LADOTD
IDIQ Contract for Bridge Load Rating
Contract Number: 4400025865

Gresham
Smith

January 11, 2023

Genuine Ingenuity

10000 Perkins Rowe
Suite 280
Baton Rouge, LA 70810

225.757.5849
GreshamSmith.com

January 11, 2023

Mr. Michael Gorbaty, Consultant Contract Services Administrator
Department of Transportation and Development
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

RE: IDIQ Contracts for Bridge Load Rating Contract Number: 4400025865

Dear Mr. Gorbaty,

Gresham Smith has been honored to partner with LADOTD on a variety of projects, including our Complex Bridge In-Depth Inspection contract with DOTD's Bridge Maintenance and Inspection team. 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. We have performed bridge ratings for over 150 complex structures for TDOT and also rated hundreds of bridges utilizing AASHTO's BrR program in an efficient manner and we look forward to providing similar services to DOTD.

Gresham Smith will manage all aspects of the program, and our overriding goal is to Focus on the Success of Our Client. To make this project a success for LADOTD, we have assembled an extremely strong team that includes Gresham Smith's local staff who have extensive experience and knowledge of the department's policies, processes and procedures. Our local team will be supported by key subject matter experts located in regional offices, and we are supported by key staff from TriCoeur (a DBE firm with DOTD bridge rating experience) and Bridge Diagnostics, Inc, TriCoer will support Gresham Smith with the bridge load ratings, while BDI will perform any load testing required.

Herbert "Bert" Moore II, P.E., PLS, PTOE, Project Executive will ensure the team has the expertise and resources necessary for LADOTD's successful completion of this project on-time and on-budget. John Weres, P.E., will serve as Project Manager and Lead Structures Engineer. John brings over 40 years of experience including DOTD experience, complex bridge design and inspection experience. Dr. Yun Lin, P.E. has rejoined Gresham Smith's national bridge team and will lead the modeling efforts for all refined analysis. Dr. Lin, a former Baton Rouge resident is considered a national expert on 3-D Finite Element analysis and is experienced with DOTD procedures and staff. Adam Davidson, P.E., who leads or Tennessee bridge team, will lead the quality control efforts for the structure team.

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, John Weres at 225.960.5480 or by email at john.weres@greshamsmith.com.

Sincerely,

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

Gresham
Smith

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. Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract title as shown in the advertisement	IDIQ Contract for Bridge Load Rating
2. Contract number(s) as shown in the advertisement	4400025865
3. State Project Number(s), if shown in the advertisement	N/A
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	John Weres, P.E. Senior Bridge Engineer 225.960.5480, john.weres@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 above shall be the same person listed in #9):  Date: January 11, 2023
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): TriCoeur Services, LLC Firm(s)' %: 2

12. Past Performance Evaluation Discipline Table:

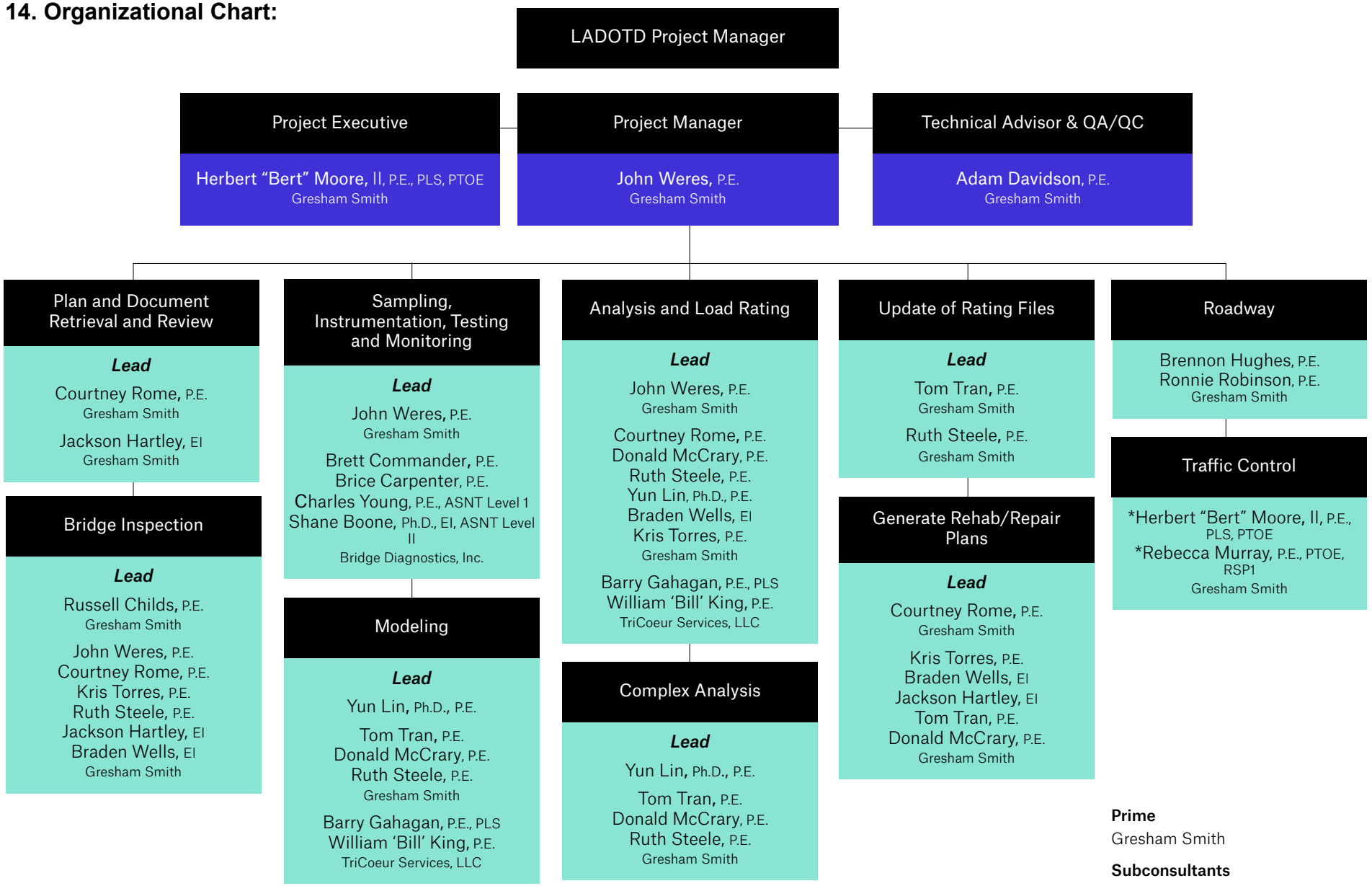
Past Performance Evaluation Discipline(s)	% of Overall Contract	Gresham Smith (Prime)	Bridge Diagnostics, Inc. (Sub)	TriCoeur Services, LLC (Sub)
Bridge	95%	91.6%	6.3%	2.1%
Traffic	5%	100%	0%	0%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.				
Percent of Contract	**100%**	**92%**	**6%**	**2%**

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	4	6
Gresham Smith	Supervisor-Other	3	4
Gresham Smith	Engineer	3	8
Gresham Smith	Engineer-Other	2	4
Gresham Smith	Engineer Intern	1	8
Gresham Smith	Senior Technician	1	6
Gresham Smith	Clerical	1	1
Bridge Diagnostics, Inc. (BDI)	Principal	3	3
Bridge Diagnostics, Inc. (BDI)	Supervisor – Engineer	3	6
Bridge Diagnostics, Inc. (BDI)	Supervisor – Other	8	18
Bridge Diagnostics, Inc. (BDI)	Engineering – Aide	0	1
Bridge Diagnostics, Inc. (BDI)	Engineer – Other	1	3
Bridge Diagnostics, Inc. (BDI)	Engineer Intern	3	6
Bridge Diagnostics, Inc. (BDI)	Senior Technician	5	13
Bridge Diagnostics, Inc. (BDI)	Technician	1	5
Bridge Diagnostics, Inc. (BDI)	Computer Analyst	2	2
Bridge Diagnostics, Inc. (BDI)	Accountant	2	2
Bridge Diagnostics, Inc. (BDI)	Administrative	1	1
Bridge Diagnostics, Inc. (BDI)	Clerical	2	3
Bridge Diagnostics, Inc. (BDI)	Professional	6	7
TriCoeur Services, LLC	Administrative	1	1
TriCoeur Services, LLC	Principal	1	1
TriCoeur Services, LLC	Engineer	2	3
TriCoeur Services, LLC	CADD Technician	3	3
TriCoeur Services, LLC	Engineer - Intern	1	1

(Add rows as needed)

14. Organizational Chart:



Prime
Gresham Smith

Subconsultants
Bridge Diagnostics, Inc. (BDI)
TriCoeur Services, LLC

*Certificates of completed required traffic training included in Section 20.

15. Minimum Personnel Requirements:

MPR (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. (Civil)	Louisiana	P.E., LA 31065 Exp. 9/30/2024
			PLS	Louisiana	PLS LA 5043 Exp. 9/30/2024
			PTOE	International	PTOE 2728 Exp. 9/30/2024
2.	Herbert "Bert" Moore, II, P.E., PLS, PTOE	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 31065 Exp. 9/30/2024
			PLS	Louisiana	PLS LA 5043 Exp. 9/30/2024
			PTOE	International	PTOE 2728 Exp. 9/30/2024
3.	John Weres, P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 36429 Exp. 9/30/2023
4.	Thong “Tom” Tran, P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 32072 Exp. 3/31/2024
	Barry Gahagan, P.E., PLS	TriCoeur	P.E. (Civil)	Louisiana	P.E., LA 21586 Exp. 3/31/2024
5.	Courtney Rome, P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 43355 Exp. 9/30/2023
	Yun Lin, Ph.D., P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E. LA 42444 Exp. 9/30/2024
	William ‘Bill’ King, P.E.	TriCoeur	P.E. (Civil)	Louisiana	P.E. LA 22139 Exp. 3/31/2023

(Add rows as needed)

16. Staff Experience:

Gresham Smith

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

Project Executive

Years of experience with this firm/employer	6
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 lead traffic, design, and analysis / engineering tasks for this contract.		

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 – Ongoing	**LADOTD, Complex Bridge Inspections, Task Orders 1, 3, and 4, Statewide LA | *Project Executive***. Bert serves as the Project Executive responsible for ensuring that all aspects of the work are performed in accordance with contract requirements. Bert also serves as the lead Traffic Engineer responsible for development of the traffic control plans and coordination with DOTD District Traffic Engineers.
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.
02/16 – 10/19	**LADOTD, Retainer contract for Safe Routes to Schools (SRTS) and Local Road Safety Program (LRSP), Statewide (with the majority of work in Districts 05 & 58), Contract 4400005894, Statewide | *Project Executive.*** Bert served as Project Executive (Principal) for Gresham Smith's implementation of the entire contract, including that all task orders are completed on-time and under budget. He ensured that Quality Assurance was properly implemented and documented on all projects. Bert's technical expertise was utilized on the following Task Orders: • **T.O. 1 – Vidalia Traffic Study, Vidalia, LA | *Project Manager.*** Bert worked closely with the local municipality and all stake holders to determine all critical project issues and to develop solutions that could be implemented in a cost-effective project to improve safety and traffic flow. • **LADOTD, SRTS/LRSP Task Order 2: McMillan Road Intersection Traffic Study, West Monroe, LA | *Project Manager*.** Bert utilized his knowledge of LADOTD's traffic signal program to identify areas for improvement in the local roadway network and to work with local officials and LADOTD Maintenance staff to identify the most appropriate intersection improvements. **LADOTD, SRTS/LRSP Task Order 12: Constitution Drive Traffic Study, West Monroe, LA | *Project Executive*.** Bert was

	responsible for leading the traffic study. Bert oversaw the data collection and peak hour field observations, analyzed the traffic data, reviewed crash reports, development of recommended improvements and the report. Also lead meetings with the mayor to discuss recommendations out lined within the traffic study.
10/17 – 4/18	**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.
4/18 – 5/19	**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.
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, conduct a road safety audit, 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.
11/08 – 11/14	**LADOTD, Baton Rouge, LA	*District Traffic Operations Engineer*.** While at LADOTD Bert and his staff developed many projects to improve the safety and reduce conflict points on the highway system. Some of these projects were initiated by request from internally, the public or an elected official, as result of an RSA, or from the review of crashes or the abnormal crash list by Bert and his staff. These projects were implemented with a number of different funding sources such as Access Management, TSM, and funds from the safety section. Bert and his staff were responsible for writing the stage zero forms to implement these projects. Some of these stage zeros include LA 75 Roundabouts in Plaquemine, LA, Access Management Improvements at LA 42 at US 61, RSA improvements to LA 427 (Acadian), and TSM Turn Lane Installation on LA 30 at LA 74.
03/16 – 10/17	**LADOTD, Farmerville State and Local Road Traffic Study, Farmerville, LA	*Project Executive.*** Gresham Smith was selected to perform a formal traffic study of all the intersections (57) within and around Farmerville. The project included data collection, crash review, development of growth rates, developing conceptual design plans and cost estimates, analysis of existing and proposed conditions and benefit/cost analysis. Bert was responsible for the overall study and led meetings with local officials and agencies.
05/18 – Ongoing	**LADOTD, LA 37: Sullivan Road to Liberty Road Stage 0 Feasibility Study, Baton Rouge, LA	*Project Executive.*** Gresham Smith 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. Crash reports were reviewed and evaluated using the LADOTD safety triage and the safety tool box. Traffic analysis will be performed using mainly HCS and Synchro and other software tools as needed. Gresham Smith reviewed historic traffic volumes counts and Trans CAD models and performed an extensive count analyses to develop regional growth rates for the study area. Bert was the supervising professional who was responsible for the traffic and safety portions of the study.

16. Staff Experience:

Gresham Smith

John Weres, P.E.

Senior Bridge Engineer

Years of experience with this employer	5
Years of experience with other employer(s)	37

Degree(s) / Years / Specialization	Bachelor of Science / 1980 / Civil Engineering, University of Pittsburgh		
Active registration number / state / expiration date	PE.0036429 / LA / Exp. 9/30/23		
Year registered	2011 (LA) 1985 (PA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Project Manager. John will lead the overall effort, including the load rating task.		

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 130092 Load Rating.
6/19 – 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 – 9/20	**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 - Ongoing	**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.
6/14 – 03/17 With another firm	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Deputy Project Manager/Project Manager*.** 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. Under a separate task order,

	John led the evaluation of US 190 Bridge over US 22, including bridge rating with AASHTOWare BrR. 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.
11/17 – Ongoing	**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.
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. 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.
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.
03/03 – 10/06 With another firm	**Toll 576 Interchange at PA 60/Pittsburgh International Airport, Pittsburgh, PA Turnpike Commission | *Project Manager*.** New interchange included the design and construction of 5 mainline structures and associated ramps. The 2 longest mainline structures were 8-span continuous steel plate girder structures including 96” deep plate girders with tulip-shaped piers up to 80’ tall. John served as PM for the entire design and EOR for all bridges (sealed the plans). John oversaw all design for the multi-span mainline bridges and two ramp structures, including all quality control checks. Oversaw the roadway design and geotechnical investigations.
01/02 – 03/06 With another firm	**Allegheny Ludlum Truss Renovation, Westmoreland County, PA | *Project Manager*.** John served as lead construction manager responsible for the administration and inspection of the project. John reviewed all contractor submittals including demo and erection procedures, falsework design, change orders, material testing reports, and construction activity. This was a $2.3 million rehabilitation of a 700’ steel truss. The project included redecking, steel repairs, and full repainting. Maintaining traffic on the two-lane through truss structure at all times was a critical component as the bridge served as the only vehicular access for a specialty steel mill, and the finished rolled galvanized steel plates had to be driven across the bridge on a daily basis.
07/18 – Ongoing	**MDOT, SR 149 Simpson County Bridge Replacements, MS | *Lead Structure 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. Gresham Smith is designing 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

Tom Tran, P.E.

Senior Bridge Engineer

Years of experience with this employer	10
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 modeling and analysis tasks and also the bridge repair 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.
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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.

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08/20 – Ongoing	**GDOT, Statewide Engineering On-Call for Bridge Repair, Statewide, GA | *Project Manager*.** This contract includes, Inspection, load rating and repair of problematic bridges throughout 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	4
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. 9/30/23		
Year registered	2019 (LA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer / Courtney will support the bridge inspection, load rating, and repair plan 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 and Standard Bridge Load Ratings, Statewide, TN | *Project Engineer.*** Courtney provided bridge load rating 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.
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 – Ongoing	**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

Yun Lin, Ph.D., P.E.

Engineer

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

Degree(s) / Years / Specialization	BS Civil Engineering, West Virginia University, 2008 | MS Civil Penn State University, 2010 Doctor of Philosophy (Ph.D.) Structures, West Virginia University, 2015		
Active registration number / state / expiration date	PE. 0042444 / LA / 9/30/24		
Year registered	2018 (LA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer / Dr. Lin will lead the modeling and analysis tasks with an emphasis on finite element analysis.		

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	Dr. Lin relocated to Louisiana in 2015 and worked with John Weres with a different firm, prior to joining Gresham Smith in 2017. Dr. Lin's experience includes bridge inspection and rating, and bridge design. Dr. Lin is a trusted advisor to Midas for adapting their finite element analysis software for complex bridge geometry.
11/19 – 02/20	**LADOTD, Complex Bridge Inspections, District 08 Bridges | *Bridge Inspector*.** As an NHI Crtified Team Leader, Dr. Lin provided bridge inspection services for the Concrete Segmental Bridge in Boyce LA and also for the LA 1 truss bridge.
01/16 – 07/17	**LADOTD, Complex Bridge Inspections, GNO Bridge No. 1 | *Bridge Inspector*.** Dr. Lin served as on-site inspector and prepared the inspection report for the GNO Bridge No. 1 in New Orleans. Duties included the hands-on inspection of the fracture critical truss elements utilizing bridge access equipment.
08/16 – 03/17	**LADOTD, Earhart Expressway Preliminary Design, Metairie, LA | *Bridge Designer*.** Dr. Lin performed bridge design and evaluation for the preliminary design of a 1,500' elevated bridge structure in Metairie. Tasks included span arrangement evaluations, development of typical sections for various structure types, and foundation evaluations.
03/17 – 07/17	**MDOT, Mississippi Bridge Load Ratings, Statewide, MS | *Designer*.** Dr. Lin performed load rating calculations for three bridges in Mississippi. To include the special truck load for Mississippi, he created a stand-alone bridge load rating Spreadsheet (LFR) for three bascule bridges in Mississippi. The program included all load rating vehicles, all required trucks by MDOT, as well as, permit trucks with customized axle loads.
07/19 – Ongoing	**TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN | *Project Engineer.*** Bridge load rating 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. Dr. Lin led the modeling and analysis of complex structures utilizing both CSiBridge and Midas programs where appropriate.

16. Staff Experience:

Gresham Smith

Adam Davidson, P.E.

Senior Bridge Engineer

Years of experience with this employer	5
Years of experience with other employer(s)	19

Degree(s) / Years / Specialization	Master of Science / 2009 / Structural Engineering, University of Tennessee, Knoxville Bachelor of Science / 2002 / Civil Engineering (Structural Emphasis), Tennessee Technological University		
Active registration number / state / expiration date	PE. #110436 / TN / Exp. 1/31/24		
Year registered	2008 (TN)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Senior Bridge Engineer / Adam will lead the Quality Control tasks for all bridge rating work.		

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 | *Project Manager, Senior Bridge Engineer.*** Adam 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.
10/15 – 6/17	**Eastern Federal Lands Highway Division (EFLHD) of the FHWA | *Senior Bridge Engineer.*** Adam provided bridge load ratings on several dozen bridges as part of an on-call contract, containing over 3,347 bridges in over 32 states and Washington, DC including the entire length of the Blue Ridge Parkway and Natchez Trace Parkway. Bridge load ratings prepared using AASHTOWare BrR.
10/15 – 6/17	**Heavy Haul Load Rating (Northern Virginia) | *Senior Bridge Engineer*.** Adam provided bridge load ratings on 20 structures for the passage of several superload hauler configurations with a maximum gross vehicle weight of approximately 1.7 million pounds for the delivery of components to the Panda Stonewall Energy Center in northern Virginia. Structures were analyzed using AASHTOWare BrR software and included eight concrete culverts, one arch culvert, three cored slabs, four prestressed concrete girder bridges, and four steel girder bridges. The project also included field verification of the condition of the structures.
07/09 – 02/15	**TVA, Bridge Load Rating Services | *Senior Bridge Engineer*.** Adam served as a structural engineer providing bridge load ratings on the following four structures located on TVA properties: Intake Tower Access Bridge at Blue Ridge Reservoir, Bridge over Kentucky Dam, Bridge over Chickamauga Dam, Bridge over Pickwick Dam, and Bridge on Bellefonte Access Rd. The structures load rated consisted of a steel truss bridge, steel girder-floor beam-stringer bridges, and a concrete slab bridge.

16. Staff Experience:

Gresham Smith

Donald McCrary, P.E.

Senior Bridge Engineer

Years of experience with this employer	5
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. 7/31/23		
Year registered	2009 (TN)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer / Donald will support the load rating and bridge repair tasks, including all CSi Bridge analysis.		

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.

16. Staff Experience:

Gresham Smith

Ruth Steele, P.E.

Bridge Design

Years of experience with this employer	4
Years of experience with other employer(s)	0

Degree(s) / Years / Specialization	Bachelor of Science / 2018 / Civil Engineering / Lipscomb University		
Active registration number / state / expiration date	PE. #126968 / TN / Exp. 10/31/24		
Year registered	2022	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	Bridge Design / Ruth will support the load rating and complex analysis 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).**
04/22 – Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Engineer Intern*.** 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. Ruth 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.
07/19 – Ongoing	**TDOT, Complex Bridge and Standard Bridge Load Ratings, Statewide, TN | *Engineer Intern.*** Ruth provided support 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.
06/17 – 01/18	**TDOT, I-40 Interchange at SR 255, Davidson County, TN | *Engineer Intern*.** 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 | *Engineer Intern*.** Engineer Intern. Gresham Smith was hired by the City to widen SR 171 to add an additional lane across the bridge and carry the project through the TDOT Local Programs process. The project widened the roadway for 0.70 miles to add another lane, bike lanes and sidewalks through the interchange with landscaping features to create an entrance into the City. The design consisted of revised drainage systems, decorative lighting and decorative bridge rails, retaining walls to minimize impacts to the property owners, signal design, bridge design and signing. Ruth's role on this projected included drawing the approach slab and prestressed box beams as well as calculating quantities for the box beams, superstructure, abutments, excavation, backfill, and pipe underdrain.

16. Staff Experience:

Gresham Smith

Kris Torres, P.E.

Bridge Engineer

Years of experience with this employer	1
Years of experience with other employer(s)	10

Degree(s) / Years / Specialization	Master of Science / 2016 / University of Central Florida Bachelor of Science / 2013 / Civil Engineering / University of North Florida		
Active registration number / state / expiration date	P.E. 122486 / TN / 1/31/24		
Year registered	2020	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer / Kris will support the bridge design and bridge inspection 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	Kris has 10 years of experience, including nearly five years at TDOT. His responsibilities have included complete bridge design, shop drawing checks, consultant design reviews, resolving construction issues, and mast arm / sign structures checks. He has designed multiple bridges of various types including a two-span welded steel plate girder bridge, prestressed concrete bridges of various beam types along with different support types (pile bents, multicolumn bents).
06/22 – Ongoing	**TDOT, Complex Bridge and Standard Bridge Load Ratings, Statewide, TN | *Project Engineer.*** Kris provided load rating 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.
08/22 – Ongoing	**City of Jackson, US 45 Bypass Southern Extension, Jackson, TN | *Project Engineer*.** This TDOT Local Programs Hybrid project includes approximately nine miles of both new and existing alignment through residential, commercial, industrial and rural areas. The proposed US 45 Bypass Southern Extension will connect at an interchange with existing US 45 on the south end of the project and extend to the existing US 45 Bypass at Airways Boulevard on the north end of the project. Gresham Smith has developed Preliminary Plans and will be developing ROW/Utilities plans for the proposed extension of US 45 Bypass including the proposed realignment of SR 18 (along existing Raines Springs Road) to proposed US 45 Bypass.
06/22 – Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Bridge Engineer*.** Kris has inspected more than 15 bridges under Task Orders 4 and 6 for the District 62 Re-Inspection assignment. Bridges have included precast slabs, rail cars, and full-timber bridges.

16. Staff Experience:

Gresham Smith

Braden Wells, EI

Bridge Engineer Intern

Years of experience with this employer	4
Years of experience with other employer(s)	0

Degree(s) / Years / Specialization	Bachelor of Science / 2018 / Civil Engineering, University of Tennessee		
Active registration number / state / expiration date	EI. 33695 / N/A		
Year registered	N/A	**Discipline**	E.I. / Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer Intern / Braden will support the bridge inspection and bridge repair 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).**
10/19 – Ongoing	**LADOTD, Complex Bridge-T.O. 1- District 8, Alexandria, LA | *Engineer Intern*.** Gresham Smith is one of two firms performing in-depth inspections (fulfilling both routine and fracture critical inspection types) for LADOTD. Inspections and reports are completed. • Task 1, District 08. (11/2019 to 02/2020) Inspection support for the routine NBIS inspection of the Boyce Bridge, a multispan precast concrete segmental box girder structure over Red River. • Inspection support for the routine and fracture critical NBIS inspection of the Simmesport Bridge, a cantilevered steel truss bridge over the Atchafalaya River. Inspections utilized an underbridge inspection (UBI) vehicle. • Inspection support for the routine and fracture critical NBIS inspection of the Alexandria Lift Bridge, a major crossing of the Red River. The main span of the vertical lift bridge included a truss superstructure.
06/22 – Ongoing	**TDOT, Complex Bridge and Standard Bridge Load Ratings, Statewide, TN | *Project Engineer.*** Braden provided load rating 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.

11/17 – 09/18	**TDOT, Underwater Bridge Inspection Program, Statewide, TN | *Engineer Intern*.** Braden served as lead field inspector for the underwater inspection of 37 structures throughout the state of Tennessee. Braden coordinated with the divers and documented the field conditions based on their direction. Braden also lead the preparation and development of the underwater inspection reports.
03/21 – Ongoing	**FDEP, Florida Keys Overseas Heritage Trail, Marathon, FL | *Engineer Intern*.** Braden assisted with the bridge inspection and evaluation of two historic bridges in the Florida Keys. The bridges include the Seven Mile Bridge and the BahiaHonda Truss structures. Both bridges are closed to all use and Gresham Smith was tasked with evaluating the structures, documenting the condition and proposing rehabilitation/replacement options. Inspection activities included both visual observation from a boat and drone video documentation. Braden served as lead boat operator and assistant inspector.

16. Staff Experience:

Gresham Smith

Russell Childs, P.E.

Senior Inspector

Years of experience with this employer	1
Years of experience with other employer(s)	20

Degree(s) / Years / Specialization	Bachelor of Science / 2002 / University of Mississippi		
Active registration number / state / expiration date	P.E. 17676 / MS / 12/31/23		
Year registered	2007	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer / Russell will support the bridge inspection 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	Russell's 20-year career was gained primarily as an employee of the Mississippi Department of Transportation (MDOT), focused on bridges. Upon graduation, Russell served seven years in the MDOT Bridge Design Division in Jackson, followed by 13 years as a bridge inspector for MDOT District 2 in Batesville, eventually serving as a team leader.
06/02 – 06/09	**MDOT, Bridge Design Unit | *Bridge Designer*.** Developed preliminary bridge layouts for hydraulic structures, analysis of prestressed concrete beams, design of reinforced concrete decks, piers and abutments, and shop drawing reviews.
06/09 – 06/22	**MDOT, District 2 | *Inspection Team Leader*.** Served as Inspection Team Leader on routine, special, in-depth and fracture critical inspections for all in-house bridge inspections across the Batesville District.
07/22 – Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Supervisory Engineer*.** Russell is serving as bridge inspection Team Leader for various bridge Special inspections throughout DOTD District 62. The inspections are used to develop a sound base of inspection format for future District inspectors. Russell is leading the inspection activities in the field as well as taking a leadership role in updating all AssetWise information. Bridge inspections have included prestressed concrete slabs, concrete beam bridges, railcar structures, curved steel girders and full timber bridges.

16. Staff Experience:

Gresham Smith

Jackson Hartley, EI

Bridge Engineer Intern

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

Degree(s) / Years / Specialization	B.S. Civil Engineering, Louisiana State University, 2021		
Active registration number / state / expiration date	EI. 35058 / 09/30/24		
Year registered	N/A	**Discipline**	E.I. / Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer Intern / Jackson will support the bridge inspection and bridge repair 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).**
06/21 – Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA	*Bridge Engineer Intern*.** Task Order 3 - Retainer project for various movable bridge inspections. Jackson began his career assisting with site inspections of movable bridges including Bridge 009130, Charington Swing Bridge, Bridge 005860 Jeanerette Swing Bridge, and Bridge 003450 Boudreaux Canal. Following graduation from LSU, Jackson has performed photo log preparation and stream bed analysis for the Boudreaux Canal Bridge. Jackson participated in the site inspections and photo documentation as a summer intern and has progressed.
09/21 – 11/21	**MDOT, MS-493 Bridge Replacements, Lauderdale County, MS	*Bridge Engineer Intern***. Jackson is assisting bridge services during construction (Phase C) work for the replacement of two stream crossing bridges in Lauderdale County, MS. The design includes a curved structure alignment and a sharply skewed bridge alignment. Modified FIB concrete beams, similar to DOTD's LG-25 girders, were utilized to minimize the structure depth in order to meet hydraulic requirements.
06/21 – 08/21	**FDOT, Florida DEP, Florida Keys Overseas Heritage Trail Historic Bridge Evaluation, Marathon, FL	*Bridge Engineer Intern.*** 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. Jackson assisted with cataloging the drone videos and photographs and also assisted with the report formatting.
11/22 – Ongoing	**Florida DEP, Florida keys Shark Channel Bridge preservation, Monroe County, FL	*Engineer Intern*.** Jackson is assisting with quantity takeoffs and cost estimates for the rehabilitation of a concrete spandrel arch on the Florida Keys Overseas Heritage Trail.

16. Staff Experience:

Gresham Smith

Brennon Hughes, P.E.

Roadway Design Engineer

Years of experience with this firm/employer	3.5
Years of experience with other firm(s)/employer(s)	6.5

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 Engineer / Brennon will lead the traffic control development for any field related work and provide any 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 years of experience specified in the applicable MPR(s).**
06/21 – Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA	*Roadway Engineer*.** Task Order 3 - Retainer project for various movable bridge inspections. Jackson began his career assisting with site inspections of movable bridges including Bridge 009130, Charington Swing Bridge, Bridge 005860 Jeanerette Swing Bridge, and Bridge 003450 Boudreaux Canal. Following graduation from LSU, Jackson has performed photo log preparation and stream bed analysis for the Boudreaux Canal Bridge. Brennon was responsible for developing traffic control plans.
09/17 – 06/19	**LADOTD, SRTS/LRSP Task Order 7: McMillan Street at Blanchard Street Intersection Improvements Design, West Monroe, LA	*Lead Roadway Design Engineer.*** This was a striping and intersection improvement project in West Monroe, LA. Brennon's role was to lead the design and the preparation of preliminary and final plans and cost estimates. The scope included the design and installation of an ADA ramp and a new crosswalk.
4/20 – Ongoing	**City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design	*Lead Roadway/Roundabout Design Engineer*.** Gresham Smith is tasked with the full roundabout design which will 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 is leading the design and the preparation of preliminary and final plans and cost estimates.
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.
10/18 – Ongoing	**LADOTD, SRTS/LRSP Task Order 16: Tangipahoa Design, Tangipahoa Parish, LA	*Lead Roadway Design*.** Brennon was responsible for planning and coordinating staffing, scheduling, and budgeting. He also led the design and preparation of preliminary and final plans and cost estimates. Brennon led the plan-in-hand meeting with local officials for the preliminary design review and served as engineer-of-record for the design development.

16. Staff Experience:

Gresham Smith

Ronnie Robinson, P.E.

Senior Transportation Engineer

Years of experience with this firm/employer	4
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 all aspects of roadway design development and retrieval of plans from DOTD files.		

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	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.
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.
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.
4/20 – Ongoing	**City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design | *Senior Transportation Engineer*.** Gresham Smith is tasked with the full roundabout design which will 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 will provide quality control for the preliminary design phase, participate in the plan-in-hand meeting, and 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 developing 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.

16. Staff Experience:

Gresham Smith

Rebecca Murray, P.E., PTOE, RSP1

Traffic Engineer

Years of experience with this employer	6
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 / 3/31/24 | PTOE 4861 / 3/26/23 | RSP1 611 / 4/5/2024		
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 provide all traffic related services, including development of Traffic Control 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).**
05/17 – 03/19	**LADOTD, I-210 at LA 1138-2 (Nelson Road) Interchange Modification Re-Evaluation Study, Lake Charles, LA | *Engineer Intern.*** 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, conduct a road safety audit, developing and calibrating an existing VISSIM model and evaluation of the proposed alternative. Rebecca conducted the safety analysis, performed the traffic analysis, development of VISSIM models, development of alternatives and development of the report.
07/18 – Ongoing	**LADOTD, LA 37: Sullivan Road to Liberty Road Stage 0 Feasibility Study, Baton Rouge, LA | *Engineer.*** Gresham Smith 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. Crash reports were reviewed and evaluated using the LADOTD safety triage and the safety tool box. Traffic analysis will be performed using mainly HCS and Synchro and other software tools as needed. Gresham Smith reviewed historic traffic volumes counts and Trans CAD models, performed an extensive count analyses to develop regional growth rates for the study area. Rebecca assisted with review of count data, development of growth rates, crash data analysis and performed existing and future traffic analysis.
03/16 – 10/17	**LADOTD, Farmerville State and Local Roads Study, Farmerville, LA | *Engineer Intern.*** 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, development of growth rates, developing alternatives, analysis of existing and proposed conditions and benefit/cost analysis. Rebecca's role was to review traffic and crash data, develop growth rates, perform existing and proposed traffic analysis, develop alternatives and prepare the project report.
05/17 – 03/19	**LADOTD, US 171 MLK Boulevard Traffic Study, Lake Charles, LA | *Engineer Intern.*** Gresham Smith was selected to develop a calibrated VISSIM model to model existing conditions and the future no build conditions along US 171 in Lake Charles, LA. Rebecca's role on the project was to oversee data collection, develop a data collection report, determine a growth rate, perform the safety analysis, develop and calibrate VISSIM models and development of the final report.

16. Staff Experience:

Bridge Diagnostics, Inc. (BDI)

Brice Carpenter, P.E.

Senior Engineer / Engineering Department Lead

Years of experience with this firm/employer	13
Years of experience with other firm(s)/employer(s)	2

Degree(s) / Years / Specialization	MS / 2009 / Civil Engineering / New Mexico State University BS / 2007 / Structural Engineering / New Mexico State University		
Active registration number / state / expiration date	PE.0039341 / Louisiana / 03/31/2023		
Year registered	2014	**Discipline**	Civil Engineering
Contract role(s) / brief description of responsibilities	Senior Structural Testing and Load Rating 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 years of experience specified in the applicable MPR(s).**
07/09 – Ongoing	Brice is BDI's Engineering Lead responsible for testing plan oversight, data processing and investigation, structural analysis, load rating, and reporting. Brice has been involved with evaluating hundreds of structures of various types (steel, reinforced concrete, prestressed concrete, hybrid FRP, and simple to complex geometry and configurations) using a variety of design codes such as AASHTO, AREMA and many state-specific codes/guidelines including Louisiana specifications. Brice has expertise in the management and execution of load rating projects for super heavy configurations for permitting purposes, often working with both the client and the haulers to find solutions for trouble structures. Brice also has years of experience in capacity testing of concrete and steel structures using various NDE techniques and has completed LADOTD Flagger Training, valid through 2025.
10/21 – 05/22	**Load Test and Field-Verified Load Ratings of 10 Structures, LA** | BDI performed refined load ratings of ten structures based on load testing of each structure. The evaluated structures ranged from short-span reinforced concrete slabs to culverts of various types with minimal fill depths. In all cases, the bridges were selected for refined analysis based on their inability to meet posting requirements using more standard evaluation techniques. BDI designed each structure's instrumentation/testing plans and coordinated the field activity. BDI then performed load testing and subsequent load rating within the requirements of LADOTD and AASHTO based on BDI's field-verified integrated approach. Individual load rating reports meeting LADOTD requirements were submitted. Mr. Carpenter was the lead analysis engineer for the project and provided model calibration, load rating, and reporting.
03/19 – 12/19	**Emergency Monitoring of the Prien Lake (Calcasieu River) Bridge, LA** | Due to unintentional damage to this structure's steel girders during the replacement of its concrete deck, Modjeski and Masters engaged BDI in this emergency construction monitoring project to design, procure and quickly install a temporary small-scale instrumentation system. A permanent instrumentation system then replaced this temporary monitoring system to capture 32 strain and temperature gages in four major locations. BDI designed, procured, and built out the two monitoring systems for the I-210 Prien Lake Bridge. The first system was a quickly deployed temporary system consisting of in-stock BDI instrumentation. This instrumentation focused on capturing girder behavior before any new concrete was poured. The second instrumentation installation consisted of more permanently installed instrumentation to capture girder behavior under the second, larger deck pour, and future live-load once the bridge was reopened. BDI built out and tested the hardware fully

	before mobilizing each system to the site, prepared instrumentation drawings for the permanent system, and procured the equipment after receiving approval from LADOTD. Brice was the project manager and field engineer for this project.
11/12 – Ongoing	**US-90 Bayou Ramos Bridge Load Testing & Monitoring, LA** | Due to unexpected cracking in PS concrete beams, BDI performed load tests and load ratings to determine the cause and effect of cracks in continuous PS/C girders. After the initial evaluation, monitoring systems were installed on the structure to monitor two sections of the structure. Health Monitoring is still ongoing. As lead analysis engineer, Brice performed field-verified load ratings and acts as the project engineer to monitor system maintenance and troubleshooting.
11/11 – Ongoing	**Bonnet Carre Spillway Load Testing and Monitoring, LA** | In 2004, BDI used its Integrated Approach to determine if a 500-ton load could cross the bridge safely. Based on provided configurations, BDI determined the "superload" could cross with stresses below its serviceability limit. In 2011, BDI installed an event-based monitoring system that helps LADOTD capture weigh-in-motion data, strains induced by heavy loads, and photos of heavy loads. Brice performed superload load ratings and reporting for LADOTD and currently acts as the project engineer for monitoring support to LADOTD.
05/15 – 10/15 02/18 – 08/18	**Truss Monitoring on US 84 Over the Mississippi River, MS** | During the pin replacements on the Natchez cantilever truss over the Mississippi River, BDI performed Structural Health Monitoring (SHM) on the critical truss members and temporary load path systems during pre, during, and post-construction. Brice acted as project field and analysis engineer in charge of field prep, field installation, data analysis, and reporting.
07/20 – 12/20	**LA507 over I-20 ABC Span Move Monitoring, LA** | During the replacement of this bridge, accelerated bridge construction was utilized where spans were cast nearby and moved into place during short outages. Brice was the field/analysis engineer responsible for monitoring plan implementation, instrumentation, monitoring during span moves, on-site data interpretation, and data processing and reporting.
05/21 – 05/21	**Bayou Teche Pier Testing, LA** | As part of a LADOTD complex inspection task order, BDI helped the inspection team quantify movement observed in the center pier of this swing bridge. During this testing, rotation and displacement of the pier were measured during bridge openings. Brice was the project engineer responsible for testing plan development, instrumentation, testing, data analysis, and reporting.
07/19 – 12/19	**St. Claude Lift Bridge Balance and Operation Testing, LA** | Project and field/analysis engineer responsible for counterweight/span balance, friction calculations, and structural performance evaluation on a double-heal trunnion Strauss Bascule Bridge. Strain gauge testing and various instrumentation tasks were performed during the investigation of a bearing failure on the span to counterweight link.
08/16 – 05/17	**Live Load Testing of Eight Culverts and Testing, LA** | BDI worked in coordination with LSU, LTRC, and LADOTD to perform comprehensive diagnostic live-load tests that allowed these structures to be better evaluated based on induced live-load effects, observed distribution, and general fixity at the culvert walls. BDI manufactured the structural testing system used for this testing based on LSU's specifications and needs. Brice acted as a project and testing engineer on this project.
07/09 – 11/12	**Load Testing and Rating of 35 Rhode Island Bridges, RI** | BDI performed field testing on 35 bridges throughout Rhode Island. BDI collected and reviewed the strain, displacement, and NDE (GPR) data for all the structures and provided it directly to AECOM for evaluation. BDI used the field data for select bridges to calibrate finite element models and develop accurate load ratings using the AASHTO Manual of Bridge Evaluation. Brice acted as analysis and rating engineer responsible for data processing and review, structural analysis, load rating, and reporting.

16. Staff Experience:

Bridge Diagnostics, Inc. (BDI)

Brett Commander, P.E.

Vice President of Engineering / Principal Engineer

Years of experience with this firm/employer	32
Years of experience with other firm(s)/employer(s)	1

Degree(s) / Years / Specialization	MS / 1989 / Structural Engineering / University of Colorado BS / 1986 / Civil Engineering / University of Colorado		
Active registration number / state / expiration date	PE.0035864 / Louisiana / 3/31/2023		
Year registered	2010	**Discipline**	Civil Engineering
Contract role(s) / brief description of responsibilities	Quality Control Manager		

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).**
10/89 – Ongoing	Brett is a co-founder of BDI and has led the engineering team for more than 32 years. He started his engineering career developing software and analytical methods for a realistic assessment of structural performance, particularly dealing with load distribution of various bridge types and understanding the loading applied to bridges. All BDI's modeling procedures have been compared with and calibrated to actual response measurements during live-load tests and structural health monitoring applications. Brett's experience with vehicle load considerations includes Bridge Weigh-in-Motion research and numerous super-heavy load tests and permit load ratings on more than 500 highway and railway bridges using a variety of design codes such as AASHTO, LADOTD BDEM – Part II – Vol. 5 Bridge Evaluation/Rating Load Rating Criteria, and many state-specific codes including Louisiana specifications. Brett now leads a team of engineers to accurately assess bridge performance. He is currently a licensed professional engineer in 28 states (including Louisiana), mainly because heavy permit truck routes typically cross state lines. Brett has also designed/overseen capacity testing projects of concrete and steel structures using various NDE techniques and has implemented hundreds of structural monitoring systems.
10/21 – 05/22	**Load Test and Field-Verified Load Ratings of 10 Structures, LA** | BDI performed refined load ratings of ten structures based on load testing of each structure. The evaluated structures ranged from short-span reinforced concrete slabs to culverts of various types with minimal fill depths. In all cases, the bridges were selected for refined analysis based on their inability to meet posting requirements using more standard evaluation techniques. BDI designed each structure's instrumentation/testing plans and coordinated the field activity. BDI then performed load testing and subsequent load rating within the requirements of LADOTD and AASHTO based on BDI's field-verified integrated approach. Individual load rating reports meeting LADOTD requirements were submitted. Brett was Principal Engineer for the project and provided PE Review of all deliverables.
07/22 – 09/22	**Nondestructive evaluation of the Eight (8) USDA Forest Service Bridges, MT and ID** | BDI performed nondestructive evaluation (NDE) of eight bridges around Missoula, Montana, and northeastern Idaho. These structures are owned and managed by the National Forest Service and are a combination of reinforced concrete slabs, prestressed concrete slabs, prestressed double tees, and concrete arches. Due to the lack of available as-built drawings, various nondestructive and minimally destructive techniques were utilized to determine critical information and perform load ratings. Techniques included ground penetrating radar (GPR), Ultrasonic Shear Wave Tomography (USWT), and removal of concrete cover

	at selected locations to verify bar/strand size, shape, and cover depth. This provided information such as reinforcing steel and prestressing strand location, orientation, size, shape, spacing, and cover depths at each bridge. Overall geometric information such as span length, width, and member dimensions were also obtained and used to prepare a report and CAD drawings for each structure. Great West Engineering used this information to calculate load ratings for each structure. Brett provided PE Review of all deliverables.
11/12 – 9/22	**US-90 Bayou Ramos Bridge Load Testing and Monitoring, LA** | Due to unexpected cracking in PS concrete AASHTO beams, BDI performed load tests and load ratings to determine the cause and effect of cracks in continuous multi-span PS/C girders. Load ratings were completed according to LADOTD specifications. After the completion of the initial evaluation, monitoring systems were installed on the structure to monitor the state of two sections of the structure. Structural Health Monitoring is still ongoing. As a technical advisor/principal engineer, Brett oversaw live-load and thermal load monitoring that was performed during and after repairs to evaluate the performance of the retrofit.
01/17 – 01/22	**Retainer Contract for Testing of Unknown Foundations Statewide (DOTD Contract No. 4400009224)** | Brett was the principal investigator for the NDE to determine the unknown foundations of 1,857 piles in Louisiana. The project utilized multiple methods of NDE, including ultraseismic testing, parallel seismic survey, sonic echo/impulse response, and guided wave. Thousands of piles have been tested to determine the embedded depth for subsequent NBIS 113 scour evaluation and reporting. BDI also assisted LADOTD in FHWA reporting these items by uploading all reports into AssetWise.
11/04 – 12/04 11/11 – Ongoing	**Bonnet Carre Spillway Load Testing, Rating, and Monitoring, LA** | BDI used its Integrated Approach to determine if a 500-ton load could cross the bridge safely. BDI then installed an event-based monitoring system that helps LADOTD capture weigh-in-motion data, strains induced by heavy loads, and photos of heavy loads. Health Monitoring is still ongoing. Over multiple contracts, Brett was the principal-in-charge of this project in its many phases, including testing program oversight, structural analysis, the load rating of structure for atypical load configurations, on-site data interpretation, report creation, and submittal, and providing recommendations for future crossings.
07/21 – Ongoing	**NDE of the Whiskey Bay and Piot Channel Bridge Decks, LA** | NDE of 3.5M sf of bridge deck on the structure carrying I-10 over the Atchafalaya Basin between Baton Rouge and Lafayette, LA. Testing included IR/HRI, CWSF GPR, and SounDAR from BDI's mobile NDE testing van. IR/HRI bridge deck data was also collected via drone. BDI also performed an inspection of the substructure to satisfy LADOTD's NBI requirements of the structure with IR/HRI via drone. The data will be used to quantify and locate repair and preservation areas and report NBE and NBI data to FHWA. Brett is providing QA/QC and PE reviews.
07/19 – 01/20	**St. Claude Lift Bridge Balance and Operation Testing, LA** | Brett was the project principal engineer responsible for counterweight/span balance, friction calculations, and structural performance evaluation of a double-heal trunnion Strauss Bascule Bridge. Strain gauge testing and various instrumentation tasks were performed during an investigation of a bearing failure on the span to counterweight link, including strain gage testing on the link frame and on counterweight balance procedures.
06/14 – Ongoing	**Phinney Avenue Bridge Load Testing, Rating, and NDE, WA** | As part of BDI's On-Call contract with the Seattle Department of Transportation, BDI was contracted to perform diagnostic load tests and structural reinforcement investigation on the Phinney Avenue bridge. Instrumentation, load tests, and a reinforcement investigation were performed with the overall goal of these tests to better understand the structures' load distribution and reinforcement details and provide refined load ratings. Brett acted as the principal engineer and oversaw testing plan development, field-verified model calibration, load ratings performed according to SDOT/WSDOT specifications, and reporting.

16. Staff Experience:

Bridge Diagnostics, Inc. (BDI)

Charles Young, P.E., ASNT Level I

Nondestructive Evaluation Program Manager

Years of experience with this firm/employer	5
Years of experience with other firm(s)/employer(s)	6

Degree(s) / Years / Specialization	MS / 2017 / Structural Engineering / Drexel University BS / 2012 / Architectural Engineering / Drexel University		
Active registration number / state / expiration date	PE.0042773 / Louisiana / 3/31/2023		
Year registered	2018	**Discipline**	Civil Engineering
Contract role(s) / brief description of responsibilities	Nondestructive Evaluation Program Manager		

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).**
05/18 – Ongoing	Charles has more than 11 years of experience in nondestructive evaluation and testing (NDE/NDT), and structural monitoring and testing. Charles is responsible for project management, analysis, and field services related to NDT of civil infrastrufcture. He works closely with a multifaceted group of engineers and technicians to perform NDE on bridges, culverts, pavements, and other civil infrastructures. Charles is heavily involved in testing and instrumentation of existing structures using NDE methods (acoustic, ultrasonic, electromagnetic, and electrochemical), performing dynamic and digital signal processing and analysis, and numerical and finite element modeling of complex structures. Charles is a SPRAT Level 1 Rope Access Certified, NBIS Certified Bridge Inspector, ASNT Level I GPR Inspector, and a Licensed Part 107 UAS (UAV/Drone) Pilot.
03/19 – 12/19	**Emergency Monitoring of the Prien Lake (Calcasieu River) Bridge, LA** | Due to unintentional damage to this structure's steel girders during the replacement of its concrete deck, Modjeski and Masters engaged BDI in this emergency construction monitoring project to design, procure and quickly install a temporary small-scale instrumentation system. A permanent instrumentation system then replaced this temporary monitoring system to capture 32 strain and temperature gages in four major locations. BDI designed, procured, and built out the two monitoring systems for the I-210 Prien Lake Bridge. The first system was a quickly deployed temporary system consisting of in-stock BDI instrumentation. This instrumentation focused on capturing girder behavior before any new concrete was poured. The second instrumentation installation consisted of more permanently installed instrumentation to capture girder behavior under the second, larger deck pour, and future live-load once the bridge was reopened. BDI built out and tested the hardware fully before mobilizing each system to the site, prepared instrumentation drawings for the permanent system, and procured the equipment after receiving approval from LADOTD. Charles was a field engineer for this project.
07/22 – 09/22	**Nondestructive Evaluation of the Eight (8) USDA Forest Service Bridges, MT and ID** | BDI performed nondestructive evaluation (NDE) of eight bridges around Missoula, Montana, and northeastern Idaho. These structures are owned and managed by the National Forest Service and are a combination of reinforced concrete slabs, prestressed concrete slabs, prestressed double tees, and concrete arches. Due to the lack of available as-built drawings, various nondestructive and minimally destructive techniques were utilized to determine critical information and perform load ratings. Techniques included ground penetrating radar (GPR), Ultrasonic Shear Wave Tomography (USWT), and removal of concrete cover at selected locations to verify bar/strand size, shape, and cover depth. This provided information such as reinforcing steel

	and prestressing strand location, orientation, size, shape, spacing, and cover depths at each bridge. Overall geometric information such as span length, width, and member dimensions were also obtained and used to prepare a report and CAD drawings for each structure. Great West Engineering used this information to calculate load ratings for each structure. Charles was the Project Manager.
01/17 – 01/22	**Retainer Contract for Testing of Unknown Foundations Statewide (DOTD Contract No. 4400009224)** | Charles was the project manager and lead field engineer for the NDE to determine the unknown foundations of 1,857 piles in Louisiana. The project utilized multiple methods of NDE, including ultraseismic testing, parallel seismic survey, sonic echo/impulse response, and guided wave. Thousands of piles have been tested to determine the embedded depth for subsequent NBIS 113 scour evaluation and reporting. BDI also assisted LADOTD in FHWA reporting these items by uploading all reports into AssetWise.
01/19 – Ongoing	**IDIQ Contract for Nondestructive Evaluation of Structures Statewide (DOTD Contract No. 4400015262/4400017163)** | Charles is the project manager for statewide NDE of structures for LADOTD under this contract. Scope items include testing of bridge decks, concrete substructures, steel elements such as welds and pin and hanger assemblies, unknown foundations, tunnels, culverts, and other highway transportation infrastructure. Charles also assists LADOTD with identifying proper technologies for application and the best methods for analysis and reporting of findings into LADOTD's AssetWise. He also provides coordination with all subcontractors for work performed under this contract and its TOs.
04/22 – Ongoing	**Aerial Imaging and UAV Inspection of I-15 (DOTD Contract No. 4400015262/4400017163 TO 11)** | BDI is performing an inspection of the bridge carrying I-15 over US 51 and Louisiana swamp land that will include high-altitude HRI and IR (via helicopter), unmanned aerial vehicles (UAV / Drone) and land vehicle-based IR, High-Resolution Imaging (HRI), Continuous Wave Step Frequency (CWSF) Ground Penetrating Radar (GPR), and Deck Acoustic Response (DAR) utilizing BDI's SounDAR system. BDI provides a complete analysis of all measurements made for all structures. This analysis uses all datasets to quantify and map specified bridge deck conditions. The different IR data sets will be compared/contrasted and compared to SounDAR, GPR, and HRI data sets to determine the resolution levels of each method. A recommendation on IR methodologies for different data collection types (i.e., network vs. program level) will be recommended. Charles is the project manager for this work and will assist with data review, 3D modeling, digital twin generation, and report review.
10/20 – 09/22	**Bonnet Carre Spillway Inspection and Nondestructive Evaluation, LA (DOTD Contract No. 4400015262/4400017163 TO 7)** | This project involved an NHI routine inspection of the Bonnet Carre Spillway Bridge and targeted NDE techniques at various critical portions of the structure. Also included were supplemental inspection access techniques, including (UAV). The nondestructive evaluation included a multi-technology bridge deck assessment including SounDAR, CWSF GPR, IR, and HRI. Charles was the project manager for this project as well as an NBIS inspector, provided a review of the draft report, and oversaw the uploading of data to AssetWise.
08/19 – 07/20	**NDE of City Park Lake Bridge LA** | Charles was the project manager for the NDE of the City Park Lake Bridge in Baton Rouge, LA. NDE technologies included ground penetrating radar (GPR), deck acoustic response (DAR), infrared thermography (IR), and high-resolution video (HRV). The remote inspection was performed on the substructure utilizing visual inspection and IR.
11/19 – 02/20	**NDT of Pins at the Simmesport Truss Bridge, LA** | Charles was the project manager to perform Ultrasonic Testing (UT) of the 8 False Chord Pins on the US 1 Simmesport Truss Bridge (Structure Number 08050520500001) near Simmesport, LA. A total of 8 pins were inspected at panel points 19 and 19'.

16. Staff Experience:

Bridge Diagnostics, Inc. (BDI)

Shane Boone, Ph.D., EI, ASNT Level II

Senior Vice President – Nondestructive Evaluation

Years of experience with this firm/employer	7
Years of experience with other firm(s)/employer(s)	13

Degree(s) / Years / Specialization	Ph.D. / 2008 / Civil Engineering / Utah State University MS / 2005 / Structural Engineering / University of Tennessee BS / 2002 / Civil Engineering / University of Tennessee		
Active registration number / state / expiration date	EI/ 22748 / TN / N/A		
Year registered	N/A	**Discipline**	Nondestructive Evaluation Subject Matter Expert
Contract role(s) / brief description of responsibilities	Shane will provide subject matter expertise for this project		

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).**
05/02 – Ongoing	Shane has spent more than 20 years in the government, academic, and private sectors of specialized infrastructure inspection, NDE, and monitoring. He specializes in the research, development, and application of nondestructive testing and evaluation technologies and monitoring of civil infrastructure. Previously, Shane managed NDE programs at the Federal Highway Administration (FHWA) and Oak Ridge National Laboratory. He serves as the chair of the American Society for Nondestructive Testing's Structural Materials Technology Conference, chair of the ASNT Infrastructure Committee, and sits on TRB's Standing Committee on Testing and Evaluation of Transportation Structures, AKB40. Shane is a certified ASNT Level II GPR and IR inspector.
01/17 – 01/22	**Retainer Contract for Testing of Unknown Foundations Statewide (DOTD Contract No. 4400009224) |** Shane was the Subject Matter Expert (SME) for the NDE to determine the unknown foundations of 1,857 piles in Louisiana to determine the embedded depth for subsequent NBIS 113 scour evaluation and reporting. The project utilized multiple methods of NDE, including ultraseismic testing, parallel seismic survey, sonic echo/impulse response, and guided wave. Shane provided guidance to subcontractors, worked with LADOTD to develop presentations and reports for outside stakeholders and provided data analysis feedback when required for reporting.
01/19 – Ongoing	**IDIQ Contract for Nondestructive Evaluation of Structures Statewide (DOTD Contract No. 4400015262/4400017163) |** Shane is the SME for statewide NDE of structures for LADOTD under this contract. Scope items include testing bridge decks, concrete substructures, steel elements such as welds and pin and hanger assemblies, unknown foundations, tunnels, culverts, and other highway transportation infrastructure. Shane assists LADOTD with identifying proper technologies for application and the best methods for analysis and reporting of findings into LADOTD's AssetWise. Shane interacts with LADOTD and BDI staff daily to ensure data collection, analysis, and reporting are meeting BDI's Quality Management Plan (QMP) and are on schedule and budget. Shane also assisted LADOTD in generating presentations and reports to outside stakeholders based on the findings from the TOs awarded under this contract.
04/22 – Ongoing	**Aerial Imaging and UAV Inspection of I-15 (DOTD Contract No. 4400015262/4400017163 TO 11) |** BDI is performing an inspection of the bridge carrying I-15 over US 51 and Louisiana swamp land that will include high-altitude HRI and IR (via helicopter), unmanned aerial vehicles (UAV/Drone) and land vehicle-based IR, High-Resolution Imaging (HRI), Continuous

	Wave Step Frequency (CWSF) Ground Penetrating Radar (GPR), and Deck Acoustic Response (DAR) utilizing BDI's SounDAR system. BDI provides a complete analysis of all measurements made for all structures. This analysis will use all datasets to quantify and map specified bridge deck conditions. The different IR data sets will be compared/contrasted and compared to SounDAR, GPR, and HRI data sets to determine the resolution levels of each method. A recommendation on IR methodologies for different data collection types (i.e., network vs. program level) will be recommended. Shane is SME for NDE.
07/21 – Ongoing	**Whiskey Bay and Pilot Channel NDE (DOTD Contract No. 4400015262/4400017163 TO 8 & 10) |** The objective of this project is to perform an NHI routine inspection of the bridge carrying I-10 over the Atchafalaya Basin between New Baton Rouge and Lafayette along with targeted NDE techniques at various critical portions of the structure. These technologies included IR, HRI, CWSF, GPR, and SounDAR. Also included are supplemental inspection access techniques, including (UAV). Nondestructive evaluation includes a multi-technology bridge deck assessment, including Deck Acoustic Response, Ground Penetrating Radar, Infrared Thermography, and High-Resolution Imagery. Shane is the SME for this project and works with LADOTD and BDI staff to coordinate staffing, scheduling, and budgets.
10/20 – 09/22	**Bonnet Carre Spillway Inspection and Nondestructive Evaluation, LA (DOTD Contract No. 4400015262/4400017163 TO 7) |** This project involved an NHI routine inspection of the Bonnet Carre Spillway Bridge and targeted NDE techniques at various critical portions of the structure. Also included were supplemental inspection access techniques, including (UAV). The nondestructive evaluation included a multi-technology bridge deck assessment including SounDAR, CWSF GPR, IR, and HRI. Shane was the subject matter expert for this project.
11/19 – 02/20	**NDT of Pins at the Simmesport Truss Bridge, LA |** Shane was the principal investigator in performing Ultrasonic Testing (UT) of the 8 False Chord Pins on the US 1 Simmesport Truss Bridge (Structure Number 08050520500001) near Simmesport, LA. The structure carries US 1 over the Atchafalaya River and is owned and maintained by the Louisiana Department of Transportation and Development (LADOTD). A total of 8 pins were inspected at panel points 19 and 19'. The locations include a top and bottom pin at the upstream and downstream location of panel point 19 and a top and bottom pin at the Upstream and Downstream location of panel point 19'.
02/22 – Ongoing	**Nondestructive Evaluation of I-65 over the Tennessee River, AL |** Alabama DOT repaired the deck of the structure carrying I-65 over the Tennessee River near Decatur, AL, approximately ten years ago. Since then, ALDOT has documented visual degradation of the deck above previously patched areas. BDI is performing IR and High-Resolution Imaging (IR/HRI), CWSF GPR, and SounDAR via BDI's mobile NDE testing van. The results will allow ALDOT to identify areas of concern and determine estimated quantities for repair. Additionally, the results will provide insight to ALDOT on the efficacy of their previous repair. Shane is providing QA/QC, project management, NDE Subject Matter Expertise.
01/21 – Ongoing	**Nondestructive Evaluation of I-470 over the Ohio River |** BDI will collect over 171 concrete cores to test for chloride contamination, strength, and petrography to pair with the NDE of the bridge deck carrying I-470 over the Ohio River in Wheeling, WV. NDE testing will include IR/HRI, CWSF, and SounDAR via BDI's mobile NDE testing van. The results are anticipated to assist WVDOH in producing an asset management plan for the bridge and determining quantities needed for immediate repair and preservation of the bridge deck. Shane provides QA/QC, project management, and NDE Subject Matter Expertise.
12/18 – 06/19	**NDE of I-84 Decks in Oregon |** Oregon DOT contracted BDI to perform nondestructive evaluation (NDE) on seven select bridge decks carrying traffic on the Interstate 84 corridor along the northern part of the state from Portland to Boise. The NDE activities contracted were to perform IR/HRI and SounDAR. Results provided ODOT with quantities for repair and preservation of the decks. Shane provided QA/QC, project management, and NDE Subject Matter Expertise.

16. Staff Experience:

TriCoeur Services, LLC

Barry Gahagan, P.E., PLS

Project Engineer

Years of experience with this employer	12
Years of experience with other employer(s)	30

Degree(s) / Years / Specialization	Bachelor of Science / 1980 / Civil Engineering, Louisiana State University Master of Science / 1990 / Civil (Structural) Engineering, Louisiana State University		
Active registration number / state / expiration date	P.E.21586 / LA / Exp. 3/31/24 | PLS 4834 / LA / Exp. 3/31/24		
Year registered	1985 (PE); 1997 (PLS)	**Year registered**	1985 (PE); 1997 (PLS)
Contract role(s) / brief description of responsibilities		Project Engineer / Barry will support Prime with project research, rating analyses, and quality assurance for this project.	

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).**
01/20 - 04/20	**East Baton Rouge City Parish, Load Capacity Review (Perkins Road Overpass of KCS Railway) Project No. 20-BR-PT-0005, East Baton Rouge, LA | *Project Manager.*** Served as Project Manager and Lead Rating Engineer. Provided Bridge Load Capacity Rating AASHTOWare Calculations and reporting for previously designed/rehabilitated WPA period CODEKG/CONIBM bridge system.
03/14 – 11/14	**Jefferson Parish, Lapalco Over Bayou Segnette Parish, Project No. 2013-010-RB, Jefferson Parish, LA | *Bridge Inspection and Rating.*** Served as Bridge Rating Subconsultant provided Load Capacity Rating AASHTOWare Calculations of continuous CIP slab span, varied AASHTO PS girder and haunched / link supported steel main span girder system. Provided independent calculation of link / hanger and displaced bearing corbel support conditions. Recommended enhanced inspection practices for areas of concern.
1999	**LADOTD, US Hwy167 N. Hodge – Quitman TIMED Program, Jackson Parish, LA | *Project Engineer.*** Provided Final Design of prestressed concrete girder bridges over Cypress Bayou, Jackson Parish.
1998	**LADOTD US Hwy 167 TIMED Program, Jackson/Lincoln Parish, LA | *Project Engineer.*** Provided Final Design of prestressed concrete girder bridges over Shepherd Creek, Jackson /Lincoln Parish, LA.
2003	**LADOTD Bridge Ratings, Statewide, S.P. No. 700-99-0245 Supplemental Agreement, Statewide, LA | *Project Engineer.*** Coordinated Development, prepared algorithms for coding, and database preparation of Composite Steel Influence Line Rating "**COMPSTIL**" Software and source database for LA DOTD's complex bridge rating of unconventional/complex bridges Subjected to user defined live load configurations.
2003	**LADOTD Bridge Ratings Statewide, S.P. No. 700-99-0245 Supplemental Agreement, Statewide, LA | *Project Engineer.*** Coordinated development and prepared algorithm updates for conversion of FORTRAN to BASIC software coding, and database preparation of state timber bridge database and algorithm conversions of LADOTD's "Timber-C" software for bridge rating of conventional timber bridges to aid Bridge Maintenance evaluations of bridges under various stages of distress / repair with user defined "permit" live load configurations.

2001	**LADOTD Bridge Load Ratings Statewide, S.P. No. 700-99-0245, Statewide, LA | *Project Manager and Lead Rating Engineer*.** Provided Bridge Load Capacity Rating Analyses using STAAD and VIRTIS software for approximately 185 On System Highway Bridges including composite steel plate girder, prestressed concrete standard AASHTO girder, concrete voided slab span, and concrete CIP box girder span bridges.
07/21 – 12/21	**Associated Grocers Inc., Bridge Inspection and Load Capacity Rating**. Provided field inspection, maintenance recommendations, and load capacity rating of existing multi-span precast slab span Perkins Road access bridge over Dawson Creek, Baton Rouge, LA.

16. Staff Experience:

TriCoeur Services, LLC

William 'Bill' King, P.E.

Project Engineer

Years of experience with this employer	1
Years of experience with other employer(s)	37

Degree(s) / Years / Specialization	Bachelor of Science / 1981 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	P.E. 22139 / LA / Exp. 3/31/23		
Year registered	1986 (PE)	**Year registered**	1985 (PE); 1997 (PLS)
Contract role(s) / brief description of responsibilities	Project Executive / Bill will assist Prime with ratings of conventional cast-in-place and precast/prestressed concrete, and steel plate girder bridges for this contract.		

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).**
11/19 – 08/20	-Checked Preliminary Bridge design of SP No. H.013098 –Jim Cryer Lane Bridge replacement; a four span prestressed concrete LG-25 girder bridge, over Bayou Anacoco, Vernon Parish. -Prepared AASHTOWare Load Rating Analysis of Perkins Rd Overpass over KCS Railway, East Baton Rouge Parish. Evaluated for rehabilitation over 50 parish roads following 2016 Flood (EFP PW1000 DR4277) East Feliciana Parish. -Prepared Design, Plan Development, and Cost Estimate for Carruth Road replacement bridge over Comite River relief and tributary crossing (EFP PW1178 DR4277); a four span prestressed concrete LG-25 girder bridge, East Feliciana Parish. -Prepared Design, Plan Development, and Cost Estimate of the John Thomas multiple span CIP slab span bridge over Waterfall Bayou (PW1190 DR4277), East Feliciana Parish. -Checked final Bridge design for Plettenberg Road Bridge replacement over Polly Creek (16-HMP PW02 (DR4277)) West Feliciana Parish. -Prepared Construction load rating for access bridge to Hero Bayou Pump Station. Jefferson Parish.
11/15 – 11/18	Assisted the LDOTD Bridge Design Section - Bridge Load Rating Unit as Program Engineer Manager for the Off-System Bridge Program Files and Load Rating Statewide, completing the load rating requirements and bridge files of the NBIS / FHWA Metrics for the Louisiana Statewide Off-System Bridge Load Records and Bridge Load Rating. Maintained updated records for over 5,000 off system bridges.

17. Firm Experience:

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

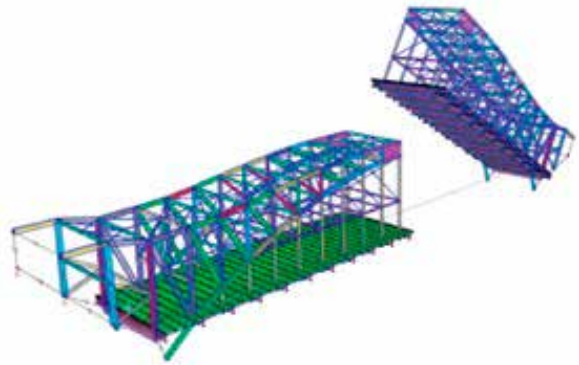
Complex Bridge Load Ratings

Firm responsibility (prime or sub?)	Prime				
Project number	Work Orders 5,11,14,15, 21 & 26; Agreement No. E4149 | Work Order 12; Agreement No. E2231 | Work Orders 3 & 7; Agreement No. E 2451	**Owner's name**	Tennessee Department of Transportation		
Project location	Statewide, TN		**Owner's Project Manager**	Rebecca Hayworth, P.E.	
Owner's address, phone, email	James K. Polk Building, Suite 1200, 505 Deaderick Street, Nashville, TN 37243-0338 / 615.253.2448 | rebecca.hayworth@tn.gov				
Services commenced by this firm (mm/yy)	07/19		**Total consultant contract cost ($1,000's)**		$3,225
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$3,225

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

Over a series of 8 separate work orders, Gresham Smith performed a total of 141 bridge load ratings for existing complex bridge structures for the Tennessee Department of Transportation's (TDOT) Structures Division. The vast majority of these bridges are multi-beam structures with irregular geometries, such as curved girders, flared girders, and bridges with connecting ramps. Other complex structure types include through trusses, through arches, movable bascule bridges, deck trusses, steel K-frames and delta-frames, curved steel tubs, and curved concrete multi-cell bridges with integral piers.

Our team is capable of using a large variety of FEM software packages for refined analysis. Complying with our client's requirement, CSIbridge was used for FEM modeling. Supplemental calculations in Mathcad and spreadsheets were also included. With the DOT's agreement, our team created alternative and sometime creative solutions to overcome software limitations, such as lack of modeling features, overly conservative assumptions, and programming errors, in order to produce load ratings that are most reflective of the current conditions. Field visits were performed when necessary to verify information from bridge plans and inspection reports. After exhausting load rating refinements, our team provided rehabilitation alternatives with schematic illustrations for structures requiring load postings.



Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.
Firm members involved include: Adam Davidson, Donald McCrary, Ruth Steele, Braden Wells, Courtney Rome, John Weres and Yun Lin

17. Firm Experience:

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

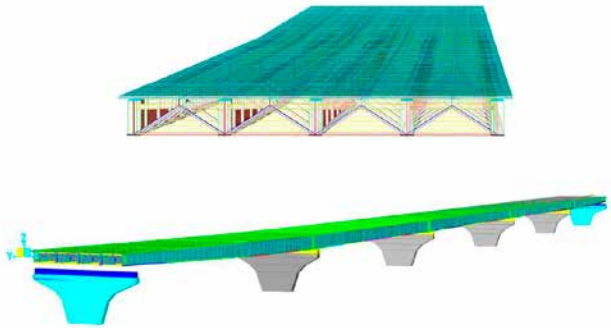
Routine On- and Off-System Bridge Load Ratings

Firm responsibility (prime or sub?)	Prime

Project number	Work Order 26; Agreement No. E2149	**Owner's name**	Tennessee Department of Transportation		
Project location	Statewide, TN		**Owner's Project Manager**	Rebecca Hayworth, P.E.	
Owner's address, phone, email	James K. Polk Building, Suite 1200, 505 Deaderick Street, Nashville, TN 37243-0338 / 615.253.2448 | rebecca.hayworth@tn.gov				
Services commenced by this firm (mm/yy)	07/19		**Total consultant contract cost ($1,000's)**		$3,225
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$3,225

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

Over a series of 8 separate work orders, Gresham Smith produced a total of 137 load ratings for existing routine bridge structures for the Tennessee Department of Transportation's (TDOT) Structures Division. Typical structure types include multi-beam, tee Beam, truss, frame, girder-floor beam-stringer, slab, and culverts. AASHTOWare BrDR was used for superstructure ratings. Substructure ratings were provided as needed depending on substructure condition ratings and structural continuity.
With a group of specialized load rating engineers and optimized workflow, our team produced accurate AASHTOWare BrDR models. Combined with automated reporting and stringent QC and QA processes, load rating reports were produced consistently with few human errors. As a result, it made our client's review process more convenient and effective. When an AASHTOWare BrDR rating results in load posting, refined analysis was used as appropriate to improve load ratings. Similar to complex bridge load ratings, rehabilitation solutions were provided when required.



Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.
Firm members involved include: John Weres, Adam Davidson, Donald McCrary, Braden Wells, Tom Tran and Ruth Steele.

17. Firm Experience:

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

Conceptual and Schematic Recommendations to Improve Load Posting and Bridge Rehabilitation to Strengthen	**Firm responsibility (prime or sub?)**	Prime

Project number	Work Order 26; Agreement No. E2149	**Owner's name**	Tennessee Department of Transportation		
Project location	Statewide, TN		**Owner's Project Manager**	Rebecca Hayworth, P.E.	
Owner's address, phone, email	James K. Polk Building, Suite 1200, 505 Deaderick Street, Nashville, TN 37243-0338 / 615.253.2448 | rebecca.hayworth@tn.gov				
Services commenced by this firm (mm/yy)	07/19		**Total consultant contract cost ($1,000's)**		$3,225
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$3,225

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

As part of our ongoing bridge load rating work with the Tennessee Department of Transportation, Gresham Smith has made it standard practice to include a section in our load rating reports that identifies specific locations and the controlling force effects of the low rating factors and conceptual approaches to improve the load posting. An example of the information provided at this phase would be, "A thin web on the interior girder at bent 2 is causing a low rating due to shear. Additional stiffeners need to be added to address this."

From this practice, TDOT has asked Gresham Smith to take the recommendations for seven bridges and develop a schematic design regarding strengthening measures to facilitate planning and cost estimates for the TDOT bridge repair office. An example of the information provided at this phase would be to provide a plan sheet that identifies the exact placement and number of stiffeners required to resolve the low rating due to shear. Plate sizes would also be identified during this phase.

Subsequently, Gresham Smith has been assigned one of these structures to develop final bridge rehabilitation construction plans and documents to strengthen the bridge and avoid load posting. This phase takes the schematic details and brings them up to construction plans standards that details things like connections, material properties, pertinent notes to the contractor and fabricator, etc.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.
Firm members involved include: John Weres, Adam Davidson, Donald McCrary, Braden Wells,Tom Tran and Ruth Steele.

17. Firm Experience:

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

Complex Bridge Inspections IDIQ – Multiple Task Orders

Firm responsibility (prime or sub?)	Prime

Project number	4400013322	**Owner's name**	Louisiana Department of Transportation and Development
Project location	Statewide, Louisiana	**Owner's Project Manager**	Haylye Browne
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA / 225.379.1205 / haylye.brown@la.gov		

Services commenced by this firm (mm/yy)	10/19	**Total consultant contract cost ($1,000's)**	$5,006
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**	$1,959

Complex Bridges: Task Order 1 included three major structures: Red River Lift Bridge in Alexandria, LA 1 Truss over Atchafalaya River and LA 8 Concrete Segmental Bridge in Boyce. In 2022, Gresham Smith led the in-depth inspection of the I-20 Mississippi River Bridge in Vicksburg. Drone inspections was utilized to supplement the hands-on inspections.
Emergency Repairs: In April 2020, a train derailment impacted the US 71 Bridge over KCS Railroad in downtown Shreveport, causing the emergency closure of the bridge. LADOTD assigned Gresham Smith under TO #2 to prepare design plans to replace bent three and to install a concrete crash wall for future protection. Gresham Smith performed an emergency inspection of the bridge to perform measurements and evaluate potential repairs. Repairs included the installation of helical piles to resist the railroad crash loads on the foundations and utilization of rolled shapes to expedite steel fabrication.
Movable Bridges: Gresham Smith served as the lead for the in-depth inspection of 10 movable bridges, including Mechanical, Electrical, and Structural tasks. The structural tasks included rope access, manlifts and UBI equipment dependent of span details. Mechanical/Electrical inspections included full testing and assessments. Movable bridges included: Bridge 006210 Loreauville Vertical lift bridge, Bridge 054360 Gross Tete Steel Swing Bridge in Iberville Parish and Bridge 054472 Indian Village Steel Swing Bridge in Iberville Parish.
On-System/Off-System Re-Inspections: Gresham Smith was selected to re-inspect multiple bridges in District 62 to establish proper base inspection reports that can be utilized for future in-house District inspectors to ensure consistency and thoroughness. To date, Gresham Smith has inspected more than 35 bridges including timber trestles, concrete slab, railcar bridges, and concrete girder spans.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.
Firm members involved include: Bert Moore, John Weres, Yun Lin, Courtney Rome, Tom Tran, Russell Childs, Ruth Steele, Braden Wells, Kris Torres, Brennon Hughes and Rebecca Murray.




17. Firm Experience:

Gresham Smith	**Past Performance Evaluation Discipline(s)***	Bridge
Florida Keys Overseas Heritage Trail (FKOHT) Historic Bridge Evaluations & Shark Channel Preservation	**Firm responsibility (prime or sub?)**	Prime

Project number	N/A	**Owner's name**	Florida Dept. of Environmental Protection (FDEP)
Project location	Monroe County, Florida	**Owner's Project Manager**	Garland Sandel
Owner's address, phone, email	3900 Commonwealth Boulevard, Tallahassee, FL / 850.245.2798 / garland.sandel@floridadep.gov		
Services commenced by this firm (mm/yy)	03/21	**Total consultant contract cost ($1,000's)**	$420
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**	$400

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.

The FKOHT consists of approximately 100 miles of multiuse trail from Key Largo to Key West, Florida. The trail system was developed by incorporating the bridge and right-of-way network from the defunct Overseas Railroad. Two of the primary historic bridges, the Seven Mile Bridge and the Bahai-Honda Bridge are severely deteriorated and closed, creating a missing link in the 100-mile trail system. Gresham Smith inspected and evaluated the bridges and developed recommendations on rehabilitation and replacement options. Because of the advanced deterioration, the conceptual inspection was performed by boat access and incorporated drones.

The Seven Mile Bridge evaluation included both steel plate girder and concrete arch spans. The Bahia-Honda Bridge is a 32-span steel truss that was previously converted from a thru-truss railroad bridge to a deck-truss vehicular/trail structure.

A follow-up task order was issued to Gresham Smith to prepare rehabilitation design plans for the preservation of the Shark Channel Bridge near Key West. The preservation design is on an accelerated 6-month schedule that includes LiDAR survey and environmental permitting. The concrete arches are being preserved while the deck is modified and rehabilitated with new pedestrian railings.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.
Firm members involved include: John Weres, Braden Wells, Tom Tran, Courtney Rome

17. Firm Experience:

Bridge Diagnostics, Inc. (BDI)	**Past Performance Evaluation Discipline(s)***	Bridge / Data Collection

Emergency Monitoring of the Prien Lake (Calcasieu River) Bridge	**Firm responsibility (prime or sub?)**	Sub

Project number	4400012382	**Owner's name**	Louisiana Department of Transportation and Development (LADOTD)		
Project location	I-210, Lake Charles, LA 70601		**Owner's Project Manager**	Mark Bucci, PE	
Owner's address, phone, email	LADOTD HQ / 225.379.1076 / mark.bucci@la.gov				

Services commenced by this firm (mm/yy)	03/09	**Total consultant contract cost ($1,000's)**	Unknown
Services completed by this firm (mm/yy)	12/19	**Cost of consultant services provided by this firm ($1,000's)**	$97.3

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

Due to unintentional damage to this structure's steel girders during the replacement of its concrete deck, Modjeski and Masters engaged BDI in this emergency construction monitoring project to design, procure and quickly install a temporary small-scale instrumentation system. A permanent instrumentation system then replaced this temporary monitoring system to capture 32 strain and temperature gages in four major locations. BDI designed, procured, and built out the two monitoring systems for the I-210 Prien Lake Bridge. The first system was a quickly deployed temporary system consisting of in-stock BDI instrumentation. This instrumentation focused on capturing girder behavior before any new concrete was poured. The second instrumentation installation consisted of more permanently installed instrumentation to capture girder behavior under the second, larger deck pour, and future live-load once the bridge was reopened. BDI built out and tested the hardware fully before mobilizing each system to the site, prepared instrumentation drawings for the permanent system, and procured the equipment after receiving approval from LADOTD.

Nature of firm's responsibility: Emergency Response, Monitoring System Design, Monitoring System Procurement, Monitoring System Installation, Ongoing Monitoring

Firm members involved include: Brice Carpenter (Project Manager/Field Engineer); Charlie Young (Field Engineer)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

17. Firm Experience:

Bridge Diagnostics, Inc. (BDI)	**Past Performance Evaluation Discipline(s)***	Bridge / Data Collection

Nondestructive Evaluation of the Eight (8) USDA Forest Service Bridges	**Firm responsibility (prime or sub?)**	Sub

Project number	N/A	**Owner's name**	National Forest Service (Client: Great West Engineering)**		
Project location	Montana and Idaho		**Owner's Project Manager**	Karl Yakawich, PE	
Owner's address, phone, email	2501 Belt View Drive, Helena, MT 59601 / 406.495.6182 / kyakawich@greatwesteng.com				
Services commenced by this firm (mm/yy)	07/22		**Total consultant contract cost ($1,000's)**		Unknown
Services completed by this firm (mm/yy)	09/22		**Cost of consultant services provided by this firm ($1,000's)**		$53.4

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

Great West Engineering contracted Bridge Diagnostics, Inc. (BDI) to perform nondestructive evaluation (NDE) of eight bridges around Missoula, Montana, and northeastern Idaho. These structures are owned and managed by the National Forest Service and are a combination of reinforced concrete slabs, prestressed concrete slabs, prestressed double tees, and concrete arches. Due to the lack of available as-built drawings, various nondestructive and minimally destructive techniques were utilized to determine critical information and perform load ratings. Techniques included ground penetrating radar (GPR), Ultrasonic Shear Wave Tomography (USWT), and removal of concrete cover at selected locations to verify bar/strand size, shape, and cover depth. This provided information such as reinforcing steel and prestressing strand location, orientation, size, shape, spacing, and cover depths at each bridge. Overall geometric information such as span length, width, and member dimensions were also obtained and used to prepare a report and CAD drawings for each structure. Great West Engineering used this information to calculate load ratings for each structure.

Ranch Creek Bridge (Solid PS Slab)

Nature of firm's responsibility: Nondestructive Evaluation including Ground Penetrating Radar, Ultrasonic Shear Wave Tomography; Destructive Evaluation Techniques, As-Built Drawings

Firm members involved include: Charlie Young (Project Manager); Brett Commander (PE Review)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

****BDI was a subconsultant to Great West Engineering and did not have direct contact with the owner – National Forest Service.**

17. Firm Experience:

Bridge Diagnostics, Inc. (BDI)	**Past Performance Evaluation Discipline(s)***	Bridge

Load Test and Field-Verified Load Ratings of 10 Structures	**Firm responsibility (prime or sub?)**	Sub

Project number	TO No. 5: H.012485.1 Contract: 4400010099	**Owner's name**	Louisiana Department of Transportation and Development (LADOTD)		
Project location	Various Locations, LA		**Owner's Project Manager**	Wei Peng, PE	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 / 225.379.1486 / wei.peng@la.gov				
Services commenced by this firm (mm/yy)	10/21		**Total consultant contract cost ($1,000's)**		Unknown
Services completed by this firm (mm/yy)	05/22		**Cost of consultant services provided by this firm ($1,000's)**		$456

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

BDI performed refined load ratings of ten structures based on load testing of each structure. The evaluated structures ranged from short-span reinforced concrete slabs to culverts of various types with minimal fill depths. In all cases, the bridges were selected for refined analysis based on their inability to meet posting requirements using more standard evaluation techniques. BDI designed each structure's instrumentation/testing plans and coordinated the field activity. BDI then performed load testing and subsequent load rating within the requirements of LADOTD and AASHTO based on BDI's field-verified integrated approach. Individual load rating reports meeting LADOTD requirements were submitted.

Jefferson Island Over Par Perdu Bayou

Nature of firm's responsibility: Load Ratings, Load Testing, Instrumentation Plans, Testing Plans

Firm members involved include: Brett Commander (Principal Engineer, PE Review); Brice Carpenter (Lead Analysis Engineer - Model Calibration, Load Rating, and Reporting)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

17. Firm Experience:

TriCoeur Services, LLC	**Past Performance Evaluation Discipline(s)***	Bridge

LaPalco Boulevard Overpass of Bayou Segnette				**Firm responsibility (prime or sub?)**	Sub
Project number	Parish #2013-010-RB	**Owner's name**	Jefferson Parish		
Project location	Baton Rouge, LA		**Owner's Project Manager**	Ryan Breaux	
Owner's address, phone, email	3421 N Causeway Blvd Ste 203, Metairie, LA, 70002 / 504.838.3880 / rabreaux@jeffparish.net				

Services commenced by this firm (mm/yy)	03/14	**Total consultant contract cost ($1,000's)**	N/A
Services completed by this firm (mm/yy)	07/14	**Cost of consultant services provided by this firm ($1,000's)**	$35.9

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

The existing structure is comprised of low level multiple span continuous CIP slab span units, AASHTO Type III and Type IV mod PS girder approach spans and a three span continuous main span steel plate girder unit. Barry prepared bridge rating analyses using AASHTOWare for primary component flexure and shear capacity ratings and supplementary analyses for steel plate girder link hanger and for haunch bearing rating of as found partial bearing conditions. Repair plan recommendations were reported to assist Parish maintenance and repair efforts.

Firm members involved include: Barry Gahagan, Aileen Foley

17. Firm Experience:

TriCoeur Services, LLC	**Past Performance Evaluation Discipline(s)***	Bridge / Other

I-10: LA 415 to Essen on I-10 and I-12 PHASE 1: West Of Washington Street To Essen	**Firm responsibility (prime or sub?)**	Sub

Project number	H.004100.5	**Owner's name**	LADOTD		
Project location	Baton Rouge, LA		**Owner's Project Manager**	Charles Nickel, P.E.	
Owner's address, phone, email	1201 Capitol Access Rd, Baton Rouge, LA 70802 / 225.379.1078 / charles.nickel@la.gov				

Services commenced by this firm (mm/yy)	02/21	**Total consultant contract cost ($1,000's)**	$75
Services completed by this firm (mm/yy)	02/21	**Cost of consultant services provided by this firm ($1,000's)**	$38

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

A VE Workshop was facilitated by Atkins/TriCoeur along with team members from Atkins, TriCoeur and LADOTD over a Virtual Value Engineering Workshop setting. The VE Workshop activities were undertaken during the week of February 08th – 12th, 2021. Barry Gahagan served as Bridge/Structural Team Member. The subject of the study was the I-10: LA 415 to Essen on I-10 and I-12; Phase 1: West of Washington Street to Essen Lane; S.P. No. H.004100.5.

The construction cost estimate indicated that the project would be delivered at a cost of approximately $715 million. During the course of the VE workshop, the team developed 30 VE Alternatives and 29 Design Suggestions. In addition, 29 Alternatives were thoroughly explored, and it was found that they were neither cost effective nor technically feasible. One of the goals of the VE Team was to identify opportunities through which cost savings might be realized while indicating ways in which the resulting savings might be invested back into the project to realize added value. It was estimated that between $60 and $75 million in value addition may be reasonably expected from the implementation of these alternatives.

Firm members involved include: Barry Gahagan, Aileen Foley

17. Firm Experience:

TriCoeur Services, LLC	**Past Performance Evaluation Discipline(s)***	Bridge / Other

I-20 MRB At Vicksburg Overlay And Rehab

Firm responsibility (prime or sub?)	Sub

Project number	H.012739.5	**Owner's name**	LADOTD	
Project location	Delta, LA	**Owner's Project Manager**	Charles Nickel, P.E.	
Owner's address, phone, email	1201 Capitol Access Rd, Baton Rouge, LA 70802 / 225.379.1078 / charles.nickel@la.gov			

Services commenced by this firm (mm/yy)	10/18	**Total consultant contract cost ($1,000's)**	$54
Services completed by this firm (mm/yy)	10/18	**Cost of consultant services provided by this firm ($1,000's)**	$8

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

A VE Workshop was conducted with Barry Gahagan served as Bridge/Structural Team Member at the LaDOTD Head Quarters in Baton Rouge and included a site visit to Vicksburg. The subject of the study was the I-20 MRB At Vicksburg Overlay And Rehab", State Project H.012739.5; Federal Project H012739.

The construction cost estimate indicated that the project would be delivered at a cost of approximately $44 million. During the course of the VE workshop, the team developed Twenty (20) Design Alternatives (some mutually exclusive) that offer an estimated four million dollars ($4 Million) in potential first cost value additions to be considered for implementation. These alternatives were selected as being reasonable considerations for incorporation in the design. There were also Nine (9) Design Suggestions that offer measures to simplify construction, provide various means for reducing costs (in these cases the savings are hard to quantify), may help to improve the operational requirements for the facility, and reduce the construction duration. One of the goals of the VE Team was to identify opportunities through which cost savings might be realized while indicating ways in which the resulting savings might be invested back into the project to realize added value in addition to mitigating risks.

Firm members involved include: Barry Gahagan, Aileen Foley

18. Approach and Methodology:

Team Approach

Gresham Smith understands the enormous responsibility owners have in operating and maintaining public bridges and the gravity of the impacts that load posting decisions have on mobility and the economy. We understand that posting avoidance is not just a technical engineering exercise but also an art form that has to negotiate many unique in-service factors. This requires more than a typical bridge design engineer.

Gresham Smith's FHWA-trained and certified team of specialized bridge load rating experts can evaluate a wide variety of standard and complex bridges using different analysis methods to support critical load rating decisions. Our team's professional experience has rated and strengthened thousands of bridges across the nation. Over the last three years, our firm's team has been the consultant of choice to deliver nearly 300 bridge load ratings for the Tennessee Department of Transportation. Our team has the proven ability to meet the most demanding schedules using our innovative and enhanced load rating process. Our local bridge staff brings extensive load rating experience gained at other firms and we are currently providing bridge inspection for the Department's complex structures.

Gresham Smith's **Project Executive (Principal), Herbert "Bert" Moore II, P.E., PLS, PTOE** has over 20 years of experience, including six years of experience as District 61 Traffic Operations Engineer (DTOE). As Project Executive, Bert will provide overall management and direction for our team, ensuring that LADOTD's vision for the project is achieved. **John Weres, P.E.**, will serve as **Project Manager and Lead Structures Engineer.** John brings over 40 years of experience including DOTD experience, complex bridge design and inspection experience and major program management with multiple bridges. **Adam Davidson, P.E.** will serve as **Quality Control Lead** for the bridge rating program. Adam currently leads our Nashville bridge team and is responsible for our bridge rating program for TDOT, as detailed in our Project Experience section. In addition, **Dr. Yun Lin, P.E.** will lead our complex analysis and modeling as required. Dr. Lin is a former Baton Rouge resident and is experienced with DOTD policies and procedures and has worked on inspection of several of our complex bridge structures.

To support our staff, we have teamed with two subconsultant firms. **Tricoeur Services LLC**, a certified DBE firm will support the bridge load ratings and quality control aspect. In addition, **Bridge Diagnostics, Inc. (BDI)** will continue their teaming relationship with our firm and provide Bridge Load Testing and miscellaneous testing services as needed.

Scope of Work

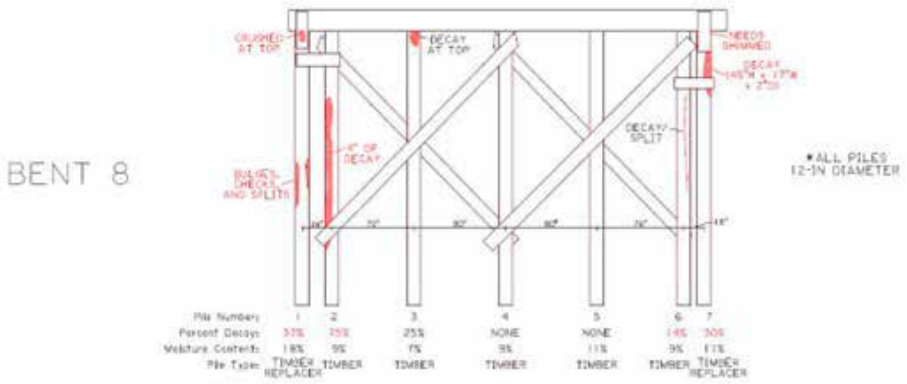
Gresham Smith thoroughly understands the contractual operations with DOTD IDIQ contracts, and the details required to establish efficient budgets for bridge rating task orders through our experience with the Complex Bridge Inspection program (6 separate task orders to date) and the ongoing TDOT retainer contract. When a task order or group of bridge ratings is identified by DOTD, Gresham Smith can assist with the development of the technical scope and prepare the staff hours and cost proposal within 2 weeks. We will utilize standard spreadsheets to facilitate DOTD's development of an independent cost estimate and then provide recommendations on adjusting the scope of estimates to ensure that the task orders can quickly process through Consultant Contract Services.

Beginning a project with thorough and complete information provides the proper foundation for a successful bridge rating assignment. Gresham Smith's preliminary work will begin even before the Notice to proceed. First item of work would be development of our Project Plan which is shared with our entire internal team so that everyone is familiar with the scope and schedule requirements. Upon NTP, we will obtain all necessary information and files, including past bridge inspection reports, historical bridge plans, standard plans from the construction year and similar information. With our current bridge inspection project, we are familiar with AssetWise and the available past reports and ratings stored in that database. Our team members have also visited the DOTD's plans records room and obtained old bridge plans from microfilm, including the necessary research. For any off-system bridges, we can contact the local Parish and request all available information.

Site visits or Special Inspections will be performed as required to gather additional information, take all necessary information, and to verify the issues and degree of deterioration previously reported. In addition to our complex bridge inspection activities, out team has also performed over 30 Special Inspections for DOTD including inspection and

measurements of full-timber bridges. The adjacent sketch is an example of our timber inspection notes level of detail.

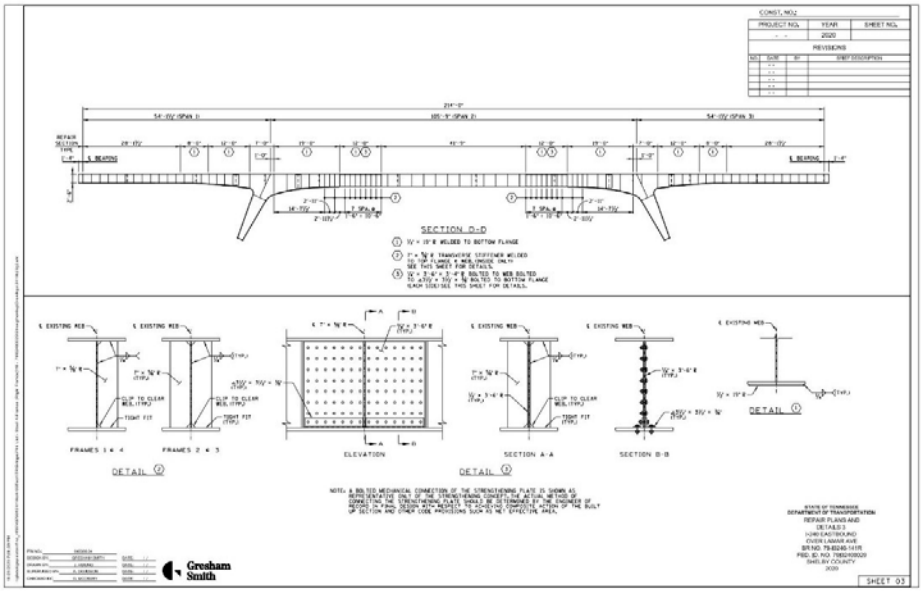
Features such as cracks, spalls, corrosion, and displaced members are oftentimes determined from careful review of the photographic records, and depending on the defects found in the photos, a first pass analysis can be performed to determine if the observed defects negatively affect the analysis to a point where a legal load limit would be necessary.



For the bridge rating and analysis, the Gresham Smith team will utilize AASHTO BrR rating program whenever possible to expedite the analysis and facilitate data sharing for future ratings. When necessary due to the complexity of the structure or inadequate rating results, a refined analysis would be performed. Our staff is experienced in utilizing in-house developed spreadsheets with MathCAD and intricate software such as Midas and CSIBridge for finite element analysis. The vast majority of bridges can utilize the BrR rating program; however, even for “standard bridges”, details such as curved girders, flared spans, and intersecting ramps can require a more refined analysis. For bridges without plans and when an appropriate Standard Plan is not able to be determined, our team can develop bridge rating plans to document the field measurements and assumptions.

With a group of specialized load bridge rating engineers and an optimized workflow, our team will develop accurate bridge rating models for each assignment. Then utilizing our typical, QA/QC Process, our team will verify and document the accuracy of our ratings and reports. Once the load rating is complete, each bridge goes through a multi-level QC process with checklists for the superstructure, substructure, and report items before a final QA review is conducted on the completed report. For all bridges that require a posting, our team will propose a refined analysis as appropriate to remove or improve the load rating. Gresham Smith will immediately notify DOTD of any required posting and discuss further options to avoid posting of bridges.

As part of our ongoing bridge load rating work with the Tennessee Department of Transportation, Gresham Smith has made it standard practice to include a section in our load rating reports that identifies specific locations and the controlling force effects of the low rating factors and conceptual approaches to improve the load posting. This information can be utilized by DOTD’s maintenance forces or used to develop bridge repair plans.



A final task for each assignment would be to update existing bridge rating files within the AssetWise database and bridge records folder. We understand the process for uploading the load rating reports and rating factor information to this system through our ongoing bridge inspection contract. After each rating is performed and submitted to LA DOTD for comments, the Load Rating Report and Rating Factor information is uploaded to AssetWise and we can provide monthly reports to the Bridge Maintenance Section on changes and any missing information identified.

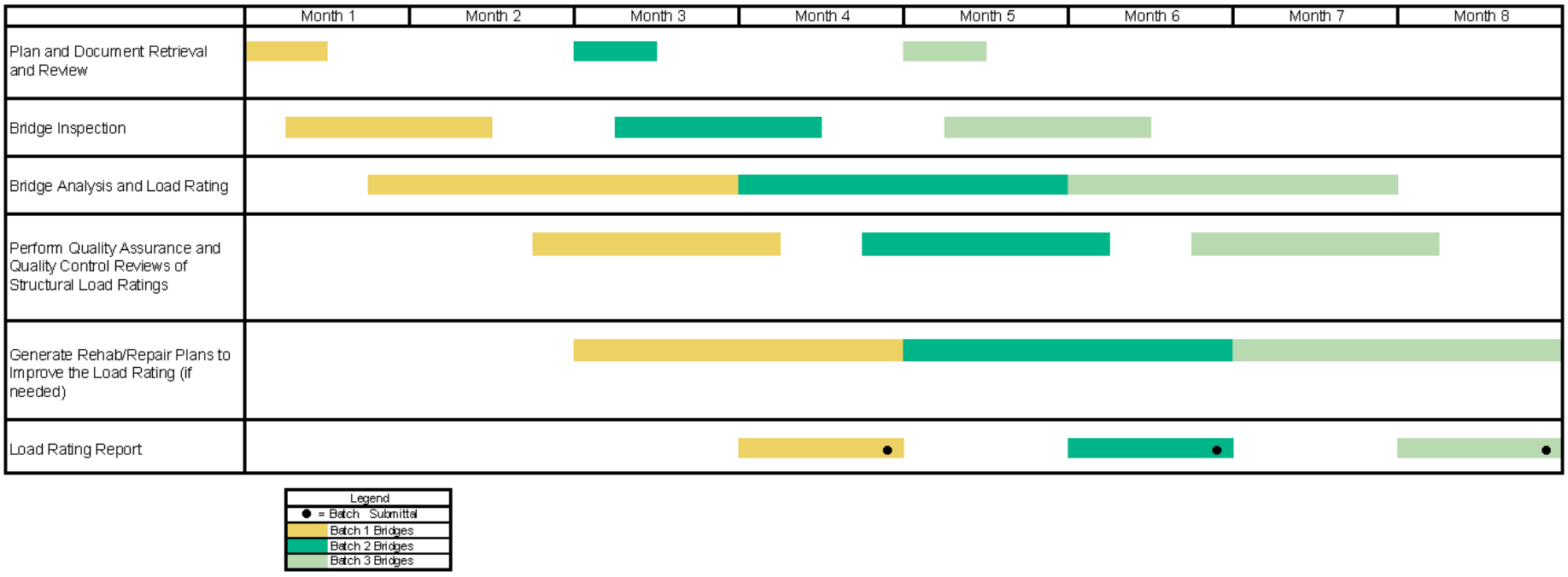
When required testing and field sampling is required, our subconsultant, Bridge Diagnostic, Inc., will provide any required sampling, instrumentation, non-destructive testing/evaluation (NDT/NDE), and structural health monitoring (SHM). BDI will utilize state of the art equipment and software for data acquisition, instrumentation, and communication of data from the bridge directly to a custom monitoring website for LADOTD's use. Field installation techniques, software and hardware are customized for each project's objective for both temporary and permanent applications.

Our number one goal is to help our clients make well-informed decisions – we do this by exhausting all refinement options and implementing the latest research to avoid unnecessary load posting, repair/strengthening, and bridge replacement whenever possible.

Demonstrated Ability to Meet Schedules

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. TDOT has repeatedly selected Gresham Smith to provide bridge load ratings on various task orders based on our ability to meet FHWA mandated schedules on large volume routine structures as well as complex structures.

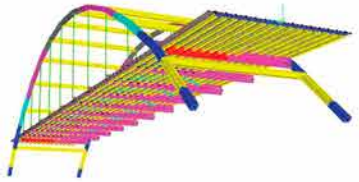
Our team provides the ability to "staff-up" to meet any schedule and also the ability to assign the most technically qualified staff for any particular structure. A bridge rating program schedule would be dependent on the number of bridges to be rated, their complexity, whether inspections are required to verify member sizes or condition, and whether bridge repair plans are required for any or all bridges in a particular group. The schedule below demonstrates our understanding of a typical bridge rating program where multiple bridges are rated in groups or batches, as assignments are delegated. The schedule shows that our team would have the flexibility to work on several groups or batches of bridge rating assignments at one time with overlapping work included for the inspections, analysis, report preparation and generation of repair plans.

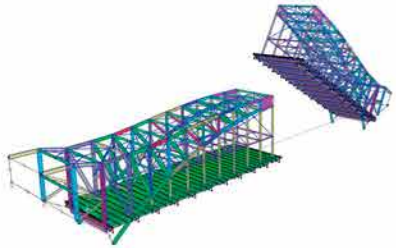


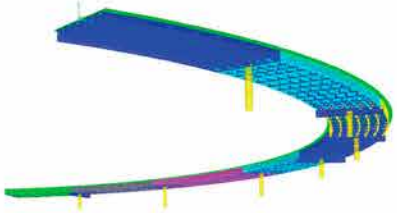
"The team at Gresham Smith has consistently delivered high quality load ratings of TDOT bridges. They have the ability to work on a wide variety of bridge types and complexities. TDOT has specifically assigned bridges that are challenging to load rate and model to the Gresham Smith team, due to their exceptional understanding of current load rating practices and ability to provide insight on these issues."

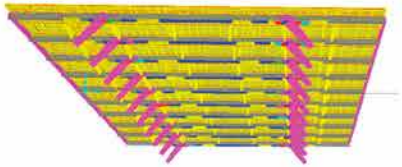
— *TDOT Rebecca Hayworth, P.E. | C.E. Manager 1, Structures Division / Bridge Inspection Office*

Refined Analysis for Complex Bridges









Refined Analysis for Conventional Bridges can Avoid Unnecessary Postings

- Validate Average Daily Truck Traffic
- Reduce Dynamic Allowance When Applicable
- Consider Striped Lanes
- Improve Serviceability Checks
- Reduce Adjacent Lane Loads
- Use Finite Element Analysis
- Include Barrier Stiffness
- Consider the Latest Industry Research
- Recommend Instrumenting and Load Testing

- 3D FEM for RC T-beam bridge
- Striped lanes considered
- Improved rating factor
- Unnecessary weight restriction avoided

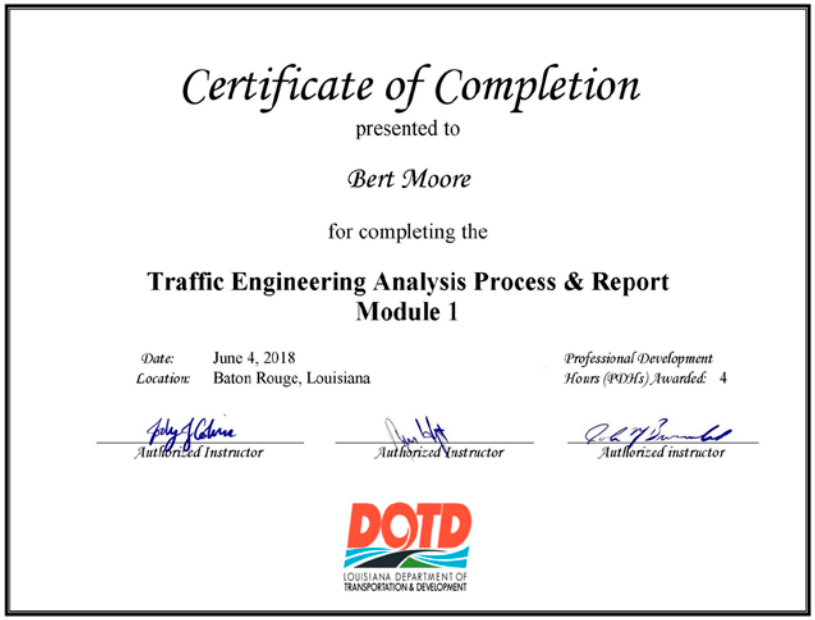
- 3D FEM Steel Tub-girder bridge
- Flexibility at bridge supports considered
- Improved rating factor due to moment redistribution
- Unnecessary weight restriction avoided

19. Workload:

Firm (All firms must be represented in this table)	**Past Performance Evaluation Disciplines(s) ***	**Contract Number and State Project Number**	**Project Name and Location**	**Remaining unpaid balance****
Gresham Smith	Traffic	4400005890; H.12018.5	Lafayette Adaptive Traffic Signals	$122,288
Gresham Smith	Road	4400005894; H.012279.5	LRSP/SRTS Endom Bridge Construction Support Supplement	$4,326
Gresham Smith	CE&I/OV / ITS	4400011253; H.011500.6	Lake Charles ITS Phase 3	$205
Gresham Smith	CE&I/OV / ITS	4400011253; H.012381.6	Fiber Optic Mapping and Management Services - Calcasieu, Jefferson, Orleans, Ouachita, Plaquemines and St. Charles	$165,076
Gresham Smith	Bridge	4400013322; H.009730.5	Complex Bridge Inspection TO #4	$8,386
Gresham Smith	Bridge	4400013322; H.009730.5	Complex Bridge Inspection TO #5	$54,860
Gresham Smith	Bridge	4400013322, H.009730.5	Complex Bridge Inspection TO #6	$161,595
Gresham Smith	Road	4400019871; H.013720.5	LRSP/STRPPP Bonner Street Bridge Pedestrian Improvements	$12,354
Gresham Smith	Road	4400019871; H.013767.5	LRSP/STRPPP Signs and Striping - St. Landry and St. Martin Parishes	$19,002
Gresham Smith	Road	4400019871; H.013073.5	LRSP/STRPPP Greenwells Springs & Wooddale Sidewalks	$133,040
Gresham Smith	Road	4400019871; H.015086.5	LRSP/STRPPP LA 14	$252,715
Gresham Smith	CE&I/OV	4400013851; H.009308.6	TO#1 New Orleans DPW SRTS Sidewalk Project	$18,898
Gresham Smith	Bridge	4400013322 H.009730.5	Complex Bridge Inspection TO#6 - District 62	$64,065
Gresham Smith	CE&I/OV	4400024424; H.013256.6	LADOTD I-10 ITS Scott to Lake Charles	$351,608
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 1 General Services BDI1904004	$6,672
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 7 Bonnet Carre Spillway 2006002	$13,858
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 8 I-10 Atchafalaya Floodway (EB&WB) and I-10 Over Whiskey Bay Pilot Channel	$2,675
BDI	Bridge	4400017163; H.014703.5	Retainer for Non Destructive Evaluation of Structures Task Order 9 Non-Destructive Evaluation of Structures Calcasieu Parish	$4,085

Firm (All firms must be represented in this table)	**Past Performance Evaluation Disciplines(s) ***	**Contract Number and State Project Number**	**Project Name and Location**	**Remaining unpaid balance****
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 10 Non-Destructive Evaluation of Structures Structures 300333-612404500700651, 300335-612404500700652, and 300330-612404500700141	$8,310
BDI	Bridge	4400002791; H.009859.5	Bridge Monitoring System Maintenance	$105
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 11 Non-Destructive Deck Evaluation of Structures Structures 623030, 621450, 623040, 620248, 623060, 623070, 621460, 623050, 620249, and 623020	$265,961
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 12 Deck Evaluation of I-10 Atchafalaya Basin Bridges District 03	$15,511
BDI	Bridge	4400017163; H.009730.5	Retainer for Non Destructive Evaluation of Structures Task Order 13 NBI Inspection of I-10 Bonnet Carre Spillway Bridges District 02	$38,998
BDI	Data Collection	4400017263; H.010603.6	Mississippi Bridge at Vicksburg GPS Monitoring	$7,745
TriCoeur Services, LLC	Bridge	4400013405; H.013098.5	Off System Bridge Program, Vernon Parish Jim Cryer Road Bridge, Stage 3 – Part IV Final Plans	$9,228

20. Certifications/Licenses:



Certificate of Completion

presented to

Bert Moore

for completing the

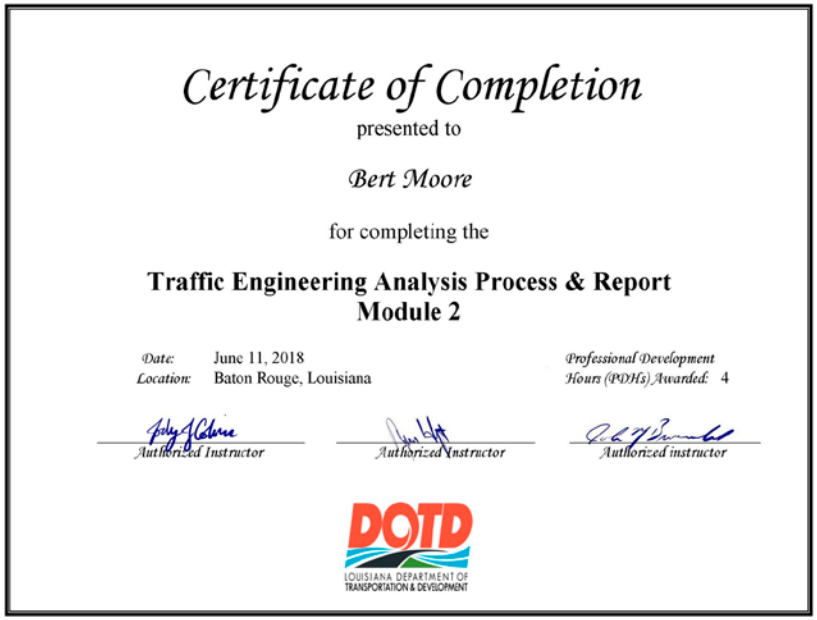
Traffic Engineering Analysis Process & Report
Module 1

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

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Bert Moore

for completing the

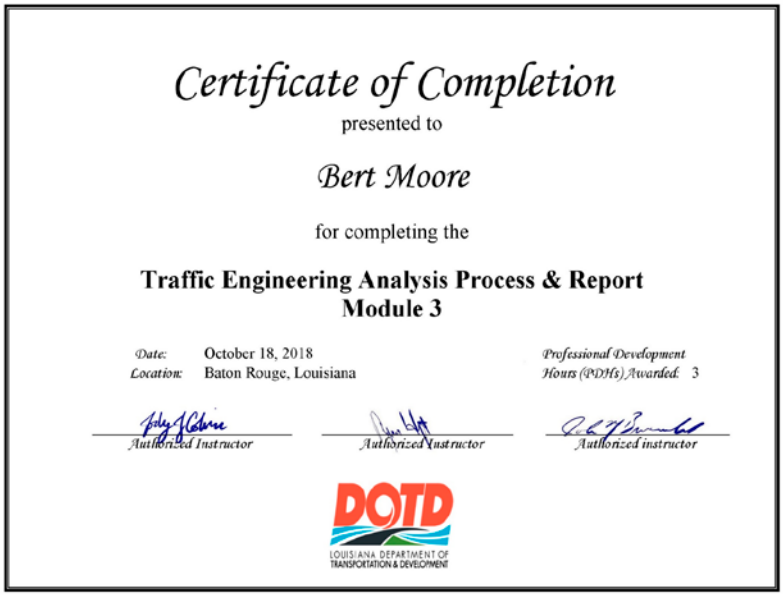
Traffic Engineering Analysis Process & Report
Module 2

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

Professional Development Hours (PDHs) 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 (PDHs) 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

LOUISIANA'S ON THE MOVE DOTD BUILDS THE WAY

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:

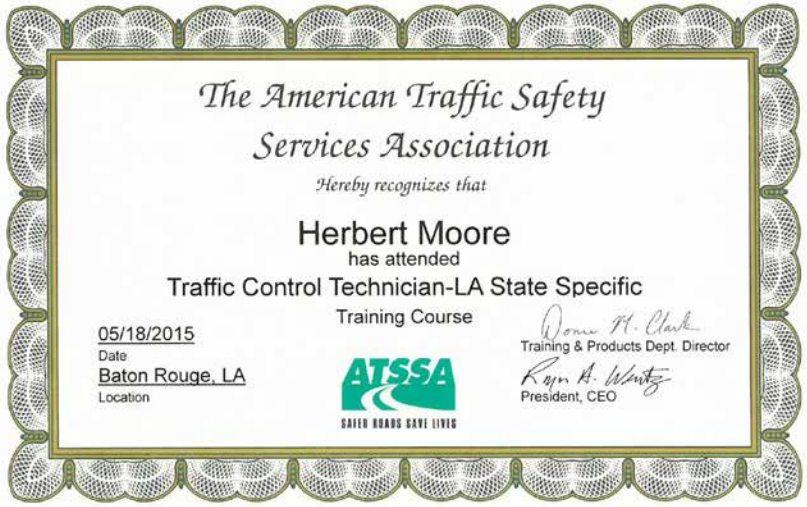
Regional Crash Data Workshop

Director of Louisiana LTAP Center

LOCAL TECHNICAL ASSISTANCE PROGRAM LTAP

February 23, 2017
Date

Baton Rouge, Louisiana
Location



The American Traffic Safety
Services Association

Hereby recognizes that

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

05/18/2015
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

SLOW

This is to affirm that
Herbert Moore
has satisfied the requirements
to be designated as a
CERTIFIED FLAGGER

Expiration Date ~~4/25/2023~~ *State Issued in* ~~LA~~

Instructor Signature

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

The American Traffic Safety Services Association

Hereby recognizes that

Herbert Moore

has attended

Traffic Control Supervisor-LA State Spec

Training Course

4/29/15 to 4/30/15
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Herbert Moore

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

4/13/2019 to 4/13/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

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*

Ken Tidwell, PE
Instructor

Allison H. Landrey
Local Coordinator

Thomas Harman
Instructor

Thomas Harman, Director
National Highway Institute

The American Traffic Safety Services Association

Hereby recognizes that

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

07/24/2018
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Klingler
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

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

07/26/2018
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Klingler
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

ATSSA
SAFER ROADS SAVE LIVES

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

SLOW

This is to affirm that

Brennon Hughes

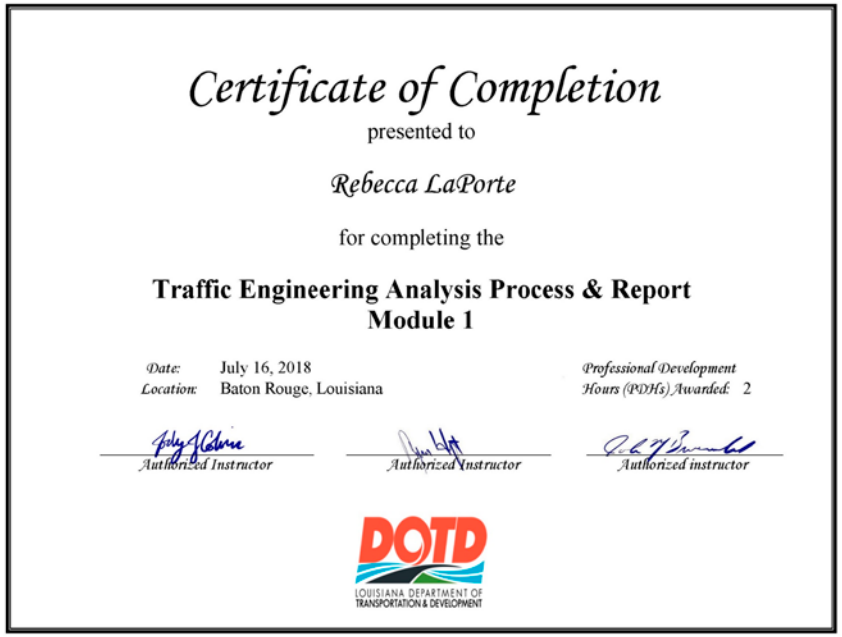
has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 4/28/2023 *State Issued in* LA

Instructor Signature

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



Certificate of Completion

presented to

Rebecca LaPorte

for completing the

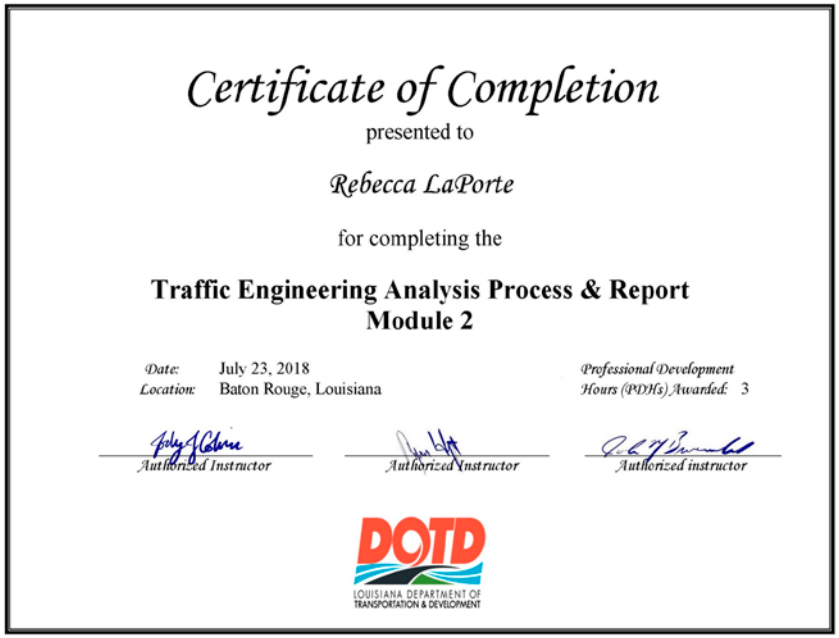
Traffic Engineering Analysis Process & Report
Module 1

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

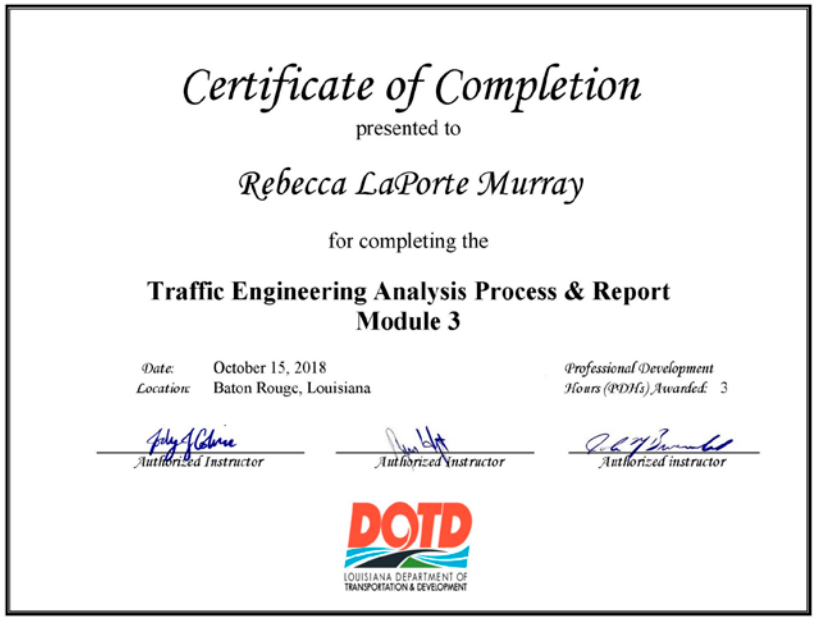
Traffic Engineering Analysis Process & Report
Module 2

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

The American Traffic Safety Services Association

Hereby recognizes that

Rebecca LaPorte

has attended

Traffic Control Technician-LA State Specific

1/12/16 to 1/12/16
Date

Baton Rouge, LA
Location

Training Course

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

SAFER ROADS SAVE LIVES

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

The American Traffic Safety Services Association

Hereby recognizes that

Rebecca LaPorte

has attended

Traffic Control Supervisor-LA State Specific

1/13/16 to 1/14/16
Date

Baton Rouge, LA
Location

Training Course

SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

Mead & Hunt

In cooperation with the
Louisiana Department of Transportation & Development
presents this

Certificate of attendance and participation for:

John S. Weres

Training Course:
Maintenance and Rehabilitation of Historic Bridges

Transportation Training and Education Center
4099 Gourrier Avenue, Room 179
Baton Rouge, Louisiana 70808

Please select the date you attended the course:

- ☐ Tuesday, April 12, 2016
- ☐ Wednesday, April 13, 2016
- ☐ Tuesday, May 10, 2016
- ☐ Wednesday, May 11, 2016
- ☐ Tuesday, July 12, 2016
- ☒ Wednesday, July 13, 2016

You have earned 8 PDH units that can be applied to applicable continuing education requirements for professional engineering licensure.

Amy Squitieri
Mead & Hunt Instructor
Amy Squitieri

Darrell Berry
Mead & Hunt Instructor
Darrell Berry, PE, SE

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

John Weres

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by
Kansas Department of Transportation

Date: February 2-13, 2015 *Hours of Instruction:* 67
Location: Topeka, Kansas

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

John Weres

has participated in

FHWA-NHI-130092 Load and Resistance Factor Rating of Highway Bridges

hosted by
Mississippi Department of Transportation

Date: June 07-10, 2022 *Hours of Instruction:* 24
Location: Jackson, MS

Instructor

Instructor

Local Coordinator

Thomas Harman, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

JOHN WERES

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by
LA DOTD/LTRC

Date: February 26 – March 1, 2019 *Hours of Instruction:* 25
Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

John Weres

has participated in

FHWA-NHI-130091B Underwater Bridge Repair, Rehabilitation, and Countermeasures

hosted by
Texas Department of Transportation

Date: *July 17 –18, 2018*
Location: *Fort Worth, TX*

Hours of Instruction: *14*

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

John Weres

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by
Kansas Department of Transportation

Date: *February 2-13, 2015*
Location: *Topeka, Kansas*

Hours of Instruction: 67

Guy R Lang PE
Instructor

William R Hartman PE
Instructor

Becky Welsh
Local Coordinator

Valerie Briggs, Director
National Highway Institute

Mead & Hunt

In cooperation with the
Louisiana Department of Transportation & Development
presents this

Certificate of attendance and participation for:

Courtney Rome

Training Course:
Maintenance and Rehabilitation of Historic Bridges

Transportation Training and Education Center
4099 Gourrier Avenue, Room 175
Baton Rouge, Louisiana 70808

Please select the date you attended the course:

- ☐ Tuesday, May 1, 2018
- ☑ Wednesday, May 2, 2018

You have earned 8 PDH units that can be applied to applicable continuing education requirements for professional engineering licensure.

Mead & Hunt Instructor
Amy Squitieri

Mead & Hunt Instructor
John A. Rathke, PE, SE

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Courtney Rome

has participated in

FHWA-NHI-135095
Two-Dimensional Hydraulic Modeling of Rivers at Highway Encroachments

hosted by

Arkansas State Highway & Transportation Department

Date: November 15-17, 2016
Location: Little Rock, AR

Hours of Instruction:
Each Day of Training = 7 Hours

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

COURTNEY ROME

has participated in

FHWA-NHI-130056 Safety Inspection of In-Service Bridges for Professional Engineers

hosted by

LA DOTD/LTRC

Date: May 13-17, 2019
Location: Baton Rouge, LA

Hours of Instruction: 34

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Courtney Rome

has participated in

FHWA-NHI-132070 Drilled Shaft Foundation Inspection

hosted by

Arkansas Highway and Transportation Department

Date: June 6-8, 2017
Location: Little Rock, AR

Hours of Instruction: 14.0

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

Certificate of Attendance

Yun Lin

has participated in

AASHTOWare Bridge Rating Fundamentals Training

hosted by

LA DOTD/LTRC

Date: August 1st-2nd, 2017
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 12

Herman Lee, P.E., PMP
Michael Baker International

Michael S. Pichura, P.E.
Michael Baker International

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Yun Lin

has participated in

FHWA-NHI-130081 LRFD for Highway Bridge Superstructures

hosted by

LA DOTD/LTRC

Date: October 17-20, 2016
Location: Baton Rouge, LA

Hours of Instruction: 25

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Yun Lin

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

Texas Department of Transportation

Date: April 24- May 5, 2017
Location: Fort Worth, TX

Hours of Instruction: 67

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Yun Lin

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

Texas Department of Transportation

Date: April 24- May 5, 2017
Location: Fort Worth, TX

Hours of Instruction: 67

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

ADAM S DAVIDSON

has participated in

FHWA-NHI-130053
Bridge Inspection Refresher Training

hosted by

Indiana Department of Transportation

Date: November 3-5, 2015 ***Hours of Instruction:*** 18

Location: Indianapolis, IN

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Adam Davidson

has participated in

FHWA-NHI-130078 – Fracture Critical Techniques for Steel Bridges

hosted by

Ohio Department of Transportation

Date: September 10-13, 2013 ***Hours of Instruction:*** 21

Location: Columbus, OH

Instructor

Local Coordinator

Instructor

Richard Barnaby, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

national highway institute

Certificate of Training

Ruth Steele

has participated in

FHWA-NHI-130092

Load and Resistance Factor Rating of Highway Bridges

hosted by

Texas Department of Transportation

Date: August 10-13, 2021

Location: Online Delivery, TX

Hours of Instruction: 24

Instructor

Instructor

Shandon Richardson
Local Coordinator

Thomas Harman

Thomas Harman, Director
National Highway Institute

LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Brice Alan Carpenter

License/Certificate Type - Number	Expiration Date
PE.0039341	03/31/2023

Status: Active

LOUISIANA PROFESSIONAL
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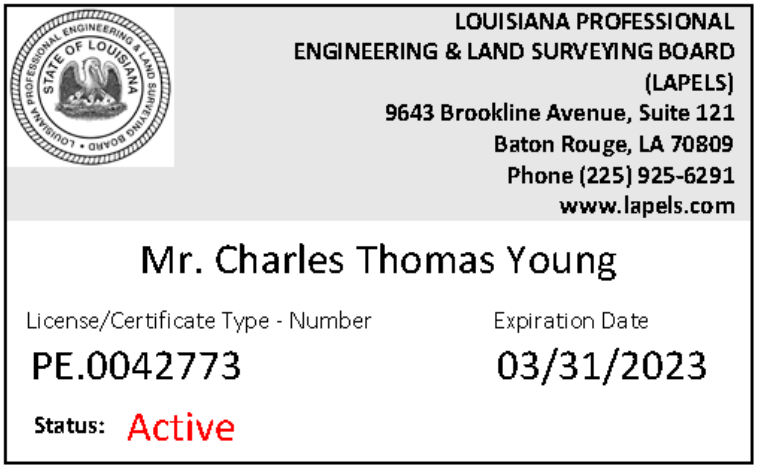
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Brett Cameron Commander

License/Certificate Type - Number	Expiration Date
PE.0035864	03/31/2023

Status: Active



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9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Charles Thomas Young

License/Certificate Type - Number
PE.0042773

Expiration Date
03/31/2023

Status: Active

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:

TriCoeur Services, LLC

Public Address:

Mr. Barry P. Gahagan, PE, PLS9270 Siegen Lane, Suite 501

Baton Rouge, Louisiana 70810

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004660	Active	09/16/2010	03/31/2023	Mr. Barry Patrick Gahagan # PE.0021586 - Active

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:

TriCoeur Services, LLC

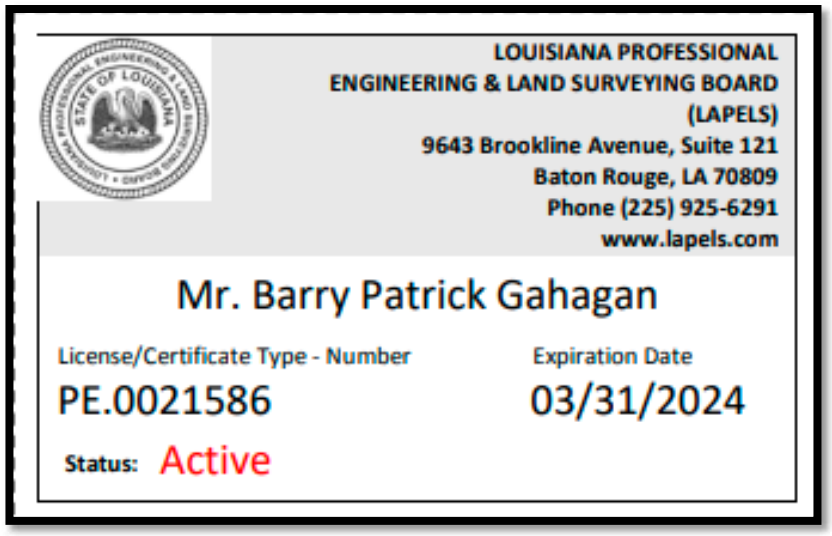
Public Address:

Mr. Barry P. Gahagan, PE, PLS9270 Siegen Lane, Suite 501

Baton Rouge, Louisiana 70810

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000653	Active	09/16/2010	03/31/2023	Mr. Barry Patrick Gahagan # PLS.0004834 - Active



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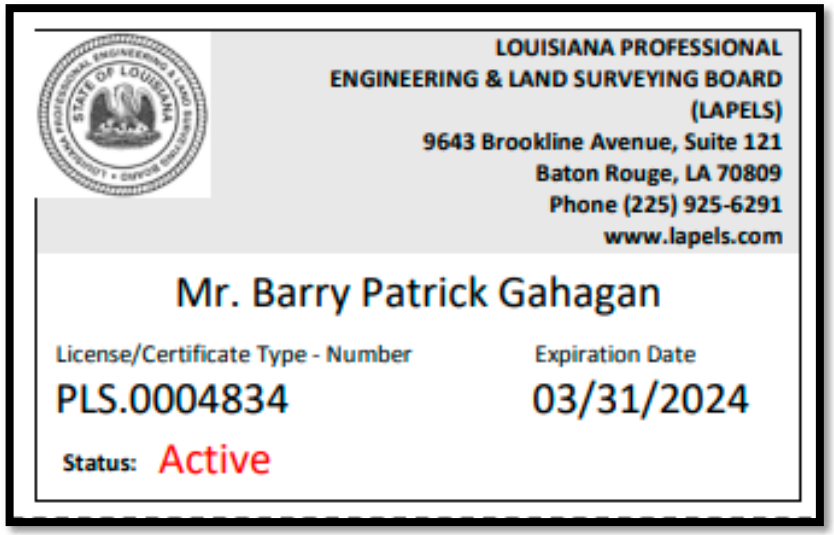
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Barry Patrick Gahagan

License/Certificate Type - Number
PE.0021586

Expiration Date
03/31/2024

Status: Active



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(LAPELS)
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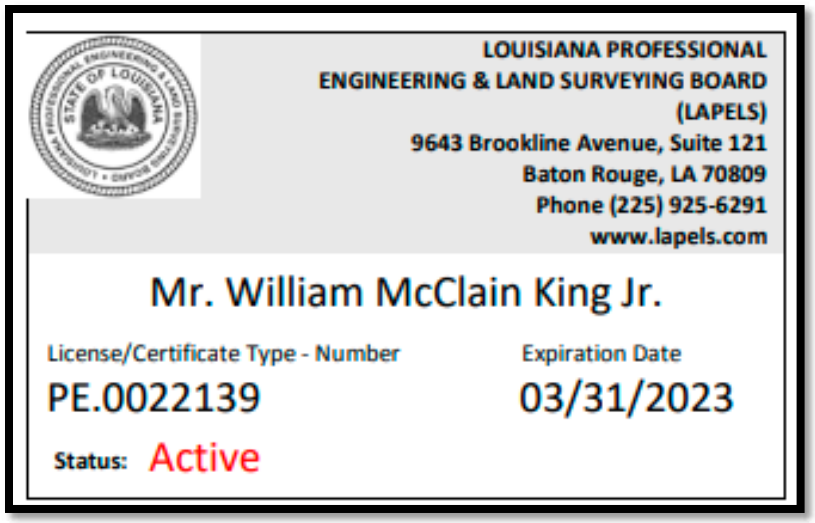
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Barry Patrick Gahagan

License/Certificate Type - Number
PLS.0004834

Expiration Date
03/31/2024

Status: Active



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ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. William McClain King Jr.

License/Certificate Type - Number
PE.0022139

Expiration Date
03/31/2023

Status: Active

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

Our team will provide a thorough QA/QC Plan upon contract award.

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
Bridge Diagnostics, Inc. (BDI)	4300 S I-10 Service Road W Ste 210 Metairie, LA 70001	Scott Aschermann, P.E. scotta@bditest.com	303.494.3230
TriCoeur Services, LLC	9270 Siegen Lane Suite 501 Baton Rouge, LA 70810	Barry Gahagan, P.E. bgahagan@tricoeur.com	225.228.2681

(Add rows as needed)

23. Location:

N/A

Gresham Smith

Genuine Ingenuity

Alpharetta, GA
Atlanta, GA
Baton Rouge, LA
Birmingham, AL
Charlotte, NC
Chattanooga, TN
Chicago, IL
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
Nashville, TN
Orlando, FL
Richmond, VA
Suwanee, GA
Tallahassee, FL
Tampa, FL

10000 Perkins Rowe
Suite 280
Baton Rouge, LA 70810

225.757.5849
GreshamSmith.com