## **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.

1.	Contract Name as shown in the advertisement	IDA MISSIONARY RD OVER NANCE BRANCH CADDO PARISH
2.	Contract Number(s) as shown in the advertisement	4400030632
3.	State Project Number(s), if shown in the advertisement	H.015912.5
4.	Prime consultant name (name must match <u>exactly</u> as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; <u>include</u> <u>screenshot from SOS at the end of Section 20</u> )	
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. 0006655
6.	Prime consultant mailing address	8966 Interline Avenue, Suite D, Baton Rouge, LA 70809
7.	Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	8966 Interline Avenue, Suite D, Baton Rouge, LA 70809
8.	Name, title, phone number, and email address of prime consultant's contract point of contact	Marcio Araujo, Ph.D., P.E. – President & CEO Phone No.: (225)803-3744 Email: Marcio.Araujo@mcaengrbr.com
	Name, title, phone number, and email address of the official with signing authority for this proposal	Marcio Araujo, Ph.D., P.E President & CEO Phone No.: (225)803-3744 Email: Marcio.Araujo@mcaengrbr.com

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

<ul> <li>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.</li> <li>Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association.</li> </ul>	Signature above shall be the same person listed in Section 9:         Main Main Manual         Date: 01/02/2025
<b>11.</b> 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.	<u>Firm(s)' %:</u>

#### 12. Discipline Table:

As indicated in the advertisement, insert a completed table here. The percentages for the prime and sub-consultants must total 100% for each discipline, as well as the overall total percent of the contract.

The **only** disciplines to be used are listed in the drop down in each row (Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic). **Remove rows as needed.** 

Discipline(s)	% of Overall	MCA Engineering,	SJB Group,	Thompson	Firm D	Firm E	Each Discipline
	Contract	LLC	L.L.C.	Engineering,			must total to 100%
				INC., of			
				Louisiana			
Bridge	54%	100%					100%
Other (Hydraulic Study)	12%	100%					100%
Survey	17%		100%				100%
Right-of-Way	10%		100%				100%
Environmental	7%			100%			100%
Identify the percentage of w	vork for the <b>over</b>	all contract to be perfo	rmed by the prime	e consultant and eac	h sub-consultant.	1	1
Percent of Contract	100%	66%	27%	7%			

#### 13. Firm Size:

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (must specify)" and include the classification title inside the parentheses.

The DOTD Job Classification(s) to be used can be found at the following link:

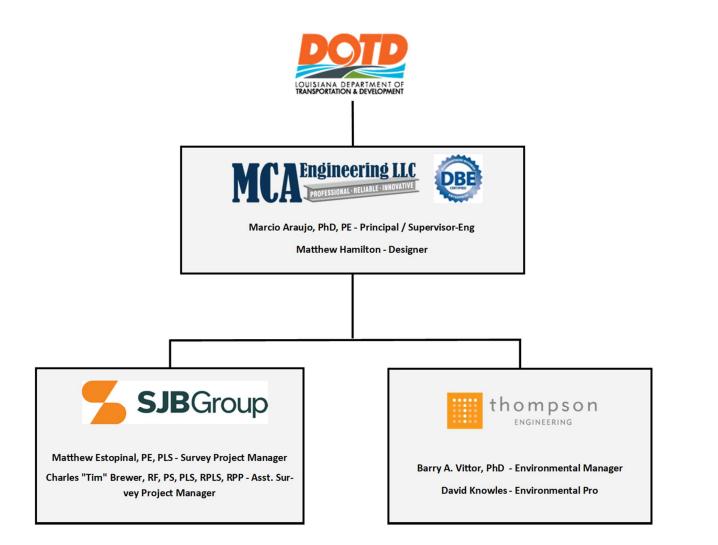
http://wwwsp.dotd.la.gov/Inside LaDOTD/Divisions/Engineering/CCS/Job Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel <u>committed</u> to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
MCA Engineering, LLC	Principal	1	2
MCA Engineering, LLC	Supervisor - Eng	1	1
MCA Engineering, LLC	Designer	1	2
SJB Group, L.L.C.	Surveyor	2	4
SJB Group, L.L.C.	Engineer	0	4
SJB Group, L.L.C.	Party Chief	3	6
SJB Group, L.L.C.	CADD Technician	1	1
SJB Group, L.L.C.	Engineer Intern	0	1
SJB Group, L.L.C.	Landscape Architect	0	1
SJB Group, L.L.C.	Technician	0	1
SJB Group, L.L.C.	Rodman	0	1
SJB Group, L.L.C.	Principal	1	1
SJB Group, L.L.C.	Instrument Man	0	2
SJB Group, L.L.C.	Administrative	0	4
SJB Group, L.L.C.	Supervisor - Eng	0	2
SJB Group, L.L.C.	CADD Drafter	0	1

SJB Group, L.L.C.	CADD Operator	2	3
SJB Group, L.L.C.	Senior Technician	2	4
Thompson Engineering, Inc., of Louisiana	Environmental Manager	1	1
Thompson Engineering, Inc., of Louisiana	Environmental Pro	1	23

#### 14. Organizational Chart:

Provide an organizational chart showing ALL relevant prime consultant and sub-consultant (if applicable) personnel assigned to the contract, area of project responsibility for each, and reporting lines for the purposes of this contract. An individual's role does not necessarily have to match their DOTD job classification identified in Section 13. If applicable, identify all personnel performing traffic engineering analysis and/or QC of traffic engineering analysis by placing an asterisk next to their name. Include the certificates required by the Traffic Engineering Process and Report Training Requirements article of the Advertisement in Section 20. It is acceptable to use an 11x17 format for Section 14.



#### 15. Minimum Personnel Requirements:

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	Marcio Araujo	MCA Engineering, LLC	PE.0035506 - Civil	LA	09/30/2026
2	Marcio Araujo	MCA Engineering, LLC	PE.0035506 - Civil	LA	09/30/2026
3	Marcio Araujo	MCA Engineering, LLC	PE.0035506 - Civil	LA	09/30/2026
4	Matthew Estopinal, PE, PLS	SJB Group, L.L.C.	PLS.0004955	LA	03/31/2025
5	Dr. Barry A. Vittor, PhD	Thompson Engineering, Inc., of Louisiana	Environmental – more than 5 years of experience in wetland delineation	N/A	N/A
5	David Knowles	Thompson Engineering, Inc., of Louisiana	Environmental – more than 5 years of experience in wetland delineation	N/A	N/A

#### 16. Staff Experience:

Résumés shall be provided for all prime and sub-consultant personnel listed in Sections 14 and/or 15 of the proposal. Résumés of personnel not identified in Section 14 or Section 15 of the proposal should not be included and will not be evaluated. Résumés are **limited to 2 pages per person**. Any certificates required by the advertisement are to be placed in Section 20.

	Firm employed by: MCA Engineering, LLC							
Name	Marcio C. Araujo, Ph.D., P.E.				Years of relevant experience with this employer	5		
Title	President				Years of relevant experience with other employer(s)	16		
Degree(s) /	Years / Spe	cializ			0. / 2009 / Civil Engineering / Louisiana State University			
					/ 2002 / Civil Engineering / Louisiana State University			
				B.S.	/ 1998 / Civil Engineering / Universidade Federal do Piaui,	Teresina, Brazil		
Active regis	stration num	iber /			essional Engineering – Louisiana #35506 / September 2026			
				Profe	essional Engineering – Mississippi #30841 / December 202	6		
					essional Engineering – Arkansas #20112 / December 2026			
					essional Engineering – Texas #141933 / June 2025			
					essional Engineering – Alabama #51221 / December 2025			
Year registe		2010	Discipline		Engineering			
		description of re			l Design Engineer			
Experience		1 1			the proposed contract; i.e., "designed drainage", "design	e		
(mm/yy-mm/yy) intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).				~ /				
07/19 - 01/		0 0			Engineering LLC – Co-founder, majority owner, and tech			
		company provides civil/structural analysis, design, and support to various industrial, commercial, retail, and governmental						
					ch as VA Hospitals, US Coast Guard, industrial plants, offic	ce buildings, US Navy,		
2010 5/20		US Air Force, medical facilities, retail shops, and various government buildings.						
2018 - 5/20		Lead Civil / Structural Engineer / BRIS/Wink Engineering – Led teams assigned to provide engineering analysis and						
		design efforts needed to support major capital projects at various industrial sites across the Greater Baton Rouge region. These						
	nro	viects included n	ina racks major a	allinma	ant foundations blast analysis and design platforms pile de	0 0		
	-		1 0	<b>- -</b>	ent foundations, blast analysis and design, platforms, pile do	esign, and various		
	str	uctural assessme	1 0	<b>- -</b>	ent foundations, blast analysis and design, platforms, pile de uring this time included organizations such as Exxon, Rubio	esign, and various		
2015 - 201	str	uctural assessme estlake.	ents. Customers se	erved du	uring this time included organizations such as Exxon, Rubic	esign, and various con, Shintech, and		
2015 - 201	8 Ci	uctural assessme estlake. vil/Structural M	ents. Customers se	erved du	uring this time included organizations such as Exxon, Rubic Associates – Responsible for all aspects of leading the Civil	esign, and various con, Shintech, and I/Structural department		
	8 Cir act	uctural assessme estlake. vil/Structural N tivities and mana	ents. Customers se Manager / Hargro aging staff perform	ove & Anance a	uring this time included organizations such as Exxon, Rubic Associates – Responsible for all aspects of leading the Civil as well as actively worked as the discipline lead for multiple	esign, and various con, Shintech, and l/Structural department e clients.		
	8 Ci act 5 Ci	uctural assessme estlake. vil/Structural N tivities and mana vil/Structural E	ents. Customers se <b>Ianager / Hargro</b> aging staff perform <b>Engineer &amp; Proje</b>	ove & Anance a	Associates – Responsible for all aspects of leading the Civil as well as actively worked as the discipline lead for multiple ager / CDI Engineering – Leadership positions as the Civi	esign, and various con, Shintech, and l/Structural department e clients. ril/Structural Engineer		
	8 Cir act 5 Cir of	uctural assessme estlake. vil/Structural N tivities and mana vil/Structural E Record and Proj	Anager / Hargro Aging staff perform Angineer & Projecter Manager for m	ove & Anance a ct Man	Associates – Responsible for all aspects of leading the Civil as well as actively worked as the discipline lead for multiple ager / CDI Engineering – Leadership positions as the Civil Shell/Motiva projects in Convent, Geismar and Norco, LA	esign, and various con, Shintech, and //Structural department e clients. ril/Structural Engineer A. Lead Engineer for		
	8 Cir act 5 Cir of Pro	uctural assessme estlake. vil/Structural M tivities and mana vil/Structural E Record and Proj oject Amite, the	Anager / Hargro aging staff perform Angineer & Project ect Manager for m largest project awa	ove & A nance a ct Man nultiple arded t	Associates – Responsible for all aspects of leading the Civil as well as actively worked as the discipline lead for multiple tager / CDI Engineering – Leadership positions as the Civil Shell/Motiva projects in Convent, Geismar and Norco, LA to the Baton Rouge office at the time. Performed structural a	esign, and various con, Shintech, and //Structural department e clients. il/Structural Engineer A. Lead Engineer for analysis on vessel		
2015 – 201 2008 – 201	8 Ci act 5 Ci of Pro fou	uctural assessme estlake. vil/Structural N tivities and mana vil/Structural E Record and Proj oject Amite, the undations, pipe ra	Anager / Hargro aging staff perform aging staff perform aging staff perform aging staff perform aging staff perform act Manager for m largest project awa acks, pipe support	ove & A nance a ct Man nultiple arded to ts and a	Associates – Responsible for all aspects of leading the Civil as well as actively worked as the discipline lead for multiple ager / CDI Engineering – Leadership positions as the Civil Shell/Motiva projects in Convent, Geismar and Norco, LA	esign, and various con, Shintech, and //Structural department e clients. ril/Structural Engineer A. Lead Engineer for analysis on vessel g field work,		
	8 Cir act 5 Cir of Pro fou top	uctural assessme estlake. vil/Structural M tivities and mana vil/Structural E Record and Proj oject Amite, the undations, pipe ra- pographic survey	Anager / Hargro aging staff perform aging staff perform agineer & Project ect Manager for m largest project awa acks, pipe support ys, production of d	ove & A nance a ct Man nultiple arded to ts and a lrawing	Associates – Responsible for all aspects of leading the Civil as well as actively worked as the discipline lead for multiple ager / CDI Engineering – Leadership positions as the Civil be Shell/Motiva projects in Convent, Geismar and Norco, LA to the Baton Rouge office at the time. Performed structural a access platforms. Involved in all phases of design, including	esign, and various con, Shintech, and //Structural department e clients. ril/Structural Engineer A. Lead Engineer for analysis on vessel g field work, ocuments.		

	involved shallow and deep foundations, post-tensioned slabs, timber, and steel structures. Responsible for all facets of the business, including but not limited to marketing, human resources, negotiating fees and invoicing.
2019 - 2009	Teaching & Researching Assistant / LSU Dept of Civil Engineering – Researched non-linear kinematic hardening for
	multi-axial cyclic plasticity. Developed 3-D full finite element models of prestressed concrete bridges for both linear and
	nonlinear analysis using ANSYS. Inspected nearly 90 highway bridges for truck impact damage in the state of Louisiana.
01/98 - 11/98	Construction Supervisor / Construtora Rego Monteiro – Supervised the construction of reinforced concrete highway
	bridges, commercial buildings, and structural restoration of concrete structures. Work involved using independent judgement
	and initiative, scheduling and assigning work, requisitioning materials and supplies, estimating man hours and materials, and
	making payments.

Name Richa	: MCA Engineering, LLC ard Farmer	Years of relevant experience with this employer	5			
	ations Lead & Co-Founder	Years of relevant experience with other employer(s)	37			
Degree(s) / Years /	/ Specializ	B.S. / 1980 / Mechanical Engineering / Louisiana Tech University	sity			
Active registration			*			
Year registered	Discipline					
Contract role(s) / b	prief description of responsibilities	Project / Office Manager				
Experience dates	Experience and qualifications relev	ant to the proposed contract; i.e., "designed drainage", "designed drain	gned girders", "designed			
(mm/yy–mm/yy)	intersection", etc. Experience dates s	should cover the years of experience specified in the applicable M	IPR(s).			
07/19 - 01/25	<b>Operations Lead &amp; Co-Founder / M</b>	MCA Engineering LLC – Responsible for general operational ad	ctivities including			
		ayroll as well as project management support tasks.				
09/11 - 02/18		Chemical Geismar Plant in Geismar, Louisiana – Responsible	11			
		the site in the areas of civil, electrical, mechanical, pressure equi				
	engineering/inspection. Also included project engineering staff that designed and implemented approximately \$50 million					
	annually in capital upgrades. Retired					
05/09 - 08/11		ering Manager / Motiva Convent Refinery (Shell Joint Ventur				
		n of reliability and maintenance engineers, as well as the proactiv				
	support refinery operations and improvements (approx. 12 individuals). Also included a small team of contract drafting					
03/06 - 04/09	resources for piping and structural design drawings.					
03/06 - 04/09	Project Lead / Shell North American Lubricants Logistics / Global SAP Implementation – Shell Lubricants in					
	<b>Houston, Texas</b> – Responsible for the Logistics segment of the US Shell Lubricants production and supply chain network implementation of the global SAP enterprise software system (included Pennzoil/Quaker State).					
01/04 - 02/06	· · ·	bricants / Project Sunrise in Houston, Texas (Jan 2004 – Feb	2006) - Supply chain			
01/04 - 02/00		global initiative to enable growth and market leadership by elim				
	inefficiencies while standardizing and	č 1,	initiating regional			
12/98 - 12/03		icants Plant in Wood River, Illinois – Responsible for Upstream	n Lubes production of			
		stream operations of blending, packaging, warehousing, and ship				
		sed of approx. 80 staff and 30 contractors.	1 0			
03/97 - 11/98		ormance & Analysis / Shell Wood River Refinery in Wood Ri	ver, Illinois –			
	Responsible for developing and subn	nitting the annual refinery budget of approximately \$150 million	and then measuring,			
	analyzing, and reporting against monthly performance targets.					
03/96 - 02/97		uels / Shell Wood River Refinery in Wood River, Illinois – Re	sponsible for			
		ocessing units (staff of approx. 6 engineers).				
12/93 - 02/96		Il Wood River Refinery in Wood River, Illinois – Responsible				
		g the turnarounds for major units in the refinery (average of 12 or	n staff and a budget of			
	approximately \$40 million annually).					

11/91 - 11/93	Field Projects Construction Manager / Shell Wood River Refinery in Wood River, Illinois – Responsible for the field
	construction team for capital projects (approx. 75 direct and contract crafts plus supervisors).
06/89 - 10/91	Field Maintenance Manager / Shell Wood River Refinery in Wood River, Illinois – Responsible for providing the needed
	field maintenance efforts for the refinery (approx. 120 crafts and supervisors in electrical, piping, rotating equipment,
	instrument, and civil/structural support).
10/86 - 05/89	Process Manager – Argo Resins Facility (Shell) in Chicago, Illinois – Responsible for the staffing, planning, and
	production operations for Shell's epoxy resins business. (Approx. 30 total in direct and contract staff).
06/83 - 09/86	Production Team Support Engineer / Shell Wood River Refinery in Wood River, Illinois – Provided engineering support,
	project support, and reliability improvement for various refining operating units.
05/82-05/83	Start-up Support Engineer / Shell Wilmington Refinery in Los Angeles, California – Provided engineering support to
	complete, safely start-up, and optimize refining units for a major capital improvement program (upgrading Cat Cracking,
	Hydrocracking, and other operating units).
09/80 - 04/82	Maintenance Engineer / Shell Chemical Mobile Plant in Mobile, Alabama – Provided engineering support for unit
	operations and small projects.

Firm employ	yed by: MCA	A Engineering, LLC					
Name	Matthew H	lamilton	Years of relevant experience with this employer 0.75				
Title	Project Engineer			Years of relevant experience with other employer(s)	19.66		
Degree(s) / Years / Specializ			B.S.	. / 2004 / Civil Engineering			
Active regist	tration numb	per /					
Year register	red	Discipline					
Contract role	e(s) / brief d	escription of responsibilities	Lea	d Designer			
Experience d	lates Exp	erience and qualifications releva	ant to	the proposed contract; i.e., "designed drainage", "	gned girders", "designed		
(mm/yy-mm	n/yy) inte	rsection", etc. Experience dates s	ce dates should cover the years of experience specified in the applicable MPR(s).				
04/24 - 12/2	4 Des	Designed wastewater treatment plant site drainage, access roads, concrete structures, PEMB concrete foundations,					
	mis	miscellaneous access platforms; and a conveyor truss bridge.					
06/16 - 04/2		•		eel pipe supports, concrete foundations, underground draina	age piping, developed		
	desi	design drawings and checked construction packages for various industrial projects.					
01/13 - 06/1		Designed industrial steel structures & civil concrete foundations, analyzed industrial piping & vessel supports, and coordinated					
		* * * *		ads, piping leads, and department manager.			
04/09 - 01/1		Designed metal building concrete foundation, residential house concrete foundation, equipment access steel platforms, steel					
structure, and cond		cture, and concrete foundation for high school baseball field, RFP roof of access catwalks.					
12/04 - 04/0	9 Des	igned process & industrial foundation	ations,	, structures, skids, substations, miscellaneous pipe supports	, cable tray supports, and		
	drai	nage.					

Firm employed by	/: SJB Group, L.L.C.					
	hew Estopinal, PE, PLS	Years of relevant experience with this employer	3			
Title Princ	cipal / CEO	Years of relevant experience with other employer(s) 15				
Degree(s) / Years	/ Specialization	B.S. in Civil Engineering   2009   LSU				
		B.S. in Microbiology   1996   LSU				
Active registration	n number / state / expiration date	PE #0039151   Louisiana   3/31/2025   Year Registered: 2014   P				
		PLS #0004955   Louisiana   3/31/2025   Year Registered: 2006	Professional Land			
		Surveyor				
		PE #122184   Tennessee   1/31/2025   Year Registered: 2019   Pr	e			
X7 · / 1		PE #32982   Mississippi   12/31/2024   Year Registered: 2022   F	rofessional Engineer			
Year registered	Discipline	Derived Manager Commission 1 March 11 17				
Contract role(s) / (	brief description of responsibilities	<b>Project Manager – Surveying</b>   Mr. Estopinal has 17 years of e				
		Louisiana managing transportation and community development private clients, MoveBR, and LA DOTD. His survey experience	1 0			
		Topographic, As-Built and ALTA Surveys, Right-of-Way Mapp				
		Layout, and control for aerial survey and mapping.	sing, construction			
Experience dates	Experience and qualifications releva	nt to the proposed contract; <i>i.e.</i> , "designed drainage", "design	ned girders", "designed			
(mm/yy–mm/yy)						
07/21 -10/23	LA DOTD Project No. H.004100.5 – I-10: LA 415 to Essen on I-10 and I-12					
	QA/QC. SJB Group provided a Property Survey and extensive Right-of-Way Mapping for approximately 4 miles of I-10 as					
	well as multiple intersecting streets, for which a property map was created that encompassed the parcels affected by					
		ect also included the creation of Base Right-of-Way Maps; Final				
		along with a pdf copy of the Full Title Research Reports with aff	fected parcel number			
0.0 /0.0 0 1 /0 1	and an ASCII parcel input file descrip					
08/20-04/24		Replacement Initiative, Districts 03, 07, 61, 62	1 1			
		raphic surveying, property surveying, right-of-way mapping, and				
		7, 61, and 62 as a sub-consultant to Burk-Kleinpeter within their our ways were provided in accordance with the current Locations an				
	Addendum A.	inveys were provided in accordance with the current Elocations an	a Survey Manual and			
04/23 - 09/23		- Morgan City Sidewalks & Shared Use Path, St. Mary Parisl	1			
0.120 07720		This project included Right-of-Way Mapping, Topographic Surve				
	Utility Engineering to assist in the installation of sidewalks, handicapped ramps, drainage structures, and other related work in					
	Morgan City. All surveying was performed to LADOTD Location & Survey Section requirements and delivered in Autodesk					
	format.					
02/22 08/22	LA DOTD Droject No. 11.012(95.5	I A 295. Dyon Street Intersection Improvements				
03/22 - 08/23	0	- LA 385: Ryan Street Intersection Improvements graphic Survey in Calcasieu Parish near the intersection of I-210	and I A 385 (Ryan			
		tate University. The survey included all utilities, drainage, and fi				

	buildings that fell within the survey limits. The total linear distance was approximately 2.67 miles. LiDAR Data was gathered using a Velodyne Mobile Scanner and Ladybug. Terrestrial Surveying was performed using a Leica TS16 Robotic Total Station and a Leica GS18 T GNSS RTK Rover. Data was processed using OpenRoads Designer TopoDOT and InSuite MicroStation. All surveying was performed to LADOTD Location & Survey Section requirements.
07/21 - 02/22	LA DOTD Project No. H.013715.5 – LA 77 Union Pacific Railroad Crossing (Iberville) QA/QC. This project consisted of Property Surveying, Right-of-Way Mapping and Topographic Surveying for a project that included the depiction of a railroad right-of-way, state-maintained highway, and city streets. The deliverables included preparation of a Property Map, Base Right-of-Way Maps, Final Right-of-Way Maps and the creation of a parcel input file for acquisition descriptions of the subject area. All surveying was performed to LADOTD Location & Survey Section Addendum A requirements.
10/20 - 08/22	LA DOTD Project No. H.002176.50 – LA 10 Bridges QA/QC. The LA 10 Bridges project in St. Landry Parish included Property Surveying and Right-of-Way Mapping for three sites. The property survey depicted the affected properties, the existing Right-of-Way for LA Hwy 10, and multiple state- claimed water bodies. The Property Survey was utilized for creating Base Right-of-Way maps, Final Right-of-Way Maps and ASCII parcel input files for acquisition parcels. All surveying was performed to LADOTD Location & Survey Section Addendum A requirements.
06/21 - 10/21	LA DOTD Project No. H.007963 – Blackwater Bayou Bridge Project Manager/QA/QC. This project required replacement of the Bayou River Bridge and a diversion road during construction along LA Hwy 410 in East Baton Rouge Parish near the City/Town of Central. This project involved Property Surveys, Right-of-Way maps, and title take-offs. This project went through design changes which halted project progress temporarily and significantly changed the required right-of-way taking. All surveying was performed to LADOTD Location & Survey Section Addendum A requirements.

Firm employed by: SJB Group, LLC					
Name Charles "Tim" Brewer			Years of relevant experience with this employer 3		
Title Vice	e President of Surveying Years of relevant experience with other employer(s) 28			28	
Degree(s) / Years	/ Specialization	Bach	elor of Science in Forestry Management / 1988 / Mississipp	oi State University	
Active registration number / state / expiration date		PLS.0005009   Louisiana   9/30/2025   Registered 2009   Professional Land SurveyorPLS.35341-S   Alabama   12/31/2025   Registered 2015   Professional Land SurveyorRPLS.6142   Texas   12/31/2025   Registered 2010   Reg. Professional Land SurveyorPS.1683   Arkansas   6/30/2025   Registered 2009   Professional SurveyorLS.2726   Tennessee   12/31/2025   Registered 2008   Land Surveyor80756RPP   Oregon   12/31/2025   Registered 2008   Reg. Professional PhotogrammetristPS.2766   Mississippi   12/31/2025   Registered 1999   Professional Land SurveyorRF.1286   Mississippi   12/31/2025   Registered 1988   Registered Forrester			
Year registered	Discipline				
Contract role(s) / brief description of responsibilities			Asst. Project Manager   Mr. Brewer, has over 30 years of survey experience and over 15 years of experience managing a wide variety of surveying projects for USACE, MDOT, LADOTD, MovEBR, MoveAscension, and private clients. His survey experience includes Boundary, Topographic, As-Built and ALTA Surveys, Right-of- Way Mapping, Construction Layout, and control for aerial survey and mapping.		
Experience dates			the proposed contract; i.e., "designed drainage", "design	0	
(mm/yy–mm/yy)			cover the years of experience specified in the applicable M	PR(s).	
10/23 - 12/24	LA DOTD Project No. H005121.5 LA				
	<i>Project Manager.</i> The project provides field data for the design of a roadway to connect LA 415 to LA 1. The project is a supplement to previously performed surveying for the realignment of the due to recent development and construction. The project limits include a 2.9-mile corridor beginning approximately 0.2 miles north of the intersection of I-10 and LA 415 and continuing in a southeasterly direction along the extension of LA 415 across the intercoastal canal, industrial areas, and agriculture field to the intersection of LA 1. The project limits also include an approximate 1.8-mile corridor along LA 1 that extends from the roadway into residential, commercial, and retail areas. The project includes the collection of current conditions of the areas included in the project limits and merging the current data with the previous survey and updating any observed condition changes. The project includes the recovery and supplement of the existing control network. The collection of field data is completed through the utilization of conventional survey methods with survey total stations and global positioning systems (GPS). Mobile LiDaR methods are utilized for the collection of data along the high traffic segments of LA 1 and processed through Trimble Business Center, with data extraction performed through TopoDot. The survey is being conducted according to the Louisiana Department of Transportation and Development Location and Survey Manual. The deliverables will be provided in accordance with the LADOTD guidelines for electronic deliverables.				
04/23 - 09/23	Image: The deriverables will be provided in accordance with the EADOTD guidelines for electronic deriverables.         LA DOTD Project No. H.017322.5 – Morgan City Sidewalks & Shared Use Path, St. Mary Parish         Surveyor of Record/Project Manager. Sub to Digital Engineering. This project included Right-of-Way Mapping, Topographic         Survey, and Subsurface Utility Engineering to assist in the installation of sidewalks, handicapped ramps, drainage structures, and other related work in Morgan City. The project limits included Everett Street from Front Street to 4th Street, 4th Street				

	from Everett Street to Barrow Street, and Myrtle Street from Youngs Road to Auditorium Drive. In the performance of this
	contract the existing right-of-way of twenty streets, one state highway right-of-way, and an irregular railroad right-of-way was
	determined at two crossing locations. All surveying was performed to LADOTD Location & Survey Section requirements.
	The deliverables were provided in Autodesk format.
08/20 - 09/23	LA DOTD 44-17597 - Rural Bridge Replacement Initiative, Districts 03, 07, 61, 62
	Project Manager. Sub to Burk-Kleinpeter. This project included a Topographic Survey, Right-of-Way Mapping, and roadway
	design performed for the proposed bridge replacements for LA DOTD Districts 03, 07, 61, and 62. Each site required a
	complete property map and the preparation of Right-of-Way Maps with supporting data for right-of-way acquisition. The
	Topographic Survey of the project limits of each bridge included a complete inventory for each drainage structure (type, size,
	length, and invert) and cross sections of all drainage ways. A Leica TS16 Robotic Total Station and a Leica GS18 T GNSS
	RTK Rover were used. All surveying was performed to LADOTD Location & Survey Section requirements.
03/22 - 8/22	LA DOTD Project No. H.012685.5 – LA 385: Ryan Street Intersection Improvements
	Project Manager. This project included a Topographic Survey in Calcasieu Parish near the intersection of I-210 and LA 385
	(Ryan Street) near the campus of McNeese State University. The survey included all utilities, drainage, and finish floor
	elevations of buildings that fell within the survey limits. The total linear distance was approximately 2.67 miles. LiDAR Data
	was gathered using a Velodyne Mobile Scanner and Ladybug. Terrestrial Surveying was performed using a Leica TS16
	Robotic Total Station and a Leica GS18 T GNSS RTK Rover. Data was processed using OpenRoads Designer TopoDOT and
	InSuite MicroStation. All surveying was performed to LADOTD Location & Survey Section requirements.
6/21 - Ongoing	LA DOTD Project No. H.004100.5 – I-10: LA 415 to Essen on I-10 and I-12
0/21 - Oligoling	<i>Project Manager.</i> SJB Group performed the property surveying along a 4.4-mile stretch of Interstate 10 from St. Joseph St. to
	College Dr. in East Baton Rouge Parish, Louisiana for the Louisiana Department of Transportation and Development's
	widening project. This project required extensive title research to acquire the necessary existing surveys and deeds. It also
	required field surveying and mapping of more than one hundred twenty-five parcels along the project corridor, which range in
	size from small urban residential lots to large commercial tracts. This project corridor also encompasses existing drainage
	servitudes, a railroad right-of-way, and numerous side streets in the heart of Baton Rouge.

Firm employed by	: SJB Group, L.L.C				
Name Colby	y Mire, PLS	Years of relevant experience with this employer	9		
Title Assist	istant Survey Department Manager Years of relevant experience with other employer(s) 0				
Degree(s) / Years / Specialization		B.S. in Construction Engineering Technology   2015   Southeas	tern Louisiana		
		University			
	number / state / expiration date	PLS #0005308   Louisiana   9/30/2025			
Year registered	2023 Discipline	Professional Land Surveyor			
Contract role(s) / b	prief description of responsibilities	<b>Surveyor</b>   Mr. Mire has more than 9 years of experience in land surveying. His survey experience includes Boundary, Topographic, As-Built and ALTA Surveys, Right-of-Way Mapping, Construction Layout, and control for aerial survey and mapping projects for LA DOTD, MDOT, MoveBR, MoveAscension, and private clients.			
Experience dates (mm/yy-mm/yy)		ant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed drainage", "designed cover the years of experience specified in the applicable M			
7/21 – Ongoing	LA DOTD Project No. H.004100 -	I-10: LA 415 to Essen			
Assistant Project Manager   This project included a Property Survey and extensive Right-of-Way Mapping for a 4 miles of I-10 as well as multiple intersecting streets, which included parcel data for approximately 125 parcels. TS16 Robotic Total Station was used as well as a Leica GS18 T GNSS RTK Rover for RTK. SUE data was colle combination of Ground-Penetrating Radar and Electromagnetic Pipe and Cable locators. All surveying was perfor LADOTD Location & Survey Section requirements, and all Subsurface Utility Engineering was completed to AS standards.					
8/20-4/24	LA DOTD 44-17597 - Rural Bridge Replacement Initiative, Districts 03,07, 61,62 Assistant Project Manager  Sub to Burk-Kleinpeter. This project included a Topographic Survey, Right-of-Way Mapping, and roadway design performed for the proposed bridge replacements for LA DOTD Districts 03, 07, 61, and 62. Each site required a complete property map and the preparation of Right-of-Way Maps with supporting data for right-of-way acquisition. The Topographic Survey of the project limits of each bridge included a complete inventory for each drainage structure (type, size, length, and invert) and cross sections of all drainage ways. A Leica TS16 Robotic Total Station and a Leica GS18 T GNSS RTK Rover were used. All surveying was performed to LADOTD Location & Survey Section requirements.				
4/23 - 9/23	LA DOTD Project No. H.017322.5	– Morgan City Sidewalks & Shared Use Path, St. Mary Paris	h		
	igital Engineering. This project included Right-of-Way Mapping o assist in the installation of sidewalks, handicapped ramps, drain oject limits included Everett Street from Front Street to 4th Street treet from Youngs Road to Auditorium Drive. A Leica TS16 Rol d a GeoSLAM ZEB Horizon 3D were used. SUE data was collec asted vacuum excavation, Electromagnetic Pipe and Cable locator surveying was performed to LADOTD Location & Survey Section ompleted to ASCE 38-02 standards.	age structures, and other , 4th Street from Everett potic Total Station, a ted using a combination rs, and other non-			

7/21 - 2/22	LA DOTD Project No. H.012851 – Union Pacific Railroad Corridor (Plaquemine)							
	Assistant Project Manager/Senior Technician   This project included a Topographic Survey and Quality Level "D" and							
	Quality Level "B" Subsurface Utility Engineering for this project located in Iberville Parish along the Union Pacific Railroad							
	Corridor between the intersection of LA 1 and Bayou Road and the intersection of Belleview Drive and Railroad Avenue.							
	Leica TS16 Robotic Total Station and a Leica GS18 T GNSS RTK Rover were both used, the GS18 being used for both RTK							
	and as a static base station. SUE data was collected using a combination of Ground-Penetrating Radar and Electromagnetic							
	Pipe and Cable locators. All surveying was performed to LADOTD Location & Survey Section requirements, and all							
	Subsurface Utility Engineering was completed to ASCE 38-02 standards.							
3/22 - 8/23	LA DOTD Project No. H.012685.5 – LA 385: Ryan Street Intersection Improvements							
	Assistant Project Manager. This project included a Topographic Survey in Calcasieu Parish near the intersection of I-210 and							
	LA 385 (Ryan Street) near the campus of McNeese State University. The survey included all utilities, drainage, and finish							
	floor elevations of buildings that fell within the survey limits. The total linear distance was approximately 2.67 miles. LiDAR							
	Data was gathered using a Velodyne Mobile Scanner and Ladybug. Terrestrial Surveying was performed using a Leica TS16							
	Robotic Total Station and a Leica GS18 T GNSS RTK Rover. Data was processed using OpenRoads Designer TopoDOT and							
	InSuite MicroStation. All surveying was performed to LADOTD Location & Survey Section requirements.							
3/21 - 5/21	City Parish No. 20-CP-HC-0046 – MOVEBR – Jefferson Highway at Bluebonnet Intersection Improvement							
	Project Manager/Senior Technician. Sub to Meyer Engineers. This project involved a Corridor Survey, Topographic Surveys,							
	Property Surveys, Right-of-Way Mapping, Subsurface Utility Engineering, and the development of a map of existing drainage							
	throughout the survey limits at the intersection of Jefferson Highway and Bluebonnet Boulevard. A Leica TS16 Robotic Total							
	Station was used as well as a Leica GS18 T GNSS RTK Rover for both RTK and as a static base station. InRoads Suite							
	MicroStation was utilized for the data processing and creation of all deliverables.							

Firm employed by: SJB Group, LLC							
Name 1	Phillip Dowden	Years of relevant experience with this employer 3					
Title		Years of relevant experience with other employer(s) 26					
Degree(s) / Y	Tears / Specialization	Construction Management   1985   LSU					
Active registr	ration number / state / expiration date	N/A					
Year registere	ed Discipline						
Contract role(s) / brief description of responsibilities		Survey Technician   Mr. Dowden has more than twenty-seven years of experience in the survey field. He is knowledgeable in a variety of software including Trimble Business Center, POSPac MMS, TopoDOT, OpenRoads Designer, LadybugCapPro, IrfanView 64, and Quick Terrain Modeler. He is also thoroughly knowledgeable in a variety of equipment, such as the Trimble MX50 and tertiary equipment such as DMI, Ladybug, and Leica Base Positioning, Faro S350, Geoslam, and compact microdrones with Teledyne LiDAR, amongst others. His responsibilities include processing field data, project management, and occasionally conducting field work.					
Experience da (mm/yy-mm/		int to the proposed contract; <i>i.e.</i> , "designed drainage", "design hould cover the years of experience specified in the applicable M	ned girders", "designed				
11/23 – Ongo	Mobile LiDAR Lead. This project inclOrleans, Louisiana. The purpose of thThe field data was collected via Mobilsurvey methods. The project includedincluded the determination of the existproject was established in accordanceManual. The point cloud data was project	LA DOTD Project No. H.15487.5 – New Orleans Pedestrian Improvements         Mobile LiDAR Lead. This project included a Topographic Survey of fifty-five intersections in the downtown area of New         Orleans, Louisiana. The purpose of the project was to upgrade and construct pedestrian sidewalk crossings to ADA standards.         The field data was collected via Mobile LiDAR Scanning utilizing a Trimble MX -50 and supplemented with conventional survey methods. The project included utility mapping of each intersection by records research. Additionally, the project included the determination of the existing right-of-way for the specific streets and LA DOTD roadways. The control for the project was established in accordance with the Louisiana Department of Transportation and Development Location and Survey Manual. The point cloud data was processed through Trimble Business Center and extracted with Topo Dot. The deliverables included topographic base maps, plan-profile sheets, coordinate files, and a control sketch.					
10/23 –12/24	Mobile LiDAR Lead. The project prov supplement to previously performed s project limits include a 2.9-mile corri- continuing in a southeasterly direction agriculture field to the intersection of extends from the roadway into resider conditions of the areas included in the observed condition changes. The pro- collection of field data is completed the global positioning systems (GPS). M	LA DOTD Project No. 005121 LA 1 – LA 415 Connector <i>Mobile LiDAR Lead.</i> The project provides field data for design of a roadway to connect LA 415 to LA 1. The project is a supplement to previously performed surveying for the realignment of the due to recent development and construction. The project limits include a 2.9-mile corridor beginning approximately 0.2 miles north of the intersection of I-10 and LA 415 and continuing in a southeasterly direction along the extension of LA 415 across the intercoastal canal, industrial areas, and agriculture field to the intersection of LA. The project limits also include an approximate 1.8-mile corridor along LA 1 that extends from the roadway into residential, commercial, and retail areas. The project includes the collection of current conditions of the areas included in the project limits and merging the current data with the previous survey and updating any observed condition changes. The project includes the recovery and supplement of the existing control network. The collection of field data is completed through the utilization of conventional survey methods with survey total stations and global positioning systems (GPS). Mobile LiDAR methods are utilized for the collection of data along the high traffic segments of LA 1 and processed through Trimble Business Center, with data extraction performed through TopoDot. The					

	survey is being conducted according to the Louisiana Department of Transportation and Development Location and Survey Manual. The deliverables will be provided in accordance with the LADOTD guidelines for electronic deliverables.
07/21 -10/23	LA DOTD Project No. H.004100 - I-10: LA 415 to Essen
	Survey Technician for the project which included a property survey and extensive right-of-way mapping for approximately 4
	miles of I-10 as well as multiple intersecting streets, for which a property map was created that encompassed the parcels
	affected by acquisition and accessibility.
08/20 - 4/24	LA DOTD 44-17597 - Rural Bridge Replacement Initiative, Districts 03,07, 61,62
	Survey Technician for a topographic survey, property survey, right-of-way mapping, and roadway design for bridge
	replacements in Districts 03, 07, 61, and 62. The project deliverables included both electronic MicroStation files, along with
	matte prints.
04/23 - 09/23	LA DOTD H.017322.5 - Morgan City Sidewalks and Shared Use Path
	Mobile LiDAR Lead for a topographic survey, right-of-way survey and SUE of 2 linear miles of roadway in Morgan City, LA
	for ADA compliant sidewalk design. The project included a detailed topographic survey of data collected with robotic total
	station global positioning systems, and mobile LiDAR scanning.
3/22 - 8/23	LA DOTD Project No. H.012685.5 – LA 385: Ryan Street Intersection Improvements
	Mobile LiDAR Lead. This project included a Topographic Survey in Calcasieu Parish near the intersection of I-210 and LA
	385 (Ryan Street) near the campus of McNeese State University. The survey included all utilities, drainage, and finish floor
	elevations of buildings that fell within the survey limits. The total linear distance was approximately 2.67 miles. LiDAR Data
	was gathered using a Velodyne Mobile Scanner and Ladybug. Terrestrial Surveying was performed using a Leica TS16
	Robotic Total Station and a Leica GS18 T GNSS RTK Rover. Data was processed using OpenRoads Designer TopoDOT and
	InSuite MicroStation. All surveying was performed to LADOTD Location & Survey Section requirements.

Firm employed by: Thompson Engineering, Inc.						
Name Di	r. Barry A. Vittor, PhD	Years of relevant experience with this employer 1 year (Thompson)				
Title Pr	rincipal Scientist	Years of relevant experience with other employer(s) 52 years				
Degree(s) / Yea	ars / Specialization	PhD/ Ecology, University of Oregon, 1971				
	-	MS/ Marine Biology, California State University, San Diego, 1	968			
		BA/Zoology, University of California, Riverside, 1966				
	<b>1</b>	N/A				
Year registered		N/A				
		Environmental - NEPA				
Experience date		nt to the proposed contract; i.e., "designed drainage", "designed draina				
(mm/yy-mm/y		ould cover the years of experience specified in the applicable M				
(01/21 – ongoin		ment, Baldwin County, AL - Principal Scientist for environme				
		88 bridge replacement project at the Tensaw-Spanish River cross				
		ing of wetlands and SAV in the construction area and required				
		ral locations in the vicinity of the bridge were surveyed for pre				
		ble site for restoration of SAV through transplanting of donor s	-			
(01/09 12/22)		tigation plan was coordinated with ALDOT, USACE, NOAA,				
(01/08 - 12/22)		ty Coal Mine, Kemper County, MS – Principal Scientist respon				
	1 6	permitting, wetland delineation, stream assessment, threatened/endangered species survey, and vegetation/wildlife study for a				
		proposed lignite coal surface mine facility in portions of Kemper County, Mississippi. Dr. Vittor and his team developed a comprehensive wetland and stream mitigation plan that would be implemented during the 40-year life of mine period,				
	-	r the mine, and coordinated the permit review and approval pro	-			
		gencies. They also conducted annual monitoring of the wetland	-			
	sites through 2021.	generes. They also conducted annual monitoring of the weath	d and sirean mitigation			
(01/19 - 12/21)	¥	otic Line Environmental Resources, Counties in AL/MS – Princ	inal Scientist for the			
		his project involved surveys of wetlands, streams, and endange	-			
	-	existing transmission line corridor that extended 114 miles from				
		Alabama to the Mississippi-Louisiana state line. Wetlands were delineated and mapped in accordance with Corp of Engineers				
		guidelines. Surveys for Threatened and Endangered species focused primarily on Gopher Tortoise, which is listed by the				
		issippi. Three navigable waters (Pascagoula River, Biloxi River	•			
		on. Dr. Vittor and his team obtained Sec. 10 permits for each c				
(11/21 –		nental Services MSA, Mobile County, AL – Principal Scientist				
Ongoing)	services for Mobile County's Environm	services for Mobile County's Environmental Services Department, through a Master Service Agreement (MSA). Tasks that				
	are on-going include the Dauphin Islan	are on-going include the Dauphin Island Causeway and Salt Aire shoreline protection and restoration projects and Muddy				
		monitoring. The Dauphin Island Causeway project was design	-			
		establishing historic shoreline marsh and installing breakwater				
		s established for the County by Dr. Vittor and his team to provi				
	stream and wetland mitigation for seve	ral public road projects as well as for projects such as the Cour	nty Sports Complex.			

	Habitat restoration and monitoring of these mitigation projects is on-going. The MSA has also been used for natural resource surveys of conservation acquisition properties and public parks.
(01/99 – 12/99)	Duke Energy, Wetland Delineation and Threatened & Endangered Species Survey, Rapides Parish, LA – Principal Scientist for a wetland delineation and threatened & endangered species survey of a proposed 2-mile long natural gas pipeline corridor in Kisatchie National Forest (Louisiana) for Duke Energy. Wetlands were delineated and mapped in accordance with Corp of Engineers guidelines.
(01/15 – 12/15)	Anchor Engineering, Wetland Delineation, Lafayette, LA – Principal Scientist for wetland delineation and permitting for a commercial development associated with a FedEx facility in Lafayette, LA for Anchor Engineering, and coordinated the permit review and approval process with the USACE for impacts associated with the development.

Firm employed by: Thompson Engineering, Inc.							
	id Knowles	Ŋ	Years of relevant experience with this employer	1 year (Thompson)			
Title Seni	or Wetlands Biologist	Ŋ	Years of relevant experience with other employer(s) 20 years				
Degree(s) / Years	Degree(s) / Years / Specialization B.S./Wildlife Science, Auburn University, 2004						
Active registration	n number / state / expiration date	N/A					
Year registered	N/A Discipline	N/A					
Contract role(s) /	brief description of responsibilities		nmental – Wetland Delineation				
Experience dates			he proposed contract; i.e., "designed drainage", "designed drainage				
(mm/yy-mm/yy)			over the years of experience specified in the applicable N				
(01/21 - ongoing)			Baldwin County, AL - Senior Biologist for environment				
		-	ge replacement project at the Tensaw-Spanish River cros				
	1 5 13	· ·	wetlands and SAV in the construction area and required	1			
			ations in the vicinity of the bridge were surveyed for pre				
			for restoration of SAV through transplanting of donor s	ite plants to into the			
(01/08 12/22)			ed with ALDOT, USACE, NOAA, and ADEM.	1.1			
(01/08 - 12/22)		-	Mine, Kemper County, MS – Senior Biologist wetland	-			
			arvey, and vegetation/wildlife study for a proposed lignit ssippi. Dr. Vittor and his team developed a comprehensiv				
			uring the 40-year life of mine period, prepared the Section				
			ew and approval process with the USACE, USEPA, USE	1 11			
	<b>_</b>		oring of the wetland and stream mitigation sites through				
(01/19 - 12/21)			e Environmental Resources, Counties in AL/MS – Senio				
		-	ject involved surveys of wetlands, streams, and endange	2			
	fiber optic line corridor adjacent to an existing transmission line corridor that extended 114 miles from west Mobile County,						
	Alabama to the Mississippi-Louisiana state line. Wetlands were delineated and mapped in accordance with Corp of Engineers						
		guidelines. Surveys for Threatened and Endangered species focused primarily on Gopher Tortoise, which is listed by the					
	UFWs as Threatened in southern Miss	ssissippi.	. Three navigable waters (Pascagoula River, Biloxi River	r, Jourdan River) were			
			. Vittor and his team obtained Sec. 10 permits for each c				
(11/21 –	-		Services MSA, Mobile County, AL – Senior Biologist fo				
Ongoing)	for Mobile County's Environmental Services Department, through a Master Service Agreement (MSA). Tasks that are on-						
	going include the Dauphin Island Causeway and Salt Aire shoreline protection and restoration projects and Muddy Creek						
	Mitigation Area implementation monitoring. The Dauphin Island Causeway project was designed to provide enhanced protection for the State highway, by reestablishing historic shoreline marsh and installing breakwater structures in Mobile Bay.						
			lished for the County by Dr. Vittor and his team to provi				
	<u> </u>	stream and wetland mitigation for several public road projects as well as for projects such as the County Sports Complex. Habitat restoration and monitoring of these mitigation projects is on-going. The MSA has also been used for natural resource					
				iscu for natural resource			
	surveys of conservation acquisition properties and public parks.						

(01/99 – 12/99)	Duke Energy, Wetland Delineation and Threatened & Endangered Species Survey, Rapides Parish, LA – Senior Biologist for a wetland delineation and threatened & endangered species survey of a proposed 2-mile long natural gas pipeline corridor in Kisatchie National Forest (Louisiana) for Duke Energy. Wetlands were delineated and mapped in accordance with Corp of Engineers guidelines.
(01/15 – 12/15)	Anchor Engineering, Wetland Delineation, Lafayette, LA – Senior Biologist for wetland delineation and permitting for a commercial development associated with a FedEx facility in Lafayette, LA for Anchor Engineering, and coordinated the permit review and approval process with the USACE for impacts associated with the development.

#### 17. Firm Experience:

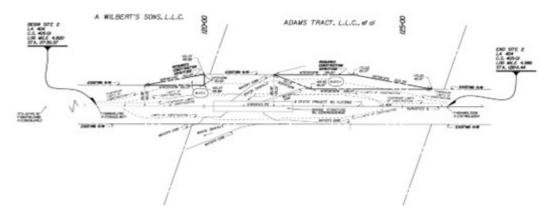
Identify the team's project experience <u>most relevant</u> to the scope in the advertisement. The projects\*\*\* should be limited to a total of 20, with no more than 5 projects being represented by the prime consultant and with no more than 3 projects represented by each sub-consultant on the team. If more than 5 projects are identified for the prime consultant, all projects identified after the first 5 will not be evaluated. If more than 3 projects are identified for a single sub-consultant, all projects identified after the first 3 from that sub-consultant will not be evaluated. Include no more than one page per project. Projects identified shall only include work performed by firms on the team. The projects identified do not necessarily need to have been DOTD projects.

Firm name	SJB Group, LLC		Discipline(s)*	Survey, Right-of-Way	
Project name	<b>Rural Bridge Replacem</b>	ent Initiative		Firm responsibility (prime or sub?	) Sub
Project number	21-DR-US-0038	Owner's name	Louisiana Department	of Transportation and Developm	ent
Project location	Multiple Locations in Lo	uisiana (Districts 0	3,07,61,62) Owner's Pro	ject Manager Mark Hughes, Pl	LS
Owner's address, phone, email 1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1105, mark.hughes@la.gov					
Services commenced by this firm (mm/yy) 8/20 Total consultant contract cost (\$1,000's) \$1,254					
Services completed by this firm (mm/yy) 4/24		4/24	Cost of consultant services	provided by this firm (\$1,000's)	\$1,254

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

Key Personnel: Tim Brewer, PLS, Matt Estopinal, PLS, Elvis Nguyen, Phillip Dowden, John Burleigh, Duke Koontz, C. Paul Young, Tyler Foster

SJB Group performed **topographic surveying, property surveying, right-of-way mapping,** and roadway design of 33 bridge replacements for Districts 03, 07, 61, and 62 as a sub-consultant to Burk-Kleinpeter within their contract with the LA Department of Transportation (LA DOTD). The topographic survey was completed in accordance with all principles and objectives set forth in the latest version of the LA DOTD Location and Survey Manual. A complete topographic survey of the project corridor for each site included a complete inventory for each drainage structure (type, size, length, and invert), and includes cross sections of all drainage ways.



Property surveys were carried out for all potentially affected properties within the project corridor. Right-of-way mapping was also performed for each roadway along the project corridor. Roadway design included vertical and horizontal alignment of the bridge transitions, guard rails, and embankment design, typical roadway sections, and roadside drainage. The deliverables included preparation of property maps, base right-of-way maps, final right-of-way maps, Bently design files, drawing files, right-of-way map sets, and the preparation of a parcel input file of the acquisition parcels. The survey was conducted according to the LA DOTD location and survey manual "Addendum A" requirements.

The deliverables were provided in accordance with the LA DOTD guidelines for electronic deliverables. SJB Group performed 100% of the project 480530

Firm name	SJB Group, LLC		Discipline(s)*	Survey				
Project name	LA 1 to LA 415 Connec	ctor to Interstate 10	)	Firm responsibility (prime or sub?	) Prime			
Project number	H.005121 Owner's name LA Department of Transportation and Development							
Project location Port Allen, West Baton Rouge Parish, Louisiana Owner's Project Manager Jonathan Herrod								
Owner's address, phor	ne, email   1202 Capital A	Access Road, Baton	Rouge, LA   225-379-1105	Jonathan.Herrod@la.gov				
Services commenced	by this firm (mm/yy)	10/23	Total consultant contract co	ost (\$1,000's)	\$247			
Services completed by	this firm (mm/yy)	12/24	Cost of consultant services	provided by this firm (\$1,000's)	\$242.9			

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

Firm's Role and Responsibilities: Topographic Survey, Subsurface Utility Engineering (SUE)

Highlighted Team Members: C. Tim Brewer, RF, PS, PLS, RPLS, RPP | Colby Mire, PLS | Tyler Foster | Elvis Nguyen | Phillip Dowden | Erick Kidder

The project provides field data for the final design of a roadway to connect LA 1 to LA 415. The project is a supplement to previously performed surveying for the realignment of the due to recent development and construction. The project limits included a 2.9-mile corridor beginning approximately 0.2 miles north of the intersection of I-10 and LA 415 and continuing in a southeasterly direction along the extension of LA 415 across the intercoastal canal, industrial areas, and agriculture field to the intersection of LA. The project limits also include an approximate 1.8-mile corridor along LA 1 that extends from the roadway into residential, commercial, and retail areas. The project includes the collection of current conditions of the areas included in the project limits and merging the current data with the previous survey and updating any observed condition changes. The project includes the recovery and supplement of the existing control network. The collection of field data is completed through the utilization of conventional survey methods with survey total stations and global positioning systems (GPS). Mobile LiDaR survey methods utilized for the collection of data along the high



traffic segments of LA 1, Interstate 10 ramps, and LA 415. The data was processed through Trimble Business Center, with data extraction performed through TopoDot. The survey is being conducted according to the Louisiana Department of Transportation and Development Location and Survey Manual. The deliverables will be provided in accordance with the LADOTD guidelines for electronic deliverables.

Firm name	SJB Group, LLC		Discipline(s)*	Survey, Right-of-Way				
Project name	I-10 Widening from LA	415 to Essen		Firm responsibility (prime or sub?) <b>Prime</b>				
Project number	H.0016118	Owner's name	LA Department of Transportation and Development					
Project location East Baton Rouge Parish, Louisiana Owner's Project Manager Mark Hughes								
Owner's address, phone, email   1201 Capitol Access Road, Baton Rouge, LA 70802   225-379-1206   Mark.Hughes@la.gov								
Services commenced	by this firm (mm/yy)	7/21	Total consultant contract co	ost (\$1,000's)	\$148,326			
Services completed by	this firm (mm/yy)	Ongoing	Cost of consultant services	provided by this firm (\$1,000's)	\$148,326			

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

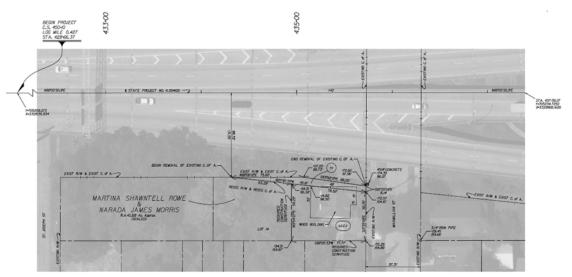
Firm's Role and Responsibilities: Property Survey, Topographic Survey, Right-of-Way Mapping, Subsurface Utility Engineering (SUE)

Highlighted Team Members: Tim Brewer, PLS, Matt Estopinal, PLS, Phillip Dowden, Tyler Foster, Duke Koontz, C. Paul Young, Colby Mire, PLS, John Burleigh

SJB Group performed **property surveying, partial topographic surveying, and right-of-way mapping** along a 4.4-mile stretch of Interstate 10 extending from LA 415 to Essen Lane in East Baton Rouge Parish for the LA Department of Transportation and Development's widening project. This project included a limited topographic survey to supplement and verify previous topographic surveys of the I-10 and I-12 corridor. Under the current IDIQ contract and task orders, SJB Group performed additional **property surveys** of specific areas designated by the project design team. This project required extensive title research to acquire the necessary existing surveys and deeds for initiation of the property survey portion in addition to the substantial amount of review of the title research reports supplied to SJB by LADOTD. It also required field surveying and mapping of an excess of one hundred parcels along the project corridor, which range in size from small urban residential lots to large commercial tracts. This project corridor

also encompasses existing drainage and access servitudes, railroad rights-of-way, and numerous side streets in the heart of Baton Rouge, all of which SJB Group surveyed and mapped. The deliverables included preparation of property map, base right-of-way maps, final right-of-way maps, MicroStation drawing files in Bentley Design Files, right of way map sets, and the preparation of a parcel input file of the acquisition parcels.

The survey was conducted according to the LA Department of Transportation and Development Location and Survey Manual, Addendum "A" requirements. The deliverables were provided in accordance with the LADOTD guidelines for electronic deliverables.



Firm name	<b>Thompson Engineering</b>	, Inc.	Discipline(s)*	Enviro	nmental			
Project name	Tensaw-Spanish River	Bridge Replacemer	nt	ility (prime or sub?) Prime				
Project number		Owner's name	Alabama Department of	f Transportation				
Project location	Mobile Bay, AL		Owner's Pro	oject Manager	Adam Anderson			
Owner's address, phot	Owner's address, phone, email 1409 Coliseum Blvd, Montgomery, AL 36110, 334-242-6833, andersonad@dot.state.al.us							
Services commenced	by this firm (mm/yy)	01/2021	Fotal consultant contract c	cost (\$1,000's)				
Services completed by	this firm (mm/yy)	Ongoing (	Cost of consultant services	s provided by this	s firm (\$1,000's)			

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

Thompson Engineering was Prime Contractor for environmental assessment and permitting of the proposed U.S. Hwy 98 bridge replacement project at the Tensaw-Spanish River crossing in Baldwin County, Alabama. This project involved mapping of wetlands and SAV in the construction area and required development of a mitigation plan for SAV impacts. Several locations in the vicinity of the bridge were surveyed for presence/absence of SAV and for water depth, to identify a suitable site for restoration of SAV through transplanting of impact site and donor site plants into the mitigation site. Approval of the mitigation plan was coordinated with ALDOT, USACE, NOAA, and ADEM.

This project also involved an assessment of protected species that are associated with habitats that will be impacted by the bridge replacement project. Monitoring of work areas during construction will be required, to minimize potential impacts to such species. Thompson Engineering is managing implementation of the SAV mitigation effort and will conduct long-term monitoring after transplanting has been completed.



#### 18. Approach and Methodology:

Provide a description of how the work will be performed and **provide the proposed project schedule**. Include any additional information or description of unique resources that are planned to be used to produce the deliverables. Include any proprietary technologies, methods or approaches that will be used on this project to improve quality or efficiency. If the proposal is for an IDIQ contract, the consultant should review the scope of services in Attachment A to the advertisement to obtain a general understanding of what a typical task order would entail. Based upon that understanding, the consultant should provide a sample schedule that identifies the major milestones, deliverables, tasks, etc., to demonstrate sufficient understanding of a typical task order. The duration of the task order is not required. This section shall be limited to four pages. If more than four pages are included, all pages after the fourth page will not be evaluated.

#### If the consultant has information it believes is proprietary, label it accordingly.

#### - BRIDGE DESIGN

The design team will perform the superstructure design, including barriers and sidewalk, using AASHTO LRFD Bridge Design Specification, 10th Edition, 2024.

MCA Engineering will gather all relevant information about this bridge prior to starting the design process. To validate dimensional information, MCA Engineering intends to perform a 3d laser scan of this structure at the same timeframe when the topographic survey is scheduled to take place at no additional cost to the project.

The calculations package will include hand calculations in addition to a structural Finite Element Analysis (FEA) model of the bridge.

The following loads will be considered in accordance to AASHTO LRFD Chapter 3:

Permanent Loads

DC = dead load of structural components and non-structural attachments

DW = dead load of wearing surfaces and utilities

SH = force effects due to shrinkage

CR =force effects due to creep

Transient Loads:

LL = vehicular live load

IM = vehicular dynamic load allowance (impact load)

BR = vehicular breaking force

CT = vehicular collision force

LS = live load surcharge

PL = pedestrian live load

TU = force effect due to uniform temperature

Load Combinations and Load factors will be applied according to section 3.5 to determine the load effects on the bridge elements.

The vehicular live load will be determined based on the calculated live load design lane based on the bridge width. The maximum live load effect will consider all possible load combinations of number of lanes loaded multiplied by the corresponding multiple presence factor (MPF). This will be used mainly for verification of the intermediate substructure because we assume a slab bridge will be designed for this project.

The design vehicular live load considered will be HL-93 (truck, tandem and lane loads).

### - HYDRAULIC STUDY

MCA Engineering, LLC will prepare the Hydraulic Report for this project. The U.S. Army Corps of Engineers Hydrologic Engineering Centers River Analysis System (HEC-RAS) Computer Program will be used to determine water surface elevations for the 2-, 5-, 10-, 25-, 50-, and 100-year discharge events. This initial modeling system task is designed to calculate water surface profiles for steady, gradually varied flow. Watershed Boundary Dataset (WBD) will be obtained from the USGS National Map website to be overlaid on the USGS QUAD maps to delineate the watershed area for this bridge. The Drainage Map required will then be created. Design flows will be based on the calculated drainage area. A threshold of 2,000 acres will be used to determine if the USGS Method with an isohyetal line map for mean annual rainfall data is applicable. If this threshold is not exceeded, the Natural Resources Conservation Service (NRCS) Method, utilizing Soil Groups and the Hydrologic Classification of Soil to calculate the appropriate Runoff Curve Number (CN), will be used in conjunction with the LADOTD 24-Hour Rainfall Frequency Maps and I-D-F Curves to determine design flows. Geometric cross-sectional data will be obtained from the topographic survey as well as applicable computer programs and used in HEC-RAS. Using the flows derived from the current LADOTD Hydraulics Manual, the HEC-RAS program will be used to calculate the backwater of the existing bridge and to recommend the most efficient replacement structure. Scour calculations will be based on the latest FHWA methods hydraulic engineering applications to calculate contraction and local scour at piers and abutments. Our design team will be released to develop the Preliminary Plans for the proposed bridge once the Hydraulic Report is approved by the DOTD Hydraulics Section.

#### - SURVEYING

*Topographic Survey* – Any topographic and bathymetric surveys will be in accordance with all principles and objectives set forth in the latest version of the DOTD Location and Survey Manual. All deliverables will be developed in accordance with the current Location and Survey Section's list of topographic survey submittal requirements.

*Drainage Map* – When required by a task order, an existing drainage map will be prepared. The existing drainage map will be in accordance with Section 2.6.1 of the DOTD Hydraulics Manual and will include existing drainage structure locations (size & type & inverts/tops), break lines for drainage boundaries,

and a determination of existing drainage patterns within the project limits. The existing drainage survey will include any highwater marks and the nearest outfall locations for the project area.

*Title Take-Offs & Boundary Survey* – SJB will begin any property boundary tasks by acquiring title reports or title takeoffs. The property records data will be used to proceed with field investigation to recover property boundary monumentation and observe the monumentation recovery to determine the property boundaries and existing right of way. SJB will process and analyze monumentation and depict the property boundaries and existing right-of-way on the property survey map.

Prime consultant: MCA Engineering, LLC

*Right-of-way Maps* – SJB will incorporate the property survey map, the adopted project centerline, parcel line locations and ownership, required right- of-way, limits of construction, and critical topographic features into the 60% base maps. SJB or CD&C will attend a Joint Plan Review (JPR) meeting hosted by DOTD. The surveyor will then incorporate any JPR comments and provide Final Right-of-way Map deliverables in the standard DOTD format as specified in the Location and Survey Manual Addendum "A".

#### - WETLANDS SURVEY

Thompson wetland specialists perform wetland delineations according to the criteria set forth in the regionally appropriate supplement to the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual; in this case the Atlantic & Gulf Coast Regional Supplement is the reference guidance. Regarding streams, Thompson Engineering utilizes the North Carolina Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11, September 1, 2010 (NC Method) technical guideline to determine if there are any potential jurisdictional streams, and if so, the most appropriate classification (intermittent or perennial). Stream Identification Forms (v. 4.11) are used to classify streams that are not clearly perennial (i.e. well-defined channel that contains water year-round, groundwater is the primary source of water and exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water).

When performing a wetland survey Thompson specialists evaluate a site's hydrology, vegetation, and soils. Wetland hydrology generally is recognized on the basis of depth to saturation and water table, although indicators of hydrology are also relied upon when conditions are relatively dry; such as the presence of crawfish chimneys, water-stained leaves, oxidized rhizospheres and several other indicators. Observations are made of the relative abundance/dominance of the plant species observed, and their wetland indicator status is documented. Thompson has found that the presence/absence of hydric soils is generally the most consistent measure of wetland conditions.

Hydric soil indicators are features in the soil formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds under saturated and anaerobic conditions. Of particular importance is the uppermost 10-16 inches of the soil profile; redoximorphic features (observed as red, orange, yellow mottles) and/or signs of reduced iron within the matrix (splotchy lighter grey areas within a soil profile), mucky soils formed by accumulation of organics under anaerobic conditions, or sulfidic odors caused by sulfate reduction are present, the investigator will conclude that hydric (wetland) soil conditions are present. It is important to note that all three wetland parameters must be present for a site to be classified as a federally jurisdictional wetland.

Thompson biologists utilize the guidance for determining the presence of hydric soils found in the 2024 "Field Indicators of Hydric Soils in the United States, Version 9" developed by the NRCS in cooperation with the U.S. Fish and Wildlife Service (FWS), USACE, and the Environmental Protection Agency (EPA). Thompson's senior wetland delineators (David Knowles and Matthew Stowe) have a certificate of training for a hydric soils training course tailored to wetland scientists and conducted in accordance with the standards of the National Technical Committee for Hydric Soils and Whole Landscape Hydrology; the course was taught at the time (2006) by Mr. G. Wade Hurt. Mr. Hurt worked at the USDA Natural Resources Conservation Service in Gainesville, FL and was one of the individuals responsible for creating the Atlantic & Gulf Coast Regional Delineation Supplement and the afore-mentioned Field Indicators of Hydric Soils.

Prime consultant: MCA Engineering, LLC

	PROJECT SCHEDULE																							
	MONTHS																							
DELIVERABLES	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
KICK OFF																								
SURVEY																								
HYDRAULICS																								
ENVIRONMENTAL																								
DOTD REVIEW																								
PRELIMINARY PLANS																								
FINAL PLANS																								

#### 19. Workload:

For all contracts where a firm on the team is a prime consultant or sub-consultant and where **a**) the consultant selection was made by DOTD, and **b**) a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

1) one of the team's firms is responsible for the performance of the work;

2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;

3) the work has not yet been performed and invoiced; and

4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.

List only the portion of the fees attributable to firms on the team.

Firm(s) <u>ALL FIRMS</u> MUST BE REPRESENTED IN THIS TABLE *		Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
MCA Engineering, LLC	N/A	N/A	N/A	N/A
SJB Group, L.L.C	Survey	Contract No: 44-17597 S.P. No. H.4400017597	IDIQ Surveying Services Rural Bridge Replacement Initiative	\$667
SJB Group, L.L.C	Survey	Contract No: 44-16018 S.P. No. H.0120012.5	LA 339 Canal and Creek Bridge	\$4,393
SJB Group, L.L.C	Survey	Contract No: N/A S.P. No. H.013716.5	US 167 Johnston St. – Mt. Vernon - Churchill	\$39,723
SJB Group, L.L.C	Survey	Contract No: 44-17711 S.P. No. H.005121.5 Task Order 5	LA 1 – LA 415	\$55,888
SJB Group, L.L.C	Survey	Contract No: N/A S.P. No. H.003931	I-10 Calcasieu Project P3	\$3,500,000
SJB Group, L.L.C	Survey	Contract No: 44-19379 S.P. No. H.013797	LA 30: EBR PL – I-10 – Part 1	\$600
SJB Group, L.L.C	Right-of-Way	Contract No: 44-28371 S.P. No. H.004100.5   Directive 1	I-10 LA 415 Acadian	\$10,536
SJB Group, L.L.C	Right-of-Way	Contract No: 44-28371 S.P. No. H.004100.5 Directive 2	I-10 LA 415 Directive 2	\$1,536
SJB Group, L.L.C	Right-of-Way	Contract No: 44-28371 S.P. No. H.004100.5 Directive 3	I-10 LA 415 to Essen – Directive 3	\$84,651
SJB Group, L.L.C	Other (DBE)	Contract No: 44-26952 S.P. No.	LA DBE Supportive Services	\$490,714
Thompson Engineering, Inc.	Geotech	#4400019016 / H.015013.5 Geotech	IDIQ FOR GEOTECHNICAL SERVICES STATEWIDE	\$58,020
Thompson Engineering, Inc.	Geotech	#4400019016 / H.014986.5 Geotech	IDIQ FOR GEOTECHNICAL SERVICES	\$37,755

Thompson Engineering, Inc.	Geotech	#4400019016 / H.015014.5 Geotech	IDIQ FOR GEOTECHNICAL SERVICES	\$34,345
			STATEWIDE	

\* The only disciplines to be used are: Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic. If a firm has more than one discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per discipline.

\*\* Round to the nearest dollar. <u>**Do not**</u> round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. NOTE: <u>**ALL**</u> FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

**20.** <u>Certifications/Licenses:</u> If the advertisement requires submission of licenses and/or certificates, include them here. **Otherwise, leave this section blank**.



# Nouisiana Professional Engineering Dand Surveying Board

Hereby Certifies that

Dr. Marcio Costa Araujo

having qualified before this Board in accordance with laws is licensed as a

Professional Engineer and is hereby entitled to practice engineering in the State of Louisiana.

Baten Reuge Leuisiana · 06/22/2010

Ali Mustapha

License Number 35506

# Louisiana State University

and

# Agricultural and Mechanical College

On the Momination of the Faculty of the

# Graduate School

has conferred upon

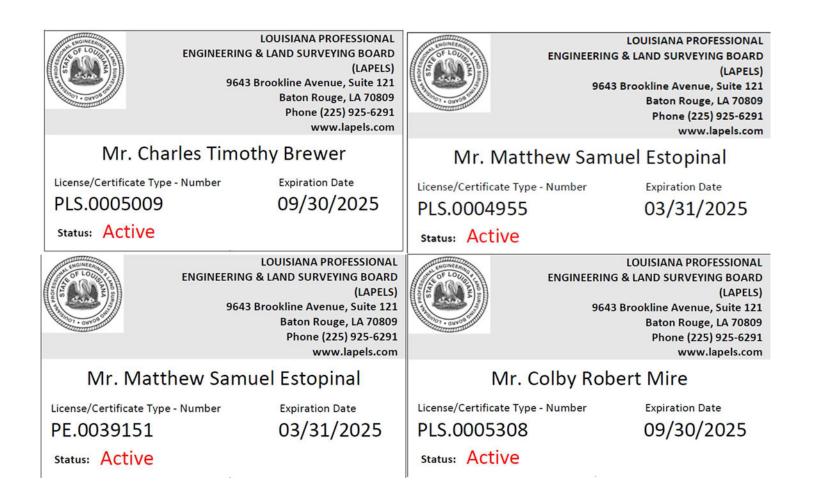
# Marcio Costa Araujo

the degree of Poctor of Philosophy

with all the Honors, Rights and Privileges to that degree appertaining. In testimony Whereof, the seal of the University and the signatures as authorized by the Board of Supervisors are hereunto affixed. Siven at Baton Rouge, Louisiana on the fifteenth day of May in the year two thousand and nine.

Taran

Congratulations! Marcio Araujo You have completed **Traffic Engineering Analysis Process & Report Class** Modules 1, 2 & 3 Date: August 17-18, 2022 Professional Development Baton Rouge, Louisiana Hours (PDHs) Awarded: 8.50 Location: Authorized instructor Authorized Instructor OUISIANA DEPARTMENT O TRANSPORTATION & DEVELOPMENT





ATSSA	ATSSA		
TRAINED	TRAINED		
PROOF OF TRAINING	PROOF OF TRAINING		
THIS CERTIFICATE HEREBY RECOGNIZES THAT	THIS CERTIFICATE HEREBY RECOGNIZES THAT		
Matthew Estopinal	Matthew Estopinal		
has attended	has attended		
Traffic Control Supervisor-LA State Specific	Traffic Control Technician-LA State Specific		
Training Course	Training Course		
6/22/2022 to 6/22/2026	6/21/2022 to 6/21/2026		
Training Valid Through Director of Training	Training Valid Through Director of Training		
Baton Rouge, LA Advance Techer Awar	Baton Rouge, LA Alacon Technology		
Location President, CEO	Location President, CEO		
ATSSA provides training and carification hat nother constitutes employment by ATSSA.	ATSSA provides training and confifcation but methar constitutes employment by ATSSA.		
American Traffic Bufry Services Association ATSBAccen	American Traffic Safety Services Association ATSBA.com		







	ATSSA TRAINED			
	OF TRAINING			
Duke Koontz has attended Traffic Control Technician-LA State Specific Training Course				
<u>11/29/2022 to 11/29/2026</u> Training Valid Through Baton Rouge, LA Location	Lange 3 MLA Director of Training Alace. Technologue President, CEO			
.4755.4 provider training a	nd certification hat meither constitutes employment by .4785.4.			
SAFER ROADS SAVE LIVES SET	erican Traffic Safety vices Association is is to affirm that	<b>PROOF OF TRAINING</b> THIS CERTIFICATE HEREBY RECOGNIZES THAT		
Charles Young has satisfied the requirements to be designated		Charles Young has attended Traffic Control Technician-LA State Specific Training Course		
Issue Date3/17/2022		<u>11/29/2022</u> to <u>11/29/2026</u> Training Valid Through	Lange Bult- Director of Training	
Exp. Date3/16/2026	Instructor Name ulh	Baton Rouge, LA Location	Alace, Tether Inor President, CEO	
State IssuedLA	- Instructor Signature	ATSSA provides training and certification but net	ther constitutes employment by ATSSA.	
A1000054195	Verify at Flagger.com	American Tr	affic Safety Services Association ATSSA.com	

# 21. QA/QC Plan:

If the advertisement requires submission of a QA/QC plan, include it here. Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.

#### MCA Engineering, LLC

#### Quality Assurance/Quality Control (QA/QC) Policy

#### 1. Introduction

This **Quality Assurance/Quality Control (QA/QC) Policy** is designed to ensure that all bridge design projects conducted by **MCA Engineering, LLC** meet or exceed the standards, specifications, and expectations set forth by the **Louisiana Department of Transportation and Development (DOTD)**. The goal of this policy is to establish consistent and effective QA/QC processes that ensure the safety, functionality, and durability of bridge structures while maintaining compliance with all DOTD requirements.

MCA Engineering, LLC is committed to providing high-quality bridge designs that are on schedule, within budget, and compliant with applicable safety and regulatory standards. This policy applies to all bridge design projects undertaken by MCA Engineering, LLC, including preliminary design, final design, and any required design revisions during construction.

#### 2. Quality Assurance (QA) Philosophy

The **Quality Assurance (QA)** process focuses on ensuring that the systems, procedures, and resources employed in bridge design projects are effective and aligned with DOTD standards. QA is primarily concerned with preventing issues before they arise, and this is achieved through proactive management, oversight, and periodic verification.

#### Key QA Objectives:

- Compliance with DOTD Specifications: All designs, methods, and practices will comply with the DOTD Bridge Design Manual, Standard Specifications for Roads and Bridges, and relevant sections of the Louisiana Manual on Uniform Traffic Control Devices (LMUTCD).
- **Design Review and Verification**: All design calculations, drawings, and specifications will undergo a structured review process to verify compliance with DOTD's requirements.
- **Risk Identification and Mitigation**: Any risks to quality, such as design conflicts, resource limitations, or schedule pressures, will be identified early, and mitigation strategies will be implemented.
- **Continuous Monitoring**: Throughout the project, quality will be continually monitored through regular project reviews and assessments.

#### **QA Practices Include:**

- Regular peer reviews of designs at key milestones (e.g., preliminary design, final design).
- Technical audits to ensure compliance with DOTD requirements.

- Regular communication with DOTD to align design efforts with their needs and regulatory changes.
- Documented corrective actions to address any deviations found during design reviews.

#### 3. Quality Control (QC) Philosophy

**Quality Control (QC)** is the reactive process used to inspect and verify that the final design output meets all required specifications. In the context of bridge design, QC focuses on ensuring that the project's drawings, reports, and specifications meet DOTD's strict requirements before submission or approval.

#### Key QC Objectives:

- **Design Verification**: Ensuring all design calculations, plans, and reports conform to DOTD standards and best engineering practices.
- **Conflict Resolution**: Identifying and resolving any discrepancies, errors, or conflicts in design before submission to DOTD for approval.
- **Final Design Review**: Ensuring that all elements of the design are accurate, including structural components, materials, and safety features.

#### **QC Practices Include:**

- Comprehensive internal reviews of all design packages before submission.
- Detailed checks of all calculations, design assumptions, and modeling outputs to ensure they align with DOTD guidelines.
- Independent checks by senior engineers or third-party specialists for high-risk or complex designs.
- Maintaining clear records of inspections, revisions, and final approvals to ensure traceability and accountability.

# 4. Objectives of QA/QC Policy

The primary objectives are:

- Ensure Compliance: Guarantee that all bridge design projects comply with DOTD's Bridge Design Manual and related specifications.
- **Maintain High-Quality Standards**: Implement structured processes to ensure the quality of bridge designs, reduce the risk of errors, and enhance the safety, durability, and performance of the designed bridges.
- **Timely Project Delivery**: Avoid delays due to quality issues by catching design flaws early in the process, allowing timely corrections and maintaining project schedules.

• **Enhance Stakeholder Confidence**: Build trust with DOTD, contractors, and the public by consistently delivering high-quality bridge designs.

#### 5. QA/QC Roles and Responsibilities

To ensure effective implementation of QA/QC procedures, clear roles and responsibilities are assigned within MCA Engineering, LLC:

#### Project Manager (PM)

- **Overall Responsibility**: The Project Manager oversees all aspects of the bridge design project, ensuring compliance with project goals, timelines, and quality standards.
- Key Responsibilities:
  - Ensure all quality assurance and control activities are carried out according to this policy.
  - Communicate with DOTD to ensure alignment with their standards and expectations.
  - Address any issues that may arise and ensure corrective actions are implemented.

#### **Lead Design Engineer**

- **Design Responsibility**: The Lead Design Engineer is responsible for the technical design of the bridge, ensuring all calculations, drawings, and specifications comply with DOTD standards.
- Key Responsibilities:
  - Perform and oversee detailed bridge design calculations.
  - Collaborate with other engineers to ensure interdisciplinary coordination.
  - Review design documents for compliance with DOTD standards and the project requirements.

#### QA/QC Manager

- **Oversight of QA/QC Processes**: The QA/QC Manager ensures that all design and review processes are properly followed, audits the design process, and maintains documentation of quality activities.
- Key Responsibilities:
  - Develop and maintain the QA/QC plan.
  - Conduct internal audits of designs, plans, and specifications to verify compliance with DOTD guidelines.
  - Ensure the timely identification and resolution of any design issues.

#### **Design Engineers and Drafters**

- **Technical Execution**: Design engineers and drafters work under the direction of the Lead Engineer to carry out calculations, design tasks, and prepare the final bridge design documentation.
- Key Responsibilities:
  - Create and update design drawings and reports.
  - Perform calculations and review design documents for quality and accuracy.
  - Coordinate with the Lead Engineer and QA/QC Manager to ensure quality standards are met.

#### **Contractor and Subcontractors (if applicable)**

- **Construction Quality Control**: Contractors and subcontractors are responsible for maintaining their own QC processes for materials and construction methods used during implementation of the bridge design.
- Key Responsibilities:
  - Ensure all materials and construction methods comply with DOTD specifications.
  - Submit all necessary documentation (e.g., material certifications, test reports) for review and approval.

#### 6. QA/QC Procedures and Practices

#### Design Phase QA/QC Procedures

#### **Pre-Design Phase**

- **Review Project Requirements**: Review the project scope, specifications, and site conditions to ensure that the design will meet DOTD's requirements.
- Identify Risks: Identify and document any design challenges or potential risks that could affect the quality of the design.

#### **Preliminary Design**

- Initial Design Review: After completing the preliminary design, the Lead Engineer conducts an internal review to verify compliance with DOTD standards and regulations. The design will be reviewed by senior engineers for critical elements such as load capacity, safety features, and material selection.
- **Stakeholder Review**: A review of the preliminary design will be held with DOTD to ensure alignment with their requirements.

#### **Final Design**

- **Detailed Design Review**: The final design package, including calculations, drawings, specifications, and reports, will undergo a comprehensive internal review by the QA/QC Manager, Lead Engineer, and senior engineers.
- **Independent Verification**: Critical design elements such as structural calculations and complex bridge systems will undergo independent verification by senior engineers or third-party specialists, where required by DOTD.
- **Submission to DOTD**: Once verified, the final design will be submitted to DOTD for review and approval. The submission package will include all supporting documents (e.g., calculations, material specifications, and environmental impact assessments).

#### **Construction Phase (If applicable)**

- Material Testing: Materials will be tested as specified by the DOTD Standard Specifications for Roads and Bridges. Test results must meet DOTD's acceptance criteria.
- **Construction Inspections**: Regular inspections will be conducted during construction to verify that the design is being adhered to and that the quality of workmanship complies with DOTD standards.
- Non-Conformance Reporting (NCR): Any deviations from the approved design will be documented in a Non-Conformance Report (NCR). Corrective actions will be taken as necessary, and the NCR will be submitted to DOTD for resolution.

#### 7. Documentation and Reporting

MCA Engineering, LLC is committed to maintaining thorough documentation for all QA/QC activities related to the bridge design project. This includes:

- **Design Review Reports**: Detailed reports of all internal and external design reviews, including comments, revisions, and final approvals.
- **Quality Control Checklists**: Checklists for design calculations, drawings, and specifications to ensure compliance with DOTD standards.
- Non-Conformance Reports (NCRs): Documentation of any design or construction issues, along with corrective actions taken.
- **Final QA/QC Report**: At the end of the design phase, a comprehensive QA/QC report will be compiled, summarizing all activities and ensuring compliance with DOTD specifications.

#### 8. Training and Competency

To ensure that all personnel involved in bridge design projects are qualified to perform their roles, MCA Engineering, LLC will:

- Provide ongoing training for all engineers and designers on DOTD standards, engineering practices, and QA/QC procedures.
- Ensure that all team members have the necessary certifications and qualifications to perform their duties.
- Offer continuing education opportunities to stay current with changes in DOTD specifications and industry best practices.

#### 9. Continuous Improvement

MCA Engineering, LLC is committed to continuous improvement in the execution of QA/QC procedures:

- **Post-Project Review**: After the completion of each project, a post-project review will be conducted to identify areas for improvement in the QA/QC process.
- **Feedback Loop**: Input from DOTD, project stakeholders, and internal team members will be used to improve processes and ensure future projects are delivered with even higher quality standards.
- **Process Updates**: The QA/QC policy will be updated periodically to reflect changes in DOTD requirements and industry standards.

#### 10. Conclusion

This **QA/QC Policy** ensures that all bridge design projects undertaken by **MCA Engineering, LLC** meet the highest quality standards in compliance with the **Louisiana Department of Transportation and Development (DOTD)** guidelines and attached **Appendices A through D**. By adhering to these procedures, MCA Engineering guarantees that every bridge design is safe, reliable, and meets the performance expectations of DOTD.

# Appendix A Design Criteria Checklist

Design criteria for each project shall include, but not limited to, the following sections:

#### Cover sheet

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- Revision date
- The Supervisor or Team Leader's signature and date

# \_\_\_\_ Governing Design and Construction Specifications and Other References

A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.

# \_\_\_\_ Design Assumptions and Design Exceptions

All design assumptions and design exceptions received must be included in this section along with supporting documents.

# \_\_\_\_ General Information

The general information as listed below should be included in this section:

- Bridge information (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Other relevant information



All hydraulic design criteria (design year, design water elevations, scour depth and scour elevation, etc.) shall be included in this section and the information shall be provided by the Hydraulic Engineer.

# \_\_\_\_ Design Factors

The ductility factor  $\eta_D$ , redundancy factor  $\eta_R$ , and operational importance factor  $\eta_I$  shall be listed in this section.

# seismic load, wave loads, etc.) used for the project shall be included in this section. **Limit States** All applicable limit states for this project shall be listed in this section. **Bridge Barrier** The design criteria, types, and test levels for bridge barriers shall be listed in this section. Standard plans and special details should be listed if they are utilized. Guardrail The design criteria, types, and test levels for guardrails shall be listed in this section. Standard plans and special details should be listed if they are utilized. **Approach Slab** Design criteria for approach slab shall be included in this section. Standard plans and special details should be listed if they are utilized. **Deck and Deck Drainage** All design criteria for deck and deck drainage design shall be included in this section. Standard plans and special details should be listed if they are utilized. Bearing All bearing types and design criteria for each bearing type shall be included in this section. Standard plans and special details should be listed if they are utilized. Joint All joint types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized. Superstructure All superstructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

# \_\_\_\_\_ Substructure

**Design Loads** 

All substructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

All design loads (dead load, live load, wind load, thermal loads, vessel collision loads,

# \_\_\_\_ Piles and Drilled Shafts

All pile types, sizes, and structural design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.

#### \_ Geotechnical Design

All geotechnical design criteria shall be included in this section and the information shall be provided by the Geotechnical Engineer. Standard plans and special details should be listed if they are utilized.

#### \_\_\_ Mechanical Design

All mechanical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

#### \_\_\_\_ Electrical/Lighting Design

All electrical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

#### \_\_\_\_ As-Designed Bridge Rating Criteria

All as-designed bridge rating criteria shall be included in this section.

#### \_\_\_\_\_ Software

All software used for design and check shall be included in this section.

#### Appendix B

#### **Final Calculation Book Checklist**

The final calculation book for each project shall include, but not limited to, the following sections:

#### \_\_\_\_ Cover Sheet

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- The title of "Final Calculation Book"
- The EOR's seal with signature and date
- \_\_\_\_ Final Calculation Book Check List
- \_\_\_\_\_ QC/QA Certifications
- \_\_\_\_ Peer Review Resolution Agreement (if peer review is performed)
- \_\_\_ Design Criteria
- \_\_\_\_ Final Hydraulic Analysis Report from Hydraulic Engineer
- \_\_\_\_ Final Geotechnical Analysis Report from Geotechnical Engineer
- \_\_\_\_ Superstructure Design Calculations
- \_\_\_\_ Substructure Design Calculations
- \_\_\_\_ Quantity Calculations
- \_\_\_\_ Special Provisions/NS-Items
- \_\_\_ Construction Cost Estimate
- \_\_\_\_ As-Designed Rating Report
- \_\_\_\_ List of All Final Electronic Design Files and File Locations (ProjectWise directory name)

Consultants shall submit the final calculation book to LADOTD bridge task managers; the submittal shall be on a CD or Flash Drive or placed to a designated ProjectWise folder including the following information:

- \_\_\_\_ A PDF File of the Calculation Book
- \_\_\_\_ All Electronic Design Files
- \_\_\_\_ A PDF File of the As-Designed Rating Report Only

The final calculation book for in-house projects shall include the same files listed above for consultant projects. The final calculation book and other final design documents for all projects including in-house and consultant projects shall be uploaded to the archiving location designated in the record retention policy within 30 calendar days after the stamped final plans are delivered.

# Appendix C QA Information Package Checklist

Project No.: Project Description:

 Calculation Book
 Plans
 Special Provisions
 Cost Estimate
 Other Documents

# Appendix D QC/QA Certification

Project No.: Project Name:

We, the undersigned designers, detailers, checkers and reviewers for this project, have reviewed and accepted the calculations, plans, quantities, special provisions, and cost estimate prepared for the project. We certify that the work for which we are responsible has been completed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

Team Members Designers	Name	PE Registration No.	Responsible Plan Sheets	Responsible Special Provisions	Construction Cost Estimate	Signature
Design Checkers						
Detailers						
Detail Checkers						
Reviewers						
Peer Reviewer						
Geotechnical Engineer						
Hydraulic Engineer						
EOR						

# 22. <u>Sub-consultant information:</u>

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name	Address	Point of Contact and email address	Phone Number
(Name must match <u>exactly</u> as registered			
with Louisiana's Secretary of State			
(SOS): including punctuation, include			
screenshot(s) from SOS at the end of			
Section 20)			
SJB Group, L.L.C.	5344 Brittany Drive, Baton	Charles "Tim" Brewer	225-769-3400
	Rouge, LA 70808	Tim.Brewer@sjbgroup.com	
Thompson Engineering, Inc., of Louisiana	2970 Cottage Hill Road, Suite	Kendall Kilpatrick, PE – CEO	251-666-2443
	190	kkilpatrick@thompsonengineering.com	
	Mobile, AL 36606		

# 23. Location:

If location is an evaluation criterion for this advertisement (see page 2) and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank. Any information included in this section will be redacted if not required by <u>the Evaluation</u> <u>Criteria section</u> of the advertisement.