LADOTD

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IDIQ Contract for Bridge Inspection Services Statewide Contract Numbers 4400023510, 4400023511, & 4400023512 February 24, 2022





Genuine Ingenuity

10000 Perkins Rowe Suite 280 Baton Rouge, LA 70810

225.757.5849 GreshamSmith.com February 24, 2022

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

RE: IDIQ Contract for Bridge Inspection Services Statewide | Contract Numbers 4400023510, 4400023511, & 4400023512

Dear Ms. Major,

Gresham Smith has been honored to partner with LADOTD on the current Complex Bridge Inspection program. To date, we have completed 3 task orders, all under budget and we are approximately 80% complete with Task Order 4. Our local staff of certified bridge inspectors and traffic control experts have teamed with select regional experts to meet all the needs for the complex bridge inspections.

We are proposing a similar team with this new project, with one key improvement. Four of our team members from the previous contract will again be key contributors to the success of the program. In addition, we have added Michael Baker International as a primary subconsultant to assist with the structural components of the inspections. Michael Baker is a nationally recognized expert in bridge inspection, and they were instrumental in developing the initial NHI training classes.

John Weres, P.E. with more than 40 years of experience will lead the inspection program, coordinating all of the various components. The structural inspections will be completed by staff selected from three major firms – Gresham Smith, Moffatt & Nichol, and Michael Baker. This will include conventional inspections, rope access, underwater inspections, and bridge load ratings and repairs. The technical expertise of our structural team is unmatched and additional staff is available to address any size project.

Our support team of specialized expertise will remain the same – we have developed a great working relationship and everyone is familiar with the program requirements. Forte & Tablada will be responsible for any surveying tasks, including point cloud development and drone access, as well as assistance with bridge load rating. Bridge Diagnostics, Inc (BDI) will be responsible for any ultrasonic testing and other non-destructive testing. KTA-Tator will be responsible for paint evaluation and testing.

Sincerely,

Gresham Smith

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

DOTD FORM: 24-102 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 Inspection Services Statewide
2. Contract number(s) as shown in the advertisement	4400023510, 4400023511, and 4400023512
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (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. 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 (shall be the same person as #9): When the same person as #9): Date: February 24, 2022
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): N/A Firm(s)' %:

12. Past Performance Evaluation Discipline Table:

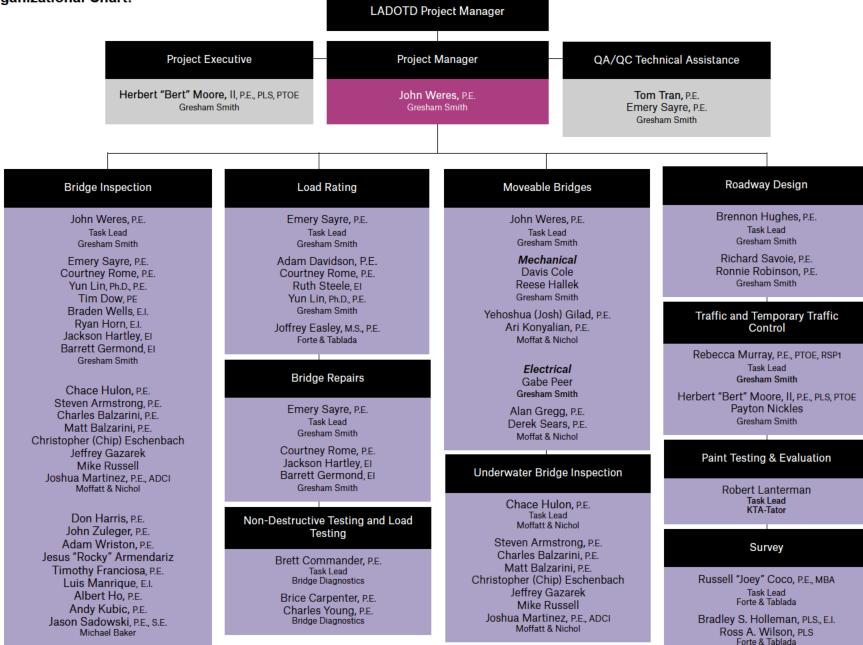
Past Performance Rating Categories	% of Overall Contract	Gresham Smith (Prime)	Moffat & Nichol (Sub)	Michael Baker (Sub)	Forte & Tablada (Sub)	KTA-Tator (Sub)	Bridge Diagnostics, Inc. (Sub)
Bridge	93%	51%	22%	18%	2%	3%	4%
Traffic	5%	100%					
Survey	2%				100%		
Identify	/ the percentag	e of work for the	e <u>overall contra</u> sub-cons		ed by the prime o	consultant and ea	ach
Percent of Contract	100%	52%	20%	17%	4%	3%	4%

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	2
Gresham Smith	Supervisor-Engineer	5	8
Gresham Smith	Supervisor-Other	1	5
Gresham Smith	Engineer	4	11
Gresham Smith	Engineer-Other	1	4
Gresham Smith	Professional	1	3
Gresham Smith	Engineer Intern	6	8
Gresham Smith	Senior Technician	2	3
Gresham Smith	GIS Analyst	0	1
Gresham Smith	CADD-Operator	0	2
Gresham Smith	Clerical	1	1
Moffatt & Nichol	Accountant	1	10
Moffatt & Nichol	CADD Technician	1	25
Moffatt & Nichol	Engineer (LA PE)	6	25
Moffatt & Nichol	Inspector – Bridge	12	50
Moffatt & Nichol	Supervisor – Engineer	2	8
Moffatt & Nichol	Technician	5	12
Michael Baker	Administrative	1	2
Michael Baker	Clerical	1	2
Michael Baker	Engineer	0	4
Michael Baker	Engineer Intern	1	8
Michael Baker	Engineer - Other	6	28
Michael Baker	Inspector -Bridge	8	25
Michael Baker	Principal	1	5
Michael Baker	Senior Technician	1	13
Michael Baker	Supervisor - Eng	1	3
Michael Baker	Supervisor - Other	1	22
Michael Baker	Technician	1	12
Forte & Tablada	CADD Technician	4	8
Forte & Tablada	Instrument Man	1	1
Forte & Tablada	Party Chief	2	6

Forte & Tablada	Principal	1	3
Forte & Tablada	Rodman	1	11
Forte & Tablada	Supervisor – Engineer	1	1
Forte & Tablada	Senior Technician	1	3
KTA-Tator, Inc.	Supervisor-Other	1	12
Bridge Diagnostics	Principal	3	5
Bridge Diagnostics	Supervisor – Engineer	3	6
Bridge Diagnostics	Supervisor – Other	3	6
Bridge Diagnostics	Engineer – Other	3	6
Bridge Diagnostics	Engineer Intern	3	7
Bridge Diagnostics	Senior Technician	8	12
Bridge Diagnostics	Technician	3	6
Bridge Diagnostics	Computer Analyst	2	5
Bridge Diagnostics	Accountant	1	3
Bridge Diagnostics	Clerical	1	3

14. Organizational Chart:



*See Page 108 for Inspectors and Divers qualification summary, including NHI, SPRAT, and ADCI diver certifications.

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 / certification required	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
			PLS	Louisiana	Exp. 9/30/2022 PLS LA 5043
			PLO	Louisiana	Exp. 9/30/2022
			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. 9/30/2022
			PLS	Louisiana	PLS LA 5043
					Exp. 9/30/2022
			PTOE	International	PTOE 2728
					Exp. 9/30/2024
3.	John Weres, P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 36429
					Exp. 9/30/2022
	Emery Sayre, P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 34414
					Exp. 9/30/2023
	Tom Tran, P.E.	Gresham Smith	P.E. (Civil)	Louisiana	P.E., LA 32072
					Exp. 3/31/2022
4.	Chace Hulon, P.E.	Moffatt & Nichol	P.E. (Civil)	Louisiana	P.E., LA 39701
					Exp. 9/30/2023
5.	Ross Wilson, PLS	Forte & Tablada	PLS	Louisiana	PLS, LA 5148
					Exp. 3/31/2022
	Bradley S. Holleman, PLS	Forte & Tablada	PLS	Louisiana	PLS, LA 5082
	-				Exp. 9/30/2022

(Add rows as needed)

	Staff Experiences Sham Smith	e:				
6	Jol	nn Weres, P.E. ect Manager / Lead Bi	ridge Engineer		Years of experience with this employer	5
	R				Years of experience with other employer(s)	37
	Degree(s) / `	Years / Specialization	Bachelor of Science /	1980 / Civil Er	ngineering, University of Pittsburgh	
		registration number / state / expiration date	PE.0036429 / LA / Exp	0. 9/30/2023		
		Year registered	2011 (LA) 1985 (PA)	Discipline	P.E./Civil	
Cont	tract role(s) / bri	ef description of respo	onsibilities	-	ager / Lead Bridge Engineer. John will manage the overall and lead the coordination of the bridge inspection teams.	
	erience dates n/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders" cover the time specified in the applicable MPR(s).	,
C.	06/19 – 03/20 LADOTD, Complex Bridge Inspections, Statewide, LA Project Manager. Task Order 1 - Retainer project for variable 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 Bo and the US165 Vertical Lift Bridge over Red River. Gresham Smith was able to complete the inspection of Bridge 0056 in Jeanerette, a steel swing truss and Bridge 009130, in Charenton, a steel swing truss – within the original budget.				byce	
S.	04/20 – 09/20 LADOTD, Complex Bridge Inspections, Statewide, LA Task Order 2 - Emergency Bridge Repairs, US 71 in Downtown Shreveport, LA Project Manager. In April 2020, a train derailment damaged Bent 3 of the Spring Street Bridge forcing the roadway closure. Gresham Smith was selected to perform the bridge repairs to open the bridge. Working with the selected contractor, helical piles were designed to support the new column foundations and crash wall. John served as the design coordinator and facilitated the repairs.					
C	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.					
C.	07/13 – 12/17 TDOT, Underwater Bridge Inspection Program, TN Lead Inspector. John served as technical lead for the underwater inspection of 57 structures throughout the state of Tennessee. John oversaw the field inspection and diving services and prepared the reports for each structure in accordance with NHI guidelines and requirements.					
C.	11/17 – 09/21	Design Engineer for th	ne final design of a 2-cel ter crossings improved t	l box culvert a	, MS Lead Structure Engineer. John served as the Lead and two prestressed concrete girder structures in northern conditions at the sites and incorporated low-maintenance	

*Icon represents key project highlighted in Section 17.

S.

09/16 – 03/17 With another firm	Complex Bridge Inspections, Various Locations, MS Team Leader. Prior to joining Gresham Smith, John served as Bridge Inspection Team Leader and Deputy PM for the in-depth inspections of the US 84 Dual Bridges over Mississippi River, steel cantilever truss structures in Natchez MS. A second major bridge inspection for MDOT included the I-110 Biloxi Bay Bridge, including the bascule movable span. Inspection access included UBI, telescoping manlift and boat mounted manlift.			
O7/20 – Ongoing O7/20 – Ongoing O7/20 – Ongoing LADOTD, Complex Bridge Inspections, Statewide, LA Project Manager. Task Order 3 - Retainer project for version 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 006 Vertical Lift Bridge at Loreauville, LA, Bridge 054360 Gross Tete Steel Swing Bridge and Bridge 054472 Indian Villa Steel Swing Bridge in Iberville Parish. Due to cost savings on the initial 3 bridges in Task Order 2, Gresham Smith version of Bridge 006306, Bayside Bridge in Jeanerette, a steel swing bridge – within the or budget for the initial three bridges.				
06/14 – 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.			
04/15 – 03/17 With another firm	LADOTD, I-49 Lafayette Connector, Lafayette, LA <i>Deputy Lead Structural Design Engineer.</i> 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.			
1985 – 1990 With the City	City of Pittsburgh, Bridge Department, Pittsburgh, PA <i>Project Engineer.</i> John managed the structures program for the City of Pittsburgh, including database management, bridge inspection (NBIS), consultant procurement, design reviews and construction management. He was responsible for the design of various retaining walls, pole foundations, and miscellaneous structures. Bridge inspection duties included free climbing of several trusses and arches, operating a bridge snooper, and coordinating with rigging firms. Inspection reports were prepared and reviewed; and coordinated with the state DOT as part of the statewide inspection program.			
Certifications (See section 20)	 American Traffic Safety Services Association –Traffic Control Supervisor, LA State Specific NHI 130055 Bridge Inspection Team Leader and NHI 130078 Fracture Critical Steel Inspection FAA Part 107 USAS (Drone) Pilot. 			
Career	John's 40+-year career includes diverse structure related activities including inspection, alternatives analysis, final design and construction management and program management. John served as Team Leader on several LA DOTD complex bridge inspections prior to joining Gresham Smith, and as Project Manager for underwater bridge inspections for TDOT.			

16. Staff Experienc	e:				
	om Tran, P.E. uctures QA/QC			Years of experience with this employer	9
AT				Years of experience with other employer(s)	22
	Years / Specialization	Bachelor of Scie University of Ce	nce / 1991 / Civil Er ntral Florida	ngineering,	
	e registration number / state / expiration date	PE.0032072 / L/	A / Exp. 3/31/22		
	Year registered	2005 (LA) 1996 (GA)	Discipline		
Contract role(s) / brief description of responsibilities Technical Resource / Structures QAQC. Tom will provide qualit bridge inspection reports.			eports.		
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders' over the time specified in the applicable MPR(s).	",
11/14 – 10/17	MDOT, MS-309 Bridge Replacements, Marshall County MS <i>Lead Bridge Engineer</i> . Tom served as the design engineer 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.				
07/15 – 12/18 - Design				ice the	
10/19 – Ongoing	MDOT, I-55 West Frontage Road Bridge Preservation (Bridge No.16.9C), Madison County, MS Lead Bridge Engineer. Gresham is performing Phase A & B Roadway Drainage analysis and design and bridge repair conceptual and final design for a			for a Fom is over	
11/13 – 10/14	11/13 – 10/14 MDOT, Roadway WA #4: US 82 Underpass Bridge Removal at Leland, Leland, MS Senior 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.				
01/13 – 06/14	Statewide, LA Senior	Bridge Engineer. existing foundation	Tom led the detailed	I-10 Twin Span ITS-Orleans & St. Tammany Parishes, I structural analyses of new camera poles and the DMS pole structure. The DMS pole required the design of a butterfly closure.	ś

16. Staff Experience	9:				
Gresham Smith Courtney Rome, P.E. Bridge Engineer			Years of experience with this employer	4	
The second secon				Years of experience with other employer(s)	7
Degree(s) /	Years / Specialization	Bachelor of Scie	nce / 2009 / Civil E	ngineering, Southern University and A&M College	
	registration number / state / expiration date	PE.0043355 / LA	A / Exp. 9/30/23		
	Year registered	2019 (LA)	Discipline	P.E./Civil	
Contract role(s) / br	ief description of respo	onsibilities	Bridge Engineer / rating and repair p	Courtney will perform bridge inspections and support the lo lan development.	oad
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders" over the time specified in the applicable MPR(s).	,
06/19 – Ongoing	LADOTD, Complex Bridge Inspections, Statewide, LA <i>Engineer.</i> 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. For Task Order 3 and 4 projects, Courtney is assuming a leadership role in the development of the reports and element level evaluations.				
Normal States (11/17 – Ongoing States)	MDOT, SR 178 Benton County Bridge Replacements, MS <i>Engineer.</i> Gresham Smith is providing 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.			ssed gn	
06/17 – 07/18				n, TN <i>Report QC.</i> Courtney provided quality assurance ructures throughout the state of Tennessee.	
04/20 – 08/20	04/20 – 08/20 LADOTD, Task Order 2, US 71 Spring Street Emergency Repairs, Shreveport, LA Design Engineer. Following the train derailment that damaged the steel bent for the US 71 Spring Street Bridge, Gresham Smith was selected to evaluate the structure and design the emergency repairs. Courtney led the substructure design elements including the temporary shoring to support the railroad loads and for the crash wall and helical piles.			uate	
07/18 – Ongoing	calculations including L prepared the bridge pla	eap Bridge Desig In sheets for two s f design and detai	n for FIB girders for structures including Is for MDOT's first (nty, MS Bridge Engineer. Courtney performed final design multiple span designs for two of the four bridges. Courtne all deck, beams, and foundations. Courtney led Gresham use of partial depth concrete deck panels, to accelerate	èy
Certifications (See section 20)	 NHI 130055 – Brid SPRAT Level 1 Ro 			130078 Fracture Critical Insp. Techniques	

16. Staff Experience	:				
	nery Sayre, P.E. nior Bridge Engineer			Years of experience with this employer	3
Nault				Years of experience with other employer(s)	17
Degree(s) /	Years / Specialization	Bachelor of Scie	nce / 2001 / Civil Ei	ngineering, University of Mississippi	
	registration number / state / expiration date	PE. 0034414 / L	A / Exp. 9/30/2023		
	Year registered	2009 (LA) 2007 (MS)	Discipline	P.E./Civil	
Contract role(s) / br	ief description of respo	onsibilities	Senior Bridge Eng rating and bridge r	ineer / Emery will perform bridge inspections and lead the epair tasks.	load
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders" over the time specified in the applicable MPR(s).	,
06/19 – Ongoing	an NHI certified Team I Inspection Program wit Bridge Inspection vehic has completed Task Or LA 1 Simmespo Jackson Street	Leader, Emery se h LADOTD's Sector the (UBI) and he a rder #1 in-depth b ort Truss over Atch Vertical Lift Bridge	rved as a structural tion 21. Emery provi lso performed qualit ridge inspections in		;
07/18 – 06/21	 07/18 - 06/21 MDOT, SR 178 Benton County Bridge Replacements, MS Bridge 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. Emery provided Services During Construction for the replacement of 2 rural bridges including review of all contractor submittals, including deck overhang designs, pile driving submittals, and shop drawings. 				f
04/20 – 08/20	04/20 – 08/20 LADOTD, Task Order 2, US 71 Spring Street Emergency Repairs, Shreveport, LA Design Engineer. Following the train derailment that damaged the steel bent for the US 71 Spring Street Bridge, Gresham Smith was selected to evaluate the structure and design the emergency repairs. Emery provided constructability reviews for the temporary support bracing system, the steel repairs, and railroad coordination.			uate	
07/18 – Ongoing	Phase B (Final Design) designed the two longe pilot to verify the ease of Engineer-of-Record for	o for the reconstru- er structures (Bridg of construction an the other two hyd action (Phase C) w	ction of S.R. 149 ne ge 128.2 and Bridge d as an accelerated fraulic crossing brid	IS Engineer. Gresham Smith is partnered with MDOT fo ar D'Lo, Simpson County, Mississippi. Gresham Smith 128.6), with partial depth deck panels utilized for MDOT a bridge construction (ABC) technique. Emery served as th ges (Bridge 131.4 and Bridge 131.7) and will manage the once it is awarded for construction.	as a

10/19 – Ongoing	MDOT, MS-493 Bridge Replacements, Lauderdale County, MS Design Engineer. Emery is serving as Engineer-of-Record (EOR) for the project and is responsible for the overall structural design and coordination with MDOT and the roadway designer for the final design 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. Emery is currently managing the bridge support services during construction (Phase C) work now that the construction contract has been awarded.
03/21 – Ongoing	TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN <i>Project Engineer.</i> Following the successful completion of 2019/2020 Task Orders for load rating of 90 complex structures, TDOT issued a 2021 task order to Gresham Smith for additional bridge load ratings. TO26 Included 21 complex bridges including Reinforced Concrete Hollow (Multi-cell) Box bridges, Reinforced Concrete Hollow (Multi-cell) Box spliced with Prestress-Precast Concrete Box Beam bridges, Rigid Frame (K-Frame) Reinforced Concrete Hollow (Multi-cell) Box spliced with Prestress-Precast Concrete Box Beam bridges, Steel Stringer-Floorbeam-Girder systems, Steel Rigid Frame (K-Frame) Bridges, Steel Curved Bridges with multiple ramp spurs (fingers), Integral bent caps, and 35 standard bridges to be rated using AASHTOWare BrR software in order to complete the load ratings of 56 bridges in 4 months. Emery supported the load rating of more than 13 of these bridges using the AASHTOWare BrR software.
09/18 – 11/18	MDOT, SR 15 over Potterchitto Creek Bridge Repairs, Newton County, MS Jacking Engineer. On behalf of the repair contractor, Emery designed and detailed temporary shoring and bridge jacking plans to allow for bearing replacements and the resetting of slab spans to correct horizontal alignment of the bridge railing and perform other repairs to the 17-span slab span bridge while maintaining traffic throughout the work.
06/16 – 11/16	MDOT, US-78/I-22 over Tallahatchie River Bridge Repairs, Union County, MS Shoring Engineer. On behalf of the repair contractor, Emery designed and detailed temporary top-down shoring to allow for partial demolition and reconstruction of the 3-span continuous box girder bridge.
08/13 – 08/14	MDOT, US 84 WB over Mississippi River Pin & Link Replacements, Adams County, MS <i>Assistant Project Manager.</i> On behalf of the MDOT Bridge Division, Emery managed the preliminary engineering phase including assisting in the development of RFQ and RFP documents for a \$4 million pin & link replacement project for the cantilevered through truss constructed in 1940.

16. Staff Experienc	e:				
Yu	Gresham Smith Yun Lin, Ph.D., P.E. Bridge Engineer			Years of experience with this employer Years of experience with other employer(s)	4
		Paphalar of Saia		ngineering, West Virginia University,	'
	Years / Specialization	Master of Science	ce / 2010 / Civil Eng	ineering, Penn State University / Structures, West Virginia University	
Active	e registration number / state / expiration date	PE. 0042444 / L	A / Exp. 9/30/2022		
	Year registered	2018	Discipline	P.E./Civil	
Contract role(s) / br	ief description of respo	onsibilities	Bridge Engineer / load rating analysi	Dr. Lin will perform bridge inspections and support complex s.	x
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", over the time 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.				
01/20 – 05/20	LADOTD, Complex Bridge Inspections, District 08 Bridges Bridge Inspector. As an NHI Certified Team Leader, Dr. Lin provided bridge inspection services for the Concrete Segmental Bridge in Boyce LA and also for the LA 1 truss bridge is Simmesport, LA.				
05/18 – 08/18		report for the GN	NO Bridge No. 1 in N	1 Bridge Inspector. Dr. Lin served as on-site inspector a New Orleans. Duties included the hands-on inspection of the hent.	
01/16 – 07/17	MDOT, Mississippi Bridge Load Ratings, Statewide, MS <i>Designer</i> . 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.				
03/21 – Ongoing	finite element methods arches with steel cables girder-floor beam-string prestressed girders for	and CSi Bridge se s supporting steel per system bridges center span bridge	oftware. The structu floor beam – string s, steel rigid K-fram les. The standard st	oject Engineer. Complex structures were analyzed utilizing tres load rated consisted of curved steel tub girders, steel er systems, deck trusses, bascule arched steel truss, steel e bridges, and reinforced concrete rigid k-frames with splice ructures were analyzed using the AASHTOWare BrR softw utilizing both CSiBridge and Midas programs where	ed

16. Staff Experience Gresham Smith):				
A	dam Davidson, P nior Bridge Engineer	Р.Е.		Years of experience with this employer	4
				Years of experience with other employer(s)	18
Degree(s)	Years / Specialization	Master of Science	ce / 2004 / Civil Eng	ineering, University of Tennessee	
Activ	e registration number / state / expiration date		I / Exp. 1/31/2024 cessing for LA PE lid	censure)	
	Year registered	2008 (TN)	Discipline	P.E./Civil	
Contract role(s) / b	rief description of respo	onsibilities	Senior Bridge Eng	ineer / Adam will perform bridge ratings.	
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders" over the time specified in the applicable MPR(s).	,
07/19 – 04/2020	curved steel tub girders a floor beam-stringer de work order, WO11-Sys	and two steel ar eck support syster tem Bridges and Ip the State meet	ch bridges with the n for WO#5. Based WO12-Off System I	roject Manager. Gresham Smith load rated 23 continuou roadway suspended from the arches by steel cables supp on our performance on WO #5, we were entrusted with a se Bridges, to load rate a total of 41 complex bridges within a adline. Emery performed Quality Control on the models and	oorting econd a 2-3-
03/21 – 10/21	analyzed utilizing finite girders, steel arches wi truss, steel girder-floor	TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN <i>Project Engineer.</i> 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			
10/15 – 06/17	ratings on several doze	n bridges as part ing the entire leng	of an on-call contra	FHWA Senior Bridge Engineer. Adam provided bridge ct, containing over 3,347 bridges in over 32 states and e Parkway and Natchez Trace Parkway. Bridge load rating	
10/15 – 06/17	bridge load ratings on 2 vehicle weight of appro	20 structures for the ximately 1.7 million tures were analyzed	ne passage of sever on pounds for the de red using AASHTOV	Ige Engineer. Prior to joining Gresham Smith, Adam prover al superload hauler configurations with a maximum gross livery of components to the Panda Stonewall Energy Cent Vare BrR software and included eight concrete culverts, or	ter in

16. Staff Experience Gresham Smith	e:					
Ti	m Dow, P.E. nior Bridge Engineer			Years of experience with this employer	8	
A A				Years of experience with other employer(s)	0	
Degree(s) /	Years / Specialization	Bachelor of Scie	ence / 2015 / Civil Er	ngineering, Southern Polytechnic State University		
Active	e registration number / state / expiration date	P.E. 43940 12/3	1/2022			
	Year registered	2018 (GA)	Discipline	P.E. / Civil		
Contract role(s) / b	rief description of respo	onsibilities	Senior Bridge Eng tasks.	ineer / Tim will support the bridge inspection and bridge rep	bair	
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", over the time specified in the applicable MPR(s).		
11/14 – 09/21	and bearing pad desigr	ns. The deck used	a link system to eli	hall County, MS <i>Design Engineer</i> . Tim provided the dec minate the deck joints at the simplespan beam joints. Tim a dures for this multi-span bridge.		
07/15 – 12/18	Sandersville, GA Bri Smith developed prelim existing roadway widen roundabout, bicycle acc using a reduced media	GDOT, SR 15/Sandersville Truck Route GRIP Rural Widening and New Bridge Over Railroad Spur Line, Sandersville, GA Bridge Engineer. Tim provided preliminary layout, final bridge design and plan preparation. Gresham Smith developed preliminary and final plans for a TIA truck bypass project, including a combination of new alignment and existing roadway widening to create a four-lane section, as well as a new bridge over a railroad spur line, a multilane roundabout, bicycle accommodations, and 3.3 miles of side road realignments. Tim developed a value engineering design using a reduced median width and MSE walls to reduce the bridge length to reduce costs, including mitigation costs. He assisted with the hydraulic analysis and design of a new triple 6-foot by 6-foot culvert at Sisters Church Creek.				
08/16 – Ongoing	bridge inspections and for seven bridges in Ne Specifications should h We used the 2014 Brid	creating bridge re wton County in a ave sufficient det ge Assessment re	epair plans for the pr ccordance with the 2 ail to be used in the eport, as well as, sev	A, Covington, GA Bridge Engineer. Jim was responsible ojects. Gresham Smith prepared the plans and specification 2014 Bridge Assessment previously completed for the coun selection of a contractor and for the performance of the work ven site visits as a basis for producing the repair plans and dge and cost estimate for each recommended maintenance	ns ity. irk.	
02/08 – 02/10	the bridge inspection of	f the twin 23 span plans, special pro	structures to provid	ilitation, Thomas County, GA Engineer of Record. Time e a comprehensive rehabilitation design. Gresham Smith et cost estimate. Proposed repairs included pile encasemen yment of the deck.		

16. Staff Experience Gresham Smith	9:				
Bra	aden Wells, El Ige Engineer Intern			Years of experience with this employer	4
No.				Years of experience with other employer(s)	0
Degree(s) /	Years / Specialization	Bachelor of Scie	nce / 2018 / Civil En	gineering, University of Tennessee	
	registration number / state / expiration date	EI. 33695 / N/A			
	Year registered	N/A	Discipline	E.I. / Civil	
Contract role(s) / br	ief description of respo	onsibilities	Bridge Engineer In repair tasks.	tern / Braden will support the bridge inspection and bridge	}
Experience dates (mm/yy–mm/yy)				contract; <i>i.</i> e., "designed drainage", "designed girders", over the time specified in the applicable MPR(s).	,
Sector 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 in accordance with the FHWA, BIRM, AASHTO MBE, AASHTO BEIM, and the LADOTD Bridge Inspection Manual (BIM) as needed. Bridge types include cantilever trusses, segmental concrete structures (with confined space inspections), movable swing span bridges and bascule bridges. Management, communication and implementation of the QC/QA plan was an instrumental component to this project. 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 to inspect the lower chord and floor system, and telescoping manlifts for the superstructure above the deck. 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. 				al s an l wer
() 11/17 – 09/18	the underwater inspection	on of 37 structures	throughout the state	N Engineer Intern. Braden served as lead field inspector for of Tennessee. Braden coordinated with the divers and n also lead the preparation and development of the underwat	
03/21 – Ongoing	evaluation of two historic structures. Both bridges condition and proposing	c bridges in the Flo are closed to all us rehabilitation/repla	rida Keys. The bridge se and Gresham Smi acement options. Insr	Engineer Intern. Braden assisted with the bridge inspection es include the Seven Mile Bridge and the BahiaHonda Truss th was tasked with evaluating the structures, documenting the bection activities included both visual observation from a boat or and assistant inspector.	e

16. Staff Experience Gresham Smith	e:				
Ry	r an Horn, El Ige Engineer Intern			Years of experience with this employer	3
				Years of experience with other employer(s)	0
Degree(s) /	Years / Specialization	Bachelor of Scie	ence / 2019 / Civil Er	ngineering, The University of Georgia	
	registration number / state / expiration date	EI. 028076 / N/A	N		
	Year registered	EI (2019)	Discipline	E.I. / Civil	
Contract role(s) / br	ief description of respo	onsibilities	Bridge Engineer Ir tasks.	tern / Ryan will support the bridge inspection and bridge r	repair
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders' over the time specified in the applicable MPR(s).	,
06/21 – 08/21	assisted with the bridge Mile Bridge and the Bal evaluating the structure	e inspection and e hiaHonda Truss s es, documenting th servation from a b	valuation of two his structures. Both bridg he condition and pro	uations, Monroe County, FL Bridge Inspector. Ryan toric bridges in the Florida Keys. The bridges include the S ges are closed to all use and Gresham Smith was tasked oposing rehabilitation/replacement options. Inspection active o documentation. Ryan served as boat operator, assistant	with vities
01/19 – Ongoing	GDOT, Bridge Replacement, SR 10/ US 78 at North Oconee River, Clarke County, GA Bridge Engineer. Gresham Smith designed the replacement of the existing SR 10/US 78 rural bridge over the North Oconee River, which is approximately 215 feet long and 89 feet wide. We developed the environmental document with NEPA guidelines, preliminary and final roadway plans, and preliminary and final bridge plans. This project is still ongoing. Ryan was responsible for Concept layouts, Existing plan research and site visit for field measurements. Including final bridge deck, beam design and plan production. As well as designing the closed system deck drainage system and generating deck drainage calculations.				
01/19 – 01/21	replacement of twin brid crossovers to allow for	dges located alon traffic to be maint	g SR 10 Loop over ained during all pha	16, GA Bridge Engineer. This project involves the SR 8/US 28 and West Fork Trail Creek utilizing median ses of construction and reduce the number of detours. Ry plans, including geometric layout, preliminary beam and o	

16. Staff Experience Gresham Smith	e:				
	ckson Hartley, E	El		Years of experience with this employer	<1
				Years of experience with other employer(s)	1
Degree(s) /	Years / Specialization	B.S. Civil Engine	eering, Louisiana Sta	ate University, 2021	
	registration number / state / expiration date	EI. 35058 9/30/2	2022		
	Year registered	N/A	Discipline	E.I. / Civil	
Contract role(s) / br	ief description of respo	onsibilities	Bridge Engineer Ir repair tasks.	tern / Jackson will support the bridge inspection and bridg	je
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders' over the time specified in the applicable MPR(s).	',
06/21 – Ongoing	various movable bridge Bridge 009130, Charing Following graduation fr	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			
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	Engineer Intern. Florid	la DEP selected (listoric Truss. Bot	Gresham Smith to in h structures are clos	ail Historic Bridge Evaluation, Marathon, FL Bridge spect and evaluate two historic bridges, the Seven Mile B sed to traffic. Jackson assisted with cataloging the drone v g.	

16. Staff Experienc Gresham Smith	e:				
Ba	rrett Germond, Ige Engineer Intern	EI		Years of experience with this employer	2
No.				Years of experience with other employer(s)	1
Degree(s) /	Years / Specialization	Bachelor of Scie	ence / 2019 / Civil Er	gineering, Mississippi State University	
	registration number / state / expiration date	EI, (Passed PE	Test / Awaiting expe	rience for license)	
	Year registered	N/A	Discipline	E.I. / Civil	
Contract role(s) / br	ief description of respo	onsibilities	Bridge Engineer In bridge repair tasks	tern / Barrett will perform bridge inspections and support th	he
Experience dates (mm/yy–mm/yy)				contract; <i>i.</i> e., "designed drainage", "designed girders", over the time specified in the applicable MPR(s).	,
Career	Barrett is a Civil Engineer graduate of Mississippi State University and joined Gresham Smith as a structural/bridge Engineer-in-Training. Barrett's emphasis is on structural design and load rating, and his recent experience includes working with the MDOT Bridge Division on prestressed concrete FIB girders.				rking
03/21 – Ongoing	LADOTD, Complex Bridge Inspections, Statewide Bridge Inspection. Barrett has been assisting the bridge inspection for Task Order 3 bridges that have included movable structures in Districts 03 and 61. Barrett has developed Element Leve quantities and assisted with the reports.				
03/21 – 10/21	TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN Bridge Engineer Intern. Barrett supported the complex structures analyzed utilizing finite element methods and CSi Bridge software. The structures load rating 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.				
07/20 – Ongoing	Phase I and II Bridge S and B), Dye Branch (Br	cour Evaluations idge Nos. 49.2A	for Beaver Creek (B and B), and West Di	atewide, MS <i>Bridge Engineer Intern</i> . Gresham is provid ridge Nos. 22.6A and B), Dickerson Creek (Bridge Nos. 24 tch (Bridge Nos. 264.1A and B) at I-55 in Pike, Lincoln, Co ering support for these evaluations.	4.8A
07/20 – 11/20	support for the bridges includes a curved struc	which included th ture alignment an	e use of Modified Fl d a sharply skewed	y, MS Bridge Engineer Intern. Barrett served as engined B girders and special link slab joint details. The design bridge alignment. Modified FIB concrete beams, similar to e depth in order to meet hydraulic requirements.	

16. Staff Experience: Gresham Smith					
Bren	non Hughes, Roadway Design E			Years of experience with this firm/employer	4
				Years of experience with other firm(s)/employer(s)	6.5
Degree(s) / Years	/ Specialization	Bachelor of Sci	ence / 2011 / Civil E	Engineering, Louisiana State University	
-	ration number / expiration date	P.E.0039985 /	LA / 3/31/24		
	Year registered	2015	Discipline	P.E./Civil	
Contract role(s) / brief	description of resp	oonsibilities		esign Engineer / Brennon will lead the development of the re ment of bid packages.	pair
Experience dates (mm/yy–mm/yy)	-	-		ed contract; <i>i.</i> e., "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).	
08/17 – 12/20	Roadway Design	Engineer. Brenno ed safety and oper	on led the design and rations improvement	ridge Preliminary and Final Design, West Monroe, LA Lea I the preparation of preliminary and final plans and cost estimat s for the intersection realignment, curb and gutter drainage des	tes.
09/11 – 07/17		s a designer and s		joining Gresham Smith, Brennon served with the LADOTD ous roadway projects including a new roundabout, overlay proje	ects,
09/17 – 06/19	Monroe, LA Lea LA. Brennon's role	d Roadway Designed was to lead the d	in Engineer. This wa	at Blanchard Street Intersection Improvements Design, We as a striping and intersection improvement project in West Mon ration of preliminary and final plans and cost estimates. The sco a new crosswalk.	roe,
04/20 – Ongoing	Roadway/Rounda	about Design Eng ADOTD's Roadwa h pedestrians and	gineer. Gresham Sm y Design Manual ge bicycles through this	n Road (LA 3034) Roundabout Design <i>Lead</i> ith is tasked with the full roundabout design which will be in ometric requirements and LADOTD's Complete Streets Policy t intersection. Brennon is leading the design and the preparation	
10/18 – Ongoing	was responsible for and the preparation	or planning and coo on of preliminary ar eliminary design re	ordinating staffing, so nd final plans and cos	sign, Tangipahoa Parish, LA Lead Roadway Design. Brenr cheduling, and budgeting for this project. He also led the design st estimates. Brennon led the plan-in-hand meeting with local engineer-of-record for the design development. This project is	
Certifications (See section 20)				tersections Designed for Safety Control Supervisor, LA State Specific	

16. Staff Experience: Gresham Smith					
Rie	chard Savoie, I adway Design Engine			Years of experience with this firm/employer	3.5
A CONTRACT OF A				Years of experience with other firm(s)/employer(s)	40
Degree(s) / Ye	ears / Specialization	Bachelor o	of Science / 1978 / Civil Er	ngineering, McNeese State University	
	egistration number / ate / expiration date		936 / LA / 9/30/22		
	Year registered	1983 (LA)	Discipline	P.E./Civil	
Contract role(s) / br responsibilities	ief description of		Roadway Design Engine to verify DOTD requirem	eer. Richard will support the roadway portion of repair plans ents.	and
09/18 – 12/20	Senior Engineer. T and safety. Right-of- coordination betwee	he project c way is bein n the right-o	consisted of roadway realig g acquired at one quadran of-way plans and the road	ridge Preliminary and Final Design, West Monroe, LA gnment at the bridge approach to improve roadway geometry at of the intersection and Richard is assisting with the way requirements. Richard performed Quality Control review nsible for Quality Control on the final design process.	-
09/18 – 12/19	LADOTD, SRTS/LRSP Task Order 14: Farmerville Design, Union Parish, Farmerville, LA Senior Engineer. Richard provided quality control review for the Final Plan submission for this Safe Routes to Public Places Project. The review was to ensure that the plans were developed in accordance with standard LADOTD policy and procedure. Plans included installation of sidewalks along various local roadways, driveway adjustments to ensure ADA compliance and utility relocation avoidance.				ns
04/20 – Ongoing	Gresham Smith is ta Manual geometric re through this intersec staff on the field eva	City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design Senior 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. Richard is responsible for overall Quality Control on the project. He is mentoring the engineering staff on the field evaluation requirements, reviewing all potential improvements, and will perform QC reviews on the preliminary and final design plan submissions.			
02/90 – 03/14	project in Caddo Par progressed to the Er project delivery for th	rish, from I- nvironmenta his \$670 mil	220 to the Arkansas State al Impact Study. Once the Ilion project. As the Deput	ager. Richard was the Project Manager for the I-49 North Line. The project started with the Corridor Selection Study a alignment was selected plan development began and thenc y Chief and Chief Engineer, he met with program managers d changes to their budget partitions and project schedules.	e
Career	Engineer. As Chief E budgets, expenditure	Engineer, R es, program	ichard was responsible for	D in increasing roles culminating as the LADOTD Chief r establishing engineering directives and standards, policies, ided project and program delivery, construction, and tems.	,

16. Staff Experience: Gresham Smith					
Roni	nie Robinson, Transportation En			Years of experience with this firm/employer	6
				Years of experience with other firm(s)/employer(s)	33
Degree(s) / Years	/ Specialization	Bachelor of Scie	ence / 1982 / Civil Ei	ngineering, Louisiana State University	
-	tration number / / expiration date	P.E.0024040 / L	A / 3/31/24		
	Year registered	1988	Discipline	P.E./Civil	
Contract role(s) / brief	description of resp	oonsibilities	Senior Transportati any permitting issue	on Engineer / Ronnie will assist with repair plan development ar es.	nd
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).	
02/17 – 12/20	Senior Transpor	rtation Engineer.	Ronnie's responsib forts included coord	n Bridge Preliminary and Final Design, West Monroe, LA bilities included developing preliminary and final plans and ination of the contaminated waste investigation, drainage lay	
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/ LA Senior Engli for the study port and final plans ar	LRSP Task Orde ineer. Ronnie's re ion. For the design ad construction co	er 7: McMillan at Bl sponsibilities includ n portion, his respor st estimates.	anchard Intersection Improvements Design, West Monro led conducting field traffic observations and collecting field da nsibilities included developing conceptual designs, preliminar	ata
04/20 – Ongoing	Transportation L LADOTD's Road both pedestrians	Engineer. Gresha way Design Manu and bicycles throu	Im Smith is tasked v al geometric require ugh this intersection	van Road (LA 3034) Roundabout Design Senior with the full roundabout design which will be in accordance wi ements and LADOTD's Complete Streets Policy to accommod b. Ronnie will provide quality control for the preliminary design by de design assistance for the development of the final design	date า
Career	of his 16 years in	construction as a	project engineer, e	Department of Transportation and Development. He worked ight years as manager of the design and permit sections and irces, permit and materials testing sections.	

16. Staff Experience: Gresham Smith

Gresham Smith					
	ton Nickles ssional			Years of experience with this employer Years of experience with other employer(s)	<1 0
Degree(s) /	Years / Specialization	Bachelor of Scie	nce / 2021 / Civil Er	ngineering, Louisiana State University	
	registration number / state / expiration date	N/A	_		
	Year registered	N/A	Discipline	Civil	
Contract role(s) / br	ief description of respo	onsibilities	Professional / Pay	ton will support the roadway design and traffic teams.	
Experience dates (mm/yy–mm/yy)	"designed intersectio	n", etc. Experien	nce dates should c	contract; <i>i.e.</i> , "designed drainage", "designed girders", over the time specified in the applicable MPR(s).	,
03/21 – Ongoing	development of the traf closures with alternating Bridge in St. Mary's Par inspection team to deve	fic control plans for g traffic with flagg rish and the Jean elop the paramete	or various bridge ins ers for projects in un erette Truss Swing I ers for the lane closu	tewide, LA Professional. Payton assisted in the pection projects. The traffic control plans included single la banized areas. Projects included the Charenton Truss Swi Bridge in Iberia Parish. Peyton worked closely with the brid irres to ensure that adequate protection was provided to the DTD's traffic control standards.	ing Ige
03/21 – 04/21	Edinburg Regional Medical Center, Traffic Impact Analysis, Edinburg, TX Professional. Payton assisted in the development of the traffic impact letter by performing analysis and preparing figures to support the traffic impact analysis for roadway expansion associated with the buildout of a regional medical center. Payton worked under the supervision of the lead traffic engineer to develop roadway capacity analysis and documentation of existing conditions to support the proposed roadway build outs.				
06/21 – Ongoing	LADOTD, LRSP Task Order #1: Vernon and Sabine Signing & Striping, LA <i>Professional.</i> This project includes preliminary and final design for proposed signing and striping improvements throughout several routes within Sabine and Vernon Parish. Payton is responsible for preparing the line diagrams for each of the routes. She is also responsible for importing aerial images and developing intersection detail sheets.				
06/21 – Ongoing	East Baton Rouge Parish, MOVEBR Plank Road Segment 2, LA <i>Professional.</i> This project is a design study along a portion of the Plank Road corridor between Dawson Drive and Harding Blvd. Payton's responsibilities include assisting the design engineer with the development of Typical Sections and Plan and Profile Sheets. She is also responsible for addressing general markups in MicroStation.				

16. Staff Experience: **Gresham Smith** Gabe Peer, EPA 2 Years of experience with this employer Electrical 18 Years of experience with other employer(s) Degree(s) / Years / Specialization Electrical Apprenticeship Program / 2004 / Nashville State Active registration number / N/A state / expiration date Year registered Discipline N/A N/A Electrical / Gabe will lead the electrical inspection for the moveable bridges tasks. Contract role(s) / brief description of responsibilities Experience and gualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", Experience dates "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). (mm/yy-mm/yy) LADOTD, In-Depth Inspections of Complex Bridges | Electrical Inspector. Electrical component inspection for the current fiveyear retainer contract (2019-2024) to perform in-depth bridge inspections on complex and movable bridges throughout Louisiana. 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 in accordance with the FHWA, BIRM, AASHTO MBE, AASHTO BEIM, and the LADOTD Bridge Inspection Manual (BIM) as needed. Bridge types include cantilever trusses, segmental concrete structures (with confined space inspections), movable swing span bridges and bascule bridges. Management, communication and implementation of the QC/QA plan was an instrumental component to this project. The following movable bridges were inspected under this program: LA 671 Swing Span Bridge over Bayou Teche, Jeanerette, LA. (2021) Gabe supported the in-depth electrical inspection of this movable bridge. With few exceptions, electrical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. The bridge was built in 1944 and included electrical distribution equipment that appeared to be more than 50 years old. Most of the electrical elements showed significant 06/19 signs of deterioration. Additionally, the system lacked safety measures (e.g., equipment grounding conductors) that have been Ongoing required by the National Electrical Code for decades. Gabe detailed inspection findings and provided recommendations for remediation in the electrical portion of the multi-disciplinary inspection report. The electrical inspection procedures included complete visual inspection of electrical elements, as well as the following measurements and tests: measurement of motor no-load and full-load voltage measurement of motor starting and full-load current motor insulation resistance testing measurement of electrical service voltage submersible cable insulation resistance testing LA 324 Swing Span Bridge over Bayou Teche, Charenton, LA. (2021) Gabe supported the in-depth electrical inspection of this movable bridge. The bridge was built in 1941 and included electrical distribution equipment that appeared to be more than 50 years old. With few exceptions, electrical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. Most of the electrical elements showed significant

signs of deterioration. Additionally, the system lacked safety measures (e.g., equipment grounding conductors) that have been required by the National Electrical Code for decades. Gabe detailed inspection findings and provided recommendations for remediation in the electrical portion of the multi-disciplinary inspection report. The electrical inspection procedures included complete visual inspection of electrical elements, as well as the following measurements and tests:

- measurement of motor no-load and full-load voltage
- measurement of motor starting and full-load current
- motor insulation resistance testing
- measurement of electrical service voltage
- submersible cable insulation resistance testing

LA 56 Swing Span Bridge over Boudreaux Canal, Chauvin, LA. (2021) Gabe supported the in-depth electrical inspection of this movable bridge. The bridge was built in 1959 and included electrical distribution equipment that appeared to be more than 50 years old. In lieu of electric motor driven spans and wedges, the bridge utilized hydraulic systems for movement of the span. Wedges were driven by electric motors, and electric motors were used to power hydraulic pumps serving the span hydraulic system. Of particular significance, the bridge suffered severe damage from Hurricane Ida approximately 4 months prior to inspection, and damage to the bridge electrical system was extensive. With few exceptions, electrical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. The electrical inspection procedures included complete visual inspection of electrical elements, as well as the following measurements and tests:

	measurements and tests:
	 measurement of motor no-load and full-load voltage
	 measurement of motor starting and full-load current
	 motor insulation resistance testing
	 measurement of electrical service voltage
	 submersible cable insulation resistance testing
	 measurement of system grounding electrode and conductor contact resistance
	 measurement of system grounding electrode ground resistance.
	ITC Level III Thermography Certification
	OSHA Level 30 Certification
Certifications	EPA 608 Certification
(See section 20)	Fluke Data Analyzer Certified
	Trane University Controls Clinic Certification
	CxA Commissioning Certification

16. Staff Experien	ce:						
	ivis Cole, El _{chanical}			Years of experience with this employer	3		
1 m				Years of experience with other employer(s)	0		
Degree(s) /	Years / Specialization	Bachelor of Scie	nce, Mechanical Er	ngineering / 2018 / University of Tennessee			
	e registration number / state / expiration date	EIT / TN #33946	EIT / TN #33946				
	Year registered	2018 (TN)	Discipline	El/Mechanical			
Contract role(s) / br	ief description of respo	onsibilities	Mechanical Engine component for mo	eer Intern / Davis will support the mechanical inspection vable bridges.			
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", over the time specified in the applicable MPR(s).	,		
	LADOTD, In-Depth Inspections of Complex Bridges <i>Mechanical Engineer Intern.</i> Mechanical component inspection for the current five-year retainer contract (2019-2024) to perform in-depth bridge inspections on complex and movable bridges throughout Louisiana. 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 in accordance with the FHWA, BIRM, AASHTO MBE, AASHTO BEIM, and the LADOTD Bridge Inspection Manual (BIM) as needed. Bridge types include cantilever trusses, segmental concrete structures (with confined space inspections), movable swing span bridges and bascule bridges. Management, communication and implementation of the QC/QA plan was an instrumental component to this project. The following movable bridges were inspected under this program:						
 06/19 – Ongoing 07 – Ongoing 08/19 – Ongoing 06/19 – Ongoing 06/19 – Ongoing 06/19 – Ongoing 07 – Ongoing 08/19 – O				s were inspected using the Engineering Evaluation Method on, and Maintenance Manual. The bridge was built in 1944 an the live load shoes at the ends of the main span. The bridge w s, paint loss, and corrosion were observed. Both oil reservoirs nance of the system. Davis detailed inspection findings and portion of the multi-disciplinary inspection report. The mechani	nd vas in ical		
LA 324 Swing Span Bridge over Bayou Teche, Charenton, LA. (2021) Davis supported the in-depth mechar this movable bridge. The bridge was built in 1941 and is operated by two sets of hydraulic systems and machine rotation on the pivot pier and for the live load shoes at the ends of the main span. With few exceptions, mechan					ain		

were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. The swing span motor was fastened to its base by only one of four anchor bolts causing misalignment of the motor shaft and failure of the coupling connection. There were numerous accounts of dry gear teeth with wear, paint loss, and corrosion as well as shaft corrosion. The gear box speed reducer contained samples of sludge which may be affecting system performance. Davis detailed inspection findings and provided recommendations for remediation in the mechanical portion of the multidisciplinary inspection report. The mechanical inspection procedures included complete visual inspection of mechanical elements, as well as the following measurements and tests:

- measurement of gear tooth dimensions
- lab testing of oil in hydraulic power packs.
- Measurement of the RPMs in each motor with a tachometer.

LA 56 Swing Span Bridge over Boudreaux Canal, Chauvin, LA. (2021) Davis supported the in-depth mechanical inspection of this movable bridge. The bridge was built in 1959 and included hydraulic systems for movement of the span. Wedges were driven by electric motors, and electric motors were used to power hydraulic pumps serving the span hydraulic system. Of particular significance, the bridge suffered severe damage from hurricane Ida approximately 4 months prior to inspection, and damage to the bridge mechanical system was extensive. With few exceptions, mechanical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. The mechanical inspection procedures included complete visual inspection of mechanical elements, as well as the following measurements and tests:

- Lab testing of oil in hydraulic power packs
- Site measurement of site glass for accurate oil levels.

LA 77 Swing Span Bridge over Intercoastal Waterway, Plaquemine, LA. (2021) Davis supported the in-depth mechanical inspection of this movable bridge. The bridge was built in 1961 and was rehabilitated in May of 2021 with all mechanical elements found to be in good condition. There were significant leaks observed at the main bearing and a loose pin was found at the north live load shoe at the pivot pier. In lieu of electric motor driven spans and wedges, the bridge utilized hydraulic systems for movement of the span and of the wedges. Electric motors were used to power hydraulic pumps. With few exceptions, mechanical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual.

	ff Experien	ce:							
Gresna		ese Hallak				Years of experience with this employer	1		
						Years of experience with other employer(s)	9		
	Degree(s) /	Years / Specialization	Burleson High S	chool, High School I	Dip	loma / 2003			
	Active	e registration number / state / expiration date	N/A						
		Year registered	N/A	Discipline	N/	'A			
Contrac	ct role(s) / bi	ief description of respo	onsibilities	nsibilities Mechanical Design / Reese will support the mechanical inspection compone movable bridges.					
	nce dates /–mm/yy)					ntract; <i>i.e.</i> , "designed drainage", "designed girders", er the time specified in the applicable MPR(s).			
		current five-year retainer contract (2019-2024) to perform in-depth bridge inspections on complex and movable bridges throughout Louisiana. 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 in accordance with the FHWA, BIRM, AASHTO MBE, AASHTO BEIM, and the LADOTD Bridge Inspection Manual (BIM) as needed. Management, communication and implementation of the QC/QA plan was an instrumental component to this project. The following movable bridges were inspected under this program:							
	06/19 – Ongoing						e The I ents		

16. Staff Experience:

Gresham Smith



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

Project Executive

Years of experience with this firm/employer 7

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. 9/30/22 PTOE 2728 / Exp. 9/30/24 PLS 5043 / LA / Exp. 9/30/22				
Year registered		2004(PE); 2009(PTOE); 2010(PLS)	Discipline	P.E./Civil, PLS, PTOE		
Contract role(s) / bri	ef description of res	ponsibilities	Project Executive tasks for this contr	Bert will support the traffic, design, and analysis / engineering act.		
Experience dates (mm/yy–mm/yy)				d contract; <i>i.e.</i> , "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).		
Career	Through his consulting career and while at LADOTD, Bert led a number of Stage 0 studies and Road Safety Assessments. While the District Traffic Operations Engineer of District 61, Bert completed these tasks initiated by request from internally, the public or an elected official. Some of these Stage 0 studies include LA 75 Roundabouts in Plaquemine, LA, Access Management Improvements at LA 42 at US 61, Improvements to LA 427 (Acadian), and TSM Turn Lane Installation on LA 30 at LA 74. RSA that were performed included Stringer Bridge Road, LA 431 at Valentine Road, LA 427 (Acadian) From I-10 to LA 73 (Government), and I-210 at LA 1138 (Nelson Road).					
6/19 – Ongoing	LADOTD, Complex Bridge Inspections, Task Orders 1, 3, and 4, Statewide LA <i>Project Executive</i> . 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.					
10/17 – 04/18	LADOTD, US 90 Bridge Maintenance over I-10 Ramps, Transportation Management Plan (TMP), Lake Charles, LA <i>Project Executive.</i> 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.					
04/18 – 05/19	LADOTD, I-10 TMP West of LA 108 to I-210 Interchange TMP, Lake Charles, LA Project Executive. Gresham Smith developed a TMP for the Rubbelization and Overlay on I-10 between I-210 and the LA 108 Interchange in Lake Charles, LA. This project included the mill and overlay of I-10, widening two flat deck bridges on I-10 to add a lane, and					
Page 30 of 126 Prin	ne consultant firm: Gr	esham Smith				

	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 <i>Project Executive.</i> Gresham Smith was selected to develop a calibrated VISSIM model to model existing conditions and the future proposed diverging diamond interchange at I-210 at Nelson Road in order to evaluate the proposed interchange design. The project included data collection, development of growth rates, lead the Road Safety Assessment, developing and calibrating an existing VISSIM model and evaluation of the proposed alternative. Bert was responsible for the overall study, overseeing data collection, conducting safety analysis, development of VISSIM models, development of alternatives and the report.
11/08 – 11/14	LADOTD, Baton Rouge, LA <i>District Traffic Operations Engineer</i> . 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.
04/20 – 09/20	LADOTD, Complex Bridge Inspections, Statewide, LA Task Order 2 - Emergency Bridge Repairs, US 71 in Downtown Shreveport, LA <i>Project Executive</i> . In April 2020, a train derailment damaged Bent 3 of the Spring Street Bridge forcing the roadway closure. Gresham Smith was selected to perform the bridge repairs to open the bridge. Working with the selected contractor, helical piles were designed to support the new column foundations and crash wall. Bert served as Project Executive (Principal) and assisted with DOTD coordination.
11/08 – 11/14	LADOTD, Baton Rouge, LA <i>District Traffic Operations Engineer.</i> While at LADOTD, Bert was responsible for reviewing, approving and developing temporary traffic control plans for all construction and maintenance work on the state highway system, which included the yearly inspections of all the on system bridges each year by district forces and consultants. These bridges included all of the I-10 bridges through the Baton Rouge region and over the Mississippi River. Bert was also responsible for Transportation Management Plans (TMPs) required for construction projects on these bridges.
Certifications (See section 20)	 DOTD Traffic Engineering Analysis Process & Report – Modules 1, 2 and 3 U.S. Department of Transportation Federal Highway Administration – DPFA Certification LADOTD – Highway Safety Manual Workshop NCHRP 17-38 Louisiana Local Technical Assistance Program – Regional Crash Data Workshop American Traffic Safety Services Association –Traffic Control Supervisor, LA State Specific

16. Staff Experienc	e:				
Gresham Smith Rebecca Murray, P.E., PTOE, RSP1 Lead Traffic Engineer				Years of experience with this employer	6
				Years of experience with other employer(s)	0
Degree(s)	/ Years / Specialization	Bachelor of Scie	nce / 2015 / Civil Er	ngineering, Louisiana State University	
Activ	/e registration number / state / expiration date	P.E.0043788 / L	A / Exp. 3/31/22 P	TOE 4861 / Exp. 3/26/23 RSP1 611 / Exp. 4/5/24	
	Year registered		Discipline	P.E./Civil; PTOE; RSP1	
Contract role(s) / b	prief description of respo	onsibilities	Lead Traffic Engin and other traffic re	eer / Rebecca will lead the development of traffic control plated tasks.	lans
Experience dates (mm/yy–mm/yy)				ontract; <i>i.</i> e., "designed drainage", "designed girders", over the time specified in the applicable MPR(s).	
6/19 – Ongoing					
04/18 – 04/19	LADOTD, I-10 Transportation Management Plan (TMP) West of 108 to I-210 Interchange, H.009620.5, Calcasieu Parish, LA <i>Pre-Professional</i> . LADOTD developed design plans for the Rubblization and Overlay of I-10 from just west of the LA 108 interchange to the L-210 interchange. This project includes a full closure on L10 diverting traffic to the ramps. This diversion				
10/17 – 04/18	LADOTD, I-10 at US 90 Lockmoor Bridge Transportation Management Plan (TMP), H.013076.5-1, Lake Charles, LA Pre- Professional. LADOTD oversaw the design of planned bridge maintenance of the US 90 bridge that operates as an on ramp to I- 10 Easthound. This bridge crosses over mainline I-10 for both the Easthound and Westbound directions as well as the Westbound				
07/18 – Ongoing	 LADOTD, LA 37: Sullivan Road to Liberty Road Stage 0 Feasibility Study, Baton Rouge, LA Engineer. Collected and reviewed over 580 crash reports over a span of three years from the state highway crash database and collected ADT data on 21 segments of LA 37 and intersecting streets, peak hour turning movement counts at 12 significant intersections and 15-minute counts along 38 driveways and insignificant side streets. The reports were reviewed and evaluated using the safety triage safety tool box. Traffic analysis will be performed using HCS and Synchro and other software tools as needed. We reviewed historic traffic volume counts and TransCAD models and performed count analyses to develop regional growth rates for the study area. Rebecca assisted with review of the count data, development of growth rates, crash data analysis and traffic analysis. 				e fety
Certifications (See section 20)	 Traffic Engineering Analysis Process & Report – Modules 1, 2 and 3 American Traffic Safety Services Association – Traffic Control Technician, LA State Specific; Certified Flagger; Traffic Control Supervisor, LA State Specific 				
Dage 32 of 126	Drime consultant firm: Cr	ocham Smith			

16. Staff Experience Gresham Smith	:e:				
Ruth Steele, El Bridge Load Rating				Years of experience with this employer	5
A CON				Years of experience with other employer(s)	0
Degree(s)	Years / Specialization	Bachelor of Scie	nce / 2018 / Civil Er	ngineering, Lipscomb University	
Active	e registration number / state / expiration date	EI. 33680 / N/A			
	Year registered	EI (2018)	Discipline	E.I. / Civil	
Contract role(s) / b	rief description of respo	onsibilities	Bridge Load Rating development.	g / Ruth will support the load rating and repair plan	
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders" over the time specified in the applicable MPR(s).	,
Career	Ruth is a talented engineer intern within our structures group. She has been an integral member of the team, gaining experience through our TDOT Structural Division on-call contracts. She will take the skills she has learned through that program and apply it to your project.				
07/19 – 04/20	TDOT, Complex Bridge Load Ratings, Statewide, TN Engineer Intern. Gresham Smith load rated 23 continuous and curved steel tub girders and two steel arch bridges with the roadway suspended from the arches by steel cables supporting				
03/21 – 10/21	03/21 - 10/21TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN Engineer Intern. 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.				eel es
07/13 – 12/17	TDOT, Underwater Bridge Inspection Program, TN <i>Engineer Intern.</i> Ruth served as support for the underwater inspection of 57 structures throughout the state of Tennessee. She also supported the field inspection and diving services and prepared the reports for each structure in accordance with NHI guidelines and requirements.				

16. Staff Experience: Moffatt & Nichol



Chace Hulon, P.E., ADCI

Program Manager and NBIS Team Leader

Years of experience with this firm/employer 7

Years of experience with other firm(s)/employer(s) 10

Degree(s) / Years / Specialization		Bachelor of Science / 2005 / Civil Engineering, Norwich University, Vermont				
Active registration number / state / expiration date		P.E. 39701 / LA / Exp. 09/30/23				
		Year registered	N/A	Discipline	P.E./Civil	
Contract role(s) / brief description of respon			ponsibilities	bridge inspections	ager and NBIS Team Leader / Chace will manage complex and underwater bridge inspections as a NBIS Team Leader, e Supervisor, and SPRAT Rope Access Technician.	
					ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).	
	11/19 – Ongoing	LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. <i>MN Project Manager and Team Leader</i> for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of both cable-stayed bridges in Louisiana (Audubon and Luling) with rope access techniques to inspect a total of 208 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques. Performed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and UAS access techniques on columns. Hands-on management and implementation of the QC/QA plan is vital to the continued success of this project.				
C.	1/20 – Ongoing	LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. <i>MN Project Manager and Team Leader</i> for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed and lead the structural, mechanical, and electrical inspections of six (6) movable bridges utilizing detailed, nondestructive and laboratory testing methods with hand sketches. Hands-on management and implementation of the QC/QA plan is vital to the continued success of this project.				
C.	09/14 — Ongoing	LADOTD IDIQ for Statewide NBIS Underwater Bridge Inspection, Louisiana. Project Director and Team Leader for the third cycle of contracts in which we have performed 1,375 underwater bridge inspections statewide. Bridge types included movable bridges, long-span bridges with caissons and deep foundations, timber bridges with multiple bents in the water, culverts and multi-span bridges up to 14 miles in length. Assisted DOTD with several emergency response requests within hours utilizing local team members.				



Mike Russell, EIT

NBIS Team Leader and Rope Access Supervisor

Years of experience with this firm/employer 1

Years of experience with other firm(s)/employer(s) 11

Degree(s) / Years / Specialization Bachelor of Science / 2015 / Civil Engineering, Central Connecticut University

A - the second second second second						
Active registration nu state / expiratio		Engineer-in-Trai	Engineer-in-Training #35255 / TN			
Year regi	stered	N/A	Discipline	Civil and Structural		
Contract role(s) / brief description	-	Drone Pilot. Mike well as provide un	r / SPRAT Rope Access Supervisor-Level III / FAA Remote will support complex bridge inspections and assessments, as manned aircraft systems piloting.			
Experience dates (mm/yy-mm/yy) Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders" ("designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).						
 08/21 – Ongoing 08/	Lingpecting the steel substructure units utilizing tall protection techniques and a work hoat platform with a rope access					
04/19 – Ongoing 04/19 – Ongoing 04/19 – Ongoing 04/19 – Ongoing LADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana. Team Leader and Rope Access Supervisor for both five-year retainer contract to perform over 1700 sign truss inspections throughout Louisiana, including the Orleans District along this corridor. Lead the development of the new Sign Truss Inspection Program by implementing policies and standard operating procedures. Managed and utilized the fall protection safety program with rope access techniques and rescue plans. Lead the development of an application for an internal tablet-based inventory management system. Non-destructive testing was performed on all anchor rods at all cantilever structures, base plates with excessive standoff distances, and where deficiencies were observed at steel and aluminum welds. Managed the QC report review process and the QA field and office review process. Managed and planned the Temporary Traffic Control plans and setups for lane closures throughout the state along with all of the District traffic engineers. Analyzed altered load paths.						
				Idubon Bridge, LA Rope Access supervisor and NBIS cture critical inspection of the Audubon Bridge.		



Steven Armstrong, P.E., ADCI

NBIS Team Leader

Years of experience with this firm/employer 7

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

Degree(s) /	Years / Specialization	Bachelor of Science / 2005 / Civil and Environmental Engineering, University of New Orleans Master of Science / 2019 / Civil Engineering, University of New Orleans			
	registration number / state / expiration date	P.E. 44405 / LA	/ Exp. 09/30/22		
	Year registered	2020 (PE)	Discipline	P.E./Civil	
Contract role(s) / brief description of res		ponsibilities		r / FAA Remote Drone Pilot / SPRAT Rope Access Technician / er for complex bridge inspections to complete Level I, II, and III	
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).	
Sector 11/19 – Ongoing	retainer contracts as signature, long-spar rope access techniq of the I-10 Horace V greatly minimize traf	LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. <i>Team Member</i> for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of the Audubon cable-stayed bridge with rope access techniques to inspect a total of 136 cables, the HDPE protection, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge (New Bridge) completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed draft inputs and consolidated notes from multiple teams to present proper data consistently throughout the report.			
1/20 – Ongoing	retainer contracts as complex, movable, l inspections of six (6 document section lo	LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. <i>Team Member</i> for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed the structural inspections of six (6) movable bridges along with the M&E team. Utilized nondestructive UT methods to accurately document section loss in fracture critical members. Performed draft inputs and consolidated notes from multiple teams to present proper data consistently throughout the report.			
09/15 – Ongoing	LADOTD IDIQ for S the current five-year NBIS and AASHTO complete field work, truss bridges, timber in length. Site conditional	tatewide Underv retainer contract Manual for Bridge inspection report r stringer bridges, tions included sal	water Bridge Inspect to perform Levels I, e Element Inspection s, and quality contro cable-stayed bridge t and fresh waters, v	ction Retainer Contract, Statewide. <i>NBIS Team Leader</i> for II, and III underwater bridge inspections in accordance with n. Responsible for leading underwater inspection teams to of reviews. Bridge types inspected consisted of movable bridges, es, and single and multi-span girder bridges up to fourteen miles with varying levels of current, having low to no visibility. UAI and identify bottom conditions.	

Jeffrey Gazarek, ADCI NBIS Team Leader and Safety Officer

Years of experience with this firm/employer 6

Years of experience with other firm(s)/employer(s)

Degree(s) / Ye	ears / Specialization	Commercial Divi	ing with Concentrati	on in Subsea Inspection / 2005 / Divers Institute of Technology
	gistration number / ate / expiration date	N/A		
	Year registered	N/A	Discipline	N/A
Contract role(s) / bri	ef description of res	ponsibilities		r / Safety Officer / Equipment Manager / SPRAT Rope Access -certified Diver for complex bridge inspections to complete Level ions
Experience dates (mm/yy–mm/yy)	"designed intersec	tion", etc. Exper	ience dates should	ed contract; <i>i.e.</i> , "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).
09/15 – Ongoing	LADOTD IDIQ for Statewide Underwater Bridge Inspection Retainer Contract, Statewide. NBIS Team Leader for the third cycle of contracts in which we have performed 1,375 underwater bridge inspections statewide. Responsible for leading dive operations for underwater inspection teams to complete field work, writing inspection reports, and performing quality control reviews. Bridge types inspected consisted of movable bridges, truss bridges, timber stringer bridges, cable-stayed bridges, and single and multi-span girder bridges up to fourteen miles in length. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions.			
04/16 – Ongoing	LADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana. Team Leader and Rope Access Supervisor for both five-year retainer contracts to perform approximately 40% of 1700 sign truss inspections throughout Louisiana. Utilized the fall protection and rope access techniques with rescue plan development. Performed non- destructive testing on all anchor rods at all cantilever structures, base plates with excessive standoff distances, and wher deficiencies or impacts were observed at steel and aluminum welds. Drafted and reviewed inspection reports per the quality management plan. Monitored the TTC lane closures and reviewed the TTC plans for over 10 lane closures throughout the state.			
Sector 11/14 – Ongoing	MDOT 2014 & 2021 Underwater Bridge Inspection Contract, Districts 1 & 2, Mississippi. NBIS Bridge Inspector performed underwater inspections of 12 bridges in accordance with NBIS and MDOT PONTIS Inspection Manual. Bridges inspected were constructed of concrete, steel, and timber, and high-resolution scapping sonar was used on selected			
 LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. Team Member for one of the current retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on consignature, long-span bridges throughout Louisiana. Performed the inspection of the I-10 Horace Wilkinson Bridge) completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impact 				tracted to perform in-depth bridge inspections on complex, rmed the inspection of the I-10 Horace Wilkinson Bridge (New



Christopher (Chip) Eschenbach

NBIS Team Member

Years of experience with this firm/employer 4

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

Degree(s) / Ye	ears / Specialization	Associates / 201	15 / Welding Techno	logy
	egistration number / ate / expiration date	N/A		
	Year registered	N/A	Discipline	N/A
Contract role(s) / bri	ief description of res	ponsibilities		Inspector / SPRAT Rope Access Technician / ADCI-certified bridge inspections to complete Level I, II, and III inspections.
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).
LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. NBIS Team Member for one of the current fir year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on comp signature, long-span bridges throughout Louisiana. Performed the inspections of both cable-stayed bridges in Louisia (Audubon and Luling) with rope access techniques to inspect a total of 208 cables between the two bridges, their Ger Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope ac techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the G Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and UAS access techniques on columns.			8, contracted to perform in-depth bridge inspections on complex, rmed the inspections of both cable-stayed bridges in Louisiana bect a total of 208 cables between the two bridges, their Gensui he I-10 Horace Wilkinson Bridge completely utilizing rope access raffic impacts. Performed a supplemental inspection of the GNO cess techniques. Performed a fracture critical inspection of the ope access and UAS access techniques. Performed the	
(Note: 1/20 – Congoing)	 LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. NBIS Team Member for one of the current five year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections of complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed and lead the 			
 08/18 – Ongoing 08/18 – Ongoing underwater portion of the bridge inspection. members, gathering sediment depths aroun photos and updating current information on driving the truck and company boat, diving cabove the water. The diving operations were 			uge, LA Bridge In ection. Tasks for ins around bridges, list ion on each bridge. living on bridges and ns were conducted fi	spector for bridges in District 62. Responsibilities included the pection of said bridges included inspection of all underwater ing any additional defects not listed in previous reports, taking Responsibilities for the job compiled of equipment preparations, d assisting with the inspection and data collection for the bridges rom the Baton Rouge pontoon boat using surface-supplied diving ell as clear and precise notations.
			e Inspector for the current five-year retainer contract to perform	
Page 37 of 126 Prin	me consultant firm: Gr	esham Smith		

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	hua Martinez, Team Leader and	•		Years of experience with this firm/employer	7
LAR With same				Years of experience with other firm(s)/employer(s)	5
Degree(s) / Ye	ars / Specialization			, United States Air Force Academy , North Carolina State University	
	gistration number / ite / expiration date	P.E. 42085 / LA	/ 3/31/22		
	Year registered	2013 (PE)	Discipline	P.E./Civil	
Contract role(s) / bri	ef description of res	ponsibilities		r / SPRAT Rope Access Technician / ADCI-certified Diver fo spections to complete Level I, II, and III inspections.	r
Experience dates (mm/yy–mm/yy)				d contract; <i>i.</i> e., "designed drainage", "designed girders I cover the time specified in the applicable MPR(s).	",
06/17 – Ongoing	LADOTD IDIQ for NBIS Underwater Bridge Inspection Retainer Contract, Statewide. NBIS Team Leader for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBI and AASHTO Manual for Bridge Element Inspection. Site conditions included salt and fresh waters, with varying level current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions. Responsible for leading underwater inspection teams to complete field work, inspection reports, and qualit control reviews.				S s of
09/13 – 06/17	five-year retainer co AASHTO Manual fo	ntract to perform I r Bridge Element ws. UAI technique	Levels I, II, and III u Inspection. Responses were utilized to lo	tainer Contract, Statewide. <i>NBIS Inspector</i> for the previounderwater bridge inspections in accordance with NBIS and sible for underwater inspection field work, inspection reports, cate structural deficiencies, identify potential undermining, rap installations.	
03/17 – 08/19	Statewide Topside NBIS Team Leader concrete, steel, and maintenance items Joshua familiarized	Inspection of Br responsible for to timber. Joshua w per state requirem himself with seven	idges for the North opside inspection of as responsible for ra- nents. He also devel ral inspection vehicle	Carolina Department of Transportation, North Carolina bridges. Inspected single and multi-span bridges as well as ating the overall bridge condition and determining critical oped and generated reports rating to the element base level es including a bucket truck, snooper, and under-bridge platfo uracy and proper rating per National Highway Institute (NHI)	prm.

	trans and a second s	arles Balzarini S Team Leader and	•		Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	9
	Degree(s) / Ye	ars / Specialization	Bachelor of Scie	ence / 2008 / Civil Er	ngineering, University of Alaska, Anchorage	
		gistration number / ate / expiration date	P.E. 13854 / AK	/ Exp. 12/31/2023		
		Year registered	2013 (PE)	Discipline	P.E./Civil	
Contract role(s) / brief description of responsibilities NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified complex bridge inspections to complete Level I, II, and III inspections.			•	r		
	erience dates n/yy–mm/yy)				ed contract; <i>i.</i> e., "designed drainage", "designed girders' d cover the time specified in the applicable MPR(s).	,
	06/17 – Ongoing 11/19 – Ongoing	 LADOTD IDIQ for NBIS Underwater Bridge Inspection Retainer Contract, Statewide. NBIS Team Leader for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Site conditions included salt and fresh waters, with varying levels current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions. Responsible for leading underwater inspection teams to complete field work, inspection reports, and quality control reviews. LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. NBIS Team Leader for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complet signature, long-span bridges throughout Louisiana. Performed the inspections of the Luling cable-stayed bridge in New Orleans with rope access techniques to inspect a total of 72 cables between the two bridges, their Gensui Dampers, an anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the GNO Cantileve Truss Bridges in New Orleans utilizing rope access techniques. 				s of y lex, w and s ver
C.	04/16 – Ongoing	retainer contracts to protection and rope rods at all cantilever observed at steel an on active highways. accordance with FH	Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques. ADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana. <i>Team Leader</i> for both five-year retainer contracts to perform approximately 40% of 1700 sign truss inspections throughout Louisiana. Utilized the fall protection and rope access techniques with rescue plan development. Performed non-destructive testing on all anchor ods at all cantilever structures, base plates with excessive standoff distances, and where deficiencies or impacts were observed at steel and aluminum welds. Hands-on inspection work was performed overhead by bucket truck and climbing on active highways. Aluminum and steel sign truss members were inspected for inventory and for structural defects in accordance with FHWA guidelines. Drafted and reviewed inspection reports per the quality management plan. Monitored the TTC lane closures and reviewed the TTC plans for over 10 lane closures throughout the state.			r e ing

-60

Matthew Balzarini, P.E.

NBIS Team Leader and Diver

Years of experience with other firm(s)/employer(s)	5
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Degree(s) / Years / Specialization Bachelor of Science / 2011 / Civil Engineering, University of New Orleans

		Bachelor of ocience / 2011 / Civil Engineering, Oniversity of New Oreans				
		gistration number / ate / expiration date	P.E. 118893 / AK / Exp. 12/31/23			
		Year registered	2017 (PE)	Discipline	P.E./Civil	
Contra	act role(s) / bri	ef description of res	ponsibilities		r / SPRAT Rope Access Technician / ADCI-certified Diver for pections to complete Level I, II, and III inspections.	
	erience dates /yy–mm/yy)				d contract; <i>i.e.</i> , "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).	
C.	11/19 — Ongoing	current five-year reta on complex, signatu in Louisiana (Audub their Gensui Dampe utilizing rope access inspection of the GN critical inspection of	OTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. NBIS Team Leader Member for one of the ent five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections omplex, signature, long-span bridges throughout Louisiana. Performed the inspections of both cable-stayed bridges uisiana (Audubon and Luling) with rope access techniques to inspect a total of 208 cables between the two bridges, Gensui Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely ing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental ection of the GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture al inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques. permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and permed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charle			
I A A A A A A A A A A A A A A A A A A A	06/18 — Ongoing	LADOTD IDIQ for NBIS Underwater Bridge Inspection Retainer Contract, Statewide. NBIS Team Leader and Team Member for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions. Responsible for leading underwater inspection teams to complete field work, inspection reports, and quality control reviews.				
	07/18 – Ongoing 07/18 – Ongoin				sign truss inspections throughout Louisiana. Utilized the fall evelopment. Performed non-destructive testing on all anchor e standoff distances, and where deficiencies or impacts were wed inspection reports per the quality management plan.	



Yehoshua "Josh" Gilad, P.E.

NBIS Team Leader and Mechanical Engineer

Years of experience with this firm/employer 10

		-		Years of experience with other firm(s)/employer(s)	40
Degree(s) / Years	/ Specialization			on, Israel Institute of Technology cal Engineering, Rice University	
	tration number / / expiration date	P.E. 30046 / CA			
	Year registered	1993 (PE)	Discipline	P.E. / Mechanical	
Contract role(s) / brief description of res		ponsibilities		r and Mechanical engineer specializing in the inspection of Josh will support the mechanical inspection component for	
(mm/yy–mm/yy) "c	designed intersec	tion", etc. Exper	ience dates shoul	ed contract; <i>i.e.</i> , "designed drainage", "designed girder d cover the time specified in the applicable MPR(s).	
 er m in: Ongoing [h fix ge cc 	LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana Mechanical Engineer and Inspector. Mechanical engineer and inspector for the current five-year retainer contract to perform in-depth bridge inspections on complex and movable bridges throughout Louisiana. As a primary subconsultant, Moffatt & Nichol is performing complete in-depth inspections, including mechanical inspections on movable bridges. Bridge types include movable swing span bridges. The scope of inspection covers identification of the swing span drive [hydraulic or electro-mechanical], the end wedge drive [hydraulic or electro-mechanical], traffic barriers, wedges, and associated components. These components include hydraulic fixed or variable displacement pumps, hydraulic directional control valves [DCVs], piping, valves, hydraulic cylinders, gearmotors, gearboxes, chain drives, shafts, bearings and couplings, wedge cranks and linkages. For all systems and components, condition assessment is performed, and the systems and components are classified and ranked in accordance with LADOTD criteria, with recommendation for repair or replacement, where applicable.			e ulic	
07/21 – 12/21 sy	-depth mechanical i ngineering Evaluation he bridge was built nds of the main spa prrosion were obser	inspection of this n on Method describ in 1944 and includ n. The bridge was ved. Both oil reser d inspection finding	novable bridge. With ed in the AASHTO M ed two sets of hydra in good operating or voirs contained sam	tte, Louisiana Mechanical Engineer and Inspector. Led the few exceptions, mechanical elements were inspected using the lovable Bridge Inspection, Evaluation, and Maintenance Manu- ulic machinery for the pivot pier and the live load shoes at the der, however numerous minor hydraulic leaks, paint loss, and ples of sludge which may soon affect the performance of the mmendations for remediation in the electrical portion of the ma	he ual.
07/21 – 1/22 sy fe	A 324 Swing Span epth mechanical ins /stems and machine w exceptions, mech	Bridge over Baye pection of this more ery for the main rot nanical elements w	vable bridge. The bri tation on the pivot pie	n, Louisiana <i>Mechanical Engineer and Inspector.</i> Led the dge was built in 1941 and is operated by two sets of hydraulic er and for the live load shoes at the ends of the main span. Wi the Engineering Evaluation Method described in the AASHTO anual.	; ith

	Konyalian, P.I nanical Engineer	E.		Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	16 5
Degree(s) / Ye	ars / Specialization	Bachelor of Scie	ence / 1993 / Mecha	nical Engineering, University of California	
	gistration number / ate / expiration date	P.E. 39304 / LA	/ Exp. 3/31/23		
	Year registered	2014 (LA) 2003 (CA)	Discipline	P.E. / Mechanical	
Contract role(s) / bri	ef description of res	ponsibilities	Mechanical Engine movable bridges.	eer / Ari will support the mechanical inspection component	for
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girder d cover the time specified in the applicable MPR(s).	's",
Career	Ari has 21 years of mechanical engineering experience involving utility design for marinas, ferry terminals, urban waterfront developments, utility design for crude oil and product loading/offloading terminals. His experience involves utility planning, analysis, and design of waterfront facilities, including pump stations (water, wastewater, petroleum, and sewage), ferry terminal utilities, marine terminals, and associated equipment specification, stress analysis of pipeline, pump stations (water, wastewater, petroleum, and sewage), petroleum product/storage facilities, marine terminals, and associated instrumentation, control, and metering. Design of waterfront utility services and infrastructure including potable water, sewer, and firewater design for marinas and mixed-use facilities, and mechanical design/plumbing design in support of water features.			and e,	
Q 01/20 – Ongoing	 LADOTD, IDIQ for Statewide In-Depth Bridge Inspection, Louisiana Lead Mechanical Engineer. Inspection Teal Member. for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, bridges throughout Louisiana. Served as the lead Mechanica Engineer of Record for the following bridges: Bridge 009130 Charenton Truss/Swing Bridge 005860 Jeanerette Truss/Swing Bridge Bridge 003450 Boudreaux Canal Swing Bridge Bridge 006306 Bayside Swing Bridge 			o	
05/18 – 09/19	Seal Beach Pier Re engineer for utility re	estoration Const estoration of the s pport systems, co	ruction, Seal Beac tructurally restored s oncept and detailed	h, California Lead Mechanical Engineer. Lead mechani Seal Beach Pier. Responsibilities include inspection of exis design of potable water, firewater and sewer system ed pier.	
10/08 – 12/18	design of the Alamit	os Bay marina, w	hich involves the rep	Bechanical Engineer. Lead mechanical engineer for the blacement of all docks and piling in seven different basins, The project includes repair of bulkheads, replacement of	

	promenade railing, marina access gangways, and utilities. Engineering and design responsibilities included the design of potable water, firewater, and sewer systems for the marina and its ancillary facilities.
03/12 – 10/13	Puente Avenue Grade Separation Phase I, City of Industry, California <i>Mechanical Engineer.</i> Mechanical engineer of record for the design of a stormwater pump station that included hydraulic modeling of the pump intake and discharge to validate pump capacity and total dynamic head requirements. Responsible for wet well sizing and configuration to ensure that the number of resulting pump starts would be within manufacturer's recommendations for maximum pump starts. This was completed for two different sized pumps. Piping drawings, instrument specifications, and HVAC design and engineering were also completed as part of this design.
02/14 – 08/14	 St. James Terminal Deep-Draft Dock, St. James, Louisiana Lead Mechanical Engineer. Lead mechanical engineer for detail design of a new chemical tanker berth in a high current area on the Mississippi River in St. James. The build out will accommodate barge to Panamax class vessels. The new marine terminal will be capable of importing benzene and exporting styrene. The detailed design is developed using 3D design software for all trades. Mechanical/piping design including piping design development, hydraulic analysis, isometric development, stress analysis, and equipment selection and specification for loading arms, davit, and pumps.
09/13 – 12/16	Port of Lake Charles Liquid and Dry Bulk Docks, Lake Charles, Louisiana Lead Mechanical Engineer. Lead mechanical engineer for design of new liquid bulk transfer facility at the Port of Lake Charles. The effort included piping, equipment, and utility layouts for the purposes of loading platform and access trestle sizing.
06/11 – 12/13	Burnside Bulk Coal Terminal Development, Darrow, Louisiana Lead Mechanical Engineer. Lead mechanical engineer responsible for the quality control and design review of the pressure piping systems for drainage, dust suppression, firewater, potable water, and retention pond level control. All systems other than potable water were integrate in a single pond water source which was developed as a closed system that did not discharge into the adjacer water shed.
03/12 – 12/13	Stormwater Pump Station Engine Replacements, Long Beach, California Mechanical Engineer. Mechanical engineer for the field evaluations and summary of probable cost reports of two stormwater pump stations (SD-15 and S 23). The purpose of the evaluations and reports was to assist the City in providing cost options for the replacement of existing non-AQMD compliant natural gas engines. As-built information about the pump stations was obtained; mechanical and electrical engineers assessed the site and collected data about the existing engines. A final report was written for each pump station stating the findings and multiple cost options for engine upgrades.

A STREET	
Recht	

Alan Gregg, PE, RCDD

NBIS Team Leader and Electrical Engineer

Years of experience with other firm(s)/employer(s) 10	Years of experience with other firm(s)/employer(s)	10
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Degree(s) / Years / Specialization		Bachelor of Science / 2015 / Electrical Engineering, Kennesaw State University				
	gistration number / ate / expiration date	P.E. 045320 / G/	A / Exp. 12/31/22			
	Year registered	2019 (PE)	Discipline	P.E. / Electrical		
Contract role(s) / bri	ef description of res	ponsibilities		r and Electrical engineer. Will participate in complex bridge upport electrical component inspections.		
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).		
07/21 – 12/21	LA 0671 Swing Span Bridge over Bayou Teche, Jeanerette Electrical Engineer and Inspector. Led the in-de electrical inspection of this movable bridge. With few exceptions, electrical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. The bridge was built in 1944 and included electrical distribution equipment that appeared to be more than 9 years old. Most of the electrical elements showed significant signs of deterioration. Additionally, the system lacked safety measures (e.g., equipment grounding conductors) that have been required by the National Electrical Code for decades now. Alan detailed inspection findings and provided recommendations for remediation in the electrical port of the multi-disciplinary inspection report.					
07/21 – 01/22	LA 324 Swing Span Bridge over Bayou Teche, Charenton, Louisiana Electrical Engineer and Inspector. Led in-depth mechanical inspection of this movable bridge. The bridge was built in 1941 and is operated by two sets of hydraulic systems and machinery for the main rotation on the pivot pier and for the live load shoes at the ends of the main span. With few exceptions, mechanical elements were inspected using the Engineering Evaluation Method					
07/21 – 12/21	 described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. LA 0056 Swing Span Bridge over Boudreaux Canal, Chauvin, Louisiana Electrical Engineer and Inspector. Lead the in-depth electrical inspection of this movable bridge. The bridge was built in 1959 and included electrical distribution equipment that appeared to be more than 50 years old. In lieu of electric motor driven spans and wedges, the bridge utilized hydraulic systems for movement of the span. Wedges were driven by electric motors, and electric motors were used to power hydraulic pumps serving the span hydraulic system. Of particular significance, the bridge suffered severe damage from hurricane Ida approximately 4 months prior to inspection, and damage to the bridge electrical system was extensive. With few exceptions, electrical elements were inspected using the Engineering Evaluation Method described in the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. 					

architer	ek Sears, P.E. trical Engineer			Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	9
Degree(s) / Ye	ars / Specialization	Bachelor of Scie	ence / 2010 / Electric	al Engineering, University of South Florida	
	gistration number / ite / expiration date	P.E. 45652 / LA	/ Exp. 9/30/23		
	Year registered	2021 (LA) 2015 (FL)	Discipline	P.E. / Electrical	
Contract role(s) / bri	ef description of res	ponsibilities	Electrical Enginee movable bridges.	r / Derek will support the electrical inspection component for	or
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girde d cover the time specified in the applicable MPR(s).	rs",
(Constant) Substant S	LADOTD, IDIQ for Statewide In-Depth Bridge Inspection, Louisiana Lead Electrical Engineer. LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana. Electrical Engineer for the current five-year retainer contract to perform in-depth bridge inspections on complex and movable bridges throughout Louisiana. As the primary subconsultant to Gresham Smith, M&N is performing complete in-depth inspections to include the Mechanical and Electrical inspection and assessment of the systems. Performs the quality control reviews on the movable bridge inspection reports according to the QC/QA plan and in accordance with the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual and Chapter 16 (Complex Bridges) of the AASHTO Bridge Inspector's Reference Manual (BIRM). Will perform quality control reviews for the multidisciplinary in-depth inspection reports of six movable swing bridges; focused on the electrical elements in the inspection reports.				
12/12 – 05/14		• • •	, -	Electrical Engineer. Electrical Engineer or the bridge lightinetric calculations and developed construction documents.	ng in
08/15 - 09/16	,	• /		<i>cord</i> . Engineer of Record for the electrical distribution des load and voltage drop calculations.	ign of
06/16 – 09/18	the SR 15/600 roadway lighting. Design included lighting load and voltage drop calculations. Coast to Coast Trail Sidewalk Widening, Orange County, Florida Lead Electrical Engineer . Lead Electrical Engineer for development of the Dinner Key Marina DCP. The DCP was used by the city to bid and contract a design- build firm for the repair/replacement of the marina docks and associated utilities. The DCP included preliminary design of eight marina services served from four Florida Power and Light (FPL) transformers. Additionally, the electrical service design incorporated flood resistant design attributes, elevated and waterproofed service entrance equipment, in coordination with the city and in compliance ASCE 24 Flood Resistant Design and Construction. Moffatt & Nichol continued project involvement with construction administration services which included technical reviews of design drawings and calculations, reviews of construction submittals, and site visits of works in progress.				

16. Staff Experience: Michael Baker International



Don Harris, P.E.

Bridge Inspector Lead

Years of experience with this firm/employer 15

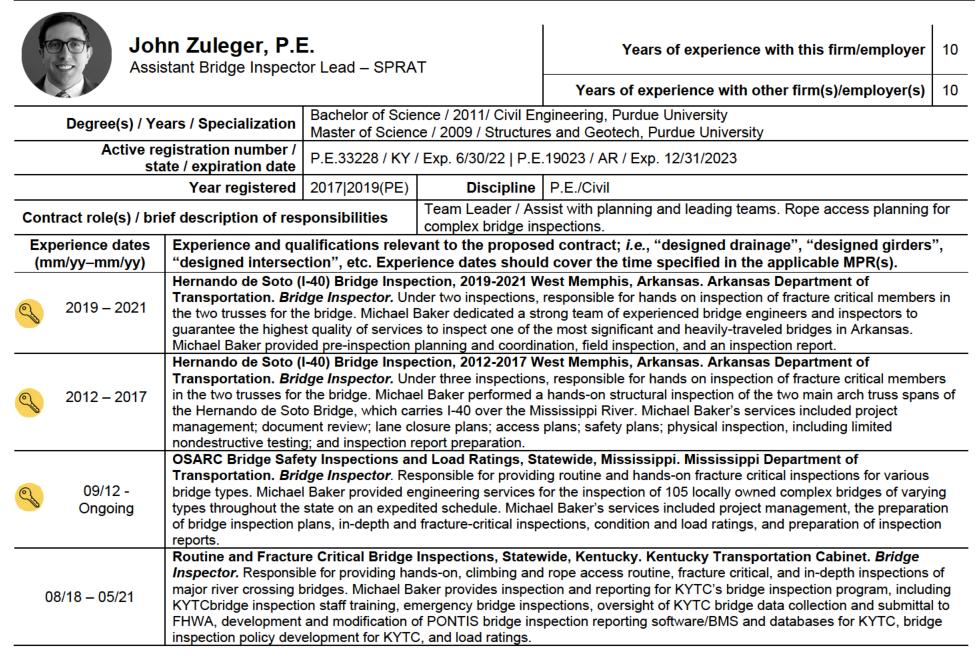
Years of experience with other firm(s)/employer(s) 17

Degree(s) / Years / Specialization Bachelor of Science / 1988 / Civil Engineering, Texas A&M University

Active registration number / state / expiration date		P.E.82662 / TX	/ Exp. 6/30/22			
	Year registered	1997(PE);	Discipline	P.E./Civil		
Contract role(s) / br	ief description of res	ponsibilities	Bridge Inspection	Lead/ Bridge Inspection Lead for Michael Baker.		
Experience dates (mm/yy–mm/yy)				d contract; <i>i.</i> e., "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).		
11/21 – Ongoing	Statewide Fracture Critical and Tunnel Inspection IDIQ, Statewide, Texas. Texas Department of Transportatio Subconsultant Project Manager/Team Leader. As a subconsultant, responsible for project planning, safety planning/training, inspections, manages multiple bridge inspection crews and performs quality control reviews of the bridge inspections and reports. The contract includes fracture critical inspection of bridges throughout Texas over a diverse range of operational environments, including multi-level interchanges, interstate/state highway, toll roads, rive lake crossings, coastal areas and navigable channels. In addition to identifying deficiencies during inspection, Michae Baker updates TxDOT asset management records, recommends maintenance, performs structural analysis/load ratir and provides traffic control plans.					
09/15 – Ongoing	Statewide Bridge Inspection IDIQ, Statewide, Texas. Texas Department of Transportation (TxDOT). Project Manager. Don manages the project planning, safety planning/training, and operations of multiple bridge inspection of and performs quality control reviews of the bridge inspections and reports. Under multiple, consecutive, multi-year contracts, Michael Baker is providing engineering services for the inspection of bridges located throughout Texas. The contract includes the initial and routine inspection of prestressed concrete beam/girder bridges, reinforced concrete bridges, reinforced concrete slab bridges, bridge-class multiple cell box culverts, and steel multigirder/ beam bridges diverse range on operational environments, including multi-level interchanges, interstate/state highway, toll roads, riv lake crossings coastal areas. In addition to identifying deficiencies during inspection, Michael Baker updates TxDOT asset management records, recommends maintenance, performs structural analysis/load ratings, and provides TCP					
09/06 – Ongoing	DFW Structural Ins DFWIA. Project Ma consultant, Don's re routine and fracture other infrastructure of with subcontractors,	pections and As nager/Team Lea sponsibilities inclu critical bridge ins deterioration; mar and coordination	sset Management, I der/Quality Manage uded project manage pections, 24/7 on-ca naging scope, budge with Terminal Oper	Dallas/Fort Worth International Airport (DFWIA), Texas. er. Under the first two consecutive contracts as prime ement, safety management, planning and coordination for Il emergency inspections, and inspections/recommendations for et and schedule, report writing, quality control, field coordination ations, Airfield Operations, Skylink Operations and Dallas Area el Baker's subconsultant role providing the same services and		

	advised the prime consultant. Under Michael Baker's current contract, Don serves as the Quality Manager and provides other inspection support when needed. Michael Baker has provided structural inspection services of the airport's infrastructure, including landside and airside bridges, the 5.8 mile elevated SkyLink guideway (bridge) structure, taxiway bridges, highway bridges and elevated departure roadways, drainage structures, sound walls, retaining walls, runway and taxiway pavement, ancillary structures (sign structures, high mast illumination poles, and various traffic sign structures), parking garages, and various building structures. Responsible for the development of the Skylink Inspection Reference Manual.
10/18 – 11/18	OSARC Statewide Bridge Inspection, Statewide, Mississippi. Mississippi Department of Transportation. <i>Team Leader.</i> Don performed routine bridge inspections of timber, concrete and steel bridges, as well as fracture critical inspections. He provided inspection reports, maintenance and repair recommendations and submitted Critical Finding Reports, initiated Critical Findings. Michael Baker provided inspection and load rating services under multiple contracts for the National Bridge Inventory bridge safety inspections, load rating, and reporting of bridges with varying superstructure types.
06/04 – 08/04	Kansas Turnpike Authority Annual Bridge Inspection Program, Kansas. Kansas Turnpike Authority. <i>Team</i> <i>Leader.</i> Don's primary responsibilities included leading the inspection team and conducting inspections. The project included annual inspection of all bridges and bridge class culverts that are on or cross the Kansas Turnpike from the Oklahoma border to Topeka (I-35 and I-335) and from Topeka to outside Kansas City, KS (I-70).

Michael Baker International



16. Staff Experience: Michael Baker International

	am Wriston, P. ge Inspector	.E.		Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	15 15	
Degree(s) / Ye	ears / Specialization			ineering/Structures, Virginia Polytechnic Institute ngineering, Virginia Polytechnic Institute and State University	/	
	gistration number / ate / expiration date	P.E.019511 / W	/ / Exp. 12/31/2022			
	Year registered	2011 (PE)	Discipline			
Contract role(s) / bri	ef description of res	ponsibilities	Team Leader / Ass inspections.	sist with planning and leading teams for complex bridge		
Experience dates (mm/yy–mm/yy)				d contract; <i>i.</i> e., "designed drainage", "designed girders [*] I cover the time specified in the applicable MPR(s).	",	
08/18 – 10/18	2018 Ohio River Fracture Critical Inspections, Newport, Kentucky, and Cincinnati, Ohio. Kentucky Transportation Cabinet. Bridge Inspector. Michael Baker performed a routine and fracture critical inspection of the Daniel Carter Beard Bridge (Big Mac), which carries I-471 between Newport, Kentucky, and Cincinnati, Ohio, using hands-on rope access techniques. To supplement the data collected by the rope access team, the Falcon 8+ octo-rotor airframe was deployed to inspect the vertical cables and various other components. The efficiency of the UAS provided inspectors with accurate scans.					
09/14 – 02/20	Eugene A. Carter Memorial Bridge Six-Year Inspection Program, Kanawha County, West Virginia. West Virginia Department of Transportation, Division of Highways. <i>Inspector-in-Charge</i> . Responsible for inspection access and safety planning, subcontractor coordination, inspection of all bridge components, and inspection report writing. Under a six-year agreement, Michael Baker conducted in-depth, periodic, and interim inspections of the Eugene A. Carter Memorial Bridge, also known as the Fort Hill Bridge. A periodic inspection of four exit/entrance ramps was also included. Michael Baker's services included project management, hands-on bridge inspections in accordance with various state and federal bridge inspection standards, preparation of a stream channel profile, oversight of traffic control and inspection access by a subcontractor, and preparation of detailed inspection reports.					
09/12 – 12/19	Complex and Fracture Critical Bridge Inspections, Statewide, Mississippi. MDOT/State Aid Road Construction. Bridge Inspector/Team Leader. Responsibilities included bridge inspection, inspection report writing, and load rating for multiple structures. Michael Baker provided engineering services under multiple contracts for the inspection of locally-owned complex bridges of varying types throughout the state on an expedited schedule. Michael Baker's services included project management; inspection plan development; in-depth condition, appraisal, and fracture-critical inspections; load ratings; and preparation of inspection and load-rating reports.					
10/18 – 11/18 Page 49 of 126 Prir	Responsible for routi used a hybrid method critical inspection of t	ne inspection of tw d of rope access an he U.S. 84 truss b trol, a hydrographi TO Manual for Brid	o Mississippi River T nd equipment (man-li ridges over the Missi c survey, and docum	ippi Department of Transportation. <i>Bridge Inspector.</i> russ Bridges in Natchez, Mississippi for MDOT. Michael Baker fts, under-bridge inspection) to perform a routine and fracture ssippi River. Michael Baker's services included a full inspection entation of the deficiencies and report preparation in accordance	of	

Michael Baker International



Jesus "Rocky" Armendariz

Bridge Inspector

Years of experience with this firm/employer 6

Years of experience with other firm(s)/employer(s) 36

Degree(s) / Years / Specialization			N/A			
Act	-	ration number / expiration date	N/A			
	•	Year registered	N/A	Discipline	N/A	
Contract role(s	s) / brief de	escription of res	ponsibilities	Team Leader / Ass inspections.	sist with planning and leading teams for complex bridge	
Experience d (mm/yy–mm/					d contract; <i>i.</i> e., "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).	
 Statewide Bridge Inspection IDIQ, Statewide, Texas. Texas Department of Tr Responsible for inspection planning, safety planning/training, inspection, operation control reviews of the bridge inspections and reports. Under multiple, consecutive, providing engineering services for the inspection of bridges located throughout Te routine inspection of prestressed concrete beam/girder bridges, reinforced concret bridges, bridge-class multiple cell box culverts, and steel multigirder/ beam bridge environments, including multi-level interchanges, interstate/state highway, toll road addition to identifying deficiencies during inspection, Michael Baker updates TxDC 					, inspection, operation of inspection crews and performs quality multiple, consecutive, multi-year contracts, Michael Baker is ocated throughout Texas. The contract includes the initial and es, reinforced concrete beam bridges, reinforced concrete slab ltigirder/ beam bridges in a diverse range on operational tate highway, toll roads, river, lake crossings coastal areas. In Baker updates TxDOT asset management records, recommends	
09/15 Ongoir						
10/18 – 1	1/18 Ins inc	SARC Bridge Safe Spector. Rocky led	ty Inspections, S an inspection team is inspection, bridg	tatewide, Mississip m for routine inspecti	bi. Mississippi Department of Transportation. <i>Bridge</i> on of off-system bridges for Mississippi DOT. Responsibilities reation, bridge safety assessment, and report of any critical	

Michael Baker International



Timothy Franciosa, P.E.

Bridge Inspector/Engineer

Years of experience with this firm/employer 1

Years of experience with other firm(s)/employer(s) 11

Degree(s) / Years / Specialization		Bachelor of Science / 2010 / Civil Engineering, University of Massachusetts, Lowell Campus						
	gistration number / ate / expiration date	P.E.51817 / MA / Exp. 6/30/22						
	Year registered	2015(PE)	Discipline	P.E./Civil				
Contract role(s) / bri	ef description of res	ponsibilities	Team Leader / Ass inspections.	sist with planning and leading teams for complex bridge				
Experience dates (mm/yy–mm/yy)				d contract; <i>i.</i> e., "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).				
4/21 - Ongoing	Transportation. Stru inspection and load re assurance (QA) revie review of the MDT loa reports for individual, based on the QA revi	Bridge Inspection and Load Rating Quality Assurance, Statewide, Montana. Montana Department of Transportation. Structural Engineer. Responsible for writing manual sections for MDT. Michael Baker is providing bridge inspection and load rating services under a bridge inspection and load rating program. The project will include quality issurance (QA) reviews of 150 bridge inspection reports, field reviews of 60 field inspections, review/update of the MDT BIRN eview of the MDT load rating program, scoping changes to the load rating program and manual, developing QA summary eports for individual, districtwide, and statewide, generating the state bridge engineer's letter, and developing year end training assed on the QA reviews for the year.						
4/21 - Ongoing	Authority. Project M Baker is providing pro Tunnel Management condition and load rai Inspection types inclu and tunnel load rating elements, and identif	Inspection and Rating of MBTA's Systemwide Tunnels, Massachusetts. Massachusetts Bay Transportation Authority. <i>Project Manager.</i> Responsible for managing the inspection of Blue Line Tunnel in Boston, Massachusetts. Michael Baker is providing professional and engineering services in support of the Massachusetts Bay Transportation Authority's Tunnel Management Program and FTA requirements. Michael Baker is conducting safety inspections to determine the condition and load rating of the tunnels and providing recommendations for the repair and maintenance of the structures. Inspection types include initial inspection, routine all-item, special member, overhead, damage and emergency inspections, and tunnel load rating. Tasks include conducting inspection and condition state rating of tunnel elements, load rating of tunnel elements, and identifying and reporting on critical elements encountered during inspections. Michael Baker is also updating the MBTA Rail Transit Tunnel Inspection Manual to include requirements for inspection of commuter rail tunnels per FRA						
11/21 – Ongoing	Statewide Fracture Subconsultant Tear including report writin diverse range of oper crossings, coastal are	n Leader. As a sub og and quality contr rational environme eas, and navigable et management rec	bconsultant, respons rol reviews of the brid nts, including multi-le channels. In addition	Statewide, Texas. Texas Department of Transportation. ible for inspection of fracture critical bridges throughout the state lge inspections and reports. The contract includes bridges in a vel interchanges, interstate/state highway, toll roads, river, lake in to identifying deficiencies during inspection, Michael Baker maintenance, performs structural analysis/load ratings, and				

01/14 – 4/21	Statewide Bridge Inspection Program, Statewide Rhode Island. Rhode Island Department of Transportation. <i>Team Leader.</i> While at another firm, responsible for the creation of estimates, coordinating scheduling with subconsultants, and performing Initial, Routine, Special member, Fracture Critical, and Damage level inspections on numerous bridges. Structures include major interstate highways and structures along the electrified Amtrak corridor; as well as a team leader for the signature Sakonnett River Bridge for Rhode Island Turnpike and Bridge Authority (RITBA).
1/14 — 1/20	MassDOT Complex Bridge Inspection, State-wide Massachusetts, Massachusetts Department of Transportation. <i>Team Leader.</i> While at another firm, responsible for the inspection of complex bridges for MassDOT. Signature bridges include the Zakim cable-stayed bridge and the Tobin Steel truss. During the Inspection of the Tobin Bridge, Timothy observed a critical deficiency which was reported to MassDOT. Emergency temporary repairs were made that day. Timothy has also inspected numerous movable swing bridges and bascule bridges for MassDOT.
10/15 – 10/15	Complex Bridge and Tunnel Inspection, Statewide Maryland, Maryland Transportation Authority. <i>Team Leader.</i> Responsible, while at another firm, for the biennial inspections of the Millard E. Tydings Bridge. The bridge is complex, long span, and fracture critical with non-redundant trusses and pin and hanger suspended trusses. The inspection utilized various access methods including rigging, free climbing, and under bridge inspection units. Led inspection team with MDTA staff through an all-item routine inspection.

Michael Baker International

	s F. Manrique, le Inspector	E.I.		Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	2	
Degree(s) / Ye	ars / Specialization			ngineering, Virginia Polytechnic Institute and State University Structural Engineering, Norwich University	,	
	gistration number / te / expiration date	N/A				
	Year registered	N/A	Discipline	N/A		
Contract role(s) / brid	ef description of res	ponsibilities	Bridge Inspector /	Assist with planning and executing inspections.		
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girders' d cover the time specified in the applicable MPR(s).	,	
interstate/state highway, toll roads, river, lake crossings, c				nt, responsible for assisting with project planning, safety perational environments, including multi-level interchanges, astal areas and navigable channels. In addition to identifying DT asset management records, recommends maintenance,		
03/20 – Ongoing	Statewide Bridge Inspection IDIQ, Statewide, Texas. Texas Department of Transportation (TxDOT). Assistant Team 3/20 – Leader. Responsible for supporting and assisting with project planning, safety planning/training, report preparation and load rating for prestressed concrete beam/girder bridges, reinforced concrete beam bridges, reinforced concrete slab bridges,					
06/21 – 06/21	 bridge-class multiple cell box culverts, and steel multigirder/ beam bridges in a diverse range on operational environments. I-40/Mississippi River Inspection, West Memphis, Arkansas and, Memphis, Tennessee. Arkansas Department of Transportation. <i>Inspector.</i> Responsibilities included hands-on inspection of superstructure elements using rope access techniques. Michael Baker provided engineering services for the inspection of the I-40 Bridge over the Mississippi River. 					

Michael Baker Intern	national					
	ert Ho, P.E. ge Inspector				9 9	
Degree(s) / Ye	ars / Specialization	Bachelor of Scie	nce / 2012 / Civil Er	igineering, University of Connecticut		
	gistration number / ate / expiration date	P.E.21017404 /	WA / Exp. 9/30/22 &	PEN.0032459 / CT / Exp. 01/31/23		
	Year registered	2021 (PE)	Discipline	P.E./Civil		
Contract role(s) / bri	ef description of res	ponsibilities	Team Leader / As inspections.	sist with planning and leading teams for complex bridge		
Experience dates (mm/yy–mm/yy)				d contract; <i>i.</i> e., "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).		
06/16 – 07/21	Baldwin Bridges Load Rating, Old Saybrook, Connecticut. Connecticut Department of Transportation. <i>Team</i> Leader. Responsible for routine, in-depth and special inspections of various types of bridges. Responsibilities also include writing inspection reports and drawing field sketches in Bluebeam Revu to satisfy client requirements. Michael Baker is providing inspection services for the pre-cast concrete segmental Baldwin Bridges in Old Saybrook, Connecticut. Services include load rating for each of the Northbound (06200A) and Southbound (06200B) bridges of this twin structure. Michael Baker is performing the load rating using a staged, time-dependent analysis model created using MIDAS Civil software; developing the load rating report and submission for each bridge; and providing QA/QC.					
06/16 – 07/21	in-depth and special drawing field sketche	inspections of varies in Bluebeam Rev	ous types of bridges. vu to satisfy client red		e,	
06/19 - 07/19 & 05/21 - 06/21	I-40/Mississippi River Inspection, West Memphis, Arkansas and, Memphis, Tennessee. Arkansas Department of Transportation. Bridge Inspector. Utilized rope access methods to inspect the bridge. Michael Baker provided engineering services for the inspection of the I-40 Bridge over the Mississippi River. Michael Baker dedicated a strong team of experienced bridge engineers and inspectors to guarantee the highest quality of services to meet the goals of the client for this important undertaking of inspecting one of the most significant and heavily-traveled bridges in Arkansas. Serving as the prime consultant, Michael Baker provided pre-inspection planning and coordination, field inspection, and an inspection report.					
07/19 – 07/19	MTA Whitestone Bridge Inspection, New York City, New York. The Thornton-Tomasetti Group, Inc. Bridge Inspector. Utilized rope access methods to inspect suspender rope groups and towers. The 3,700 foot-long Bronx-Whitestone Bridge is a suspension bridge carrying six lanes of I-678 over the East River. The bridge connects Throggs Neck and Ferry Point Park in the Bronx, on the East River's northern shore, with the Whitestone neighborhood of Queens on the southern shore.					
06/19 – 06/19	District. Bridge Insp	pector. Utilized rop	e access methods to	laware. U.S. Army Corps of Engineers, Philadelphia inspect concrete approach piers. Michael Baker provided bridge sapeake and Delaware Canal in St Georges, Delaware, under a	į	

	five-year IDIQ contract. Work included a field inspection and evaluation of the fixed, four-lane, high-level highway crossing over the canal. The field inspection consisted of a routine inspection of the structure with an in-depth, fracture critical member inspection of designated steel tension members. A thorough hands-on visual inspection of the concrete approach piers (Piers 20N to 2N and 21S to 2S) was conducted and existing deficiencies (spalls, delaminations, and cracks) were verified, sounded, measured, and delineated to identify the extent of any deterioration. Deteriorated areas were identified and updated in the inspection report.
02/13 – 06/13	Inspection of Bridges and Overhead Sign Structures, 2010-2013, Statewide, Connecticut. Connecticut Department of Transportation. Assistant Team Leader. Responsible for assisting team leaders during routine, in-depth and special inspections of various types of bridges. Responsibilities also included assisting the team leader and project manager in drafting and finalizing inspection reports. Also performed field inspections and condition evaluations of overhead sign support structures. Also responsible for writing inspection reports and any calculations included in the report. Under its fifth consecutive inspection contract, Michael Baker will evaluate and prepare reports for bridges and sign structures throughout the state of Connecticut. Michael Baker's tasks include conducting NBIS biennial in-depth and complex, fracture-critical, and movable bridge inspections and analyzing cantilever, full-span, and structure-mounted overhead highway signs and supports. Work entails performing condition ratings, performing and overseeing nondestructive testing, documenting inspection findings, and developing maintenance and protection of traffic plans. Michael Baker will also conduct quality assurance reviews of other consultants' reports on major bridges.
02/13 – 02/16	Central Artery Tunnel and Structure Inspection Services, Boston, Massachusetts. Massachusetts Department of Transportation. Assistant Team Leader. Responsible for assisting team leaders during structural and safety inspections of tunnels in Massachusetts. Also responsible for assisting team leaders and project managers during the production of inspection reports. Michael Baker inspected the tunnels and structures of Boston's Central Artery. Tunnel types included immersed binocular double-steel concrete-lined, immersed concrete, cast-in-place jacked concrete, cut-and-cover slurry wall, and cast-in-place construction. Items inspected included ceiling and wall anchoring systems, structural walls and ceilings, exhaust and intake plenums, lighting supports, overhead signs, joint seals, access hatches and stairwells, and mechanical-electrical vaults. Bridges ranged from long-span steel and concrete box-girders to single-span concrete slabs. Michael Baker inspectors of entire structures, special-member inspections of elements with advanced deficiencies, inspections that monitored known ongoing deficiencies, and damage inspections of specific locations where outside forces have impacted structures. Michael Baker submitted inspection reports in the format requested by the client.

Michael Baker International

	by Kubic, P.E. Je Inspector			Years of experience with this firm/employer	3
				Years of experience with other firm(s)/employer(s)	12
	ars / Specialization			ngineering, The Pennsylvania State University Engineering, The Pennsylvania State University	
	gistration number / ite / expiration date	P.E.0402048417	7 / VA / Exp. 06/30/2	023	
	Year registered	2013 (PE)	Discipline	P.E./Civil	
Contract role(s) / bri	ef description of res	ponsibilities	Team Leader / Ass inspections.	sist with planning and leading teams for complex bridge	
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.</i> e., "designed drainage", "designed girders I cover the time specified in the applicable MPR(s).	",
05/21 – 05/21	2018 Ohio River Fracture Critical Inspections, Newport, Kentucky, and Cincinnati, Ohio. Kentucky Transportation Cabinet. Bridge Inspector. Performed routine and fracture critical inspection Earle C. Clements Bridge in Old Shawneetown, IL/Union County, KY. Michael Baker was responsible for the inspection of all truss elements, connections, bearings, piers, and bridge deck. The structure was accessed with a variety of industrial rope access and modified bridge climbing techniques to obtain a visual and/or hands-on inspection of elements. Nondestructive testing (NDT) was used to evaluated remaining steel sections (ultrasonic testing) and potential cracks in steel members (magnetic particle testing).				
10/20 – 10/20	2018 Ohio River Fracture Critical Inspections, Newport, Kentucky, and Cincinnati, Ohio. Kentucky Transportation Cabinet. Bridge Inspector. Responsible for site visit planning and logistics and performed routine and fracture critical inspection. Michael Baker International recently performed a third cycle of routine and fracture critical inspections of the Daniel Carter Beard Bridge (Big Mac), which carries I-471 between Newport, KY and Cincinnati, OH, using hands-on rope access techniques. In 2020, enhanced NDT techniques, Magnetic Flux Leakage (MFL) and Guided Wave Ultrasonic Testing (GWUT), were also used on selected cables to assess internal conditions based on 2018 recommendations. These tests revealed internal deficiencies for further investigation and rehabilitation. NBIS components were also cataloged throughout the structure and maintenance items were identified for long-term improved service life of the structure.				
10/19 – 10/19	2018 Ohio River Fra Cabinet. Bridge Insp planning and logistics critical inspection utili deficiency locations of rope access inspecto anchorages providing rappels. UAS detector effort led to multiple r	cture Critical Insp pector. Responsib s, and performed re- izing a combined a of the <i>three-span</i> cors investigated known g unparalleled effic on capabilities wer- new deficiency find	pections, Newport, le for developing and outine and fracture cl access solution of har able-stayed William I own deficiencies at th iency by pointing ins e verified by rope act ings along the length	Kentucky, and Cincinnati, Ohio. Kentucky Transportation I managing the project safety program, assisted with site visit ritical inspection Michael Baker performed a routine and fracture inds-on rope access techniques and UAS scanning to determine <i>H. Harsha Bridge</i> . With a main span of 1050 ft (total span 2100 he tower anchorages, the UAS was utilized to scan between pectors to areas for further investigation minimizing full length c cess inspectors rappelling a sample of cables. The collaborative of a cable, and the successful completion of the complex to improve the long-term service life of the bridge.	e ft) cable

09/20 – 09/20	2020 Endicott Inspections. Hilcorp Alaska, LLC. <i>Project Manager, Bridge Inspector.</i> As project manager and team lead, responsible for conducting routine and fracture critical inspections for the four Endicott Bridges and performing a special member bridge inspection on Endicott's Big Skookum bridge (Structure SE20). Hilcorp (HAK) expressed interest in maintaining compliance with the Federal Highway Administration (FHWA) through 23 CFR 650 C, the National Bridge Inspection Standards (NBIS), which requires state bridge owners to inspect bridges every 24 months, is currently planning a rig move for December 2021, and needed to know the current condition of the bridges. With Michael Baker's combined inspection and management staff, the need for redundant coordination by different personnel is reduced. We adhere to a system integrity approach that is facilitated by initial information gathering prior to every site visit and supplemented by condition assessments executed on the site to support future life cycle recommendations. Hilcorp selected our team because of the turn key operation that we offered with minimal impact to their day-to-day operations. A hands-on inspection and assessment was conducted using rope access and did not require the assistance from the client's maintenance staff. The Rope Access Team was a three-person crew: (2) bridge inspectors with SPRAT certifications, one being a Level 2 or 3. The third member of the team remained off rope for communications and safety coordination to save mobilization and project costs, this was identified as an HAK staff member located at Endicott that is available for the duration of the inspection.
07/19 – 12/22	Bridge Inspection Term Agreement Including Complex Bridges, Statewide, Alaska. Alaska Department of Transportation & Public Facilities. <i>Project Manager, Bridge Inspector.</i> Responsible for management, emergency response, local point of contact, and lead inspector to support Michael Baker's fracture-critical bridge inspection contract for various bridges statewide in accordance with NBIS, including inspection plan development; in-depth condition and appraisal, routine, fracture critical, underwater inspections; and preparation of inspection reports. The contract includes several types of bridges (i.e. truss, frames, various marine access structures) and include rope access techniques to perform the hands-on inspection and non-destructive testing (NDT) such as magnetic particle testing and ultrasonic testing of pins.
11/20 – 11/20	Design Point Mackenzie Rail Extension Bridge Repairs, Big Lake, Alaska. Matanuska-Susitna Borough. Project Manager, Lead Bridge Inspector, Designer of Record. Responsible for managing and executing the damage evaluations, repair designs, and PS&E for 7 bridges along a section of railway linking Point Mackenzie to the ARRC mainline. FEMA appropriated funds through the Public Assistance Program to restore the bridges to as-built condition after they sustained earthquake damage during the November 2018 7.1 magnitude Southcentral Alaska earthquake.

Michael Baker International



Jason R. Sadowski, P.E., S.E.

Bridge Inspector

Years of experience with this firm/employer

Years of experience with other firm(s)/employer(s) 11

Degree(s) / Years / Specialization Active registration number / state / expiration date			ience / 2002 / Civil Engineering, University of Wisconsin at Madison neering / 2007 / Civil Engineering, Marquette University	
		P.E.38660-6 / W	WI / Exp. 7/31/2022	
	Year registered	2007 (PE)	Discipline P.E./Civil	
Contract role(s) / bri	ef description of res	ponsibilities	Team Leader / Assist with planning and leading teams for complex bridge inspections.	
Experience dates (mm/yy–mm/yy)			evant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", erience dates should cover the time specified in the applicable MPR(s).	
07/2021 – 10/2021	St. Croix Crossing Bridge Inspection, St. Croix County, Wisconsin, Wisconsin Department of Transportation. <i>Project Manager/Team Leader.</i> Responsible for inspection, team coordination, and report quality assurance reviews and pylon and cable stay anchorage inspection, as well as managing inspection of stay cables, post-tensioned box girders, and deck. The bridge carries Wisconsin State Highway 64 over the St. Croix River and consists of post-tensioned concrete box girders supported by stay cables with a total length of over 3,300 feet. Defects were summarized and quantified for inclusion in the inspection report. Access to the structure was provided with manlifts, under bridge inspection trucks, ladders, and air monitors for the interior box and pylon inspection work. Potential maintenance items were identified and tracked for reporting.			
10/2018 – 12/2018	Complex and Fracture Critical Bridge Inspections, Statewide, Mississippi. MDOT/State Aid Road Construction. <i>Quality Reviewer.</i> Provided quality control review of inspection reports and load ratings on the project for the inspection of locally- owned complex bridges of varying types throughout the state on an expedited schedule. Inspections included in-depth condition, appraisal, and fracture-critical inspections; as well as load ratings; and preparation of inspection and load-rating reports.			
07/2019 – 10/2019	Blatnik Bridge Routine and Fracture Critical Inspection, Superior, Wisconsin, Wisconsin Department of Transportation. <i>Project Manager/Team Leader.</i> Responsible for leading inspection of the fracture critical three-span continuous tied arch trusses, deck suspender cables, and 52 fracture critical approach spans of the 8000-foot Blatnik Bridge carrying IH 535 over the Saint Louis Bay shipping channel. The fracture critical main span is a 600-foot-long steel through truss arch with a suspended deck and adjacent steel deck trusses. Since the main span is load posted for 40 tons due to gusset plate section loss, close coordination with the traffic control contractor to limit the number of snoopers and attenuator trucks on the main span at a given time, due to the weight restrictions on the bridge. Previous steel thickness measurements were validated using a digital thickness gauge to ensure that load ratings were based on the most current section loss data, main span deck truss and suspender cables			

08/2019 – 12/2019	Hoan Bridge Paint System Inspection and Repairs, Milwaukee, Wisconsin, Wisconsin Department of Transportation. <i>Project Manager/Team Leader.</i> Responsible for all aspects of the project. After the re-painting of the steel tied arch Hoan Bridge was completed, defects in the new paint system were observed. Michael Baker was contracted to perform a full inspection of the paint system to determine the location of all paint deficiencies for repair under the painting warranty. 63 steel girder spans on EB and WB IH 794 were inspected, up-close, with the use of WisDOT Reachall trucks. Traffic control was coordinated daily for lane, shoulder and ramp closures. After the defects were identified and located in the field, they were digitized on plan sets and categorized by type. Phase II included construction observation and documentation of the paint system repairs including review of the repair plan, materials submittals, and scheduling of the repair work.
09/2020 – 03/2021	MDOT Complex Bridge Scoping, Statewide, Michigan, Michigan Department of Transportation. <i>Project Manager.</i> Led all aspects of the project, including inspection planning, coordination and report development for three bridges in Michigan DOT's Big Bridge Program. This included inspection of two, 1500-foot, curved steel structures carrying US 131 traffic through downtown Grand Rapids over local streets and private parking lots using inspection access equipment and the in-depth inspection of a fracture critical steel deck truss carrying US 23 over the Ocqueoc River using rope access methods (SPRAT) to minimize impacts to traffic. In addition to the in-depth inspections, evaluated the existing conditions and determined the appropriate scope of required rehabilitation; prepared detailed scoping reports that presented multiple rehabilitation options, cost estimates (including life cycle costs), sketches of the key structure components and defects, and recommendations.

16. Staff Experience: Forte & Tablada



Bradley Holleman, PLS, E.I.

Senior Vice President, Survey/Advanced Measurements & Modeling

Years of experience with this firm/employer 1

Years of experience with other firm(s)/employer(s) 14

Degree(s) / Years / Specialization Bachelor of Science / 2009 / Civil Engineering, Louisiana State University

Dogroo(o, / Touro / Opeoranization				
Active registration number / state / expiration date		PLS 5082 / LA / Exp. 09/30/22		
	Year registered	2012(PLS)	Discipline	PLS
Contract role(s) / br	ief description of res	ponsibilities	Professional Surve	yor / Brad will lead topographic surveys for the contract
Experience dates (mm/yy–mm/yy)				d contract; <i>i.e.</i> , "designed drainage", "designed girders", I cover the time specified in the applicable MPR(s).
05/12 – 09/12	for the topographic su Tangipahoa Parish. T	LADOTD, H.009456, Tchefuncte River Bridge, Tangipahoa, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for the topographic survey and existing drainage map. This project was for a bridge replacement over the Tchefuncte River in Tangipahoa Parish. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall		
01/13 – 09/13	LADOTD, H.009489 Jefferson Highway Overpass, East Baton Rouge, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for the bridge monitor survey, topographic survey and existing drainage map. This project was monitoring and the overpass replacement of Jefferson Highway over Airline Highway in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.			
07/13 – 10/13	I-12 to Bush Route La 3241 Survey Control, Bush, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for setting the primary static control and digital levels for future phases of the project. This project was for the construction of a ner connecting route from Interstate 12 to Bush Louisiana. The work consisted of setting deep rod monuments along the proposed route and conducting over 40 miles of digital levels between the deep rod monuments.			
09/13 – 03/14	LADOTD, H.002375 Amite River Bridge Near French Settlement, French Settlement, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for constructing a new bridge over Amite River in French Settlement Louisiana to the replace the existing swing bridge. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.			
09/14 – 02/15	LADOTD, H.011158 LA 3139, Jefferson Parish, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for constructing a replacement span because of a damaged girder on the LA 3139 overpass over I-10. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.			

12/14 – 03/16	LADOTD, H.011137 & H.011152 I-12 (LA 21 to LA 59), St. Tammany Parish, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for widening of Interstate 12 from LA 21 to La 59 in St. Tammany Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.
	LADOTD, H.011923 Hooper Road Roundabout at Sullivan Road, East Baton Rouge Parish, LA Surveyor-in-Charge.
09/15 – 11/15	Bradley was the surveyor-in-charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for construction of a roundabout at Hooper Road and Sullivan Road in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.
	LADOTD, H.000263 Chef Menteur Pass Bridge, Orleans Parish, LA Surveyor-in-Charge. Bradley was the surveyor-in-
06/16 – 02/17	charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for the design of new bridge to replace the existing swing bridge on US 90 over Chef Menteur Pass. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.
	LADOTD, H004987 US 190 Collins Blvd, St. Tammany Parish, LA Surveyor-in-Charge. Bradley was the surveyor-in-
03/17 – 03/18	charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for the design of capacity improvements on US 190 in Covington. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.
	LADOTD, I-10: Loyola Interchange Improvements, Kenner, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge
05/18 – 11/18	for the control survey, utility survey and 3D mobile laser scanning. This project was for the design of new exit for the New Orleans Airport. The work consisted of completing a utility and control survey, according to the LADOTD Location and Survey Manual, including all utilities with depths that fell within the survey limits.
	LADOTD, 4400017597 DOTD Rural Bridge Replacement, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge for
06/20 – 12/20	the topographic survey. This project was for design of multiple bridge replacements throughout south Louisiana. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.
	LADOTD, H.004100 I-10: LA 415 to Essen Lane, East Baton Rouge Parish, LA Surveyor-in-Charge. Bradley was the
01/18 – 04/20	surveyor-in-charge for the topographic survey and 3D Mobile laser scanning. This project was for the widening design of Interstate 10 from LA 415 to Essen Lane in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.
	LADOTD, H.000688 US 11 Norfolk Southern RR Overpass, LA Surveyor-in-Charge. Bradley was the surveyor-in-charge
04/20 – 11/20	for the topographic survey and 3D Mobile laser scanning. This project was for the design of a new US 11 overpass over Norfolk Southern Railroad. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all buildings that fall within the survey limits.

1	sell "Joey" C dent / CEO	oco, P.E., N	1BA	Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	14
	ars / Specialization	Master of Busine	ess Administration /	ngineering, Louisiana State University 2006 / Louisiana State University 08 / Old Dominion University	
	gistration number / te / expiration date	P.E.31337 / LA /	/ Exp. 9/30/22		
	Year registered	2004(PE)	Discipline	P.E./Civil	
Contract role(s) / brid	ef description of res	ponsibilities	Principal-in-Charge	e for Forte and Tablada staff	
Experience dates (mm/yy–mm/yy)				d contract; <i>i.e.</i> , "designed drainage", "designed girders' I cover the time specified in the applicable MPR(s).	,
03/18 – Ongoing	LADOTD Retainer Contract for Off-System Bridge Load Rating – Statewide, LA QA/QC. Joey served as the review engineer for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 –Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 –Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.				es,
03/14 – 03/17	slab span and girder			DOTD QA/QC . Joey served as the review engineer for over 20 bload rating software.	00
06/16 – 04/20	St. Tammany Parish Off-System Bridge Load Ratings, St. Tammany Parish, LA QA/QC. Joey served as the review engineer for the data collection, inspection, and load rating of numerous slab span, girder, and railcar bridges in St. Tammany Parish.			ny	
11/16 — 10/20	Livingston Parish Off-System Bridge Load Ratings – Livingston Parish, LA QA/QC. Joey served as the review engineer for the inspection and load rating of numerous existing slab span bridges and culverts in Livingston Parish In accordance with FHWA Metric 13, which requires a current load rating of all Off-System bridges.				
05/19 – 09/19	Danziger Bridge. Incl	uded laser scannir	ng and comparison o	ish, LA <i>Principal</i> . Joey is overseeing survey investigation of factual conditions to original plans.	
10/18 – 12/18	4400010587- Sunshine Bridge Repair- St. James Parish, LA- LADOTD <i>Principal</i> . Joey is overseeing topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord.				
05/17 – 10/18	Belle Chasse Bridge and Tunnel Replacement Hydrographic Survey- Plaquemines Parish, LA Principal-in-Charge. Principal-in-charge for comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.				

16. Staff Experience: Forte & Tablada

Ross Wilson, PLS Surveyor			Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	10 2	
Degree(s) / Ye	ars / Specialization	Bachelor of Scie	nce / 2010 / Geoma	itics, Nicholls State University	
	gistration number / ate / expiration date	PLS 5148 / LA /	Exp. 3/31/2022		
	Year registered	2015 (PLS)	Discipline	PLS	
Contract role(s) / bri	ef description of res	ponsibilities	Professional Surve	eyor / Ross will support topographic surveys for the contract	
Experience dates (mm/yy–mm/yy)	"designed intersec	tion", etc. Exper	ience dates should	ed contract; <i>i.</i> e., "designed drainage", "designed girders I cover the time specified in the applicable MPR(s).	-
04/21 – 06/21		LADOTD, H.014628, LA 397: Turn Lanes at Rice Mill, Calcasieu Parish, LA Surveyor. Ross was the surveyor responsible for topographic surveying at the intersection of LA 397 and Joe Spears Rd. in Calcasieu Parish.			sible
8/19 – Ongoing	LADOTD, H.011670, I-10/Loyola Interchange Improvements, Kenner, LA <i>Project Manager</i> . Project Manager providing Topographic Survey, Right- of-Way Survey, and Drainage Survey. The project stretches from the levee in Kenner to the Williams Blvd. off ramp, as well as Loyola Avenue and portions of Veterans Blvd.			g	
6/20 – Ongoing	LADOTD, H.013979, H.013995, H.013992, H.013994, H.013985, H.013954, H.013990, Rural Bridge Replacement Initiative 7 State Projects Numbers (22 Structures) in Districts 04, 05, 08 and 58 – Surveyor for topographic surveying of 22 bridges in Louisiana.				
1/20 – 10/20	LADOTD, H.012588, H.012169, H.012587 I-10: Atch Basin Br-W. Baton Rouge P/L, I-10: Iberville P/L-W End Miss Br, I- 10: W End of Br 290-W End of LA 415- West Baton Rouge & Iberville Parishes <i>Project Manager</i> . Ross served as the project manager for the complete topographic survey, approximately 18.3 miles, from the East end of the Atchafalaya Bridge to the West end of the I-10/LA 415 Interchange.			9	
<u>(11/19 –12/20</u>	LADOTD, H.012083, Calcasieu River Bridge Investigation, Calcasieu Parish, LA Surveyor. Ross served as the surveyor to provide laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA. Terrestrial scans were done underneath the bridge for 10 spans on the East and West side, on top the deck to capture the superstructure, as well as from the water below to capture the substructure. In addition to the terrestrial scans, mobile Lidar was done for future planning.				
12/19 – 9/20	LADOTD, H.011970, Bayou Terrebonne Bridges, LA Surveyor. Ross served as the surveyor for the Bayou Terrebonne bridge along with the entire intersection and adjacent roads.			;	
11/18 – 04/19	LA 327, Spur: Staring Lane Ext. Route LA 327-S- East Baton Rouge Parish, LA <i>Project Manager.</i> Ross served as the project manager for a topographic survey for this project which is located in East Baton Rouge Parish, in between the intersections of La 42 (Burbank Dr.) and Staring Ln. and La 327 (Gardere Ln.) and La 30. A complete Topographic survey including all utilities with depths and all drainage was required, along with finish floor elevations of all buildings that fall within the survey limits.				

LADOTD, H.004791.5, Belle Chasse Bridge and Tunnel Replacement Hydrographic Survey, Plaquemines Parish, LA <i>Surveyor.</i> Ross served as the surveyor for comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
LADOTD, H.004100, I-10 (LA 415 to Essen Lane on I-10 and I-12), East and West Baton Rouge Parishes, LA <i>Project Manager.</i> Ross served as the project manager for topographic survey of the work between LSU lakes and Essen Lane.
LADOTD, H.010753.5, US 90 / I-310 Interchange, St. Charles Parish, LA Surveyor. Ross was the surveyor responsible for topographic surveying and 3-D laser scanning at the intersection of US-90 and I-310 in St. Charles Parish.
LADOTD, H.004273.5, I-49 Connector, Lafayette Parish, LA <i>Survey Manager.</i> Ross was the survey manager responsible for providing topographic surveying services for the I-49 Connector. The project is in a dense urban area and is approximately 5 miles long. Forte and Tablada, Inc. completed laser scanning services for much of the congested corridor as a means to obtaining topographic data without endangering surveyors.
LADOTD , H.004698, Almonaster Avenue Lift Bridge, Orleans Parish, LA Survey Manager. Ross was the survey manager responsible for performing topographic and property surveys, developing a drainage map, establishing existing right-of-way for the north line of I-10, Almonaster Avenue, and CSX Railroad property, and establishing elevations to develop a Digital Terrain Model with widths matching the limits of the topographic survey.
LADOTD , H.012343, Sunshine Bridge Repair, St. James Parish, LA Surveyor. Ross was the surveyor responsible for establishing control on and near the Sunshine Bridge to use survey and laser scanning methods to monitor the damage on the bridge. This project included utilizing LiDAR data.
LADOTD , H.000303.6, Danziger Bridge Repair, Orleans Parish, LA Surveyor. Ross was the surveyor responsible for Topographic and Monitoring survey and laser scanning of Danziger bridge. This survey is necessary due to damage of joints, deck, and girder ends of the fixed spans on both sides of the bridge. This project included utilizing LiDAR data.
LADOTD, H.012308, Cook Road Improvements, Livingston Parish, LA <i>Surveyor.</i> Ross was the surveyor responsible for Topographic and Right-of-Way surveys for this project that designed improvements to an existing section of two lane roadway and an unimproved area with the construction of a four (4) lane boulevard section from LA Hwy 16 (Pete's Hwy) to LA Hwy 1026 (Juban Road), along with several bridges.
LADOTD, H.013052, LA 442 Tangipahoa River Bridge Replacement, Tangipahoa Parish, LA Surveyor. Ross provided topographic surveying for the LA 442 bridge over the Tangipahoa River. The survey included numerous cross-section surveys upstream and downstream of the bridge, as well as the along the bridge fascia.
LADOTD, H.009250, I-10: Highland Road to LA 73, East Baton Rouge and Ascension Parishes, LA Survey Manager. Ross was the survey manager for the topographic survey of approximately 7.0 miles to widen the interstate.
LADOTD, H.002365.5, LA 63: Bridges near Bluff Creek, East Feliciana Parish, LA <i>Surveyor.</i> Ross provided topographic surveys in preparation for bridge replacements with drainage structures along three portions of the existing highway including utility location and depths. Finished floor elevations of all buildings that fall within the survey limits were determined.
LADOTD, H.003119, I-10 Design Build: Siegen Lane to Highland Road, East Baton Rouge Parish, LA Survey Technician. Ross was the technician for the construction stakeout and topographic surveying for 2.8 miles on the interstate. Utilized GPS, conventional-robotic, and differential leveling surveying on this project.

16. Staff Experience: Forte & Tablada

	ey Easley, P t Engineer	.E.		Years of experience with this firm/employer	14
MU	C			Years of experience with other firm(s)/employer(s)	3
Degree(s) / Year	s / Specialization			ngineering, Louisiana State University ineering / Louisiana State University	
	stration number / e / expiration date	P.E. 31542 / LA	/ 03/31/2023		
	Year registered	2004 (PE)	Discipline	P.E./Civil	
Contract role(s) / brief	description of res	ponsibilities	Bridge Engineer /	Joffrey will assist the team with bridge load rating	
•	• •			ed contract; <i>i.e.</i> , "designed drainage", "designed girders d cover the time specified in the applicable MPR(s).	",
Congoing a	LA DOTD Retainer Contract for Off-System Bridge Load Rating – Statewide, LA – Project Manager, Load Rating Engineer, and Team Leader for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 – Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.				i.
	-		Statewide, LA – LA load rating software.	DOTD – Load rating engineer for over 200 slab span and girde	er
05/16 – 10/19 U	Retainer Contract for Complex Bridge Rating, Statewide, LA- LA DOTD - Project Manager to perform a load rating for the US 90 West Middle River Bridge near the Louisiana/Mississippi border. A detailed inspection of the steel through-trusses was also provided.				
06/16 – 04/20 k	oridge files from all a	vailable resources	, including LADOTD	t. Tammany Parish, LA - Project Manager to collect all availab and Parish records, for numerous slab span, girder, and railcar load ratings for the bridges.	
11/16 – 10/20 e	Livingston Parish Off-System Bridge Load Ratings – Livingston Parish, LA – Inspection and load rating of numerous existing slab span bridges and culverts so that Livingston Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated.				
04/18 = 09/18 f	Tangipahoa Parish Off-System Bridge Load Ratings – Tangipahoa Parish, LA – Inspection and load rating of 2 railroad flatcar bridges and a slab span bridge to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.				
03/18 – Ongoing	LA DOTD Retainer Contract for Off-System Bridge Load Rating – Statewide, LA – Project Manager, Load Rating Engineer, and Team Leader for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 – Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.				

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05/20 – 07/20	St. James Parish Off-System Bridge Load Rating - St. James Parish, LA - Inspection and load rating of a slab span bridge
00/20 01/20	to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.
08/19 – 02/20	LA DOTD Retainer for In-Depth Bridge Inspections – Simmesport, LA – Inspection of the approach spans, consisting of
00/19 - 02/20	rolled steel and plate girder spans supported by column bents, of the LA 1 bridge over the Atchafalaya River.
	Iberville Parish Off-System Bridge Load Ratings and Prioritization – Iberville Parish, LA – Inspection and load rating of
04/11 – 10/16	42 existing off-system bridges so that Iberville Parish would follow FHWA Metric 13, which requires all Off-System bridges to be
	load rated. Also developed a repair and replacement report for all bridges.
	Cook Road Expansion – Designed and produced plans for new bridges over Gray's Creek to provide additional access to the
12/12 – Ongoing	Juban Crossing shopping center by extending Cook Road off of Pete's Highway. Bridge includes special details to
	accommodate sidewalks for pedestrian use.
	H.000445.1-1- US 190 over UPRR and Little Teche Bayou, St. Landry Parish, LA - Project Engineer for this project that
	developed a scoping document for the replacement or rehabilitation of the EB and WB US 190 bridges over the Union Pacific
10/18 – 5/19	Railroad (UPRR) near I-49 and over Little Teche Bayou in St. Landy Parish, LA. Based on the findings, a Bridge Evaluation
	Report outlining the feasibility and preliminary cost estimates for several construction phasing alternatives, as well as a
	recommended scope of work, was developed.
	Westdale Road over Bayou Pierre Repairs – DeSoto Parish, LA – Inspected, laser scanned, developed plans, and provided
11/14 – 08/16	construction administration services for the repairs of a timber bridge that had been closed due to its deteriorated condition.
	Provide a load rating following the completion of the repairs. Repairs allowed the bridge to be re-opened to vehicular traffic.
01/16 – 01/21	Whittington Road Bridge Replacement – Livingston Parish, LA – Design engineer for the replacement of an existing timber
01/10 - 01/21	bridge over Grays Creek with a new concrete slab span bridge through the LADOTD off-system bridge replacement program.
12/13 – 05/14	Million Dollar Road Bridge Rating – St. Tammany Parish, LA – Served as a rating engineer for load rating of a slab span
12/13 - 03/14	bridge in St. Tammany Parish. Utilized Virtis load rating software.
	East Baton Rouge Parish Bridge Replacements – Provided design services and load rated multiple slab span bridges that
06/15 – 06/16	incorporated sidewalks. Design services included determination of pile loads, superstructure and substructure design, and
	independent technical review of completed plans.
	Musson Lane Bridge Replacement, Iberville Parish, LA – Performed a detailed structural inspection and load rating of the
05/13 – 12/14	existing bridge constructed of precast concrete spans and timber caps and piles. Developed plans and specifications for the
	replacement of the existing bridge with a new precast concrete slab span bridge.
	2012 Livingston Parish Bridge Replacement Program – Replacement of seven bridges with precast concrete slab spans
02/13 – 11/14	and precast concrete arch bridges in an effort to improve drainage. Reviewed final plans and designed precast concrete arch
	bridge substructures.

16. Staff Experience: KTA-Tator, Inc.

1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Dert Lanterma ervisor/Other	n		Years of experience with this firm/employer	16		
				Years of experience with other firm(s)/employer(s)	7		
Degree(s) / Years / Specialization		Bachelor of Science / 1999 / Chemical Engineering, Youngstown State University					
Active registration number / state / expiration date		SSPC Certified Protective Coatings Specialist 2015-820-136 / PA / Exp. 12/31/2023 NACE Certified Coatings Inspector Level 3 13505 / PA / Exp. 05/23/2022					
Year registered		2015(SSPC); 2019(NACE)	Discipline	Paint System Evaluation			
Contract role(s) / brid	ef description of res	ponsibilities	Coatings Consulta	ant / Robert will lead coating condition assessment services			
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).						
09/21 - Ongoing	IWGO Bridge, Baton Rouge, LA Coatings Consultant . As a subconsultant, Robert is performing a coating condition assessment and assisting with the development of surface preparation, coating application, and environmental/ worker protection and containment specifications/drawing notes for the rehabilitation of this bridge.						
07/20 – 08/20	Denison Harvard Bridge, Cleveland, OH Coatings Consultant . As a subconsultant to Michael Baker International, Robert performed a coating condition assessment, supervised coatings laboratory testing, developed a maintenance painting strategy, provided recommendations, and developed an opinion of probable costs for the maintenance painting of this bridge.						
02/20 – 05/20	Jackson Street (Red River) Lift Bridge, Alexandria, LA Coatings Consultant. As a subconsultant to Gresham Smith, Robert performed a coating condition assessment (visual examination, coating thickness and adhesion measurements, substrate examination, and coating sample procurement), supervised coatings laboratory testing, and prepared a report with recommendations for the rehabilitation of the coating system on this bridge.						
02/18 – 06/19	Walt Whitman Bridg engineering/coating c condition of the existi structure. KTA also c	Je NJ Approach S consulting services ing coatings on the onducted a Relativ	Spans Coatings Co for KTA on this proj structures in order t ve Risk Characteriza	onsultant . As a subconsultant, Robert provided project ect involving a coating condition assessment to determine the o develop future maintenance painting strategies for each tion that focused on the relative impacts to the environment, the rface preparation activities.	•		
10/18 – 03/19	Kootenay River Bridge, Creston, BC, Canada Coatings Consultant. As a subconsultant, Robert performed a coating condition assessment (visual examination, coating thickness and adhesion measurements, substrate examination, and coating sample procurement), supervised coatings laboratory testing, and prepared a report with recommendations for the rehabilitation of the coating system on this bridge.						
09/18 – 12/18	Argentia Newfoundland Ferry Dock Transfer Bridge, Newfoundland, Canada Coatings Consultant. As a subconsultant, Robert performed a coating condition assessment, supervised coatings laboratory testing, and developed recommendations for future maintenance painting of the structural steel end span of this bridge.						

07/17	7 – Ongoing	Benjamin Franklin Bridge, Philadelphia, PA Coatings Consultant . As a subconsultant, Robert is providing project engineering/coating consulting services for KTA on this project involving a coating condition assessment of the bridge to determine the condition of the existing coatings on the structure to develop a future maintenance painting strategy. Additional services include providing contractor containment and paint submittal review services for the maintenance painting and steel repair work on this bridge.
06/17 – 06/19 engir cond struc		Walt Whitman Bridge Corridor - PA Approach Coatings Consultant. As a subconsultant, Robert provided project engineering/coating consulting services for KTA on this project involving a coating condition assessment to determine the condition of the existing coatings on the structures in order to develop future maintenance painting strategies for each structure. KTA also conducted a Relative Risk Characterization that focused on the relative impacts to the environment, the public, and adjacent workers resulting from the proposed surface preparation activities.
	03/17 – 05/17	US 90 Morgan City Bridge and Nearby Structures, Morgan City, LA Coatings Consultant . As a subconsultant, Robert performed a coating condition assessment, supervised coatings laboratory testing, and prepared a report with recommendations for the rehabilitation of the coating system on this bridge.

16. Staff Experience: Bridge Diagnostics, Inc. (BDI)

No. of the State o	ett Commande President / Principa	•	Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	32 1			
			uctural Engineering il Engineering / Univ	/ University of Colorado /ersity of Colorado			
Active registration number / state / expiration date		Professional Engineer: 35864 / LA / 3/31/2023					
Year registered		2010	Discipline	Civil Engineer			
Contract role(s) / brief description of responsibilities		ponsibilities	QA/QC, Principal Engineer				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).						
10/89 - Ongoing	Brett has over 30 years of experience with testing, monitoring, and evaluating measured structural responses on over 1000 structures. Brett has performed/oversaw complete structural analyses and load ratings on over 500 highway and railway bridges using a variety of design codes such as AASHTO and AREMA, and many state specific codes including Louisiana specifications. Brett also has designed/oversaw capacity testing projects of concrete and steel structures using various NDE techniques as well as implemented hundreds of structural monitoring systems.						
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 DOTD capture weigh-in- motion data, strains induced by heavy loads, and photos of heavy load. Health Monitoring is still ongoing. Over multiple contracts, Brett was the principle-in-charge on this project in its many phases which included responsibilities such as testing program oversight, structural analysis, load rating of structure for atypical load configurations, on-site data interpretation, report creation and submittal, and providing recommendations for future crossings.						
03/07 – 05/07	Load Testing and Rating of White Bayou I-10 Bridge, LA – As part of a research project performed by Tulane University, in which various FRP strengthening methods were investigated, BDI performed load testing and rating on this multi-span RC T- beam bridge. Brett acted as the Principal-in-Charge and oversaw the testing plan development, analysis, load rating, and reporting using DOTD Bridge Design and Evaluation Manual and AASHTO MBE.						
05/10 – 08/11	Judge Seeber Lift Bridge Wire Rope Balancing, LA - As part of the wire rope replacement on this structure, Brett implemented a wire rope tension measurement system, using the Taut Cable Vibration Method, that calculated the load distribution of all the cables on each bridge corner real-time. Based on these calculations, Brett directed the contractor's tightening sequence to balance the loads within each cable bundle to minimize site time.						
11/12 – Ongoing	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 cause and effect of cracks in continuous multi-span PS/C girders. Load ratings were completed according to DOTD specifications. After the completion of the initial evaluation, monitoring systems were installed on the structure to monitor the state of two sections of structure. Structural Health Monitoring is still ongoing. As technical advisor/principal engineer, Brett oversaw live-load and thermal load monitoring that was performed during and after repairs to evaluate the performance of retrofit.						

06/14 – Ongoing	Phinney Avenue Bridge Load Testing, Rating and NDE, WA – As part of BDI's SDOT On-Call, BDI was contracted by Seattle DOT to perform diagnostic load tests and structural reinforcement investigation on the Phinney Ave bridge in Seattle, WA. Instrumentation, load tests, and reinforcement investigation were performed with the overall goal of these tests was to better understand the structures' load distribution, reinforcement details, and in turn 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.
05/15 – 10/15 02/18 – 08/18	Truss Monitoring on US 84 Over the Mississippi Bridge, 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. The goal of this monitoring was to validate new pin performance, as well as detect any changes in significant loading conditions during construction due to the expansion joints being seized while the pins were extracted and replaced. Brett acted as instrumentation subject matter expert on this project.
08/18 – 12/20	Live Load Testing and Field-Verified Load Rating of 16 Bridges, VA – As part of BDI's VDOT On-Call, BDI provided load testing and field-verified load rating of 16 structures in the Fredericksburg and Richmond districts of VDOT. BDI was responsible for the design of load testing requirements, development of instrumentation plans, execution of field work and load testing, data analysis, finite element (FE) model creation and calibration, and eventual load rating per VDOT and AASHTO requirements. Brett acted as principal engineer and subject matter expert for this project and responsibilities included overseeing testing program development.
07/19 – 12/19	St. Claude Lift Bridge Balance and Operation Testing, LA – Brett was project principal engineer responsible for counterweight/span balance and friction calculations as well as structural performance evaluation on a double heal trunnion Strauss Bascule Bridge. Strain gauge testing and various instrumentation tasks were performed during investigation of a bearing failure on the span to counterweight link.
02/20 - Ongoing	West Seattle High Bridge NDE and Structural Health Monitoring, WA – As part of BDI's SDOT On-Call, BDI was contracted by Seattle DOT to perform emergency structural monitoring after the bridge was closed to traffic. This bridge was the primary corridor connecting West Seattle to downtown Seattle and I-5. BDI mobilized, installed numerous displacement and crack sensors, and provided an online monitoring and alarm system. This system was used to ensure safe access during subsequent investigations and emergency strengthening construction. Following the bridge closure, BDI also performed NDE to evaluate crack depths, concrete condition, and condition of post-tension ducts and tendons. Results from the NDE investigation were essential to the decision of structure repair or replacement. Once SDOT decided to repair the structure, BDI expanded the structural monitoring with 112 new vibrating wire strain sensors and fiber optic distributed strain measurements over the length of the superstructure. Brett acted as the principal engineer with respect to NDE and monitoring activities. This included developing and participating in emergency response protocols.
01/21 - Ongoing	FHWA Structural Health Monitoring (SHM) Current Practice and Web Manual, VA – As part of this research team, Brett is a subject matter expert and providing his vast 30 year and 1000+ structure experience in the development of this manual. It will be a comprehensive and interactive toolbox to guide bridge owners through the myriad of information available and help them understand the benefits, limitations, and best applications of SHM. Starting with a review of the research and practical applications that have developed over the last thirty years, this manual will provide a menu of structural monitoring goals, define the methods that best meet those goals, and provide guidance for system specification as well as required vendor qualifications.
01/21 - Ongoing	Ballard Bridge Monitoring, WA –Brett was Project Principal Engineer responsible for overseeing the trunnion friction and operating torque monitoring system installed on this double trunnion Strauss bascule bridge. BDI installed strain gages, shaft torque gages, and tiltmeters to monitor changes in trunnion friction, system friction, and shaft torque over a 2-year monitoring period.

	ce Carpenter, or Engineer / Engine		ent Lead	Years of experience with this firm/employer			
				Years of experience with other firm(s)/employer(s)	2		
	ars / Specialization			v Mexico State University / New Mexico State University			
	gistration number / ate / expiration date	Professional Eng	gineer: 39341 / LA /	3/31/2023			
	Year registered	2014	Discipline	Civil Engineer			
Contract role(s) / bri	ef description of res	ponsibilities	Senior Engineer /	Engineering Department Lead			
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.e.</i> , "designed drainage", "designed girders d cover the time specified in the applicable MPR(s).	",		
07/09 - Ongoing	Engineering Lead res reporting. Brice has b reinforced concrete, p such as AASHTO, Af	ponsible for testin been involved with prestressed concre REMA, and many s	g plan oversight, dat the testing, monitorir ete, in simple to com state specific codes i	d rated using advanced techniques, Brice has become BDI's a processing and investigation, structural analysis, load rating, a ng, and evaluation of hundreds of structures of various types (st plex geometry and configurations) using a variety of design cod ncluding Louisiana specifications. Brice also has years of es using various NDE techniques.	teel,		
07/09 – 11/12	state of Rhode Island provided it directly to and develop accurate	I. For all of the stru AECOM for evaluate load ratings using	ictures, BDI collected ation. For select brid g the AASHTO Manu	– BDI performed field testing on 35 bridges located throughout and reviewed the strain, displacement, and NDE (GPR) data a ges, BDI also used the field data to calibrate finite element mod al of Bridge Evaluation. Brice acted as analysis and rating engi sis, load rating, and reporting.	and Iels		
11/12 – Ongoing	US-90 Bayou Ramos Bridge Load Testing & Monitoring, LA – Due to unexpected cracking in PS concrete beams, BE						
Solution 11/11 - Ongoing	Bonnet Carre Spillw ton load could cross stresses below its se in-motion data, strain	pillway Load Testing and Monitoring, LA – In 2004, BDI used its Integrated Approach to determine if a 50 ross the bridge safely. Based on provided configurations, BDI determined the "superload" could cross with ts serviceability limit. In 2011, BDI installed an event-based monitoring system that helps DOTD capture weig strains induced by heavy loads, and photos of heavy load. Brice performed superload load ratings and report urrently acts as the project engineer for monitoring support to DOTD.					

11/20 – 06/21	Terminal 5 Bridge Load Testing and Rating, WA –Terminal 5 bridge is used by heavy truck traffic to and from the Port of Seattle, WA. As part of BDI's SDOT On-call, instrumentation and load tests were performed on PSC beam and steel girder spans (curved and straight) with the overall goal of to better understand the structures' load distribution and behavior and in turn provide refined load ratings. Brice acted as the lead analysis/rating engineer responsible for data processing, model calibration, and load ratings and reporting according to SDOT/WSDOT specifications.
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 field prep, field installation, data analysis and reporting.
08/16–05/17	Live Load Testing of Eight Culverts and Testing, LA – BDI worked in coordination with LSU, LTRC, and DOTD 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.
08/18–12/20	Live Load Testing and Field-Verified Load Rating of 16 Bridges, VA – As part of BDI's VDOT On-call, load testing and field-verified load rating of 16 structures was performed in the Fredericksburg & Richmond districts. BDI was responsible for the design of load testing requirements, development of instrumentation plans, field work and load testing, NDE based capacity refinement, data analysis, finite element model creation and calibration, and eventual load rating per VDOT and AASHTO requirements. Brice acted as the lead analysis and load rating engineer responsible for data processing, model calibration, and load ratings and reporting according to VDOT specifications.
08/19	Sunshine Truss Emergency Monitoring, LA – In 2018, the Sunshine Truss Bridge was struck by a crane barge, significantly damaging a bottom chord member. As part of the Modjeski and Masters response team, BDI installed a laser displacement sensor within 48 hours of the event to monitor the behavior of the damage member. Once a monitoring plan was developed and approved by the team, BDI installed strain gages along nearby chord members that were used to evaluate the state of the structure before, during and after the replacement of the damaged bottom chord member. Brice acted as local project engineer responsible for team coordination, field instrumentation work and management, and force calculations and submittal.
07/19–12/19	St. Claude Lift Bridge Balance and Operation Testing, LA – Brice was the project engineer and field/analysis engineer responsible for counterweight/span balance and friction calculations, and also structural performance evaluation on a double heal trunnion Strauss Bascule Bridge. Strain gauge testing and various instrumentation tasks were performed during investigation of a bearing failure on the span to counterweight link.
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 DOTD 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 was measured during bridge openings. Brice was the project engineer responsible for testing plan development, instrumentation, testing, data analysis, and reporting.

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Charles Young, P Nondestructive Evaluation		Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	4				
Degree(s) / Years / Specialization		uctural Engineering	/ Drexel University ng / Drexel University				
Active registration number / state / expiration date		gineer: 42773 / LA /					
Year registered	2018	Discipline	Civil Engineer				
Contract role(s) / brief description of res	ponsibilities	Nondestructive Ev	aluation Project Manager and Engineer				
			d contract; <i>i.</i> e., "designed drainage", "designed girders I cover the time specified in the applicable MPR(s).	",			
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 01/19 - Ongoing the Bonnet Carre Spinster This work was performed and supplemental inspection multi-technology briding 							
08/19 – 12/21 US Army Corps Evaluation of Advanced Weld Inspection Methods – As USACE's ongoing want to improve inspection techniques, BDI was awarded a Task Order under its IDIQ to identify and determine best practices for steel weld inspection utilizing advanced ultrasonic testing (UT) methods such as phased array ultrasonic testing (PAUT) and total focus method / for the project engineer and lead bridge inspector for this project.							

matrix capture (TFM/FMC). These advanced methods improve the reliability and repeatability of weld inspection and flaw sizing for fitness for service level analysis. Dr. Boone was the subject matter expert for this project and helped develop the testing means and methods that were performed on eight lab samples and four comprehensive in-field bridge weld inspections. Based on these findings, USACE expanded the scope to scan further areas of concern on one of the bridges. 10/19 – 11/19 Meemorial Bridge Ropes Access FCM Inspection, ME – This project involved performing a hands-on fracture critical member inspection of the Memorial Bridge in Augusta, ME. The structure is a 2,100-foot-long cantilever deck truss spanning the Kennebec River. Access was provided via ascending/descending rope access techniques, along with aid climbing. 03/20 – 05/20 City Park Lake Bridge and targeted nondestructive evaluation. LA – This project involved perd an NHI routine inspection of the City Park Lake Bridge and targeted nondestructive evaluation. This work was performed under an IDIQ Contract for Non-destructive Evaluation of Structures for DOTD. Nondestructive evaluation included a multi-technology bridge deck assessment included in the nondestructive evaluation is Infrared Thermography, and High-Resolution Imagery. Also included in the nondestructive evaluation is Infrared Thermography of the superstructure and substructure of the bridge. 06/20 – 09/20 West Seattle High Bridge, WA – BDI was contracted by Seattle DOT to provide a non-destructive testing and structural health monitoring program to help evaluate performance of the structure during first phase of strengthening to open the bridge by 2022. Charles acted as the Task Order Manager and Lead Field Engineer for this project. 04/17 - 08/17 Eltham Brid		
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support of a future painting project, and therefore the spans were analyzed for live load, dead load, and wind load from	09/17 – 02/18	performing load rating calculations in accordance with AASHTO's Manual for Bridge Evaluation. These load ratings were in
		containment tarps that will be attached to the structure during painting.

Gresham Smith Past Performance E			e Evaluation Disciplin	e(s)* Bridge		
Complex Bri	dge Inspections II	DIQ – Task Or	der #1	Firm respons	ibility (prime or sub?)	Prime
Project number	4400013322	Owner's name	Louisiana Departmer	nt of Transporta	tion and Development	
Project location	District 08, Louisiana		Owner's Proje	ect Manager	Haylye Brown, P.E.	
Owner's address, phone, email	1201 Capitol Access Road	d, Baton Rouge, LA / 2	225.379.1205 / haylye.	brown@la.gov		
Services commenced by this firm (mm/yy) 10/19		10/19	Total consultant co	ntract cost (\$1	,000's)	\$1,318
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant	services provid	ded by this firm (\$1,000's)	\$ 387

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

Task Order #1

Gresham Smith was selected to provide services for a 5-year Complex Bridge Inspection IDIQ contract for DOTD's Bridge Maintenance Section, one of only two firms to provide these complex services on a statewide contract. The inspections are primarily in-depth bridge inspection for fracture critical bridges (primarily trusses) and for large, moveable bridges.

Task Order 1 began in late 2019 and includes three major structures:

- 1. Red River Lift Bridge in Alexandria
- 2. LA 1 Truss over Atchafalaya River
- 3. LA 8 Concrete Segmental Bridge in Boyce

The LA 8 Concrete Segmental Bridge inspection incorporated confined space safety related skills including lighting, air monitoring, ventilation and a emergency safety plan. The LA 1 Truss over the Atchafalaya River required concise traffic control details. Rope access was utilized to supplement the Underbridge Inspection vehicle.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Bert Moore, John Weres, Emery Sayre, Courtney Rome. Brennon Hughes, Rebecca Murray and Payton Nickles.



Project Highlights

- Inspection of a major steel truss, a concrete segmental box and a movable bridge.
- Variety of technical skills including structural analysis, maintenance knowledge, and structural integrity.
- Ultrasonic testing of the pins for the truss chords was performed by BDI.

• • • •		1			1		
Gresham Smith		Past Performance Evaluation Discipline(s)*			Bridge		
Complex Bridge Inspections IDIQ – Task Order #2, US 71 Spring Street Emergency Bridge Repairs					espons	ibility (prime or sub?)	Prime
Project number		Owner's name	Owner's name Louisiana Departmer			ation and Development	
Project location	Shreveport, Louisiana	Owner's Project	t Manager			Heather Patton, P.E.	
Owner's address, phone, email	1201 Capitol Access Roa	d, Baton Rouge, LA /	225.379.1306 / Heath	er.Patt	on@la.g	jov	
Services commenced by this firm (mm/yy) 04/20			Total consultant contract cost (\$1,000's)		1,000's)	\$142	
Services completed by this firm (mm/yy)		09/20	Cost of consultant services provided by this firm (\$1,000's)		\$130		

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.

LADOTD selected Gresham Smith for a 5-year IDIQ Design contract to perform Complex Bridge Inspection and Design Repairs. Gresham Smith is currently in the second year of this contract; having completed three task orders and entering contract phase on the 4th task order.

17. Firm Experience:

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. Coordination with the railroad staff was performed to minimize impacts from on-going rail traffic. A contractor was selected to perform the construction, and Gresham Smith coordinated with the contractor and DOTD on potential repair details, similar to a formal Construction Management at Risk (CMAR) contract arrangement.

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. A strongback system to support the structure during the removal of the damaged bent was designed by the contractor. Gresham Smith reviewed and approved the system, then performed a field review to verify installed compliance with the design. Geotechnical evaluations were completed and utilized for the design of the helical piles and concrete wall footer.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Bert Moore, John Weres, Courtney Rome and Emery Sayre.

Gresham Smith

Complex Bridge Inspections IDIQ – Task Orders #3 & #4, Moveable Bridges					ibility (prime or sub?)	Prime
Project number		Owner's name	Louisiana Departme	ent of Transport	ation and Development	
Project location	Various, Louisiana	Owner's Project	Manager	Stephanie Doolittle, P.E.		E.
Owner's address, phone, email	1201 Capitol Access Roa	d, Baton Rouge, LA /	225.379.1329 / Stepł	nanie.Doolittle@)la.gov	
Services commenced by this firm (mm/yy) 04/20			Total consultant contract cost (\$1,000's)		\$723	
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$723	

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.

Gresham Smith was selected to provide services for a 5-year Complex Bridge Inspection IDIQ contract for DOTD's Bridge Maintenance Section, one of only two firms to provide these complex services on a statewide contract. The inspections are primarily in-depth bridge inspection for fracture critical bridges (primarily trusses) and for large, moveable bridges. Gresham Smith 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:

- Bridge 006210 Vertical Lift Bridge at Loreauville, LA, •
- Bridge 054360 Gross Tete Steel Swing Bridge •
- Bridge 054472 Indian Village Swing Bridge ٠
- Bridge 009130 Charenton Truss/Swing
- Bridge 005860 Jeanerette Truss/Swing Bridge •
- Bridge 003450 Boudreaux Canal Swing Bridge •
- Bridge 006306 Bayside Swing Bridge ٠

Not listed were two additional vertical lift bridges in Houma LA (003240 Presque isle and 003620 Bayou Lacarpe) that were partially inspected, but have been deferred to a later date due to damage associated with Hurricane Ida which hit Houma during the initial mechanical/electrical inspections.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Bert Moore, John Weres, Courtney Rome and Emery Sayre, Brennon Hughes, Rebecca Murray and Payton Nickles.

Prime consultant firm: Gresham Smith



Gresham Smith

Project number

Project location

phone, email

Owner's address.

Florida Keys Overseas Heritage Trail (FKOHT) **Historic Bridge Evaluations**

Marathon, Florida

Services commenced by this firm (mm/yy)

Services completed by this firm (mm/yy)

(\$1.000's) 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; and is maintained by the Florida Department of Environmental Protection (FDEP). 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 inspection team was not permitted to directly access the bridges. The conceptual inspection was performed by boat access and incorporated drones to visually inspect the inaccessible structures and to document the conditions.

03/21

09/21

Gresham Smith used two FAA licensed drone pilots operating a DJI Phantom 4 drone and a DJI Mavic 2 drone. Due to FAA restrictions and the length of the bridges, drone operation was completed using a small boat, including landing and takeoff from the boat. The Seven Mile Bridge evaluation included the southern 4.5-mile segment south of Pigeon Key Island including 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. Based on the evaluations, rehabilitation and replacement options, and cost estimates were developed for the Seven Mile Bridge. Based on the sever condition of the Bahia-Honda Bridge, demolition and replacement options were evaluated since rehabilitation is not prudent. The recommendations also included "Immediate Action" recommendations for a buoy/signage program to preclude boater access under the Bahia-Honda Bridge. FDEP is currently planning and budgeting for the rehabilitation/replacement options as recommended by Gresham Smith. Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. Firm members involved include: John Weres, Braden Wells, Ryan Horn

Firm responsibility (prime or sub?) Owner's name FDEP **Owner's Project Manager** Wayne Thomas 3900 Commonwealth Boulevard, Tallahassee, FL / 850.245.2684 / wayne.thomas@floridadep.gov

Total consultant contract cost (\$1,000's)

Cost of consultant services provided by this firm



Prime

\$143.5

\$143.5

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

Past Performance Evaluation Discipline(s)* Bridge

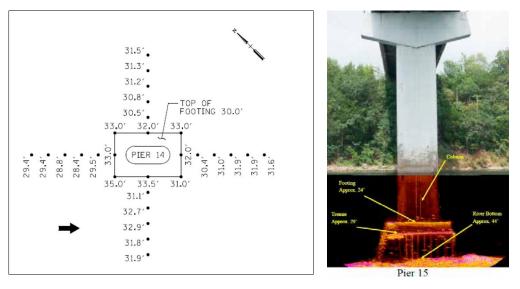
On-System & Off-System Underwater Bridge				spection	Firm res	ponsi	bility (prime or sub?)	Prime
Project number	E-1850 WO #8 & #9	Owner's name	Ten	nessee Departme	ent of Tran	sporta	ation	
Project location	Statewide, Tennessee			Owner's Proje	ect Manag	er	Stephen Paulson, P.E.	
Owner's address, phone, email	505 Deaderick Street, Na	505 Deaderick Street, Nashville, TN 37243 / 615.741.4232 / steven.paulson@tn.gov						
Services commenced by this firm (mm/yy)		03/17	Total consultant contract cost (\$1,000's)		\$169			
Services completed by this firm (mm/yy) 02/18		02/18	Cos	st of consultant	services p	orovid	ed by this firm (\$1,000's)	\$105

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

Gresham Smith holds a current TDOT Bridge Maintenance Retainer contract that has included work orders for various bridge related projects. Work Order 8 was authorized in early 2017 to perform underwater bridge inspections throughout the state of Tennessee for 16 off-system (local) bridges.

Work Order 9 was authorized in early 2017 to perform underwater bridge inspections throughout the state of Tennessee for 41 on-system (state-maintained) bridges.

The inspection services included gathering and researching historical bridge data, field work for the general site inspections, underwater inspections utilizing certified divers and NHI certified bridge inspectors and/or engineers, SONAR recording and analysis for structures, and preparation and submission of individual inspection reports in accordance with NHI procedures.



Underwater dive support and boating equipment was provided by Mainstream Divers, Inc. Soundings were performed for each underwater unit. Sonar investigations were performed for water depths greater than 30'. Additional underwater inspections were performed in 2021 under a new work order.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** John Weres, Dr. Yun Lin, Courtney Rome, Adam Davidson.

Gresham Smith		Past Performance Evaluation Discipline(s)* Bri			Bridge			
TDOT Bridge Maintenance and Repair On-Call					Firm r	respons	ibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Те	nnessee Departme	ent of T	ransport	ation	
Project location	Statewide, TN			Owner's Proje	ect Mar	nager	Ted Kniazewycz, P.E., Di Structures, State Bridge E	
Owner's address, phone, email	James K. Polk Building, St	uite 100, 505 Deaderio	ck S	treet, Nashville, Tl	N 37243	3-0032 /	615.741.3351 / ted.kniazev	vycz@tn.gov
Services commenced by this firm (mm/yy)		09/2010	Total consultant contract cost (\$1,000's)		\$12,500			
Services completed by this firm (mm/yy)		Ongoing	Co	ost of consultant s	service	s provid	led by this firm (\$1,000's)	\$12,500

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

Gresham Smith has performed bridge maintenance evaluations, inspections, load ratings, structural analysis and design, and construction plans for bridge repairs, rehabilitations, widenings and replacements on hundreds of structures across the state of Tennessee over the last twelve years. Task order assignments have included both pedestrian and vehicular bridges using steel, prestressed concrete, reinforced concrete and timber materials. Structure types include trusses, steel box beams and I-girders, cast-in-place concrete and precast concrete bridges. Work completed includes expansion joint repairs, bridge railing repairs and upgrades, full and partial depth deck repairs, deck overlays, bearing replacements, beam impact damage repairs, steel fatigue, section loss, and painting repairs, concrete spall repairs, fire damage repairs, beam prestressing stand repairs, miscellaneous general bridge repairs, bridge widenings, safety improvements, superstructure replacements and underwater bridge inspections for scour and other deficiencies. Some of the assigned projects currently under development or already completed include:



- SR 13 over Trace Creek/SR1/CSX RR in Humphreys County (Complete Replacement)
- Load Ratings and reports for over 200 routine and complex bridges across Tennessee •
- I-65 over CSX RR and Rivergate Pkwy in Davidson County (expansion joint repair) •
- I-65 over SR 76 in Robertson County (repair truck impact damage to railing and box superstructure, install inspection ports) •
- Underwater Bridge Inspections and reports for over 35 structures across Tennessee ٠

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: John Weres, Courtney Rome, Adam Davidson, Tom Tran, Emery Sayre, Yun Lin, and Barrett Germond.

Gresham Smith

Past Performance Evaluation Discipline(s)* Bridge

GDOT Bridge Contract	e Maintenance Enç	Firm responsibility (prime or sub?)		Prime				
Project number	N/A	Owner's name	Georgia Department	nt of Transportation				
Project location	Statewide	Owner's Project Manager Robbie Koirala						
Owner's address, phone, email	935 United Avenue, SE Bu	935 United Avenue, SE Building 24, 4 th Floor Atlanta, GA 30316 / rkoirala@dot.ga.gov						
Services commenced by this firm (mm/yy) 08/20			Total consultant contract cost (\$1,000's)			\$829		
Services complete	d by this firm (mm/yy)	Ongoing	Cost of consultant	services provid	ded by this firm (\$1,000's)	\$780		

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

GDOT contracted with Gresham Smith to provide On-Call Bridge Maintenance Engineering Services Statewide. This contract primary involves developing repair plans for bridge maintenance and bridge repair projects. Gresham Smith is task with inspection of the bridge to verify and identified areas of repair needed, design and produce specifications and repair plans for bid. Project typically involves roadway, and environmental support and may require other disciplines such as survey and geotechnical support.

Other tasks includes:

- Working to update GDOT's Bridge Asset Management Program (TAMP, BrM, Inspect X, TAPE)
- Help complete GDOT Tunnel Inspection Policy and Procedures Manual.
- Help rewrite QA/QC policy for Bridge Inspection.
- Provide embedded employees at GDOT to:
 - Inspect bridges and produce repair plans
 - o Provide quality control on repair plans
 - o Train GDOT staff

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Ryan Horn, Tim Dow, Morgan Edmondson, Jin Liu, Tom Tran, and Barrett Germond.

Gresham Smith

Project location

Owner's Project Manager

SR 178 Benton County – Replacement of 2 Bridges and a Firm responsibility (prime or sub?) Prime Twin-Cell Box Culvert Project number Owner's name Mississippi Department of Transportation N/A

	Owner's address, phone, email	401 North West Street, Jackson, MS / 601.359.7200 / swesterfield@mdot.ms.gov							
Services commenced by this firm (mm/yy)			11/17	Total consultant contract cost (\$1,000's)					
	Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)					
	Describe the project including the firm's role and members involved (Highlight members to be used in this proposal)								

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.) Gresham Smith holds a 3-year IDIQ Bridge Retainer with MDOT. Under Work Assignment 1, Gresham Smith was tasked for completing Phase B (Final Design) for the reconstruction of two bridges and associated roadway. A third bridge was replaced with a twin-cell box culvert. To reduce the overall construction costs, Gresham Smith was requested to re-design the previously prepared (by others) Phase A roadway design for Bridge 47.1 to utilize the existing alignment, rather than an off-line alternative designed by others.

To reduce the total structure depth and improve the bridge hydraulics, the superstructures were designed with Florida I-Beam (FIB) shaped prestressed concrete girders. As one of the longer spans in Mississippi to utilize the FIB shapes. Gresham Smith also performed a haul analysis and constructability review to verify that the 135' long, 70-ton girders could be delivered and erected at this rural location. For the multi-span structure, the bridge spans were designed as simply supported beams with a "link-slab" detail utilized to eliminate the deck joints.

The span arrangements are as follows:

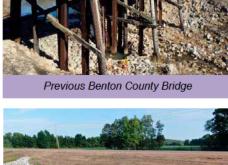
Bridge 51.3 (Bridge A) - FIB-45; 3 spans = 80' - 100' - 80' = 260'

Benton County, MS

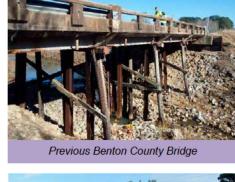
Bridge 47.1 (Bridge B) - FIB 54; 1 span = 135'

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: John Weres, Courtney Rome and **Emery Sayre**







\$417

\$417

Scott Westerfield. P.E.

New 3-Span Bridge with FIB Girders

Moffatt & Nichol

2017 Retainer Contract for Underwater Bridge Inspections, Statewide - Task Order 5 (Bridge Inspection Firm responsibility (prime or sub?) Prime Manual) **Project number** 4400009104 Louisiana Department of Transportation and Development **Owner's name Project location** Baton Rouge, LA **Owner's Project Manager** Haylye Brown, PE Owner's address. 1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov phone, email 06/17 \$4.138 Services commenced by this firm (mm/yy) Total consultant contract cost (\$1,000's) 12/21\$365 Services completed by this firm (mm/yy) Cost of consultant services provided by this firm (\$1,000's)

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.) Moffatt & Nichol was tasked with the development of the first comprehensive Bridge Inspection Manual (BIM) for the Louisiana Department of Transportation & Development (DOTD) Bridge Program. Chace Hulon, PE, served as the Chief Editor of the DOTD BIM.

The BIM is designed to capture all previous policies, directives, memorandums, manuals, and forms into a single, centralized reference manual. The BIM will align the goals of the Bridge Inspection Office Headquarters with all nine DOTD districts. The BIM will also allow for better communication and quality management between the DOTD project managers, their local bridge owners, and their consultants.

The BIM was designed to be used electronically as a reference file to be stored on tablets that is accessible to all DOTD bridge inspection team leaders. The BIM includes nine chapters that are intuitively ordered in a

systemic fashion with hyperlinks throughout for quick referencing to vital documents. The BIM also allows for documented annual revisions or critical updates following federal policy changes.

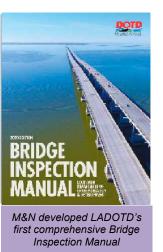
Moffatt & Nichol was responsible for the following:

- Compiling all reference material within the DOTD
- Designing the outline of the BIM
- Holding routine (weekly) progress meetings with the DOTD project manager, Federal Highway Administra- tion (FHWA) representative, and subject matter experts on the committee
- Providing statewide programmatic guidance with a national perspective
- Ensuring compliance with the FHWA's 23 National Bridge Inspection Program Metrics
- Presenting the BIM at a DOTD statewide conference

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Chace Hulon, PE; Steven Armstrong, PE

Page 83 of 126 Prime consultant firm: Gresham Smith



Moffatt & Nichol

Past Performance Evaluation Discipline(s)* Bridge

IDIQ Contrac	t for In-Depth Brid	Ige Inspection		Firm respons	ibility (prime or sub?)	Sub
Project number	4400009104	Owner's name	Louisiana Departmen	t of Transportat	tion and Development	
Project location	Baton Rouge, LA		Owner's Proje	ect Manager	Stephanie Doolittle, PE	
Owner's address, phone, email	1212 East Highway Drive,	Baton Rouge, Louisiana 70802 / / 225.379.1329 / stephanie.doolittle@la.gov				
Services commenced by this firm (mm/yy) 03/20 Total consultant contract cost (\$1,000's)		,000's)	\$5,000			
Services completed by this firm (mm/yy) Ongoing Cost		Cost of consultant s	services provid	led by this firm (\$1,000's)	\$600	

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.) As part of the current five-year retainer contract, M&N is performing the in- depth bridge inspections on complex and movable bridges throughout Louisiana. As a major subconsultant to HNTB, M&N is performing complete in-depth inspections (fulfilling both routine and fracture critical inspection types). Level III inspections of submerged elements in accordance with the FHWA, BIRM, AASHTO MBE, AASHTO BEIM, and the LADOTD Bridge Inspection Manual (BIM) will be required as needed. Bridge types include cantilever trusses, cable-stayed bridges, movable swing span bridges and bascule bridges. Management, communication and implementation of the QC/QA plan is an instrumental component to this project.



M&N is providing inspection services on complex and movable bridges

- M&N performed the routine in-depth inspection of the Audubon Bridge, specifically to inspect 136 main cables and four 450ft high concrete towers. Professional rope access techniques were used to safely access each cable within arm's reach. Element quantities were recalculated, and additional defects were added with repair recommendations, but no serious deficiencies or critical findings were present.
- M&N performed the in-depth, routine and fracture critical NBIS inspection of the Horace Wilkinson Bridge, specifically to inspect the main truss spans above the guardrail. Professional rope access techniques were used to safely access each non-redundant steel tension member. Element quantities were recalculated, and additional defects were added, but no serious deficiencies or critical findings were present. This is the first inspection that has ever been completed without the need for a lane closure; the success related to this effort will deliver all biennial inspections to consultants.
- M&N performed the in-depth, routine and fracture critical inspections of the Greater New Orleans Bridges and the Green Bridge, specifically to inspect the main truss spans. Professional rope access techniques were used to safely access each non-redundant steel tension member. Element quantities were updated, and additional defects were added with repair recommendations.
- M&N performed the in-depth and routine inspection of the Luling Bridge, specifically to inspect all bladders at the upper Gensui Dampers and at the lower friction dampers at 72 cables. Professional rope access techniques were used to safely access each cable within arm's reach.

Nature of firm's responsibility: Subconsultant; Responsibilites include underwater inspections in accordance with current FHWA, CFR, AASHTO, and LADOTD standards and guidelines.

Firm members involved include: Chace Hulon, PE; Steven Armstrong, PE; Jeffrey Gazarek; Joshua Martinez, PE

Page 84 of 126 Prime consultant firm: Gresham Smith

Moffatt & Nichol		Past Performance	Evaluation Discipli	ne(s)*)* Bridge		
IDIQ Contrac Trusses Stat	t for Inventory and ewide	I Inspection o	f Sign	Firm responsibility (prime or sub?)		Prime	
Project number	4400017089	Owner's name	Louisiana Departme	ouisiana Department of Transportation and Development			
Project location	Baton Rouge, LA		Owner's Pro	er's Project Manager Haylye Brown, PE			
Owner's address, phone, email	1212 East Highway Drive,	e, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov			wn@la.gov		
Services commend	ced by this firm (mm/yy)	09/20	Total consultant contract cost (\$1,000's)		\$3,000		
Sorviços complete	d by this firm (mm/yy)	Ongoing	Cost of consultant sorvices provided by this firm (\$1,000's)		\$839		

Cost of consultant services provided by this firm (\$1,000's)

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

As part of the current five-year retainer contract, Moffatt & Nichol (M&N) is performing the inventory and inspection of overhead sign structures in accordance with FHWA guidelines. M&N previously lead the development of the LaDOTD Sign Truss Inspection Program and continues to improve the program with the added creation of an interactive GIS database. Over 1,000 overhead sign structures have had their second routine inspection completed thus far, with an additional 200 interim inspections to monitor deficiencies more frequently. In addition, 205 post-event damage inspections were completed in 2020 due to Hurricane Laura and an additional 900 post-event damage inspections are being performed due to Hurricane Ida, including structures along this corridor. Inspections included non-destructive techniques on steel and aluminum welds, high stress moment connections, and other fatigue prone details with deficiencies. Structure configurations largely consist of bridge and cantilever signs with drilled shafts, pile supported footings, or bridge mounted foundations. The majority of the structures are aluminum box trusses that have a shorter fatigue life. Ultrasonic flaw detection is used by certified inspectors to examine the anchor rods for fractures or partial fractures. Rope access techniques are utilized to safely access primary elements while eliminating traffic interruptions and conserving costs.



M&N is performing the inventory and inspection of overhead sign structures

Work zone safety is a critical component to the overall safety and success of this project. M&N lead inspectors are ATSSA certified technicians and/or supervisors, along with an expert traffic control company to assist with safe temporary lane closures on the highway. M&N has humbly maintained a zero-incident safety record throughout the life of this contract.

M&N is creating the Inventory & Inspection Manual for Ancillary Structures for the LaDOTD under this current contract. Tablets were utilized in the field with a custom designed application that allowed for quick and efficient Quality Control reviews from the field. Separate QC reviews were performed for each bridge report by the inspection team and Quality Assurance reviews were performed on 5% of the reports by an independent qualified NBIS team leader.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. Firm members involved include: Chace Hulon, PE; Steven Armstrong, PE; Joshua Martinez, PE; Jeffrey Gazarek

17. Firm Experience:

Services completed by this firm (mm/yy)

Moffatt & Nichol

Past Performance Evaluation Discipline(s)* Bridge

Retainer Contract for Underwater Bridge Inspections, Firm responsibility (prime or sub?) Prime Statewide TO 1-10 Louisiana Department of Transportation and Development **Project number** 4400003533 **Owner's name Owner's Project Manager** Baton Rouge, LA Haylye Brown, PE **Project location** Owner's address. 1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov phone, email 03/14 \$3,243 Services commenced by this firm (mm/yy) Total consultant contract cost (\$1,000's) 12/17 \$2,822 Services completed by this firm (mm/yy) Cost of consultant services provided by this firm (\$1,000's)

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

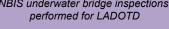
As part of the previous five-year retainer contract, Moffatt & Nichol has performed 10 task orders related to underwater bridge inspections throughout Louisiana. Teams of ADCI-certified engineer- divers provided Level I, II, & III underwater inspections in accordance with the National Bridge Inspection Standards and LADOTD PONTIS Inspection Manual. 687 bridges have been inspected statewide, including many in District 02. Bridge types inspected consisted of movable swing span bridges, bascule bridges, truss bridges, timber stringer bridges, cable-stayed bridges, single and multi-span girder bridges up to 8 miles in length, constructed of concrete, steel and timber materials. Site conditions included salt, brackish, and fresh waters and riverine conditions with varying levels of current having low to no visibility. Underwater Acoustic Imaging (UAI) was performed in response to emergency investigations following major flood events to inspect scour around the substructure units.

Report submittals included a description of each structure and elements inspected and existing conditions, shoreline conditions, presence of debris in the waterway, with NBIS ratings for Item 60 - Substructure and Item 61 – Channel condition, element level condition states for all elements inspected.

and recommendations for repair and maintenance. Three Quality Control reviews were performed for each bridge report by the inspection team and Quality Assurance reviews were performed on 5% of the reports by an independent NBIS team leader.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Chace Hulon, PE; Steven Armstrong, EI; Josh Martinez, PE; Jeffrey Gazarek





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2017 Retainer Contract for Underwater Bridge

inspections,	Statewine - 1 ask v	Jiueis I, Z, & "	+			
Project number	4400009104	Owner's name	Louisiana Departmer	nt of Transporta	tion and Development	
Project location	Baton Rouge, LA		Owner's Proje	ect Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive,	Baton Rouge, Louisia	na 70802 / 225.379.1	500 / haylye.brc	wn@la.gov	
Services commend	ced by this firm (mm/yy)	06/17	Total consultant co	ntract cost (\$1	,000's)	\$1,346
Services complete	d by this firm (mm/yy)	12/21	Cost of consultant	services provid	led by this firm (\$1,000's)	\$980

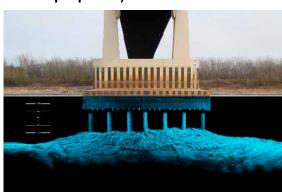
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

In June 2017, Moffatt & Nichol (M&N) began a four-year statewide retainer contract with LADOTD to provide Levels I, II, and III NBIS underwater bridge inspections throughout Louisiana. All inspections were completed in accordance with current FHWA, CFR, AASHTO, and LADOTD standards and guidelines. M&N has performed over 215 underwater bridge inspections under this contract and over 900 total. For each inspection, M&N provided a detailed inspection report within 30 days and entered inspection data into LADOTD's asset management tool (AssetWise). As part of M&N's quality control process, each inspection report was reviewed a minimum of three times, with subsequent reviews performed by team members with increasing levels of experience/ qualifications.

Task Orders 1-2: M&N performed underwater inspection of 45 bridges over large waterways, including 8 bridges crossing the Mississippi River. These inspections were performed statewide and included bridges in both riverine and coastal environments. Underwater Acoustic Imaging (UAI) was used for each inspection and was especially useful when diving conditions were hazardous.

Task Order 4: M&N performed underwater inspection of 35 submerged corrugated metal pipe (CMP) culverts, with a total length of 13,944 linear feet, crossing Interstate 10. The culverts were inspected using remotely operated vehicles (ROV) to identify areas of sediment buildup at each opening and at 50-ft intervals throughout the culvert

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Chace Hulon, PE; Steven Armstrong, PE; Joshua Martinez, PE; Jeffrey Gazarek



M&N provide Levels I, II, and III NBIS underwater

bridge inspections throughout Louisiana

Prime

Firm responsibility (prime or sub?)

Moffatt & Nichol

Retainer Contract for Underwater Bridge Inspections, Firm responsibility (prime or sub?) Prime Statewide - Task Orders 3, 6, & 7 4400009104 Louisiana Department of Transportation and Development **Project number Owner's name** Baton Rouge, LA **Owner's Project Manager** Haylye Brown, PE **Project location** Owner's address. 1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov phone, email \$3,820 06/17 Services commenced by this firm (mm/yy) Total consultant contract cost (\$1,000's) 12/21 \$3,017 Services completed by this firm (mm/yy) Cost of consultant services provided by this firm (\$1,000's)

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

As part of the LADOTD 2017 Retainer Contract for Underwater Bridge Inspections, M&N completed Task Orders 3, 6 and 7 (currently ongoing) All inspections were completed in accordance with current FHWA, CFR, AASHTO, and LADOTD standards and guidelines.

Task Orders 3 and 6: M&N performed underwater inspection of 592 bridges crossing small to midsized waterways, including six culverts requiring penetration dives. M&N was able to efficiently inspect these bridges using a combination of shore entry and small to mid-sized boats, completing all inspections on or ahead of schedule. Additionally, M&N inspected 12 bridges passing through large swamps that were between 3 and

14 miles long and 4 bridges crossing large waterways (Mississippi River & Wax Lake Outlet). M&N seamlessly integrated Engineering Operations (eO) inspector divers into the inspection teams for these task orders, which increased the project manager's ability to adapt to unforeseen changes and maintain schedule. Many of

these bridges crossed waterways inhabited by alligators, which posed a potential threat to the

inspectors. To decrease the probability of an incident, M&N implemented the use of a Louisiana Department of Wildlife and Fisheries-approved nuisance alligator trapper.

Task Order 7: This is the planned final task order for this retainer contract. Included in this task order will be the underwater inspection of 216 bridges in Districts 02, 03, 07, 08, 61, and 62, over small to midsized waterways.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Chace Hulon, PE; Steven Armstrong, PE; Joshua Martinez, PE; Jeffrey Gazarek



M&N provide Levels I, II, and III NBIS underwater bridge inspections throughout Louisiana

Past Performance Evaluation Discipline(s)* Moffatt & Nichol

Mississippi Department of Transportation (MDOT) NBIS

	Bridge Inspections	• •		Firm respons	ibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Mississippi Departme	ent of Transport	ation	
Project location	MDOT Districts 1 & 2		Owner's Proj	ect Manager	Richard Withers, PE	
Owner's address, phone, email	1401 North West Street, Ja	1401 North West Street, Jackson, MS, (601)359-7176, rwithers@mdot.ms.gov				
Services comment	ced by this firm (mm/yy)	08/14	Total consultant co	ntract cost (\$1	,000's)	\$600
Services complete	d by this firm (mm/yy)	12/16	Total consultant se	rvices provide	d by this firm (\$1,000's)	\$469

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

Under a three-year retainer contract, M&N performed Levels I, II and III underwater inspections (UWI) of 72 bridges in Districts 1 and 2. Underwater bridge inspections included the use of high-resolution scanning SONAR of selected bridge elements. All inspections were conducted by a team of ADCIcertified engineer-divers in accordance with the FHWA BIRM, AASHTO MBE, NBIS requirements, and MDOT PONTIS Inspection Manual. Several multi-span, continuous and non-continuous bridges consisting

of concrete, steel, and timber elements were inspected. Site conditions consisted of riverine conditions with varying levels of current and minimal visibility.

Final inspection reports for each structure included a description of each bridge, the elements inspected, an underwater inspection plan, shoreline and waterway conditions, NBIS ratings, AASHTO and PONTIS element- level ratings, recommendations for repair and maintenance, and channel contour drawings. Bridges were reviewed and evaluated for critical structural conditions and a pre-defined critical finding protocol was implemented for necessary remedial action.

The M&N dive team responded to an emergency UWI request within 24 hours to perform interim underwater inspections of the I-55 Bridge over Hickahala Creek. High resolution acoustic imaging was utilized to identify structural deficiencies and determine the limits of scour around Piers I, II, and III. Riverine conditions allowed for safe diving conditions at the time of inspection. Engineer-divers performed the UWI in unison with acoustic imaging to accurately evaluate the subsurface conditions of the substructure units and the channel bottom.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. Firm members involved include: Chace Hulon, PE; Steven Armstrong, PE



M&N performed Levels I, II and III underwater inspections for MDOT bridges

Bridge

Michael Baker International, Inc.

Past Performance Evaluation Discipline(s)* Ce&i/ov. cpm

I-210 Pier Protection Replacement				Firm respons	Firm responsibility (prime or sub?)		
Project number	H.003119 (CE&I) & PO No. 2-31832 (450-30-0076 Legacy)	Owner's name	Louisiana Department of Transportation and Development				
Project location	Route I-210, Calcasieu Pa	rish	Owner's Project Manager Don Duberville, P.E.				
Owner's address, phone, email	5827 Hwy 90 East, Lake C	Charles, LA 70615 31	arles, LA 70615 318-437-9100 Don.Duberville@la.gov				
Services commend	ced by this firm (mm/yy)	09/10	Total consultant contract cost (\$1,000's)		N/A		
Services complete	Services completed by this firm (mm/yy) 03/13 Cost of consultant services provided by this firm (\$1,000)		ded 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.)

Michael Baker was responsible for CE&I and construction administration. The scope of the work consisted of the removal and replacement of the pier protection system for piers 24 and 25 of the I-210 Bridge over the Calcasieu Ship Channel at Lake Charles in Calcasieu Parish, Louisiana. Michael Baker provided Contract Administration and CE&I services for this project including inspection of the construction of sheet piles, micro pile foundation and structural concrete, and sampling and testing associated construction materials. Other duties included maintaining all construction field records; monitoring and reviewing the CPM Schedule, making daily entries in the project diary (DWR) to indicate the Consultant's personnel and Contractor's personnel

present on the job site, the Contractor's personnel and equipment being utilized on the project, the work being accepted, and the charging of contract time utilizing SiteManager; preparation of monthly pay estimates; coordination with the DOTD and appropriate utility representative for all relocations/adjustments of utility facilities for the construction of work site; preparation of the entire final estimate package, including Form 2059 - "Summary of Test Results"; and submission of "As-Built" plans with the final estimate to reflect all changes made from the original plans.

Nature of firm's responsibility: Prime Consultant Firm members involved include: N/A



Before







Michael Baker International Inc

				ie(3) Dhuge		
Hernando de	Soto (I-40) Bridge	Inspection		Firm respons	ibility (prime or sub?)	Prime
Project number		Owner's name	Arkansas Departmen	nt of Transportat	ion	
Project location	West Memphis, AR		Owner's Proje	ect Manager	Mike Hill, P.E.	
Owner's address, phone, email	' 10324 Interstate 30, Little Rock, AR 72209 501-569-2466 Michael.Hill@ahtd.AR.gov					
Services commend	ced by this firm (mm/yy)	11/16	Total consultant co	ntract cost (\$1,	,000's)	\$320
Services complete	d by this firm (mm/yy)	Ongoing	Cost of consultant	services provid	led by this firm (\$1,000's)	\$320
Describe the project	t including the firm's role :	and members involv	ed (Highlight memb	ers to be used	in this proposal)	

Past Porformanco Evaluation Disciplino(s)*

National Bridge Inspection Standards mandate inspections for highway bridges every two years. In keeping with this requirement, the Arkansas Department of Transportation (ArDOT) has traditionally performed its own inspections of bridges within the state, using traditional methods to inspect all primary and secondary structural bridge members. However, the state's two-span, tied-arch truss Hernando de Soto Bridge, which carries Interstate 40 over the Mississippi River between West Memphis, Arkansas, and Memphis, Tennessee, proved too difficult to inspect adequately using traditional methods alone due to the considerable height, unique structural configuration of the trusses, and heavy-traffic considerations. The 160-foot height of the main navigation spans, combined with the arched configuration of the bridge itself, introduced a high level of complexity to the inspection, making many of the bridge's structural components inaccessible to inspectors using traditional inspection techniques. The rope-access climbing approach required extensive training of the rope climbing experts to help them



Bridge

understand and better prepare for the team's ascents to the top of the bridge and its far reaches. In 2012, 2015, 2017, and 2019, Michael Baker's unique, specially-trained team of hands-on, rope-climbing inspectors with their motorized ascenders and other specialized climbing equipment completed the inspections. The 2021 Inspection is ongoing. We are one of only a few engineering firms in the country with this technical capability. Our team used traditional and rope-climbing methods to conduct thorough inspections of the arch truss spans, including the truss chords, diagonals, verticals, joints, bracing members, suspension cable hanger connections and suspension cables. Key to the success of the inspections of the upper bridge, which revealed no major deficiencies, was the coordination effort involved. The team scheduled the inspections to minimize traffic delays and avoid unnecessary conflicts with numerous ongoing bridge maintenance projects, and it coordinated with those contractors to share lane closures and staging areas.

Nature of firm's responsibility: Prime Consultant Firm members involved include: Luis Manrique | John Zuleger

17. Firm	Experience:
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Michael Baker International, Inc.

Past Performance Evaluation Discipline(s)* Bridge

On-Call Bridg Assessment	ge Inspection and & Design	Bridge Condi	tion	Firm respons	ibility (prime or sub?)	Prime
Project number		Owner's name	Texas Department of	f Transportation		
Project location	Statewide, TX		Owner's Proje	ect Manager	Mark Wallace, P.E.	
Owner's address, phone, email	118 E. Riverside Dr., Austin TX 78704 512-416-2415 mark.wallace@txdot.gov					
Services commend	ced by this firm (mm/yy)	09/15	Total consultant co	ntract cost (\$1	,000's)	\$9,600
Services complete	d by this firm (mm/yy)	Ongoing	Cost of consultant s	services provid	ded by this firm (\$1,000's	\$8,000
2014 – Present Stat inspections of bridges	t including the firm's role a ewide On-Call Bridge Insp and culverts specified by TxE BI inspection teams determine	ection: Under three c DOT in 14 of the State'	onsecutive \$2.5M contra s 25 districts. Each stru	acts, Michael Ba cture is inspecte	aker (MBI) has performed ro ed to assess the overall cond	lition of its

necessary traffic. TxDOT has issued dozens of work authorizations (WA) to Michael Baker to inspect over 7,700+ bridges across the state. TxDOT benefited from Michael Baker's experienced inspection team who provided thorough inspection, and immediately alerted TxDOT when critical findings surfaced for deteriorated structures. Follow up action items are recorded for each structure that requires repair or rehabilitation. In addition, MBI adds any newly-completed structures to TxDOT's structure database and notifies TxDOT of any bridge that has insufficient structural capacity, thus compromising public safety. An inspection report and associated TxDOT inspection forms are completed for each structure. Completed inspections are delivered to TxDOT each month and summary packages per jurisdiction/maintenance section are delivered to TxDOT at the end of each WA.

2015 – 2019 Statewide On-Call Bridge Condition Assessment and Design: Michael Baker completed eight WAs in five TxDOT Districts, including detailed condition assessments/inspections of 12 historic truss bridges and river and lake crossings, and prepared detailed structural repairs on eight of these bridges. Four work authorizations were performed simultaneously across geographically dispersed areas and required four full inspection teams. WA1 involved the condition assessment and inspection of the Historic Trinity River (HTR) Bridge on US 90 in Beaumont. This 1930's era bridge has one 65' steel I-girder span, three 150' through truss spans and twenty-nine 32.5' concrete T-section spans. The inspection team assessed all structural elements on the truss, bridge deck, and substructure. The truss spans had significant impact damage to bracing members in both top and side panels. To accurately load rate the truss bridge, detailed measurements and assessments of each truss member was required. Using an innovative approach to meet the 9-week project completion schedule and maintain data quality, Michael Baker used vehicular-mounted LiDAR. The LiDAR point cloud provided a detailed 3D model of the bridge deck and components above the bridge deck in MicroStation format and with geospatial accuracies to submillimeter tolerances. With the LiDAR data, the engineering team was able to accurately measure the member deformations and include in the load rating calculations. Under WA4 and WA7, Michael Baker performed detailed condition assessments and inspections for six in-service bridges in Brownwood. These bridges were identified to need rehabilitation in the bi-annual BRINSAP reports. To complete the condition and assessment, Michael Baker conducted field investigations and observations on these bridges to identify the structural deficiencies. These deficiencies were documented in the final reports and were submitted to TxDOT.

Nature of firm's responsibility: Prime Consultant

Firm members involved include: Don Harris | Rocky Armendariz | Luis Manrique

Michael Baker International, Inc.

Past Performance Evaluation Discipline(s)* Bridge

DFW International Airport On-Call Structural Inspection and Asset Management				Firm responsibility (prime or sub?) Prime		
Project number		Owner's name	Dallas-Fort Worth Int	ernational Airpo	ort	
Project location				Owner's Project Manager Harish Rao, P.E.		
Owner's address, phone, email	PO Box 619428, DFW Airp	oort, TX 75261 972-9	973-6105 hrao@dfwa	irport.com		
Services commend	ced by this firm (mm/yy)	12/17	Total consultant co	ntract cost (\$1	,000's)	\$3,954
Services complete	d by this firm (mm/yy)	09/22 (estimated)	Cost of consultant	services provi	ded by this firm (\$1,000's)	\$3,954
Describe the projec	t including the firm's role a	and members involv	ed. (Highlight memb	ers to be used	in this proposal.)	

ct including the firm's role and members involved. (Highlight members to be used in this proposal.) Michael Baker's bridge inspection experience and knowledge in bridge rehabilitation methodologies helps DFWIA to maintain a variety of structures, and we provide immediate on-call availability in case of emergency. DFWIA is the second largest airport by size in the US and the fourth busiest airport in the world by aircraft movements. DFWIA owns and operates a massive system of infrastructure including 80M SF of concrete pavement in runways and taxiways, over 5.8 miles of elevated bridges for the automated people mover (APM) connecting the five terminal, more than 50 airside and landside bridges carrying heavy vehicular traffic, as well as, only 12 taxiway/aircraft bridges, parking garages and surface lots, and light commuter rail integrated into terminals. Since 2006 under four consecutive contracts, Michael Baker has provided professional services for DFWIA, including structural inspection, evaluation, and repair recommendations for their Skylink (APM) bridges, the aircraft taxiway bridges, roadway bridges, retaining walls, and other building structures. Our Dallas team of 10 structural engineers, with 6 gualified certified inspection team leaders, helps thoroughly inspect bridges and other structures, and prioritize repairs to maximize the client's budgets while addressing all public safety concerns. Michael Baker also performed forensic investigations for multiple structures, including drilled shaft wall stability, excessive cracking and spalling on a bridge concrete deck and concrete spalling at concrete inverted-T bent caps throughout the Skylink system. Rehabilitation design and construction cost estimates were included in these forensic investigations. In another investigation, Michael Baker identified concrete spalling at concrete inverted-T bent caps at numerous locations. Michael Baker performed the inspection, provided a repair recommendation, coordinated the repair design, and performed construction inspection for conformance to the plans. Michael Baker also provided on call plan review for numerous retaining walls and bridge packages, including a crash wall for the Skylink APM adjacent to the Trinity Express commuter rail track, rock anchor design for a drilled shaft wall rehab project, and Terminal A bridge deck replacement final design. Michael Baker also provides on-call emergency structural evaluation at DFWIA for any emergency event, able to address a variety of situations with urgency including 1. performing an emergency inspection of the entire high mast pole inventory in response to a structural failure of a high mast pole. The emergency evaluation identified other high mast poles with similar structural deterioration, prompting removal of public endangering structures. 2. Evaluating the Terminal A canopy system following a vehicular fire. Michael Baker inspected the fire damage of the structure and determine the structural adequacy to be re-opened to the public.

Nature of firm's responsibility: Prime Consultant

Firm members involved include: Don Harris | Rocky Armendariz

Michael Baker International, Inc.

Past Performance Evaluation Discipline(s)* Bridge, road

ArDOT State Design	wide Bridge Prese	ervation Asses	ssment and	Firm respons	ibility (prime or sub?)	Prime
Project number		Owner's name Arkansas Department of Transportation			tion	
Project location	Statewide, AR		Owner's Proj	ect Manager	Mike Fugett, P.E.	
Owner's address, phone, email	10324 Interstate 30, Little	0324 Interstate 30, Little Rock, AR 72209 501-569-2301 Mike.Fugett@ardot.gov				
Services comment	ced by this firm (mm/yy)	10/20	Total consultant co	ontract cost (\$1	,000's)	\$1,694
Services complete	d by this firm (mm/yy)	10/22 (estimated)	Cost of consultant	services provi	ded by this firm (\$1,000's)	\$1,694
Michael Baker is prov Inspection Review projects. Our team as work includes bridge	t including the firm's role viding roadway and bridge of Michael Baker reviewed ne ssessed many of the bridge deck rehabilitation using hy	lesign and engineerin early 150 bridge inspe existing conditions fo drodemolition and LM	ng services for the reha ection reports and verifi or viability for preservat IC overlay, as well as p	bilitation of 155 ied existing cond ion versus repla polymer overlay	bridges across the state of ditions to design the preservicement. Scope of Work s. This project also aims to	vation The scope of update the

approach guardrails and end terminals to current safety standards. The task order will be delivered in five construction contracts grouped by geographic proximity. Michael Baker will also provide Title II phase construction services to assist with contractor submittals, RFIs, and construction-related questions. Project Background | The Bridge Preservation Project comprises a substantial number of bridges throughout the state of Arkansas, divided under five construction contracts with five different plan sets. For the rehabilitation of the bridges, two main strategies exist: performing hydro-demolition with LMC overlay or rehabilitating newer bridge decks by applying a polymer epoxy overlay. These preventative measures will help prolong life of the decks considerably, extending the timeframe for replacement. Michael Baker is retrofitting outdated guardrails to meet current standards and providing maintenance of traffic plans. Preliminary roadway and bridge plans included grading information, alignment data, right-of-way, guardrail, and construction limits information. Field Investigations | Michael Baker began the project by performing site visits for the more deteriorated bridges that require s hydro-demolition and LMC overlay. During these investigations, it verified ArDOT's initial scoping and site conditions, adjusted the scopes for several bridges whose conditions were beyond rehabilitation, and made further recommendations for repair. It also reviewed permits and environmental constraints to create designs that would minimize environmental impacts and provided the necessary coordination for railroad overpasses. Roadway Design | Preliminary roadway and bridge plans include survey and grading information, alignment data, construction limits, plans for roadway transitions and approaches, and shoulder widening. Michael Baker's designs include pavement markings, signing, maintenance of traffic plans, and temporary erosion control plans. Hydro-Demolition | For bridges that cannot be rehabilitated using a polymer overlay, Michael Baker's rehabilitation designs employ hydro-demolition to remove the deteriorated top level of the bridge deck down to a calibrated depth, then replace that layer with LMC, adding approximately 20-25 years of life to the bridge deck. This method requires increased environmental oversight. Michael Baker is creating a wastewater plan for the rehabilitation of these bridges so that contaminated wastewater will be safely collected.

Nature of firm's responsibility: Prime Consultant

Firm members involved include: Mary Flynn, PE | Gary Chodkowski, PE | Terry Butler | Elizabeth Boone

Michael Baker International, Inc.

Past Performance Evaluation Discipline(s)* Bridge

OSARC Bride	ge Safety Inspection	ons and Load	Ra	atings	Firm respons	sibility (prime or sub?)	Prime
Project number		Owner's name		ssissippi Departme	ent of Transport	ation	
Project location	Statewide, MS			Owner's Proje	ect Manager	Harry James	
Owner's address, phone, email	PO Box 1850, Jackson, MS	601-359-7150 ma	ail@	osarc.state.ms.us			
Services commend	ed by this firm (mm/yy)	09/11	То	tal consultant co	ntract cost (\$1	,000's)	\$20,411
Services completed	d by this firm (mm/yy)	Ongoing	Co	est of consultant s	services provid	ded by this firm (\$1,000's)	\$20,411
Services completed by this firm (mm/yy)OngoingCost of consultant services provided by this firm (\$1,000's)\$20,411Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)Michael Baker has provided inspection and engineering services for the National Bridge Inventory bridge safety inspections, fracture criticalinspection plan development, routine and in-depth condition and appraisal inspections, load ratings, and report preparation. Many of the bridgeswere located on local road systems owned and maintained by various counties, cities, and towns. In total, Michael Baker inspected 1,700 ofOSARC's 11,000 bridges from FY2012 to FY2022. The purpose of the project was to perform NBI Bridge Safety inspections, load ratings, andreporting for selected bridges throughout the state. Superstructure types included truss bridges, continuous plate girder and steel girder bridges,railroad flat cars, movable bridges, bridges with prestressed concrete beams, concrete T-beams, concrete slab spans, precast channel beams, attimber bridge spans. Michael Baker performed the inspections in accordance with FHWA's NBIS. It prepared and submitted a bridge inspection pfor each bridge that included the location of fracture critical members, the fracture critical inspection procedures and additional inspector training orexperience that was required to inspect the bridges. Following each bridge inspection, Michael Baker prepared an inspection report that includedcondition and appraisal ratings, in accordance with the AASHTO Manual for Bridge Element Inspection and photographFHWA's Inspection of Fracture Critical Bridge Members and Bridge Inspector's Reference Manual. The reports included drawings and photograph						uded bridges 00 of gs, and bridges, beams, and spection plan uidance, and training or t included on and bhotographs r load-rated bles tTOWare on in located provided by	

VALUE-ADDED | Michael Baker developed specialized forms that improved efficiency and quality of inspection data and reports. The forms standardized methods of collecting inspection information, such as bridge member dimensions and deficiency information for common bridge types. OSARC adopted these forms into their inspection procedures and required the use of the forms by all inspection firms.

Nature of firm's responsibility:Prime ConsultantFirm members involved include:Don Harris | Rocky ArmendarizPage 95 of 126Prime consultant firm:Gresham Smith

Forte and Tablada, Inc.

Past Performance Evaluation Discipline(s)* Bridae

Retainer Con Rating – TO1	tract for Off-Syste	m Complex B	ridge Load	Firm respon	sibility (prime or sub?)	Prime
Project number	S.P. No. H.009859.5	Owner's name	LADOTD			
Project location	Statewide, LA		Owner's Proj	ect Manager	Dana Feng, P.E.	
Owner's address, phone, email	1201 Capitol Access Road	, Baton Rouge, LA 70	0802 / 225.379.1200 /	dana.feng@la	.gov	
Services commend	ed by this firm (mm/yy)	05/17	Total consultant co	ntract cost (\$	1,000's)	\$401.7
Services complete	d by this firm (mm/yy)	10/18	Cost of consultant	services prov	ided by this firm (\$1,000's)	\$249.6

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

As part of a Load Rating retainer contract with LADOTD, Forte and Tablada was tasked with inspecting and load rating 12 complex off-system complex bridges statewide. The type of bridges included nine (9) movable bridges (including vertical lift and swingspans), a steel truss bridge, and two (2) ferry access bridges that were composed of steel truss, movable, and pontoon spans. Where existing plans were not available, 3-D laser scanning was utilized to capture complicated geometry and to assist in the load rating and in the development of bridge load rating plans. The inspection also included the use of an ultrasonic thickness gage to verify member thickness, as well as detailed measurements to determine connection details. The scope of work also included the submittal of an Inspection Report and a Load Rating Report in accordance with the requirements of the LADOTD Bridge Design and Evaluation Manual (BDEM).

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Joey Coco, Jr., P.E. - Principal-in-Charge Joffrey Easley, P.E. - Project Manager Jason Fennell, P.E., Levi Yantis, P.E. Brandon Bollich, E.I.



St. Claude Bridge for Port of New Orleans Inspected and Rated

Forte and Tablada	a, Inc.	Past Performance Evaluation Discipline(s)* Survey				,		
Belle Chasse Bridge and Tunnel Replacement			Firm responsibility (prime or sub?)		Prime			
Project number	S.P. No. H.004791.5	Owner's name	LADOTD	·				·
Project location	Plaquemines Parish, LA Pl	aquemines Parish, LA	Owner	r's Proje	ct Man	ager	Stanley Ard	
Owner's address, phone, email	1201 Capitol Access Road	, Baton Rouge, LA 70	802 / 225.379).1292 / S	Stanley.	Ard@la	gov	
Services commend	ced by this firm (mm/yy)	05/17	Total consul	Itant con	tract c	ost (\$1,	000's)	\$401.7

Services completed by this firm (mm/yy) 10/18 Cost of consultant services provided by this firm (\$1,000's) \$249.6

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

Forte and Tablada provided comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.

1

The primary challenge for this project was to complete the topographic survey, while not shutting down travel on the bridge nor tunnel. In order to perform a traditional topographic survey, the feature being measured must be in physical reach of the equipment operator. Forte and Tablada was able to overcome this challenge through the use of remote sensing technology. Remote sense was used in the form of LiDAR for the bridge and overpass, and multi-beam sonar for the water bottom and top of tunnel. A robot was fabricated by Forte and Tablada staff to ride the bridge rail with the LiDAR scanner in order to avoid lane closures and improve the safety of equipment operators.



Laser Scan and Hydrographic Survey of Belle Chasse Bridge and Tunnel project area

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Joey Coco, P.E., Will Fontenot, PLS., Jerry Middleton, Jr., PLS

Steve LeBlanc, P.L.S., Party Chief/Technician , Jonathan Coco, Ross Wilson, PLS., Brent Campbell, Tommy Lake

Forte and Tablada, Inc.	Past Performance Evaluation Disciplin	e(s)*	Survey
0 - I		.	

Calcasieu Riv	ver Bridge Investig	gation		Firm respons	ibility (prime or sub?)	Prime
Project number	S.P. No. H.012083.5	Owner's name	LADOTD			
Project location	Calcasieu Parish, LA		Owner's Proje	ect Manager	Stanley Ard	
Owner's address, phone, email	1201 Capital Access Road	, Baton Rouge, LA 70	0802 / 225.379.1292 / 9	Stanley.Ard@la	.gov	
Services commend	ed by this firm (mm/yy)	11/19	Total consultant co	ntract cost (\$1,	000's)	\$312.4
Services complete	d by this firm (mm/yy)	Ongoing	Cost of consultant	services provid	led by this firm (\$1,000's)	\$312.4

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

Forte and Tablada provided laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA. The purpose of this project is to analyze any movement of the substructure and superstructure under varying temperature conditions. Forte and Tablada completed two sets of scans, one in cold weather and the other in hot, to determine if there are any significant changes in the structure. Terrestrial scans were done underneath the bridge for 10 spans on the East and West side, on top the deck to capture the superstructure, as well as from the water below to capture the sub structure. In addition to the terrestrial scans, mobile Lidar was done for future planning.

Forte and Tablada performed a comparative analysis and report of the cold and hot scans upon completion of the field investigations

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. **Firm members involved include:** Brent Campbell, Ross Wilson, PLS, Russell J. "Joey" Coco, Jr., P.E., MBA, Tommy Lake



Forte and Tablada, Inc.

Past Performance Evaluation Discipline(s)* Survey

Sunshine Bri	dge Emergency R	epair		Firm respons	ibility (prime or sub?)	Sub
Project number	4400010587	Owner's name	LADOTD			
Project location	St. James Parish, LA		Owner's Proj	ect Manager	Stanley Ard	
Owner's address, phone, email	1201 Capitol Access Road	, Baton Rouge, LA 7(0802 / 225.379.1292 /	Stanley.Ard@la	.gov	
Services commend	ed by this firm (mm/yy)	10/18	Total consultant co	ntract cost (\$1	,000's)	\$618
Services complete	d by this firm (mm/yy)	12/18	Cost of consultant	services provid	ded by this firm (\$1,000's)	\$618

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

Forte and Tablada provided topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord. The severity of the structural damage forced the closure of the bridge resulting in disruption and re-routing of a large volume of industrial and general population motorists. Due to the elimination of this major corridor for commerce and its consequences, an expeditious and time efficient rehabilitation was paramount. Forte and Tablada worked with a design team to formulate a practical solution for obtaining advanced measurements that were unachievable with traditional measuring practices which were required for the structural analysis and repair design for the bridge. Forte and Tablada surmounted the challenges of the repair effort through the use of LIDAR techniques employing innovative applications to provide the necessary data for the bridge repair analysis and inventive construction of an apparatus needed to apply these techniques.



Laser Scan Survey of Sunshine Bridge in Donaldsonville, LA

Nature of firm's responsibility: Sub Consultant

Firm members involved include: Russell "Joey" Coco, Jr., P.E., Wilfred Fontenot, PLS, Jonathan Coco, Ross Wilson, PLS., Surveyor Brent Campbell, Tommy Lake

KTA-Tator, Inc.

Past Performance Evaluation Discipline(s)* Bridge

Denison Harv	vard Bridge			Firm respons	ibility (prime or sub?)	Sub
Project number	N/A	Owner's name Cuyahoga County Department of Public Works Michael Baker International (prime consultant)				
Project location	Cleveland, OH		Owner's Proje	ect Manager	Christopher Cummings, P Baker Intern'l	E, Michael
Owner's address, phone, email	1111 Superior Avenue, Su	ite 2300, Cleveland, (OH 44114 / 216-776-60	606 / ccumming	s@mbakerintl.com	
Services commend	ced by this firm (mm/yy)	07/20	Total consultant co	ntract cost (\$1,	000's)	~\$50
Services complete	d by this firm (mm/yy)	09/20	Cost of consultant	services provid	led by this firm (\$1,000's)	\$9

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

The Denison Harvard Bridge is owned and maintained by the Cuyahoga County Department of Public Works. The bridge is located in Cleveland, Ohio and carries Denison Avenue traffic over the Cuyahoga River and adjacent valley. The bridge is of plate girder construction and carries 4 lanes of traffic and 2 sidewalks over 29 spans with a total length of 3,040 feet. It was erected in 1977 using weathering steel; however, project drawings indicate the bridge was abrasive blast cleaned and painted in 1990 using a three-coat system consisting of an organic zinc primer, an epoxy intermediate coat, and a urethane finish coat.

In 2020, KTA completed a condition assessment of the existing coatings on the bridge. The purpose of this assessment was to determine the condition of the existing coatings in order to develop a maintenance painting strategy, recommendations, and an opinion of probable construction costs for future coating rehabilitation. A report was prepared and submitted detailing the results of the field



inspection and testing, laboratory analysis of field samples, a discussion of results, recommendations, and an opinion of probable construction costs for painting items. Photographs depicting typical conditions found during the field investigation were also included.

Nature of firm's responsibility: Sub Consultant Firm members involved include: Robert Lanterman

KTA-Tator, Inc.

Past Performance Evaluation Discipline(s)*	Bridge

1

Jackson Street (Red River) Lift Bridge				Firm responsibility (prime or sub?)		Sub	
Project number	4400013322, TO 1	Owner's name	Owner's name LADOTD (Gresham Smith -prime consultant)				
Project location	Alexandria, LA		Owner's Project Manager John Weres, P.E., Gresham			am Smith	
Owner's address, phone, email							
					\$5,000		
Services complete	d by this firm (mm/yy)	05/20	Cost of consultant services provided by this firm (\$1,000's) \$11				

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.) The Jackson Street (Red River) Lift Bridge in Alexandria, Louisiana carries two lanes of traffic over the Red River. The main span is a through truss design with a 300' vertical lift span centered between the two towers.

1

Under Gresham Smith's task order agreement with LADOTD, KTA completed a coating condition assessment of the Red River Lift Bridge located in Alexandria, Louisiana. The coating condition assessment was performed on February 18 - 19, 2020. The purpose of this assessment was to determine the condition of the existing coatings on the structure in order to develop a maintenance painting strategy for the bridge.

A visual assessment of the coated surfaces was conducted to determine the type, extent, and location of coating breakdown and corrosion on the structure. Coating thickness, number of coats, and adhesion

were determined using appropriate instrumentation. Samples were removed for further laboratory examination to determine if toxic metal concentrations were present in the existing coatings and to generically identify the coating type. Photographs of typical coating conditions were taken. The results of the field and laboratory testing, a discussion of those results, and photographs were included in a report prepared and submitted to Gresham Smith. A discussion of various maintenance painting options was presented along with recommendations for the maintenance painting on this structure.

Nature of firm's responsibility: Sub Consultant Firm members involved include: Robert S. Lanterman



KTA-Tator, Inc.

Past Performance Evaluation Discipline(s)* Bridge

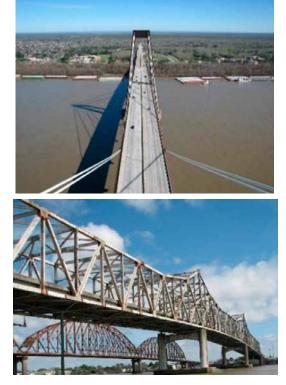
I-310 Luling E	Bridge and US 90 I	Morgan City B	ridges	Firm respons	ibility (prime or sub?)	Sub
Project number	44000005960, TO #2	Owner's name	LADOTD (HNTB Cor	poration – prime	e consultant)	
Project location	Luling and Morgan City, LA	A	Owner's Proje	ect Manager	James P. Gregg, HNTB	
Owner's address, phone, email	10000 Perkins Rowe, Suite	e 640, Baton Rouge, I	_A 70810 / 225-368-28	315 / jgregg@Hl	NTB.com	
Services commend	ed by this firm (mm/yy)	02/17	Total consultant co	ntract cost (\$1,	000's)	\$5,000
Services complete	d by this firm (mm/yy)	05/17	Cost of consultant	services provid	led by this firm (\$1,000's)	\$27

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

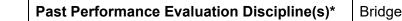
The I-310 Bridge over the Mississippi River is referred to as the Hale Boggs Bridge or the Luling Bridge. The bridge is a cable stayed design with two main towers; two large box girders run along the underside of the entire bridge deck. The bridge members, including the towers, box girders, and cross girders, are fabricated from weathering steel. The bottom six feet of the tower interiors and the interiors of the cross girders are coated. In 2017, KTA performed a corrosion assessment of the weathering steel towers and girders, performed laboratory testing, and prepared a report detailing the conditions found and providing recommendations for the remediation of the corrosion problems.

In 2017, KTA performed a corrosion assessment of the US 90 Morgan City Bridge over the Atchafalaya River located in Morgan City, Louisiana. Ramp A, Ramp F, span over LA 182, Ramp I, Ramp J, span over Victor II, Crook Collins Canal, Levy Canal, East approach, and West approach spans were also included in the assessment. KTA also performed laboratory testing and prepared a report detailing the conditions found and providing recommendations for the remediation of the coating problems.

Nature of firm's responsibility: Sub Consultant Firm members involved include: Robert S. Lanterman



Bridge Diagnostics, Inc. (BDI)



Bonnet Carre	e Spillway Testing	and Monitorin	ng	Firm respons	sibility (prime or sub?)	Sub
Project number	440000669	Owner's name	Louisiana DOTD	·		
Project location	Norco, Louisiana		Owner's Proje	ect Manager	Dana Feng	
Owner's address, phone, email	1201 Capitol Access Roac	l, Baton Rouge, LA 70	0802 / 225.379.1060 / 0	dana.feng@la.c	jov	
Services commend	ced by this firm (mm/yy)	11/04	Total consultant co	ntract cost (\$1	,000's)	Unknowr
Services complete	d by this firm (mm/yy)	Present	Cost of consultant	services provi	ded by this firm (\$1,000's)	\$320
Describe the projec	t including the firm's role	and members involv	ved. (Highlight memb	ers to be used	in this proposal.)	1

This structure is on a route that is heavily used by heavy haulers to move oil refinery components from the Mississippi River to oil processing installations inland. BDI's work on this structure spans multiple contracts including working with DOTD directly in 2004, as a sub-consultant to HNTB starting 2011, and as a sub-consultant to TRC starting in 2014. In 2004, BDI used its Integrated Approach to determine if a 500-ton load could be safely transported across the bridge per DOTD specifications. Based on configurations provided by the hauler, BDI determined that the 2004 "superload" could cross the bridge and not exceed serviceability stress limits defined by DOTD. In 2011, a much heavier transport (930-ton) with a significantly larger footprint required use of the bridge. BDI provided an updated load rating using the 2004 calibrated model. Results indicated very little factor of safety was available, therefore it was extremely important that the permit vehicle axle weights

were accurately known prior to the final load rating. To minimize load uncertainty, BDI utilized a series of roadway scales to measure each wheel of the permit vehicle as it approached the bridge. A revised load rating was immediately performed using the measured wheel weights to verify the transport could cross within DOTD stress limits. After this project (2011), BDI installed an event-based monitoring system that helps DOTD capture weigh-in-motion data, strains induced by heavy loads, and photos of heavy load crossing the structure. DOTD has continued to collect data from these systems, with BDI assisting in system maintenance using TRC's DOTD maintenance contract.

Firm members involved include: Brett Commander, Principal Engineer; Brice Carpenter, Analysis/Rating Engineer & Project Engineer for system troubleshooting and maintenance



17. Firm Experier	ice:	1				1		
Bridge Diagnostic	s, Inc. (BDI)	Past Performance	e Eva	luation Disciplin	e(s)*	Bridge		
Sunshine Tru	uss Bridge Emerge	ency Monitori	ng		Firm	respons	ibility (prime or sub?)	Sub
Project number	H.009859.5	Owner's name	Lou	iisiana DOTD				
Project location	Donaldsonville, Louisiana			Owner's Proje	ect Mai	nager	Ms. Jenny Fu, PE	
Owner's address, phone, email	1201 Capitol Access Road	, Baton Rouge, LA / 2	225.3	79.1321 / ZhengZ	heng.F	u@la.go) V	
Services commend	ced by this firm (mm/yy)	10/18	Tot	al consultant co	ntract	cost (\$1,	,000's)	Unknown
Services complete	d by this firm (mm/yy)	08/19	Cos	st of consultant s	service	s provic	ded by this firm (\$1,000's) \$175

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

The Louisiana Route 70 Sunshine Truss Bridge is a steel cantilever through truss bridge that carries four lanes of traffic over the Mississippi River near Donaldsonville, LA. In October 2018, this structure was struck by a crane barge, significantly damaging a bottom chord member. As part of the Modjeski & Master's inspection response team, BDI quickly deployed a long-distance laser displacement sensor to monitor changes in horizontal displacement of the damage member. Once a monitoring plan was developed and approved by the team, BDI installed 40 strain gages via ropes access along nearby chord members that were used to evaluate the state of the structure before, during and after the replacement of the damaged bottom chord member. These strain gages were used to compute changes in forces and evaluate load distribution, especially during the member replacement. BDI was onsite for multiple mobilizations throughout the repair portion of the project in order to reinstall or repair sensors as necessary. A base solar power datalogger was provided and installed



near the damaged bottom chord at the Sunshine Truss Bridge. This system included UPS power, datalogger, cell modem, and all additional required wiring to make the system functional. Additionally, it was equipped with a modular wireless datalogging system in the case that more sensors needed to be added. All measured and computed response data was presented on BDI's monitoring website and made available to M&M and DOTD. The monitoring duration was 9 months so that the structural behavior after the repair could be evaluated.

Firm members involved include: Brice Carpenter, Project Engineer

18. Approach and Methodology:

Project Approach – Team Qualifications

To successfully meet the requirements of this contract and assist the LA DOTD in properly maintaining their critical infrastructure, our Gresham Smith team has been assembled to provide the highest level of expertise and proven experience to complete any task order assignment. Our team includes three primary firms to perform any and all bridge inspections:

- Gresham Smith: 10 NHI Certified Inspection Team leaders.
- Moffatt & Nichol: 10 NHI Team Leaders/8 Divers
- Michael Baker: 8 NHI Team Leaders

These numbers of Divers and NHI certified Team Leaders represent the number of staff committed to perform any anticipated task order. Our national teams have larger numbers of qualified staff as noted in Section 13 and any required expertise is available to draw upon for any specialty inspections.

To supplement the three primary inspection firms, we have teamed with specialty consultants to support our team, each having held similar roles on the current Complex Bridge Inspection contract and key components of our team:



 Forte & Tablada will provide survey services, including any drone or imaging requirements, and they are also skilled in bridge rating.

- KTA-Tator will provide paint system evaluations. They have provided these services on eight complex bridges on our current complex bridge inspection contract.
- Bridge Diagnostics Inc. (BDI) will perform non-destructive testing and live load testing. BDI performed ultrasonic pin testing and substructure movement monitoring on our current complex bridge inspection contract.

Project Approach – Staff Qualifications

In order to ensure that our team members meet the highest levels of skill and qualifications, we monitor training and certifications and verify that each team member remains up to date on new skills and certifications. The spreadsheet on page 108 reflects some of the required training and certifications held by our primary team, including NHI Team Leader certifications, fracture critical inspection techniques, underwater/diver and SPRAT certifications. Our team members are constantly updating their skills and qualifications to stay abreast of new and revised policies.

Project Approach – Bridge Types

As proven in our current and past assignments, our team has demonstrated expertise on a wide array of bridge inspections including the following bridge inspections for LADOTD and MDOT.

- Major Trusses/River Crossings Under our current contract, we inspected Bridge 036110, Simmesport Truss over Red River. Members of our team have also inspected I-10 Mississippi River Bridge at Baton Rouge, I-20 Mississippi River Bridge at Vicksburg, US 84 Mississippi River Bridge at Natchez (MDOT) and LA 47 (Green Bridge) over Intracoastal Waterway.
- Segmental Structures Under Task Order 1 of our current contract, our team inspected Bridge 037532 LA 8 Boyce Bridge over the Red River, including confined space inspection techniques inside the post-tensioned segmental boxes.
- Cable-stayed Bridges Key members of our team have inspected cables and hangers for the I-110 Mississippi River Bridge, Luling and the Audubon Bridge, including SPRAT rope access techniques.
- Movable Bridges Under Task Orders 1, 3 and 4, our team members have inspected 10 movable bridges including vertical lift bridges and swing bridges. Our skilled staff includes structural, mechanical, and electrical engineers and inspectors responsible for these structures as shown in the table below.
- Underwater Inspections Moffatt & Nichol is a leading marine and underwater bridge inspection firm, holding contracts in LA, MS, FL, as shown in Section 17. In addition, under our TDOT Bridge Retainer contract, Gresham Smith has managed the underwater inspection of more than 100 bridges throughout Tennessee including water depths of up to 100'.

NAME	PRIMARY RESIDENCE	POSITION	LICENSE #
Gresha	m Smith - Movable Bridg	e Mechanical/	Electrical
Peer, Gabe	TN	Electrical	N/A
Cole, Davis	TN	Mechanical	EI - Passed PE
Hallak, Reese	TX	Mechanical	N/A
Moffatt	& Nichol - Movable Bridg	ge Mechanical/	Electrical
Gilad, Josh	CA	Mechanical	30046
Konyalian, Ari	LA	Mechanical	39304
Gregg, Alan	GA	Electrical	45320
Sears, Derek	LA	Electrical	45652

Project Approach – Bridge Design & Rating

In addition to bridge inspection expertise, our team has also proven experience with repair and preservation design for a variety of repairs. For Task Order 2 under our current complex bridge inspection contract, Gresham Smith was asked to assist the DOTD in an emergency response for severe damage to the US 71 Spring Street Bridge in Shreveport. In April 2020, a Union Pacific train derailed and caused substantial damage to Bent 3, requiring the emergency replacement of the bent. Working closely with DOTD and the selected contractor, our engineers performed an emergency inspection to access the damage and to measure and document the necessary repairs. Initially, a temporary strongback system was installed to support the structure for the removal of the damaged members. Temporary sheeting was designed to support the adjacent railroad tracks and helical piles were designed to support overturning loads from the railroad. A crashwall was designed and installed to protect the historic bridge from future derailments.

An example of Michael Baker's emergency repair expertise was demonstrated in the emergency closure of the I-40 Bridge between Arkansas and Memphis, TN. Baker's inspectors discovered a partially cracked tie girder. Following notifications and further inspections, Michael Baker's inspectors designed the repairs to the structure in order to re-open this critical structure.

Project Approach – Typical Inspection Process

Understanding the entire process to properly plan, inspect, and document the inspection of any bridge is a critical component to perform on this contract, and or team has proven to demonstrate these skills for multiple states and bridge owners for several years. The following are major steps in the overall inspection process for a typical inspection.

Initial Planning Tasks:

A good inspection begins with proper planning in advance of the inspection anniversary date. Our initial planning steps include:

- Obtain original plans and any rehabilitation plans, identify fracture critical members, and rectify references between the plans and current numbering systems utilized in the latest inspection reports.
- Download the latest inspection reports from AssetWise, prepare Element level spreadsheets and inspection checklists for previous findings.
- We prepare a traffic control plan, typically for single lane closures, review the proposed plan with the DOTD District traffic engineer, and prepare a draft press release for approval of the District.
- A project specific safety plan is developed including the nearest Page 106 of 126 Prime consultant firm: Gresham Smith

emergency room location and telephone, and the plan is distributed to the entire team.

- Heavy equipment, such as manlifts and Under Bridge Inspection (UBI) units are scheduled for delivery and operator certificates are verified and copied for inclusion in the inspection books.
- For SPRAT projects, a rope access plan will be prepared by a Level III SPRAT technician. For navigable waterways, we will contact the regional Coast Guard office to inform them of the proposed activities. Also, for railroad crossings, we will contact the operating railroad authority for information and to arrange for flaggers as required.
- A contact list is prepared that includes email and cell numbers for the entire inspection team, traffic control staff and the DOTD District and Central office staff.
- All tools and equipment such as harness and lanyards are checked and stored for shipment to the site.
- Finally, we prepare inspection forms and documents in order to facilitate the field data collection and ensure consistency among the various inspection teams.

Field Inspection Tasks:

Inspection tasks include the following:

- Each day we conduct a tailgate safety meeting with the entire team. We discuss potential hazards, a communication plan, agree on weather response notifications for inclement weather and the planned positioning of all equipment and inspection teams.
- For each Element item, we photograph the general condition and then document and photo specific damage, corrosion or wear. Joints are measures for movement and rotation, bearings are measured, and weather conditions are noted. Conditions noted in the previous report are verified and any changes noted.
- Proper tools are utilized including calipers, D-Meters, pick hammers, wire brushes, dye penetrant kits, tapes and levels.
- Prior to leaving the site, we compare progress notes for each team to ensure that no members or areas were missed where two teams are working adjacent or overlapping areas.
- At the end of each day, we photograph all field notes from the day and upload all notes and photographs to a laptop and our home network, to guard against the loss of field notes from inclement weather or other damage.

Critical Findings:

Periodically, the inspection teams find issues that are considered as a critical finding. We then follow the pre-established notification system that is dependent on the severity of the issue. Often times, the critical findings consist of missing weight posting signs or damaged guardrail end treatments. For these types of issues, we send an email to the DOTD Operations Group (multiple cc list) and include the findings and photographs. Occasionally, the critical findings are more serious and require immediate notification to DOTD District and Operations office staff. An example of this type of critical finding was observed during Michael Baker's contract to inspect the arch truss spans for the Arkansas DOT for the I-40 bridge in West Memphis, AR. While the element was not in MBI's scope of services, the inspectors noted the high level of deterioration and immediately contacted both ARDOT and TDOT and along with state police. the bridge was closed due to the potential for collapse. The inspection team provided immediate updates to TDOT ARDOT and assisted with access for further evaluations. Through a contract with TDOT, Michael Baker led the emergency design process to repair and reopen the bridge.

Report Preparation and AssetWise:

Upon return to the office, all field notes are Cataloged, photos crossreferenced, and the report text is started. Quality control for the report document includes both review by the field inspection team and an NHI certified engineer who was not part of the field inspection – an "off-team" review. Element numbers, total quantities and Condition States (CS levels) and calculated and verified. Any proposed changes to Element numbers are verified with the District to assist with future inspections, prior to submitting the report. Following the QA/QC process, the report sections are uploaded into AssetWise and the Element information is updated.

Project Approach – Team Leadership

Our team leaders are recognized on a national basis and have the proven experience and expertise to proper lead this project. Our Project Manager **John Weres**, **P.E.** has been involved with bridge inspection and design for 40 years. He began his career working for the City of Pittsburgh Bridge Department inspecting large trusses and arches. He worked directly with Dr John Fisher from Lehigh University on some of the first fracture critical inspections in the US. **Chace Hulon**, **P.E.** from Moffatt & Nichol will lead our team's efforts for SPRAT rope access and underwater inspections. Chace has performed similar inspections throughout the US and is a ADCI certified diver and SPTAT Level II Lead Technician. Michael Baker's tasks will be led by **Don Harris**, **P.E.**. Don is a certified NHI Team leader with 32 years of bridge experience. Don has lead large inspection teams in Texas, Mississippi, and Kansas and is highly skilled in managing and leading an inspection program.

Our leadership team and inspection staff understand the critical nature of proper scheduling, either for one major bridge inspection, or several concurrent inspections. Initially we verify the inspection anniversary month required and establish staff requirements and schedules to meet the required inspection date. Then we work in reverse to schedule all of the planning activities. Following the inspection, the reports must be completed, checked, and uploaded into AssetWise on schedule in order to meet FHWA reporting guidelines. A pictorial representation of a typical bridge inspection schedule is below.



Name	Position	Experience	License #	Saftey Inspection	Course #	Location	NHI Refresher Gresham Sr		Location	Fract. Crit.	Course #	Location	Expiration Date	Comments
Weres, John	Team Leader	40 Years	LA - 36429 MS-26545	Feb 2-13, 2015	130055	Topeka, KS	Apr 6-8, 2021		Virtual - NJDOT	Feb 26Mar 1, 2019	130078	Baton Rouge, LA	2026	ATSSA & UBI Certified, Drone/FAA
Davidson, Adam	Team Leader	18 Years	TN - 110436	Feb 4-15, 2008	130055	Arlington, VA	Nov 3-5, 2015	130053	Indianapolis, IN	Sep 10-13, 2013	130078	Columbus, OH	2020*	Refresher Scheduled
Sayre, Emery	Team Leader	19 Years	LA - 34414 MS-18017	Sep 13-24, 2010	USACE	Portland, OR	May 14-16, 2019	130053	525/31.197 (359-522)	and Gardenersteinet	130078	Tuscaloosa, AL	2024	UBI Certified
Rome, Courtney	Inspector/Engr	12 Years	LA - 43355 MS-31147	May 13 - 17, 2019	130056	Baton Rouge, LA				Scheduled - July 2022			2024	UBI Certified, SPRAT Level 1
Wells, Braden	Inspector/Engr	3 Years	EI	Aug 12-23, 2019	130055	Greenfield, IN							2024	UBI Certified
Germond, Barrett	Insp. Engr.	2 Years	EI	Aug 2-13, 2021	130055	Ridgeland, MS							2026	Passed PE - Awaiting Experience
Dow, Tim	Insp. Engr.	7 Years	GA - 43940	Jan 3-7, 2022	130056	Columbia, MD							2027	
lorn, Ryan	Insp. Engr.	3 Years	EI	Jan 10-21, 2022	130055	Tallahassee, FL							2027	Drone/FAA
Hartley, Jackson	Insp. Engr.	<1 Years	EI		10 MAR 40-0									Schedule 130055 in 2022
Lin, Yun	Engineer	10 Years	LA-42444	Apr 24-May 5, 2017	130055	Fort Worth, TX							2022	
Name	Position	Experience	License #	Saftey Inspection	Course #	Location	NHI Refresher Michael Ba	Course # ker	Location	Fract. Crit.	Course #	Location	Expiration Date	Comments
Harris, Don	Team Leader	32 Years	TX 82662	May 5-14,2009	130055	Houston, TX	Sep 18-20, 2018	130053	Austin, TX	Jun 9-12,2009	130078	Houston, TX	2023	
Zuleger, John	Team Leader	11 Years	OH PE.82312	Sep 10-21,2012.	130055	Indianapolis, IN	Jul 19-21, 2018	130053	Lansing, MI				2023	SPRAT 3
Wrinston, Adam	Team Leader	14 Years	WV 019511	May 14-25,2012	130055	Charleston, WV	May, 2-4, 2017	130053	Topeka, KS	May 26-29,2015	130078	Richmond, VA	2022	SPRAT 3
Armendariz, Rocky	Inspector/Engr	37 Years	NA	Sep 28 - Oct 9, 1992	130055	Austin, TX	Mar 10-12, 2020	130053	San Antonio, TX	Sep 21-24,1987	130078	Austin, TX	2025	
Franciosa, Timothy	Inspector/Engr	11 Years	MA 51817	May 2-13,2011	130055	Boston, MA	Feb 12-14, 2019	130053	Boston, MA	Mar 27-30,2012	130078	Worcester, MA	2024	
Manrique, Luis	Insp. Engr.	5 Years	TX EIT 61077	Dec 4-15,2017	130055	Baton Rouge, LA				Nov 6-9,2018	130078	Columbus, OH	2022	SPRAT 1, ANSI A92 Cert
Ho, Albert	Insp. Engr.	10 Years	CT PEN.003245	Jun 16-27,2014	130055	Newington, CT	Oct 15-19, 2019	130053	Newington, CT	Dec 13-16,2016	130078	Newington, CT	2024	SPRAT 1
Kubic, Andy	Insp. Engr.	14 Years	AK - AELC14413	Nov 6-10,2017	130056	Hillside, IL				Nov 16-19,2021	130078	Charleston, WV	2022	SPRAT 2
Sadowski, Jason	Insp. Engr.	14 Years	WI 38660	Mar 22 - Apr 4,2010	130056	Madison, WI	Dec, 8-11, 2020	130053	Virtual (TxDOT)	Apr 22-25,2014	130078	Green Bay, WI	2025	
Name	Position	Experience	License #	Saftey Inspection	Course #	Location	NHI Refresher Moffatt & Nie	Course #	Location	Fract. Crit.	Course #	Location	Expiration Date	Comments
Hulon, Chace	Team Leader	17 Years	LA - 39701 MS - 26313	Jun 20 - July 1, 2020	130055	Des Moines, IA	Oct 1-3, 2019	130053	Boston, MA	Feb 26 - Mar 1, 2019	130078	Baton Rouge, LA	2025	SPRAT 2, ADCI Diver
Armstrong, Steven	Team Leader	9 Years	LA-44405	Mar 16-30, 2018	130055	Fredericksburg, VA				Mar 10 - 13, 2020	130078	Frankfort, KY	2023	SPRAT 1, ADCI Diver, FAA Drone
Balzarini, Charles	Team Leader	16 Years	LA-44405	Sep 26 - Oct 7, 2016	130055	Columbus, OH				Feb 26 - Mar 1, 2019	130078	Baton Rouge, LA	2022	SPRAT 1, ADCI Diver
Balzarini, Matt	Team Leader	9 Years	AK-118893	Sep 26 - Oct 7, 2016	130055	Columbus, OH				Feb 26 - Mar 1, 2019	130078	Baton Rouge, LA	2022	SPRAT 1, ADCI Diver
Eschenbach, Christopher	Team Leader	10 Years		Nov 26 - Dec 7, 2018	130055	Sacramento, CA							2023	SPRAT 1, ADCI Diver
Gazarek, Jeffrey	Team Leader	20 Years		Jan 4-15, 2017	130055	Baton Rouge, LA	May 12-14, 2020	130053	Virtual				2025	SPRAT 1, ADCI Diver
Russell, Michael	Team Leader	12 Years	EI	Feb 6-17, 2021	130055	Honolulu, Hl							2026	SPRAT 3, ADCI Diver
Joshua Martinez	Engr/Insp	12 Years	LA-42085	Apr. 13-24, 2015	130055	Cary, NC	Feb 26 - Mar 1, 2019	130078	Baton Rouge, LA				2024	
Name	Position	Experience	License #	Saftey Inspection	Course #	Location	NHI Refresher Forte & Tab	Course # ada	Location	Fract. Crit.	Course #	Location	Expiration Date	Comments
Easley, Joffrey	Team Leader	17 Years	LA-31542	Apr 30 - May 11, 2012	130055	Baton Rouge, LA	Jan 11 - 13, 2022		Baton Rouge, LA	Aug 11-14, 2015	130078	Baton Rouge, LA	2027	
	. Sum Loudol		21.01012			- Lion Houge, Eri			Bart 1				2021	

19. Workload:

Firm	Past Performance Evaluation Disciplines(s) *	State Project Number	Project Name and Location	Remaining unpaid balance**
		0005890 - LADOTD Ret	tainer Contract for Traffic Engineering	
Gresham Smith	Traffic	H.12018.5	Lafayette Adaptive Traffic Signals	\$201,360
Gresham Smith	Road	H.013271.5-2	LRSP/SRTS Tangipahoa Striping and Signage	\$7,414
Gresham Smith	Road	H.012279.5	LRSP/SRTS Endom Bridge Construction Support Supplement	\$4,450
Gresham Smith	Road	H.012527.5	LRSP/SRTS West Feliciana Signs, Striping and Guardrail	\$3
Gresham Smith	Road	H.013763.5	LRSP Signs and Stripping - Vernon and Sabine Parishes	\$1,374
Gresham Smith	Road	H.013720.5	LRSP Signs and Stripping - Bonner Street Bridge Pedestrian Improvements	\$29,509
Gresham Smith	Road	H.013767.5	LRSP Signs and Stripping - St. Landry and St. Martin Parishes	\$73,854
Gresham Smith	CE&I/OV / ITS	H.011500.6	Lake Charles ITS Phase 3	\$49,490
Gresham Smith	CE&I/OV / ITS	H.012381.6	Fiber Optic Mapping and Management Services – Lafayette, West Baton Rouge, point Coupee, St. Landry and Rapides	\$46,072
Gresham Smith	CE&I/OV	I/OV H.009308.6 TO#1 New Orleans DPW SRTS Sidewalk Project		\$39,422
Gresham Smith	Bridge	Bridge H.009730.5 Complex Bridge Inspection TO#4		\$238,015
Moffatt & Nichol	Bridge	H.009730.5 4400013322	In-Depth Inspection of Complex Bridges	\$291,705
Moffatt & Nichol	Bridge	H.009730.5 4400013321	In-Depth Inspection of Complex Bridges	\$396,988
Moffatt & Nichol	Planning	NA	Future of the Louisiana Waterways Transportation	\$135,357
Moffatt & Nichol	Bridge	H.011331.5	LADOTD Inventory and Inspection of Sign Trusses	\$420,203
Moffatt & Nichol	Bridge	H.009730.5	LADOTD Underwater Bridge Inspection Statewide	\$715,252
Moffatt & Nichol	Environmental	NA	IDIQ Contract for Louisiana Watershed Initiative (LWI) Modeling Contract	\$745,498
Moffatt & Nichol	Data Collection	H.971294.1	LADOTD RIMS	\$85,791
Michael Baker	Environmental	S.P. No. H.005168 F.A.P. No. DE-9208 (500)	NORG-Jefferson Highway EA, New Orleans, Louisiana Supplemental Agreement	\$811,412
Michael Baker	Environmental, Road, Bridge	S.P. No. H.005168	NORG – Avondale PEL Study, New Orleans, Louisiana Supplemental Agreement	\$971,901
Michael Baker CE&I/OV		Contract No. 4400015166 S.P. No. H.007288.6 (CE&I) F.A.P. No. H007288	Montgomery St. (LA 34 – I-20), City of West Monroe, Ouachita Parish	\$58

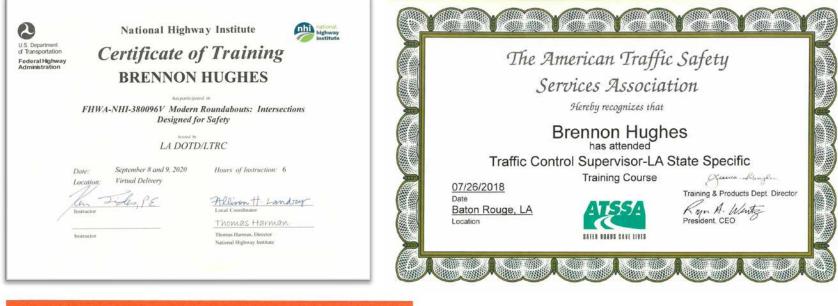
Firm	Past Performance Evaluation Disciplines(s) *	State Project Number	Project Name and Location	Remaining unpaid balance**
Michael Baker	CE&I/OV	Contract No. 4400014845 Task Order No. H.012018.6 S.P. No. H.012018.6 F.A.P. No. H012018	Adaptive Traffic Signal and Implementation, Lafayette Parish	\$428,219
Michael Baker	CE&I/OV	Contract No. 440001485 Task Order No. H.0003184.6 S.P. No. H.003184.6	IDIQ Contract for Construction Engineering and Inspection Services with majority of work in District 07, I-10: Texas State Line - E. of Coone Gully, Calcasieu Parish	\$863,105
Michael Baker	CE&I/OV	Contract No. 4400013851 Task Order No. H.013271.6 S.P. No. H0.013271.6 F.A.P. No. H.013271	IDIQ Contract for Construction Engineering and Inspection Services for Safety Projects (CE&I), Statewide Tangipahoa PH Local Road Safety Upgrade, Tangipahoa Parish	\$105,695
Michael Baker	CE&I/OV	Contract No. 4400013851 Task Order No. H.013271.6-2 S.P. NO. H.013271.6- 2 F.A.P. No. H013271	IDIQ Contract for Construction Engineering and Inspection Services for Safety Projects (CE&I) Tangipahoa PH Local Road Safety Upgrade, Tangipahoa Parish	\$41,794
Michael Baker	CE&I/OV	Contract No. 4400013851 Task Order No. H.013271.6-3 S.P. NO. H.013271.6- 3 F.A.P. No. H013271	IDIQ Contract for Construction Engineering and Inspection Services for Safety Projects (CE&I) Tangipahoa PH Local Road Safety Upgrade, Tangipahoa Parish	\$11,929
Michael Baker	CE&I/OV	Contract No. 4400013841 Task Order No. H.012473.6 S.P. No. H.012473.6 F.A.P. No. H012473	IDIQ Contract for Construction Engineering and Inspection Services for Safety Projects (CE&I), Statewide Marconi Dr. Shared-Use Path	\$22,232
Michael Baker	CE&I/OV	Contract No.4400013851 Task Order No. H.009308.6S.P. No. H.009308.6F.A.P. No. H009308	IDIQ Contract for Construction Engineering and Inspection Services for Safety Projects (CE&I), Statewide New Orleans DPW SRTS Sidewalk Project	\$242,450

Firm	Past Performance Evaluation Disciplines(s) *	State Project Number	Project Name and Location	Remaining unpaid balance**
Michael Baker	CE&I/OV	Contract No.4400013851 Task Order No. H.012527.6 S.P. No. H.012527.6 F.A.P. No. H012527	Local Road Safety Upgrade (W. Feliciana) West Feliciana Parish	\$197,289
Michael Baker	CE&I/OV	Contract No.4400013851 Task Order No. H.013082.6 S.P. No. H.013082.6 F.A.P. No. H013082	Bootlegger Road Sidewalks St. Tammany Parish	\$175,791
Michael Baker	ITS	Contract No. 4400011253 S.P. No. H.011500.6	Retainer Contract for Intelligent Transportation Systems (ITS), Lake Charles ITS Phase 3	\$15,942
Michael Baker	Other	Contract No. 4400019130 Task Order No. 1	IDIQ Contract for Statewide Aviation Program Update – Phase II Statewide	\$74,136
Michael Baker	Other	Contract No. 4400017092 Task Order No. 2	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 6	\$1,430,860
Michael Baker	Other	Contract No. 4400017092 Task Order No. 3	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 6	\$2,201,285
Michael Baker	Other	Contract No. 4400017090 Task Order No. 2	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 4	\$1,209,876
Michael Baker	Road, Bridge	Contract No. 4400021519 S.P. No. H.012030.5 F.A.P. No. H012030	US 371: KCS RR Overpasses HBI \$630,967	\$630,967
Forte and Tablada, Inc.	Bridge	H.012485.1	IDIQ Contract 4400010099, Task Order No. 4 Off System Bridge Load Rating, Statewide	\$ 190,738
Forte and Tablada, Inc.	Bridge	H.012485.1	IDIQ Contract 4400010099, Task Order No. 5 Bridge and Culvert Load testing	\$276,656
Forte and Tablada, Inc.	Survey	H.014628.5	IDIQ Contract 4400010587, Task Order No. 17 Turn Lanes at Rice Mill	\$71,418
Forte and Tablada, Inc.	Survey	H.014219, H.014222, H.014228, H.014231, H.014236, H.013954, H.013979, H.013985, H.013992, H.013994, H.013995, H.013990	Rural Bridge Replacement Initiative	\$54,676

Firm	Past Performance Evaluation Disciplines(s) *	State Project Number	Project Name and Location	Remaining unpaid balance**
Forte and Tablada, Inc.	Survey	H.003931.5	IDIQ Contract 443015237 I-10 Calcasieu River Bridge Replacement	\$2,067,730
Forte and Tablada, Inc.	Survey	H.004273.5	DOTD I-49 Connector (Lafayette Regional Airport to I-10/US 167 Interchange)	\$119,3 <mark>1</mark> 8
Forte and Tablada, Inc	Survey	H.012485.1	IDIQ Contract 4400010099, Task Order No. 3 Metal Culverts Inspection, Statewide	\$103,399
Forte and Tablada, Inc	Survey	H.011684	LA 327 Spur: Staring Lane Extension Route LA 327-S	\$50,279
Forte and Tablada, Inc	Survey	H012072	LA 60 Drain Bridge	\$1,428
KTA-Tator	Bridge	4400013321	IDIQ Contract for In-Depth Bridge Inspection Statewide (sub to HNTB) – KTA has not received any task order assignments on this contract to date.	N/A
KTA-Tator	Bridge	4400013322	IDIQ Contract for In-Depth Bridge Inspection Statewide (sub to Gresham, Smith & Partners) Task Order #4 – In-Depth Inspection of Complex Structures	\$59,234
KTA-Tator	Bridge	4400020156	State Project No. H.011965.5, LA 47; IWGO Bridge Rehabilitation (sub to TRC)	\$11,294
Bridge Diagnostics	Bridge	H.009730.5 44 17163	IDIQ Non Destructive Evaluation of Structures via SounDAR Whiskey Bay and Pilot Channel – Task Order 10	145,204
Bridge Diagnostics	Bridge	H.014703.5 44-17163	IDIQ for Non-Destructive Evaluation of Structures Calcasieu Parish – Task Order 9	4,306
Bridge Diagnostics	Bridge	H.009730.5 44-17163	IDIQ I-10 for Non Destructive Evaluation of Structures Atchafalaya Floodway and I-10 over Whiskey Bay Pilot Channel Bridge decks – Task Order 8	417,802
Bridge Diagnostics	Bridge	H.012280.1 44-09224	IDIQ for testing of Unknown Foundations, Statewide – Task Order 3 – 1802005	45,904
Bridge Diagnostics	Bridge	H.009730.5 44-17163	Retainer for Non Destructive Evaluation of Structures Task Order 1 General Services BDI1904004	140,272
Bridge Diagnostics	Bridge	H.009730.5 44-17163	Retainer for Non Destructive Evaluation of Structures Task Order 7 Bonnet Carre Spillway 2006002	397,037
Bridge Diagnostics	Bridge	H.009859.5 44-02791	Bonnet Carre & Bayou Ramos Monitoring System Maintenance	12,197
Bridge Diagnostics	Bridge	H.010603.6 44-02538	Mississippi Bridge at Vicksburg GPS Monitoring	41,456
Bridge Diagnostics	Bridge	H.012485.1 44-10099	IDIQ for Bridge Load Rating Services Statewide	160,744





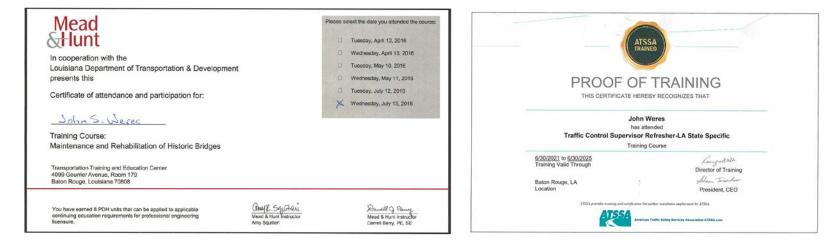




















Page 121 of 126 Prime consultant firm: Gresham Smith



National Highway Institute Certificate of Training



Emery L. Sayre

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

hosted by

Alabama DOT

Date:September 15-18, 2015Location:Tuscaloosa, AL

Hours of Instruction: 25

Steven 7. miller Instructor

Calvin 9. Kurpe Instructor

Berijanter Yeler Local Coordinator

Richard Barnaby, Director National Highway Institute



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www.sspc.org 800 Trumbull Drive Pittsburgh, PA 15205 P: 412.281.2331 T: 877.281.7772 F: 412.444.3591

January 9, 2020

Mr. Robert Lanterman, PCS KTA-Tator, Inc. 115 Technology Drive Pittsburgh PA 15275

Subject: SSPC Protective Coating Specialist (PCS) Recertification

Encl: Wallet ID Card, Certificate Certification #: 2015-820-136

Dear Mr. Lanterman,

This letter is to inform you that you have successfully completed your SSPC Protective Coatings Specialist (PCS) recertification.

This certification is awarded for a new term of four years and will expire on 12/31/2023.

At your four (4) year renewal date, you must submit documentation of 32 points of continuing education (CEU) to renew your certification.

Information on your next recertification will be mailed to you 6 months prior to expiration. In order to receive the information, you must notify SSPC of any change of address or employment. It is the responsibility of each certified individual to keep SSPC current on his or her contact information. SSPC will not be responsible for certifications that lapse because a reminder letter was sent to an incorrect address.

If you have any questions about your certification, please contact Silvia Palmieri at 412-281-2331 Ext. 2201 or by e-mail at palmieri@sspc.org at your convenience.

You may also contact me directly at Ext. 2221 if you have any comments or concerns that you would like me to address. We appreciate your participation and are here to serve you.

Sincerely,

Jennifer Merck Director of Training & Certification





April 22, 2019

Robert Lanterman KTA-Tator Inc 115 Technology Dr. Pittsburgh, PA 15275-1005

Your New Certification Card

Thank you for renewing your NACE International Institute certification. You are part of an elite group of certified professionals dedicated to protecting people, assets, and the environment from the effects of corrosion.

It is with great pleasure that we enclose your new NACE International Institute certification card. This important card includes your certification number and expiration date. If you ordered an embosser, plaque, or an update tag, it will be shipped separately. Please note that certification cards have recently been updated to better align with NACE branding. If you have any questions or need additional information regarding your certification, please call the First Service Department at 1-800-797-6223 (U.S. & Canada) or +1-281-228-6223 (Worldwide). Alternatively, you can e-mail us at <u>FirstService@nace.org</u>.

Thank you for choosing The NACE International Institute as your trusted source for corrosion information and expertise.



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

N/A

22. Sub-consultant Information:

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
Moffatt & Nichol	301 Main Street, Suite 800, Baton Rouge, LA 70825	Jonathan Hird, P.E., jhird@moffattnichol.com	225.336.2075
Michael Baker	2600 Citiplace Drive, Suite 450 Baton Rouge, LA 70808	Daniel Thornhill, P.E. daniel.thornhill@mbakerintl.com	225.218.2846
Forte & Tablada	9107 Interline Ave, Baton Rouge, LA 70809	Joey Coco, P.E. jcoco@forteandtablada.com	225.927.9321
KTA-Tator	145 Enterprise Drive Pittsburgh, PA 15275	Robert S. Lanterman rlanterman@kta.com	412.722.0745 (office) 412.303.9407 (cell)
Bridge Diagnostics	740 S. Pierce Ave., Unit 15 Louisville, CO 80027	Scott Aschermann, PE scotta@bditest.com	303.494.3230

(Add rows as needed)

23. Location:



Alpharetta, GA Atlanta, GA Baton Rouge, LA Birmingham, AL Charlotte, NC Chattanooga, TN Chicago, IL Cincinnati, OH Columbus, OH Dallas, TX Ft. Lauderdale, FL Jackson, MS Jacksonville, FL Knoxville, TN Lexington, KY Louisville, KY Orlando, FL Memphis, TN Miami, FL Nashville, TN Richmond, VA Suwanee, GA Tallahassee, FL Tampa, FL

10000 Perkins Rowe Suite 280 Baton Rouge, LA 70810 225.757.5849 GreshamSmith.com