DOTD FORM: 24-102

(Revised January 1, 2023)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

1.	Contract Name as shown in the advertisement	IDIQ CONTRACTS FOR VALUE ENGINEERING SERVICES STATEWIDE
2.	Contract Number(s) as shown in the advertisement	4400027920 AND 4400027921
3.	State Project Number(s), if shown in the advertisement	N/A
4.	Prime consultant name (name must match as registered	TriCoeur Services, L.L.C.
	with the Louisiana Secretary of State where such	
	registration is required by law)	
5.	Prime consultant license number (as registered with the	EF#: 4660
	Louisiana Professional Engineering and Land Surveying	VF#: 0653
	Board (LAPELS) if registration is required under Louisiana	
	law)	
6.	Prime consultant mailing address	9270 Siegen Lane, Suite 501, Baton Rouge, LA 70810
7.	Prime consultant physical address (existing or to be	9270 Siegen Lane, Suite 501, Baton Rouge, LA 70810
	established, if location is used as an evaluation criteria)	
8.	Name, title, phone number, and email address of prime	Barry P. Gahagan, PE, PLS; Projects Principal
	consultant's contract point of contact	Phone: 225-266-7507
		E-Mail: BGahagan@TriCoeur.com
9.	Name, title, phone number, and email address of the official	Aileen Foley, Managing Principal
	with signing authority for this proposal	Phone:225-228-2681
		Email: AFoley@TriCoeur.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israelicontrolled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Signature above shall be the same person listed in Section 9:

Date:

10/10/2023

Welen Foley

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.

Firm(s): Not applicable Firm(s)' %:

12. Past Performance Evaluation Discipline Table:

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

The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify).

Past Performance Evaluation	% of Overall	Prime	Firm B	Firm C	Each Discipline must
Discipline(s)	Contract	TriCoeur	Digital Engineering	Vectura, Inc.	total to 100%
		Services, LLC	& Imaging, Inc.		
Other - Value Engineering	30%	100%			100%
(Facilitation & PM)					
Road	28%	20%	80%		100%
Bridge	28%	80%	20%		100%
Traffic	6%		20%	80%	100%
Geotech	2%	100%			100%
Environmental	2%	50%	50%		100%
Right-of-way	2%	30%	70%		100%
ITS	2%		20%	80%	100%
Identify the percentage of work	for the <u>overall cont</u>	ract to be performed	d by the prime consultant	and each sub-consultant.	
Percent of Contract	100%	62%	32%	6%	

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 (please specify)" and include the classification title inside the parentheses.

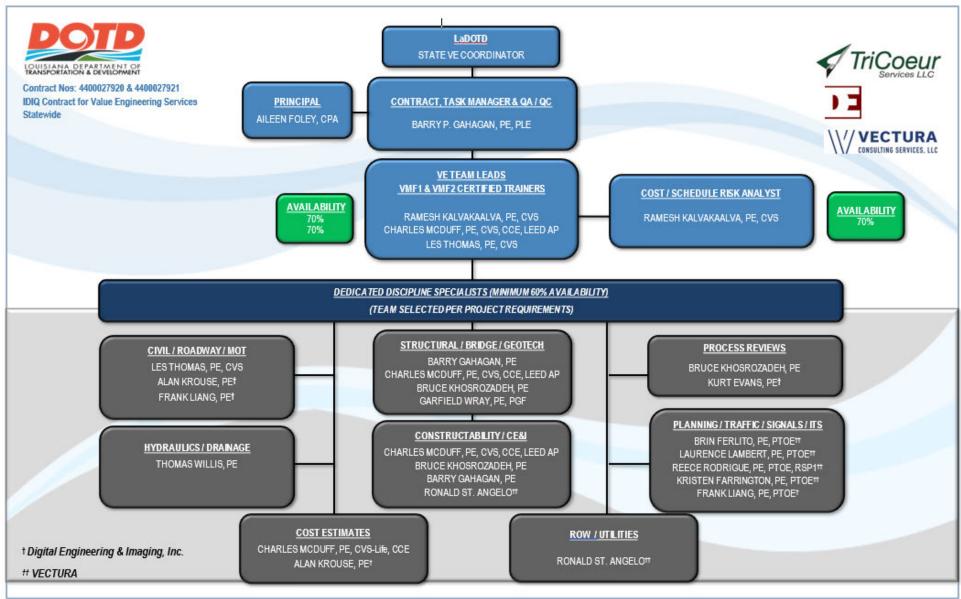
The DOTD Job Classification(s) to be used can be found at the following link:

 $\underline{http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job\%20Classifications\%20with\%20Descriptions.pdf}$

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
TriCoeur Services, L.L.C.	Administrative	1	2
TriCoeur Services, L.L.C.	Principal	1	2
TriCoeur Services, L.L.C.	(VE Team Lead)	4	4
TriCoeur Services, L.L.C.	Engineer	2	4
TriCoeur Services, L.L.C.	eur Services, L.L.C. Engineer- Other		3
Digital Engineering & Imaging, Inc.	Principal	2	7
Digital Engineering & Imaging, Inc. Supervisor – Engineer		1	5
Digital Engineering & Imaging, Inc	Engineer	0	4
Digital Engineering & Imaging, Inc.	Engineer Intern	0	3
Digital Engineering & Imaging, Inc.	CADD – Technician	0	3
Vectura Consulting Services, LLC Supervisor		2	2
Vectura Consulting Services, LLC	Vectura Consulting Services, LLC Engineer		4
Vectura Consulting Services, LLC	Engineer Intern	1	1
Vectura Consulting Services, LLC	Inspectors	2	2

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.



9270 Siegen Lane, Suite 501 • Baton Rouge, LA 70810 • (225) 228-2681 • www.TriCoeur.com

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	Barry P Gahagan, PE	TriCoeur Services, LLC	PE 21586- Civil	LA	3/31/2024
2	Barry P Gahagan, PE	TriCoeur Services, LLC	PE 21586- Civil	LA	3/31/2024
	Ramesh Kalvakaalva, PE, CVS	TriCoeur Services, LLC	PE 28219- Civil	LA	3/31/2024
3	Barry P Gahagan, PE	TriCoeur Services, LLC	PE 21586- Civil	LA	3/31/2024
	Thomas M Willis, PE	TriCoeur Services, LLC	PE 24205- Civil and Environmental	LA	3/31/2024
	Bruce Khosrozadeh, PE	TriCoeur Services, LLC	PE 34026- Civil	LA	9/30/2025
	Kurt Evans, PE	DEII	PE 20821	LA	9/30/2024
	Frank Laing, PE	DEII	PE 28549	LA	3/31/2024
	Alan Krouse, PE	DEII	PE 19391	LA	9/30/2025
	Sheelagh Brin Ferlito, PE, PTOE	Vectura	PE 25383	LA	09/30/2025
	Laurence Lucius Lambert II, PE, PTOE	Vectura	PE 29901	LA	3/31/2024
	Reece Rodrigue, PE, PTOE	Vectura	PE 42074	LA	3/31/2024
	Kristen Gahagan Farrington, PE, PTOE	Vectura	PE 42785	LA	3/31/2025
4	Ramesh Kalvakaalva, PE, CVS	TriCoeur Services, LLC	CVS 20111050- Certified Value Specialist	SAVE International (Worldwide)	10/31/2023
	Charles McDuff, PE, CVS	TriCoeur Services, LLC	CVS 820102- Certified Value Specialist	SAVE International (Worldwide)	Life
	Les Thomas, PE, CVS	TriCoeur Services, LLC	CVS 850901- Certified Value Specialist	SAVE International (Worldwide)	Life

16. Staff Experience:

Firm employe	Firm employed by TriCoeur Services, L.L.C.						
Name	Barry I	Gahagan, P.E., P.L.	S.		Years of relevant experience with this employer	1	
Title	Value S	pecialist	,		Years of relevant experience with other employer(s) 31	1	
Degree(s) / Y	ears / Spe	ecialization		Back	nelor of Science/ 1980 / Civil Engineering LSU		
5000 80M	2000			Mast	ter of Science / 1990 / Civil (Structural) Engineering LSU		
Active registr	ration nur	nber / state / expiration	n date	2158	36 / Louisiana / 2024		
Year registere		1985	Discipline	Civi	l Engineering		
Contract role(s) / brief description of responsibilities			ibilities	Contract Manager / VE Structural/Bridge Team Member. Mr. Gahagan has over thirty years of diverse structural /highway/ bridge design and construction engineering experience substantially in service to the Louisiana DOTD as highlighted below.			
Experience date mm/yy-mm/yy					e proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "d cover the <u>years of experience</u> specified in the applicable MPR(s).	lesigned	
manager, QA-QC and VE Structudesign consultant in presentation, to discuss alternative options to			nd VE Structur presentation, ever options to e	ral Tea engage enhanc	e Painting and Rehabilitation (St James and St John Parishes am Member Value Engineering (Lafayette, LA) Barry coordinated team in a workshop at LaDOTD headquarters where all discipate the project delivery. Supported scope clarity, and construct m Leads in interim, final presentations and report preparations.	ted with oles met	
Engineering (Lafayette, LA) Unconsultant presentation, engaged			ette, LA) Unde tion, engaged	er a V team i	Road Task manager, QA-QC and VE Structural Team Member Value Engineering (VE) IDIQ for DOTD, Barry participated in in the workshop at LaDOTD headquarters where all disciples belivery and supported Team Leads in interim and final presentation	design met to	
02/21 - 02/21	VE Structural Team Member: LaDOTD State Project No.: H.004100.5 I-10 and I-12 from LA-415 to E Lane in East Baton Rouge and West Baton Rouge Parishes, Louisiana Department of Transportation Development, LA. Lead Bridge Engineer. Mr. Gahagan was a study team member participating in a V			ion and			
Engineering Workshop and the development of the Value Engineering Report. The project considered altern signature bridge types spanning City Park Lake, interchange modifications, drainage retention measur Acadian Thruway /Dawson Creek, collector-distributor roadways between College and Acadian, alternative College Drive interchange, and adding laneage to approximately 9 miles of I -10 and I-12.				ernative sures at			

05/21 - 05/21	VE Structural Team Member: I-10: I-10 Overpass over US 165 & MP R.R; LaDOTD State Project No.: H.002980.5 Lead Bridge Engineer. Mr. Gahagan was a study team member participating in a Value Engineering Workshop and the development of the Value Engineering Report. The project considered alternative construction phasing, ramp realignments, and optimal interchange/intersection options.
09/15 – 08/15	VE Structural Team Member: LA 3241: LA 36 TO LA 435 TO LA 40/LA 41 S.P. No. H.004113 & S.P. No. H.004435 Mr. Gahagan was a study team member participating in a Value Engineering Workshop and the development of the Value Engineering Report. The project considered alternative construction phasing and pile bent alternatives.
03/16 – 03/16	VE Structural Team Member: LA 1 / I-10 Connector ; LaDOTD State Project No.: H.005121 Mr. Gahagan was participating in a Value Engineering Workshop and the development of the Value Engineering Report. The project considered alternative construction phasing and pile bent alternatives.
07/18 - 07/18	VE Structural Team Member: MACARTHUR INTERCHANGE COMPLETION PHASE II JEFFERSON PARISH, LOUISIANA; State Project H.011309;
10/18 – 10/18	VE Structural Team Member: I-20 MRB AT VICKSBURG OVERLAY AND REHAB State Project H.012739.5 Mr. Gahagan was a study team member participating in a Value Engineering Workshop and the development of the Value Engineering Report. The project considered historical bank movement concerns, alternative construction phasing, and manway inspection access.
03/11 – 07/11	Bridge/Structural Engineer: Interstate 10 crossing - West Flood Protection Levee- Jefferson Parish, LA. Provided concept formulation, Construction Modification design, final details and shop drawing review enabling preservation of existing I-10 East and Westbound spans over Parish Canal avoiding the expense and disruptive reconstruction of Interstate spans required to elevate profile above the raised west levee elevated (Post Katrina).
03/90 – 12/90	Bridge/Structural Engineer: I-49- I20 Interchange – Shreveport, La : Participated on Bridge Design Team responsible for Preparing Final Design and Detailing of Framing Plans for fully directional interchange system of Curved Continuous Steel Trapezoidal Box Girder Systems and T-Piers including top Ramp SW and Ramp WS.
06/88 – 03/89	Bridge/Structural Engineer: I-49- La 3132 Interchange – Shreveport, La: Prepared Design and Detail of Curved Continuous Steel Trapezoidal Box Girders and T-Piers for several Ramp components of the directional interchange
02/93 – 04/96	Bridge/Roadway Engineer: US 165 I-10 to Fenton, Jefferson Davis Parish, La :: Project Manager and Lead Civil Engineer widening of the existing 2 lane US Hwy to a 4 laning Urban Arterial Route in Jeff Davis Parish, La. Project involvement included directing value engineering assessment of preliminary design grade, coordination of alternative hydraulic analyses and justification of a lowered design grade. Value Engineering changes resulted in a substantial construction cost savings and reduced flood risk to upstream landowners.

Firm employed by	Firm employed by TriCoeur Services, L.L.C.					
Name Rai	nesh Kalvakaalva, PE, C	CVS	Years of relevant experience with this employer 2			
Title Value Specialist			Years of relevant experience with other employer(s)	30		
Degree(s) / Years	/ Specialization		Bachelor of Science/ 1991 / Civil Engineering / NIT, India			
F4 254t	550		Master of Science/ 1995 / Civil Engineering / LSU			
Active registration	number / state / expiratio	n date	28219 / Louisiana / 2024			
Year registered	1999	Discipline	Civil Engineering			
Active registration	number / state / expiratio		201110500 / SAVE International / 2023			
Year registered	2011	Discipline	Certified Value Specialist			
Contract role(s) / b	orief description of respon	sibilities	Value Engineering Facilitator / Risk Analyst / Structural/Bridge T			
			Member. Mr. Kalvakaalva has more than 30 years of experience in	ACCOUNT OF THE PARTY OF THE PAR		
			structural engineering design, value engineering, risk assessment a	-		
			management. His Value Engineering experience includes work for			
			Departments of Transportation (GA, LA, FL, TX, WY). Mr. Kalv			
			has participated as VE Facilitator or Team Member in over 250 V			
			to-date. His recent VE Facilitation experience specific to Transportation is			
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	78 22 7	listed below.			
Experience dates			to the proposed contract; i.e., "designed drainage", "designed girders"	', "designed		
mm/yy-mm/yy			ld cover the years of experience specified in the applicable MPR(s).	(VE) IDIO		
06/23-07/23			ol Road Value Engineering (Lafayette, LA) Under a Value Engineering illitator to VE design of proposed mainline, elevated interchange, and fr			
			y 90 to Interstate standards. Ramesh participated in design consultant presentation,			
			headquarters where all disciples met to discuss options to enhance the projection			
02/21 - 02/21	VE Facilitator: I-10: L.	A 415 to Essen	on I-10 and I-12; PHASE 1: WEST OF WASHINGTON STREET T	O ESSEN;		
	LaDOTD State Project	No.:	107	250		
05/21 – 05/21 VE Facilitator: I-10: I-10 Overpass over US 165 & MP R.R; La			ver US 165 & MP R.R; LaDOTD State Project No.: H.002980.5			
02/14 – 02/14 VE Facilitator: Almonaster Bridge ove		aster Bridge ov	er the Inner Harbor Navigation Canal; ridge Replacement Project On	rleans		
Parish, Louisiana; State Project N No. 1			. H.007250			
08/14 - 08/14	08/14 – 08/14 VE Facilitator: I-10: LA 1 Improvements from Leeville to Golden Meadow (Phase 2); State Project No. H.008145					
09/15 - 08/15	VE Facilitator: LA 324	11: LA 36 TO I	A 435 TO LA 40/LA 41 S.P. No. H.004113 & S.P. No. H.004435			
03/16 - 03/16			; LaDOTD State Project No.: H.005121			
07/18 - 07/18			RCHANGE COMPLETION PHASE II JEFFERSON PARISH, LO	UISIANA;		
	State Project H.011309	; Federal Proje	et H011309			

10/18 - 10/18	VE Facilitator: I-20 MRB AT VICKSBURG OVERLAY AND REHAB State Project H.012739.5; Federal Project
10/10 10/10	H012739
04/22 - 05/22	VE Facilitator: FDOT - Harborview Rd from Melbourne St. to I-75; FPN #434965-2
06/20 - 06/20	VE Facilitator / Risk Assessment Co-Facilitator: FDOT & Turnpike Enterprise CRA + VE - Widening of Florida's
00/20 - 00/20	Turnpike (SR 91) from Jupiter (Indiantown Road/SR706) to Ft. Pierce (Okeechobee Road/SR70, FPN No. 423374-1
10/19 - 10/19	VE Facilitator / Risk Assessment Co-Facilitator: FDOT & Turnpike Enterprise - CRA for the Design segment of
	Central Polk Parkway from Polk Parkway (SR 570) to US 17 (SR 35), FPID 440897-2; CRA + VE for PD&E
	segment of Central Polk Parkway from US 17 (SR 35) to SR 60, FPID 440897-4
06/19 - 06/19	VE Facilitator: FDOT District 5 - I-75 at NW 49th Street; FPN #: 435209-1
01/19 - 02/19	VE Facilitator: FDOT District 5 - SR-9/I-95 from NB Rest Area (MP 23.57) to SB Rest Area (MP 25.508), Brevard
	County; FPN: #438478-1
01/19 - 01-19	VE Facilitator: FDOT District 5 - St. Johns River to Sea (SJR2C) Loop Trail; FPN: #439865-1
03/19 - 03/19	VE Facilitator: FDOT District 5 - NASA Causeway Bridge; FPN: #440424-1
09/17 - 09/17	VE Facilitator: FDOT District 5 - S.R. 50 from U.S. 301 to C.R. 33; FPN #: 435859-1
05/19 - 05-19	VE Facilitator / Risk Assessment Co-Facilitator: FDOT District 6 - SR 826 / Palmetto Expressway from US-1 /
	South Dixie Highway to SR 836 / Dolphin Expressway; FPN #: 432639-1
12/16 - 12/16	VE Facilitator: TxDOT - H-10 Corridor - From West of FM-3538 to FM-359; Project No's.: CSJ 0271-02-055; CSJ
	0271-03-061; CSJ 0271-03-060; CSJ 0271-03-046; and CSJ 0271-04-071
09/16 - 09/16	VE Facilitator: TxDOT - US-54/IH-10 From Loop 375 (Cesar Chavez Border Highway) to Yandell Dr.; Project No.
	CSJ 0167-01-113
09/16 - 09/16	VE Facilitator: TxDOT - US-54/IH-10 From Loop 375 (Cesar Chavez Border Highway) to Yandell Dr.; Project No.
	CSJ 0167-01-113
10/18 - 10/18	VE Facilitator: USACE Galveston District - Corpus Christi Ship Channel – Jetty Repairs; Contract No. W9126G-
0.5/2.0	16-D-0017
06/20 - 06/20	VE Facilitator: USACE Fort Worth District - Design Build (DB) Request for Proposal (RFP) Development for
10/16 10/16	Dallas Floodway - 277k Levee Raise; Contract No. W9126G-16-D-0017
10/16 – 10/16	VE Facilitator: WYDOT - State Highway 238 Improvements; Lincoln County; Project No's. 1206007 & 206008
2019	Publication - SAVE International: Technical Sub-committee Member – (VMBoK), Chapter 6 and Chapter 9;
	Visiting Professor at Georgia Institute of Technology teaching VM to Graduate Students
Ongoing	Visiting Professor at Georgia Institute of Technology teaching VM to Graduate Students
2015	Publication - Charles Nickel, PE, Ramesh Kalvakaalva, PE, CVS, Charles McDuff, PE, CVS-Life, LEED AP,
	FACTORS INFLUENCING VALUE ENGINEERING OUTCOMES - GEOLOGICAL, SOCIO-ECONOMICAL
	AND SOCIO-POLITICAL, 2015 AASHTO Value Engineering Peer Exchange Workshop, Washington DC

Firm employee	Firm employed by TriCoeur Services, L.L.C.					
And the second s		Charles R. McDuff, PE, CVS-Life, CCE, LEED ^{AP}			Years of relevant experience with this employer	0
Title	Value S	pecialist			Years of relevant experience with other employer(s)	44
Degree(s) / Ye	ears / Spe	ecialization		Back	nelor of Science/ 1966 / Civil Engineering, University of Miss	souri, Rolla
Active registra	ation num	nber / state / expiratio	n date	2347	71 / Georgia / 2023	
Year registered	d	1970	Discipline	Civi	Engineering	
Active registra	tion nur	nber / state / expiratio		8201	02 / SAVE International / CVS-Life	
Year registered		1982	Discipline	Cert	fied Value Specialist	
Contract role(s) / brief description of responsibilities				Engi expe engin priva is ex and o more cost/ also Engi engin Star cons expe	the Engineering Facilitator / Risk Analyst / Construction / Cost meering Team Member. Mr. McDuff has more than 50 years rience serving as chief of design, construction engineer, and meering management consultant on a wide variety of projects at and public sectors. Mr. McDuff's value engineering (VE) tensive and includes transportation, municipal, military, composite government projects. He has served as a VE team facility than 500 projects and has participated as the civil engineer of constructability team member on numerous other projects. Meserved three years on active duty with the U.S. Army Corps of meers (USACE) where he held the rank of Captain and served meer company commander for one tour in Vietnam, earning the Medal and the Army Commendation Medal for jet fuel facility truction, often under combat conditions. His recent VE Facility rience specific to Transportation is listed below.	of general in the experience mercial, tator on or ir. McDuff of l as combat ne Bronze ties itation
Experience dates mm/yy-					ed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designe e years of experience specified in the applicable MPR(s).	a _e
mm/yy	inters	ection, etc. Experienc	e dates should et	over the	e years of experience specified in the applicable MPR(s).	
02/14 - 02/14						rleans
Parish, Louisiana; State Project N No. H.0						
08/14 - 08/14						H.008145
09/15 - 08/15	VE Co-Facilitator: LA 3241: LA 36 TO LA 435 TO LA 40/LA 41 S.P. No. H.004113 & S.P. No. H.004435					
06/20 - 06/20	20 – 06/20 VE Roadway Team Member: FDOT & Turnpike Enterprise CRA + VE - Widening of Florida's Turnpike (SR 91) from				R 91) from	
Jupiter (Indiantown Road/SR706) to Ft. Pi			SR706) to Ft. P	ierce (Okeechobee Road/SR70, FPN No. 423374-1	53

10/19 - 10/19	VE Roadway Team Member: FDOT & Turnpike Enterprise - CRA for the Design segment of Central Polk Parkway
	from Polk Parkway (SR 570) to US 17 (SR 35), FPID 440897-2; CRA + VE for PD&E segment of Central Polk
	Parkway from US 17 (SR 35) to SR 60, FPID 440897-4
06/19 - 06/19	VE Roadway Team Member: FDOT District 5 - I-75 at NW 49th Street; FPN #: 435209-1
01/19 - 02/19	VE Roadway Team Member: FDOT District 5 - SR-9/I-95 from NB Rest Area (MP 23.57) to SB Rest Area (MP
	25.508), Brevard County; FPN: #438478-1
01/19 - 01-19	VE Roadway Team Member: FDOT District 5 - St. Johns River to Sea (SJR2C) Loop Trail; FPN: #439865-1
03/19 - 03/19	VE Roadway Team Member: FDOT District 5 - NASA Causeway Bridge; FPN: #440424-1
09/17 - 09/17	VE Roadway Team Member: FDOT District 5 - S.R. 50 from U.S. 301 to C.R. 33; FPN #: 435859-1
05/19 - 05-19	VE Roadway Team Member: FDOT District 6 - SR 826 / Palmetto Expressway from US-1 / South Dixie Highway to
	SR 836 / Dolphin Expressway; FPN #: 432639-1
12/16 - 12/16	VE Co- Facilitator: TxDOT - H-10 Corridor - From West of FM-3538 to FM-359; Project No's.: CSJ 0271-02-055; CSJ
	0271-03-061; CSJ 0271-03-060; CSJ 0271-03-046; and CSJ 0271-04-071
09/16 - 09/16	VE Co-Facilitator: TxDOT - US-54/IH-10 From Loop 375 (Cesar Chavez Border Highway) to Yandell Dr.; Project No.
	CSJ 0167-01-113
09/16 - 09/16	VE Co-Facilitator: TxDOT - US-54/IH-10 From Loop 375 (Cesar Chavez Border Highway) to Yandell Dr.; Project No.
	CSJ 0167-01-113
10/18 - 10/18	VE Co-Facilitator: USACE Galveston District - Corpus Christi Ship Channel – Jetty Repairs; Contract No. W9126G-
	16-D-0017
06/20 - 06/20	VE Hydraulics Team Member: USACE Fort Worth District - Design Build (DB) Request for Proposal (RFP)
	Development for Dallas Floodway - 277k Levee Raise; Contract No. W9126G-16-D-0017
2015	Publication - Charles Nickel, PE, Ramesh Kalvakaalva, PE, CVS, Charles McDuff, PE, CVS-Life, LEED AP,
	FACTORS INFLUENCING VALUE ENGINEERING OUTCOMES - GEOLOGICAL, SOCIO-ECONOMICAL AND
	SOCIO-POLITICAL, 2015 AASHTO Value Engineering Peer Exchange Workshop, Washington DC

Firm employee	Firm employed by TriCoeur Services, L.L.C.					
Name	Leslie M. Thomas, PE, CVS	S-Life		Years of relevant experience with this employer	0	
Title	Title Value Specialist			Years of relevant experience with other employer(s)	42	
Degree(s) / Ye	ears / Specialization		BS,	Civil Engineering, Virginia Polytechnic Institute and State U	Jniversity	
Active registra	ation number / state / expiration	ı date	2321	0 / Georgia / 2023	1.07	
Year registered	d 1996	Discipline	Civi	l Engineering		
Active registra	ntion number / state / expiration	ı date	8509	001 / SAVE International / CVS-Life		
Year registered		Discipline	Cert	ified Value Specialist		
Contract role(s) / brief description of responsibilities			Men Engil leadi inclu WIS sectil singla acqui sepa mediand se barra unmi engil billio		l years of Civil rience in experience CDOT, TxDOT, rural and urban adabouts, d right-of-way gs, grade studies of in Wash. DC eadquarters; es and ducted value ranging to \$2.5	
Experience dates mm/yy– mm/yy	dates mm/yy— etc. Experience dates should cover the vears of experience specified in the applicable MPR(s).					
VE Co-Facilitator to VE design of proposed mainline,				ineering (Lafayette, LA) Under a Value Engineering (VE) IDIQ for D ted interchange, and frontage road systems enabling upgrade of the US H ette, participated in design consultant presentation, convened a work phance the project delivery.	wy 90 to Interstate	
08/23-08/23						

	workshop at LaDOTD headquarters where all disciples met to discuss alternative options to enhance the project delivery. Provided
0.5/2.0	interim, final presentations and report preparations.
06/20 —	VE Hydraulics Team Member: FDOT & Turnpike Enterprise CRA + VE - Widening of Florida's Turnpike (SR 91) from Jupiter
06/20	(Indiantown Road/SR706) to Ft. Pierce (Okeechobee Road/SR70, FPN No. 423374-1
10/19 – 10/19	VE Hydraulics Team Member: FDOT & Turnpike Enterprise - CRA for the Design segment of Central Polk Parkway from Polk Parkway (SR 570) to US 17 (SR 35), FPID 440897-2; CRA + VE for PD&E segment of Central Polk Parkway from US 17 (SR 35) to SR 60, FPID 440897-4
06/19 –	VE Hydraulics Team Member: FDOT District 5 - I-75 at NW 49th Street; FPN #: 435209-1
06/19	
01/19 – 02/19	VE Hydraulics Team Member: FDOT District 5 - SR-9/I-95 from NB Rest Area (MP 23.57) to SB Rest Area (MP 25.508), Brevard County; FPN: #438478-1
01/19 – 01 - 19	VE Hydraulics Team Member: FDOT District 5 - St. Johns River to Sea (SJR2C) Loop Trail; FPN: #439865-1
03/19 –	VE Hydraulics Team Member: FDOT District 5 - NASA Causeway Bridge; FPN: #440424-1
03/19	
09/17 –	VE Hydraulics Team Member: FDOT District 5 - S.R. 50 from U.S. 301 to C.R. 33; FPN #: 435859-1
09/17	
05/19 – 05- 19	VE Hydraulics Team Member: FDOT District 6 - SR 826 / Palmetto Expressway from US-1 / South Dixie Highway to SR 836 / Dolphin Expressway; FPN #: 432639-1
10/18 — 10/18	VE Hydraulics Team Member: USACE Galveston District - Corpus Christi Ship Channel – Jetty Repairs; Contract No. W9126G-16-D-0017
06/20 - 06/20	VE Hydraulics Team Member: USACE Fort Worth District - Design Build (DB) Request for Proposal (RFP) Development for Dallas Floodway - 277k Levee Raise; Contract No. W9126G-16-D-0017
2009-2016	VE Facilitator: Performed 66 Value Engineering (VE) studies for the GDOT. The studies included rural, secondary, primary and interstate roadways, bridges, drainage, pavement designs, interchanges, flyovers, unlimited and limited access. To date, the GDOT has reported the VE savings to be in excess of \$168 Million for just these projects.
05/18 —	VE Facilitator: IH-35 from US 37/US 281 to Loop 410 North-San Antonio, TX – Texas Department of Transportation. Recommended
05/18	capital cost savings \$17,486,000. Recommended O&M cost savings \$594,000. Recommended life cycle cost savings \$17,486,000.
06/17 –	VE Facilitator: Reconstruction of I 39/90 and US 12/18 Beltline Interchange - Wisconsin Department of Transportation - Reducing the
06/17	project construction cost by: Alternate A - \$6,238,000, Alternate B - \$24,973,000, Alternate C - \$37,110,000.
09/17 –	VE Facilitator: I-95/U.S. 301 Interchange Improvement –SC Department of Transportation - Orangeburg County Proposed savings of
09/17	\$8.7 million on this \$44 million project

Firm employe	ed by TriCoeur Serv	ices, L.L.C.				
Name	Garfield Wray, PE, PC	GE	Years of relevant experience with this employer	0		
Title	Geotechnical/Foundation Engineer		Years of relevant experience with other employer(s)	34		
Degree(s) / Y	ears / Specialization		BSCE (Honors), 1983, University of the West Indies, Trinidad, West	Indies		
\$5550 \$5703	100		ME (Geotechnical), 1988, Howard University, Washington, D.C.			
Active registr	ration number / state / ex	piration date	049734 / Florida / 2023			
Year register		Discipline	Civil Engineering			
Contract role(s) / brief description of responsibilities			Value Engineering Geotechnical/Foundations Engineering Team Me Wray has over 30 years of geotechnical experience and has provided management and performed engineering analyses and design for a wengineering projects. He has worked on many projects throughout the including California, South Florida, the New England area, Washing Maryland, Virginia, Louisiana, Texas, and throughout the Caribbean extensive knowledge of geotechnical and foundation engineering desconstruction issues. His projects include foundations over soft soils, marine ports, bridges, roadways, flood control structures, and other indevelopments, industrial facilities including LNG terminals, oil and be refineries, water and wastewater treatment plants, and commercial arbuildings up to 93 stories tall. His recent experience specific to Translisted below.	project ide variety of e United States ton D.C, . He has sign and airports, infrastructure bauxite ad residential sportation is		
Experience da			to the proposed contract; i.e., "designed drainage", "designed girders", "designed drainage", "designed girders", "designed drainage", "designed girders", "designed drainage", "designed girders", "designed girders", "designed drainage", "designed girders", "designed	gned		
mm/yy-mm/y			ould cover the vears of experience specified in the applicable MPR(s).	:l (CD 01)		
06/20 - 06/20	and a second		DOT & Turnpike Enterprise CRA + VE - Widening of Florida's Turnp (06) to Ft. Pierce (Okeechobee Road/SR70, FPN No. 423374-1	ike (SK 91)		
10/19 – 10/19	VE Geotechnical from Polk Parkwa	from Jupiter (Indiantown Road/SR706) to Ft. Pierce (Okeechobee Road/SR70, FPN No. 423374-1 VE Geotechnical Team Member: FDOT & Turnpike Enterprise - CRA for the Design segment of Central Polk Parkway from Polk Parkway (SR 570) to US 17 (SR 35), FPID 440897-2; CRA + VE for PD&E segment of Central Polk Parkway from US 17 (SR 35) to SR 60, FPID 440897-4				
05/19 - 05-19		VE Geotechnical Team Member: FDOT District 6 - SR 826 / Palmetto Expressway from US-1 / South Dixie Highway to				
		SR 836 / Dolphin Expressway; FPN #: 432639-1				
10/18 - 10/18			SACE Galveston District - Corpus Christi Ship Channel – Jetty Repair	s; Contract		
	No. W9126G-16-		ABO BAC 280	***		
06/20 - 06/20		VE Geotechnical Team Member: USACE Fort Worth District - Design Build (DB) Request for Proposal (RFP)				
	Development for	Dallas Floodway -	277k Levee Raise; Contract No. W9126G-16-D-0017			

Firm employ	red by TriCoeur Serv	rices, L.L.C.			
Name	Bruce Khosrozadeh, l	PE	Years of relevant experience with this employer	< 1	
Title	Geotechnical Engineer		Years of relevant experience with other employer(s)	30	
Degree(s) /	Years / Specialization		BSCE 1986, University of Florida	•	
Active regis	tration number / state / e	xpiration date	0034026 / Louisiana / 2025		
Year register	red 1986	Discipline	Civil Engineering		
			Value Engineering Structural/Geotechnical/Foundations Engineering Member. Mr. Khosrozadeh has over 30 years of experience in geotec engineering, construction management and inspection, and materials services. Mr. Khosrozadeh has been engaged in performance of geot studies for roadways, major highway and bridge projects, as well as office buildings, seaports, and large industrial and commercial project responsibilities have also included marketing, project management, a control. He has managed, inspected, tested, and provided technical rewith providing recommendations for foundation types. His extensive has included pavement condition surveys, shallow foundation design installation supervision of deep foundations such as drilled shafts, au pre-stressed concrete piles, steel H-piles and pipe piles. Review of pl specifications, geotechnical reports, pile/drilled shaft installation plan production pile logs, observation of test piles, and pile dynamic load as observation of drilled shaft installation are also amongst some of abilities. Mr. has also performed a wide range of forensic investigation remediation studies, asphalt and concrete testing, prestress/precast inspections, aggregate and soils tests, and non-destrevaluations.	chnical testing technical large high-rise ets. His and cost eview along experience , design and ger cast piles, ans, as, review of tests, as well his strongest ons and	
Experience da	Experience and qu	Alifications relevant	to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed g	gned	
mm/yy-mm/y 06/23 – 07/2	VE Geotechnical providing review foundations. Rev	intersection", etc. Experience dates should cover the <u>years of experience</u> specified in the applicable MPR(s). VE Geotechnical Team Member of I-49 South at Verot School Road Interchange in Lafayette Parish, SP H. 011235 providing review and recommendations for alternative evaluations for MSE wall, drilled shaft, and driven pile foundations. Review alternatives considered constructability, vibration tolerance, and anticipated cost considerations for installations in close proximity to BNSF railway.			

02/11 – 11/12	Geotechnical Project Manager of SR 9B Extension from Racetrack Road to Duval CL, FDOT District 2, St. Johns County, FL providing geotechnical engineering services for the construction of a new four-lane divided principal arterial roadway, from CR 2209 to the Duval for a distance of approximately 2.57 miles.
03/10 – 06/12	Geotechnical Project Manager of I-295 (SR 9A) Widening from Dames Point to I-95 FDOT District 2, Duval County, FL providing geotechnical engineering services for the widening of 9A from Dames Point to I-95. The overall project consists of the interior widening of nearly 8 miles of this highway, including ten bridges, as well as modifications to exit ramps.
11/10 – 03/15	Geotechnical Project Manager of I-95/I-295 Interchange Improvements FDOT District 2, Duval County, FL conducting subsurface investigations to provide design recommendations for deep foundations including driven precast concrete piles and drilled shafts for the various bridges and flyovers. Also providing design recommendations for high fill embankments, MSE walls, roadway design, and foundations on soft soil.
01/11 – 02/18	Geotechnical Project Manager of 8 Lane I-295 from Buckman Bridge to I-95, FDOT District 2, Duval County, FL providing geotechnical exploration and evaluation for widening I-295 to provide auxiliary lanes within the existing limited access Right of Way from the SR 13 (San Jose Blvd) Interchange to the Old St Augustine Interchange, and from the Old St Augustine Interchange to the I-95 south Interchange. The design also includes milling and resurfacing of the existing lanes and ramps from the Buckman Bridge to the I-95 south Interchange.
07/10 – 09/17	Geotechnical Project Manager of I-95 Widening, FDOT District 2, St. Johns County, FL managing all personnel providing Material Testing services, instrumentation, inspection services and for the widening of the intersection and bridge widening; widening of I-95 from four lanes to six lanes including bridge widenings, subgrade and rock base, asphalt base, drainage structures, embankments, curb & gutter, traffic separator, sidewalks, signing and pavement markings, signalization and maintenance of traffic.
02/10 – 06/12	Geotechnical Project Manager of FDOT SR 243 International Airport Boulevard Extension, Jacksonville, Florida The proposed improvements include the construction of a new urban roadway that consists of four 12-foot wide travel lanes (2 travel lanes in each direction) with a 55-foot wide grassed median from the current Airport Road traversing north to Pecan Park Road, for an approximate distance of 2.5 miles.
02/14 – 11/14	Geotechnical Project Manager of FDOT District 2, US 1 Bridge (Over St. Mary's River), Nassau County, Florida project directing the geotechnical exploration activities obtaining subsurface data for design of scour revetment countermeasures, deep foundation design, and construction recommendations for the subsurface modifications. Recommendations consisted of precast square concrete piles, steel pipe piles, and drilled shafts to be selected for design of new crutch bents.

		riCoeur Services, L.I	<i>1.</i> C.		Warner of malarment and make the constant	10			
Name	Thomas M. Willis, P				Years of relevant experience with this employer	8			
Title		lie / Hydrologie Engir	ieer	- 1	Years of relevant experience with other employer(s)	30			
Degree(s) / Ye	ars / Spe	cialization			elor of Science/ 1981 / Civil Engineering / LSU-Baton Roug	ge			
2 341 V 3		4 2 0 0 0 4 04	91.0		er of Business Administration / 1989 / LSU-Baton Rouge				
		ber / state / expiration			205 / Louisiana / 2024				
Year registered		1991/1994	Discipline		Engineering / Environmental Engineering				
		description of respons			e Engineering Hydraulics/Environmental Engineering Team				
Experience dates mm/yy-					contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed is specified in the applicable MPR(s).	intersection", etc.			
mm/yy	Control Participant				L				
1/12 - 3/23	New O	rleans International Ai	rport Terminal	Repla	cement, Value Engineering Support Studies, New Orleans, I	LA –VE Team			
	Membe	er for Hydraulic and E	nvironmental in	cludin	g stormwater routing and control structures, and detention be	asin design.			
1/91-1/92	Replace	ement of I-10 Bridge of	ver St. John Ri	ver Va	alue Engineering Review, Jacksonville, FL – VE Team Mem	ber for Hydraulic			
					nd detention basin design.	0.000 11			
02/93 -	US 165	Widening, I-10 to Fe	nton – VE Tean	n Men	nber for Hydraulic and Environmental to adjust design grade	and bridges at			
04/96	Woodla	awn Bayou, Bayou Ar	ceneaux, and Li	ittle Ba	ayou, resulting in reduced flood risk.				
1/02 - 1/014	LaDOTD, Crescent City Connection (CCC) Authority Project Manager and Authority Liaison, LA - VE Team Member for								
				sippi R	tiver crossing bridges, Toll Facilities, Westbank Expressway	, CCC buildings			
		rine Facilities for ferr		INSERT	100 100				
1/00-1/04					/ engineer with primary responsibility of field review, analy				
	preparation and multidiscipline coordination associated with scour inspection of 50 different structures, including major bridge								
	crossings of the I-10 Biloxi, I-10 Pearl, I-10 Jourdan, I-10 Tchoutacabouffa, I-10 Wolf, Rte. 613 Escatawpa, and Rte. I-49 Leaf.								
		countermeasure design							
1/00-1/02					livar County, Mississippi - Project engineer performing valu				
	planning for location and hydraulic studies to develop an EIS and a supplemental EIS for a new roadway alignment and crossing								
W W	of the Mississippi River.								
1/961/98	US 171 Corridor Study, LA - Performed master plan hydraulic analysis, field reviews, and value engineering for various sections								
		corridor and for severa							
1/81-1/84					ainage master plan, value engineering, and the preliminary d				
		Work consisted of designing and detailing of subsurface drainage systems, major culvert crossings, outfall channels, and roadside							
	channe	ls. Prepared the impac	t to Floodplain	Analy	vsis reports for various sections of the project.				

Firm employed	l by V	ectura Consulting Se	ervices, LLC			
Name	Sheelag	gh Brin Ferlito, PE, I	PTOE		Years of experience with this firm/employer	6
Title	Principal			100	Years of experience with other firm(s)/employer(s)	27
Degree(s) / Ye	The second second second			B.S.	/ 1988/ Civil Engineering	
		ber / state / expiration	date	PE.0	025383 / LA 9/30/2023	
Year registered		1993	Discipline	Civil		
		description of respons		Traff	ic Signal / ITS CE&I Supervisor	
Experience dates mm/yy- mm/yy	Experien should co	ce and qualifications relevely over the time-years of expe	ant to the propose rience specified in	d contra the ap	act; $i.e.$, "designed drainage", "designed girders", "designed intersection" plicable MPR(s).	
07/21 - current	Inspection	on of 24 traffic signals.	Brin oversaw the	review	(Baton Rouge, LA) Brin is the task leader for Vectura for the Construction of signal mast arm shop drawings to assist the City-Parish of Baton I warish and the Contractor conducted field visits to confirm pole foundation	Rouge in accepting the
07/19 – current	MOVEBR New Capacity Projects Program Management (Baton Rouge, LA) Brin is the lead traffic engineer for entire the New Capacity Projects program management team. All traffic engineering scope of services, traffic / speed data collection, traffic design studies, safety studies, and traffic signal design plans are reviewed by Brin. She is in constant communication with the Traffic Engineering staff of DOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects.					
06/23-06/23	H.011235.5 I-49 South at Verot School Road Value Engineering (Lafayette, LA) Under a Value Engineering (VE) IDIQ for DOTD, Brin was the subject matter expert for Traffic Engineering to VE an interchange design for construction. Brin reviewed the plan set prior to a week-long value engineering session. She visited the field with the VE team to verify if any changes could be made to the plans. Then the VE team convened a workshop where all disciples meet to discuss options to reduce the cost of the project.					
07/19 – current	traffic si develope	H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement PPP (Belle Chasse, LA) Brin is the project manager for the temporary and permanent traffic signal plans for the intersections of LA 23 at Burmaster St and at Engineers Rd. She based her traffic signal plans on design year volumes that were developed using growth rates from the New Orleans Regional Planning Commission Travel Demand Model. This project is the first ever Public-Private-Partnership performed by Louisiana DOTD.				
09/20 - 12/21	H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish, LA) Brin is the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at Tanger Boulevard. Vectura also developed signal timing plans for each phase of the construction to maintain progression along LA 30.					
07/18 - 04/19	LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design West Baton Rouge Parish, Addis, LA Brin developed a Pedestrian Crosswalk Study and Traffic Signal Construction Plans for the intersection of LA 1 at LA 990 in Addis, LA. The study was based on DOTD Traffic Engineering Manual Crosswalk Guidelines followed by traffic signal design plans based on DOTD requirements. The study included traffic and pedestrian traffic data collection, a speed study, crash analyses, intersection analyses and progression analyses. The signal plans included pedestrian signal equipment, signal timing parameter calculations, crosswalk striping, signs, DOTD pay items, estimated quantities, and construction cost. Brin also assisted with the Parish with the DOTD Permit Request for Intersection Control Devices on a State Right of Way.					
09/17-04/18	US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design Slidell, LA Brin developed a formal traffic study for a proposed crosswalk with pedestrian traffic signal equipment and pedestrian clearance timings based on DOTD requirements.					

	Brin assisted with vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed signal timing for pedestrians to cross the street. From the design study, a set of Traffic Signal Modification Plans were developed to implement the recommended alternative.
09/16 - 04/17	H.004957.5 I-12 To Bush - LA 3241 (I-12 – LA 36) Corridor Study (St. Tammany Parish, LA) Brin was the project manager of a formal DOTD traffic study for the new alignment of LA 3241 with the purpose of obtaining both existing and projected future traffic variables in accordance with standard operating procedures typically performed in these types of analyses. The traffic study included alternative analyses to improve the safety and efficiency of the roadway consistent with the latest DOTD policies related to access management and complete streets. Specific access management features examined included intersection improvements, median openings, and U-turns, spacing and type of openings, signalization of intersections and roundabouts. Brin developed the safety analyses report for the project.
04/14 – 12/14	H.002301 Signal Design for N. Sherwood Forest Dr. Widening Project (Baton Rouge, LA) As the project engineer, Brin was in responsible charge for data collection and design for three signalized intersections as part of a road widening project per EBR DPW and DOTD requirements. She developed the traffic signal equipment, signal timing and communication construction plans, special provision specifications, quantities, and cost estimate. She performed tasks to develop the striping plans and sequence of construction plans including temporary signal equipment placement due to lane shifts during construction.
07/12-03/14	EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction (Baton Rouge, LA) Brin was the Project Resident Engineer on behalf of EBR for performing CE&I services for the construction of 11 traffic signals. She maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She coordinated with DOTD ITS division for fiber splicing into interstate I-12 fiber backbone and ATM / EOC building. She processed all monthly tasks in EBR formats and all items on EBR project closeout checklist.
07/08-09/09	SPN 013-05-0043 CE&I for EBR Traffic Signal Systems Phase IV Construction (Baton Rouge, LA) Brin was the Project Resident Engineer for DOTD and EBR to perform CE&I services for the construction of 21 traffic signals. She developed the project Sample Plan, maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, coordinated concrete sampling for DOTD Materials Lab, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into Airline Highway fiber backbone and ATM / EOC building. She processed all monthly tasks electronically in DOTD Site Manager and in EBR required formats as well as all items on the DOTD Project Closeout Checklist including the 2059 Report.
01/09 – 03/12	S.P. No. 700-99-0332 US 165 Corridor Study Pineville Brin was the Senior Project Engineer for a corridor traffic study in Pineville, LA. The project included traffic data collection, forecast traffic volume development, existing analyses and proposed alternative analyses that included improved traffic signal timings. She used Highway Capacity Manual software, Sidra software and VISSIM traffic simulation software to evaluate existing and proposed alternative conditions. Access management principles were applied to the proposed alternatives.
09/13 - 04/14	S.P. 700-99-0477 Jefferson Hwy. Signal Design (Baton Rouge, LA) Ms. Ferlito designed traffic signal plans for 11 intersections along Jefferson Highway between College Drive and the I-12 On Ramp in Baton Rouge. Design included traffic data collection, traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. Design including traffic signal synchronization signal timing and pedestrian signal timing. She prepared estimated quantities, preliminary and final signal construction plans, and specifications.
03/05 – 11/05	Airline Hwy Widening SPN 700-99-0332 (Baton Rouge, LA) Brin designed 8 traffic signals as part of the Airline Hwy. widening project in Baton Rouge. Her design included traffic data collection, traffic signal equipment, signal synchronization timing, fiber communication, storage length calculations based on queues analyses, special provision specifications, quantities, and cost estimate. This project included fiber design to be the first Baton Rouge project to connect video surveillance images and traffic controller information to the ATM / EOC.
02/03 - 01/04	EBR Traffic Signal Systems Phases IV and V SPN 700-17-0172 (Baton Rouge, LA) Brin was the project engineer for the design of 66 signalized intersections on eight arterials in Baton Rouge which included traffic data collection, traffic signal equipment, pedestrian crosswalk equipment, emergency vehicle and railroad preemption equipment, fiber interconnect equipment as well as traffic signal synchronization. Brin prepared traffic signal construction plans, estimated quantities, and specifications.

Firm emp	ployed by Vectura Consul	ting Services,	LLC			
Name	Laurence Lucius Lambert, II, F	PE, PTOE, PTP		Years of relevant experience with this employer	8	
Title	Principal			Years of relevant experience with other employer(s)	18	
Degree(s	s) / Years / Specialization		B.S./	1997/Civil Engr. M.S./2006/Civil Engr. (Transportation focus) M.	B.A./2010	
	egistration number / state / exp	oiration date	PE.0	029901 / LA / 3/31/2024		
Year	2001	Discipline	Civi	1		
registered						
	ole(s) / brief description of responsib	bilities	Traff	fic Control Design, Traffic Signal Analysis and Design / TMPs / Pe	er Reviews	
Experienc	Experience and qualification	ons relevant to	the pr	oposed contract; i.e., "designed drainage", "designed girders	s", "designed intersection",	
e dates	etc. Experience dates should	ld cover the <mark>ye</mark>	ars of	experience specified in the applicable MPR(s).		
mm/yy- mm/yy						
12/21 –	H 012030 5 US 371 KCS RR Ox	vernasses HRI (W	lehster	Parish, LA) Laurence was the project manager for the design of permaner	nt navement marking and signing	
current				also participate in the QC of the sequence of construction and detour rout		
06/21 -				e, LA) Laurence was project manager for a traffic study to evaluate trail c		
02/22	required DOTD approval. The tra	affic study include	d traff	ic data collection, safety analysis, existing conditions analysis and alte	ernative analysis. Laurence used	
				IWA guidance to develop the most effective trail crossing alternatives.		
07/19 -				ment (Baton Rouge, LA) At the beginning of the program, Laurence		
current				ss from the travel demand model to prioritize the MOVEBR project list. L		
02/21 -				urs of delay. Laurence also provided peer review for the traffic studies for Louisiana) Laurence was the lead traffic engineer for a Level 2 Traffic N		
03/21				luded a safety strategy that included a CAT Scan, LOS determination u		
03/21	recommendations based on a que				anizing Chris data, faire crosure	
04/18 -				nzales (Ascension, LA) Laurence provided a Quality Control review of the	he temporary construction and	
12/21	sequence of construction plans. Vectura also provided Quality Control review of signing and striping plans at 30% and 60% plan sets to ensure the roundabouts					
				9 and the MUTCD details on roundabouts.		
04/18 -				on Parish, LA) Laurence provided a Quality Control review of the tempor		
12/21				atrol review of signing and striping plans at 30% and 60% plan sets to ens	sure the roundabouts conformed	
02/20 -	to the Pavement Markings Details Sheet PM-09 and the MUTCD details on roundabouts. College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA) Laurence was the project manager to develop Chapter 1 (Data					
02/20 - 09/21						
03/21	Collection), Appendix A (Initial Data Collection), and Appendix B (Final Data Collection) for proposed improvements College Drive. Since the I-10 interchange was included in the study, approval from DOTD was required. Vectura collected, turning movement counts, 85% speed data, travel time runs, queue measurements,					
s.	field observations, verification of Traffic Signal Inventories, and bicycle / pedestrian / transit observations.					
10/17 -	H.013025 LA 182 (University A	venue) Corridor	Plann	ing Study (Lafayette, LA) Laurence was the lead transportation engineer		
10/18				l mobility for pedestrian, bicycle, and transit users. Laurence collected a		
		movement counts as well as pedestrian and bicycle counts. Laurence coordinated with the Acadiana Planning Commission to develop growth rates and design				
	year volumes. Laurence then performed Highway Capacity Manual analysis for 5 intersections along the intersection analyses for the signalized and roundabout					

	controlled alternatives. Included in the study was a safety analyses of five intersections and the intermediate segments. Based on the results of the safety analysis,
00/16	Laurence provided design criteria to the design team for improving safety of pedestrians, bicycles, and vehicles.
09/16 -	H.004957.5 I-12 To Bush - LA 3241 (I-12 – LA 36) Corridor Study (St. Tammany Parish, LA) Laurence was the lead traffic engineer for a DOTD traffic study
04/17	for the new LA 3241 alignment with the purpose of obtaining both existing and projected future traffic variables in accordance with standard operating procedures
	typically performed in these types of analyses. Laurence worked closely with the NORPC and District 62 to develop design year volumes using data from the travel
	demand model. The traffic study examined concepts that improved the safety and efficiency of the roadway consistent with the latest DOTD policies related to access
	management that included the I-12 interchange ramps. Laurence collected 7-day, 24-hour counts w/ classification on mainlines, turning movement counts for
	morning and evening peak periods and speed data for mainlines. Laurence also developed a VISSIM traffic simulation model of the preferred alternative.
07/14 -	FHWA Intersection & Interchange Geometrics: Innovative Design Considerations for All Users (Multiple States) FHWA funded workshops for state
01/17	Departments of Transportation that were interested in learning more about innovative intersection & interchange design. Laurence presented either part or all the
	one-day or two-day workshops that included modules on the overall policy and goals of FHWA for these types of innovations, roundabouts, roundabout interchanges,
	DLTs, DDIs, J-turns / Superstreets, MUT, Thru-turns, quadrant, and the assessment tools (CAP-X) available to compare the measures of effectiveness of each
	innovation. Each module includes sections on design, traffic operations, safety and multi-modal accommodation Laurence has presented for the Alabama, Kentucky,
	Ohio, Oklahoma, Massachusetts, Tennessee, and Texas Departments of Transportation under this contract.
06/16 -	H.004490 Stage 0 Roundabout Studies, (Lafayette Parish, LA) Laurence performed a Stage 0 Feasibility Study for roundabouts at ten intersections in the
09/17	Lafayette area. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Laurence, along with Brin,
	collected 7-day, 24-hour counts w/ classification, turning movement counts for peak periods and speed data for mainlines. Once the traffic data was collected,
	Laurence performed traffic signal warrants analyses, performed a Sidra unsignalized, signalized and roundabout analyses. After the analyses were completed,
	Laurence developed a report that captured the results.
03/10 -	S.P. No. 700-09-0171 Stage 0 and 1 Study I-49 Inner City Connector (Shreveport, LA) This 3.5-mile route will connect existing I-49 / I-20 interchange to the
11/11	proposed I-49 / I-220 interchange. After completing the Stage 0 , Laurence was the project manager for the traffic analyses for the EA phase. The total traffic analyses
	effort included over 30 TransCAD Models, 20 interchanges and 70 intersections. Analyses included signalized and unsignalized intersections, basic freeway
	segments, freeway merge / diverge segments and freeway weaving segments at the studied intersections and interchanges. This project included performing both
	Interchange Modifications Reports (IMRs) and Interchange Justification Reports (IJRs).
11/09 -	I-12 at Millerville Road Interchange Modification Request (Baton Rouge, LA) The scope of this project consisted of preparing and obtaining environmental
08/10	clearance for the proposed future roadway and signal improvements at the I-12 / Millerville Road Interchange. Laurence prepared documents and obtained
	environmental clearance for all on-site work and held public meetings. Laurence developed all HCS analyses and a micro-simulation model. Laurence also
	participated in several public meetings to satisfy the environmental clearance requirements.
09/06 -	EBR 06-CS-HC-00012 Downtown Baton Rouge Signal Project (Baton Rouge) Laurence was the Project Manager to develop construction plans to upgrade 29
09/07	signals in downtown Baton Rouge as part of the EBR Green Light Plan. Laurence developed a design study that included traffic data collection, handicap ramp
0.4/0.4	recommendations, countdown pedestrian signals and internally illuminated street name signs.
04/04 -	Stage 0 I-10 at Pecue Lane Interchange Justification Study (Baton Rouge, LA) Laurence was the lead traffic engineer for a Stage 0 traffic study analyzing the
09/06	proposed interchange at I-10 and Pecue Lane. Laurence developed current and future traffic volumes based on the CRPC TransCAD model growth rates. Using
	HCS, Laurence analyzed signalized and unsignalized intersections, basic freeway segments, freeway merge / diverge segments and freeway weaving segments.
	Laurence also developed a micro-simulation model in both VISSIM and TSIS.
04/04 -	I-10 Frontage Roads, Picardy Interchange, Bluebonnet Siegen (Baton Rouge, LA) Laurence provided the traffic analysis for a highly unique reconfiguration of
12/04	interstate ramps that included frontage roads and an overpass of I-10 for new an interchange at Picardy. HCS and VISSIM were the primary analysis tools for the
	analysis. As part of the design team that developed the concept for this project, Laurence performed feasibility studies , developed design criteria, and coordinated
	with city, state and federal agencies for approvals as well as gathered public input. Laurence prepared traffic signal timings and designs that included cost estimates
	for the project.

Firm emp	ployed by Vectura Consultin	g Services, LI	C				
Name	Reece Rodrigue, PE, PTOE, R	SP1		Years of relevant experience with this employer	3		
Title	Project Traffic Engineer			Years of relevant experience with other employer(s)	7		
Degree(s) / Years / Specialization		B.S.	/ 2013 / Civil Engineering			
	egistration number / state / exp	oiration date	PE. 0	0042074 / LA / 3/31/2024			
Year registered	2017	Discipline	Civi	1			
Contract responsib	role(s) / brief description of		Proje Revi	ect Engineer for Traffic Control Design, Traffic Signal Analysis arews	nd Design / TMPs / Peer		
Experien ce dates (mm/yy-mm/yy)	Experience and qualification		the pr	roposed contract; <i>i.e.</i> , "designed drainage", "designed girder experience specified in the applicable MPR(s).	's", "designed intersection",		
04/21 - current	project included a traffic design	report, prelimina	ry and	on Rouge, LA Reece is a project engineer for the design of traffic signal final plans for traffic signals that included traffic signal layout, fiber in the design also included traffic signal synchronization signal timing and p	nterconnect layout, fiber splicing		
07/21 – current	Reece has reviewed the signal m Parish and the Contractor conduc	ast arm shop drav	vings to	VB (Baton Rouge) Reece is part of the team responsible for Construction assist the City-Parish of Baton Rouge in accepting the manufactured point pole foundation locations.	les. Reece, with the DOTD, City-		
01/21 - 05/21	with reviewing the ITS plans fo	r 15 sites along I	-10 wh	Acadia, and Jefferson Davis Parishes) Reece was a member of the subtere CCTV cameras were being installed. Reece was responsible for mest by using DOTD's Bid Tabulation and Cost Estimating Tool.			
09/20 - 12/21							
09/20 – 12/21							
04/20 - current	H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project (Belle Chasse) Reece is the project engineer who designed the temporary traffic signal for the intersection of LA 23 at Engineers Rd. The design of the temporary signals is set for eight phases of construction per the anticipated sequence of construction. Temporary pole location and heights were recommended for placement for use for all construction phases. Vehicle clearance interval calculations were conducted for each phase in accordance with DOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan, which was also used in planning for the permanent and temporary signal timing plans. Reece also produced permanent signal plans for the LA 23 intersections at Engineers Road and at Burmaster Street. He evaluated STOP bar locations, calculated vehicle, and pedestrian clearance intervals, designed the railroad preemption sequence for both at-grade crossings, designed the wiring layout, and developed the interconnect plan. Reece maintains						

	crash data at all intersections in the study scope. He conducted travel time runs. He created a model with existing traffic signal timing information using Synchro 8 Software. He recommended traffic signal pedestrian clearance times and yellow and red clearance times for each intersection. He used MicroStation V8i when designing traffic signal plans in DOTD's TSI format.
02/15 — 12/15	H.011646 Retainer Contract for DOTD District 02 Traffic Signal Inventories - Nola 3 Reece served as the lead engineer in the production of the traffic study for the District 02 Traffic Signal Inventories. The objective was to effectively correct the progression of traffic through the US 90 (Broad St) corridor. He reviewed vehicle
05/17	Loyola Dr. Interchange. He was an active member in collecting vehicle travel time data and processing the data. He also aided in collecting vehicle queues at the study intersections. He also assisted in the Vissim model calibration.
10/16 -	Loyola Interchange Modification Request, Kenner, LA Reece was a team member in the production of an Interchange Modification Report (IMR) for the I-10 at
01/16 – 11/17	Ochsner Main Campus Traffic Signals (Jefferson Parish) Reece served as a design engineer for the traffic signal plans for the two Ochsner Main Campus access traffic signals with US 90 (Jefferson Hwy). The goal of the design was to implement updated pedestrian timings as well as optimize progression through the US 90 corridor. He reviewed traffic data and assigned time of day coordination timing parameters for the two intersections so that they may be included in the coordinated system west of the intersections. He used TruTraffic to determine the appropriate offset parameters so that vehicles may progress efficiently through the coordinated system. Plans for the two intersections were drafted in the form of DOTD's latest version of the TSI format. He was responsible for estimating construction quantities using DOTD's 2016 Spec Item list.
02/16 - 12/16	H.005733.5 US 190 Superstreet Task Order (St. Tammany Parish) Reece was a team member responsible for the layouts for the US 190 Superstreet signal designs. He created the preliminary plans using CAD software program MicroStation V8i. He aided in the technical design of each intersection. He conducted field inspections to verify locations of existing equipment as well as observing the area for feasible proposed utility locations. He attended project team meetings to discuss the project details as well as the plan-in-hand walk-through.
07/19 – 12/19	Burgess Avenue at Duff Road Traffic Signal Design, Walker, LA Reece was responsible for the design of a fully actuated signalized intersection in the city of Walker, LA. The traffic signal was determined to meet signal warrants upon completion of the Foxglove subdivision in Livingston Parish, LA. Plans included road widening, signal face indication schedule, signal sequence chart, sign schedule, detector schedule, controller timing, wiring diagram, and free operation phasing diagram. Reece met with city officials to discuss the feasibility of constructing a traffic signal as opposed to other alternative measures for improving the intersection.
02/20 - 09/21	College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA) Reece was the task leader for organizing and formatting the data collection of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
04/21 - current	MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This project included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.
	correspondence with the fellow design engineering team for product consistency. In addition, Reece reviewed and approved shop drawings that were submitted by the contractor.

Firm emplo	oyed by Vec	tura Consulting Se	rvices, LLC				
Name	Kristen Ga	hagan Farrington,	PE, PTOE, RS	P1	Years of relevant experience with this employer	2	
Title	Project Trat	ject Traffic Engineer			Years of relevant experience with other employer(s)	7	
Degree(s) /	Years / Spe	cialization		B.S.	/ 2013 / Civil Engineering		
Active regi	stration num	ber / state / expirat	tion date	PE. (0042785 / LA / 3/31/2025		
Year regist		2016	Discipline	Civi			
Contract ro	ole(s) / brief	description of respo	onsibilities		ect Engineer for Traffic Control Design, Traffic Signal Analysis Reviews	and Design / TMPs /	
Experience dates (mm/y mm/yy)	ry- Experimers	rience and qualific ection", etc. Exper	cations relevan rience dates sh	t to t ould c	he proposed contract; <i>i.e.</i> , "designed drainage", "designed the vears of experience specified in the applicable M	ied girders", "designed PR(s).	
12/21 – curr					ebster Parish, LA) Kristen was the project engineer to design permation. She will also participate in the QC of the sequence of construction		
04/21 - curre	and tr						
08/21 – 04/2	study to volum Once to Unsign	H.013267 Downtown to Scotlandville Parkway Trail Safety Enhancement Study (Baton Rouge, LA) Kristen was a project engineer for a design study to evaluate the recommended street crossing treatments of the trail at eight locations. The project consisted of collecting vehicular speed and volume data at the proposed trail crossings. Geometric field checks were also performed to determine if any hazards to pedestrians or cyclists existed Once the field data was collected and analyzed, appropriate crossing treatments utilizing the FHWA STEP Guide for Improving Pedestrian Safety at Unsignalized Locations were developed that included Rectangular Rapid-Flashing Beacons (RRFB) and Pedestrian Hybrid Beacons (PHB's). Currently, Vectura is developing plans for the PHB's at four locations which will be the first implementation of PHB's in the Baton Rouge area.					
02/20 – 09/	/21 MOVI Tasks	MOVEBR College Drive Enhancement Project (Baton Rouge, LA) Kristen assisted with the data collection task of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.					
6/19 - 2/21	H.013 study t were p numbe exhibit	H.013459 US 167 Improvements Stage 0 Elsie Street to Gilbert Street (St. Landry Parish, LA) Kristen served as project manager for a Stage 0 study to evaluate the addition of a third lane to US 167 from Elsie Street south to a point past Gilbert Drive. Environmental impacts and cost estimates were prepared, as well as a benefit-cost analysis of all improvements considered. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis. Designed high-level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.					
6/19 - 2/21	H.013460 US 167 Improvements Stage 0 Enola Street to Ross Road (Evangeline Parish, LA) Kristen served as project manager for a Stage 0 stude of a two-lane road to remove a curvilinear section of US 167 from Enola Street near LA 748, southeast for approximately 1.2 miles. The study compare connecting existing property owners to a new roadway with driveways or intersection of old roadway. Environmental impacts and cost estimates we prepared. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSI existing safety analysis, and No-Build Analysis, as well as a benefit-cost analysis. Designed high-level concept exhibits and a comparison matrix determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes						

04/19 - 6/21	H.013817.1 LA 117 Improvements Stage 0 (Vernon and Natchitoches Parishes, LA) Kristen served as project engineer responsible for a Stage 0
	study for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study evaluated the impacts of correcting deficient vertical and horizontal geometry
	along the corridor, widening for the addition of shoulders, and adding passing lanes and turn lanes at strategic locations along the corridor. Kristen was
	responsible for performing the safety analysis including crash rate number method, over-representation, CAT Scan quality assurance, HSM existing
	safety analysis, and No-Build Analysis. Kristen designed high-level concept exhibits, evaluated environmental impacts, and prepared high level cost
	estimates and comparison matrices to determine which preliminary alternatives best meet the purpose and need of the project. Kristen compiled all
	findings in the Stage 0 report and coordinated with stakeholders and local agencies to ensure the purpose and need of project is met.
03/19 - 11/19	H.012311 LA 429 Connector Stage 0 (Ascension Parish, LA) Kristen was the task leader for the preparation of a Stage 0 study to evaluate alignments
	for a limited-access corridor (LA 429) near I-10, between LA 30, LA 73, and US 61. Two alternatives for the widening and reconstruction of LA 429
	were evaluated. The scope consisted of stakeholder and public meetings, site visits and data collection, phasing of alternative development for the
	corridor, scope and budget checklists, and an opinion of probable cost to prepare the Stage 0 Report. Kristen served as the civil engineer responsible for
	designing high level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need
	of the project. Compiled meeting agenda materials and minutes, coordinated with interchange study consultants for a cohesive project, and wrote report.
11/18 - 3/21	H.013322 LA 3040 Feasibility / Safety Study Stage 0 (Houma, LA) Kristen served as project engineer for a study to identify safety and operational
	issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to evaluate reasonable alternatives to address any deficiencies
	discovered. Kristen was responsible for compiling a data collection plan for submittal to DOTD, including count locations, determined peak periods,
	and peak hours. Kristen performed peak period observations in the field and geometric field checks, as well as unmet demand observations and
	calculations. Kristen prepared TMC figures, as well as performed existing analysis in Vistro. Compiled all data collected into Appendices A and B per
	the DOTD Traffic Process and Report and wrote Chapter 1 of report. Kristen represented the project at stakeholder meetings to discuss project status.
04/18 - 04/19	H.011243.1 I-49 at US 190 and LA 31 Interchange Improvements Stage 0 (St. Landry Parish, LA) Kristen was the project engineer responsible for
	crash and safety analysis, report writing, planning, and designing for this Stage 0 Study to evaluate alternatives to improve traffic operations and safety
	at the I-49 interchanges with US 190 and LA 31. Crash and safety analysis was performed using the LADOTD CAT Scan tool and IHSDM, and line and
	grade was prepared to DOTD Design Standards for various corridors, including arterial collectors and freeway ramps. Close coordination with traffic
	engineer ensured maximum improvement of safety and operations given limited right-of-way and utility conflicts along the corridors.
09/17 - 09/18	H.011160 LA 73 Corridor Study Stage 0 LA 74 to LA 621 (Ascension Parish, LA) Kristen was the designer responsible for concept development,
	report writing, and impact analysis for a Stage 0 study. The purpose of the study was to evaluate conceptual alternatives to improve capacity and
	operations along the LA 73 corridor and its connecting transportation network. The scope included the evaluation of three interchange configurations
	for the interchange of I-10 at LA 73 in conjunction with two corridor alternatives for LA 73, resulting in six different alternatives for which line and
	grade, impacts, and high-level cost estimates were prepared.
11/16 - 07/17	H.001271 Cane River Bridge Church Street Route LA 1-X Environmental Assessment Kristen was the project engineer responsible for assisting
	with the site visits, data organization, analysis of permanent alternatives and traffic control alternatives, and traffic report to aid in the delivery of
	an environmental assessment for the Cane River Bridge Replacement

Firm emplo	Firm employed by Vectura Consulting Services, LLC									
Name	Ronald St. Angelo	Years of relevant experience with this employer <1								
Title	Construction Specialist	Years of relevant experience with other employer(s) 48								
Degree(s) /	Years / Specialization	High School Diploma / 1975								
Active regis	stration number / state / expiration date									
Year registe	ered Discipline									
Contract rol	le(s) / brief description of responsibilities	Senior-level Construction Specialist								
Experience		nt to the proposed contract; i.e., "designed drainage", "designed girders", "designed								
dates (mm/yy mm/yy)	y- intersection", etc. Experience dates show	ould cover the <u>years of experience</u> specified in the applicable MPR(s).								
02/03 – 04/2	construction issues in the field such as utility conflicts and traffic signal issues. He was a project manager for numerous traffic signal related projects and oversaw a team of field technicians for signal related construction projects. He was an estimator for bidding traffic signal / ITS equipment projects. Ronnie worked extensively throughout the state of Louisiana on hundreds of local, state, and federally funded traffic signal / ITS projects, to include major metropolitan areas, such as Greater New Orleans, Baton Rouge, and Lafayette. During this time, Ronnie worked on projects that built intersections from the ground up, to include base / signal installation, signal control electrical installation, and signal termination. Read and interpreted construction plans to ensure proper installation requirements were met for span wire and mast arm installation. Extensive experience in installing all forms of traffic signals during all construction phases. Assisted site inspectors with									
07/75 – 01/0	confirming mast arm foundation locations; drawing reviews; change requests; and verifying controller data collection and timing checks. East Baton Rouge Traffic Engineering Division Ronnie was a certified IMSA Level 1 & 2 Technician while employed at the City of Ba Rouge. Ronnie performed numerous construction tasks in relation to traffic signals within East Baton Rouge Parish. Construction include traffic signal poles, signal heads, signal wiring, vehicle detection, traffic signal controller / cabinet power service. In the earlier part of career, the traffic signal controllers consisted of mechanical parts. As time progressed, the controller evolved to steady-state technology addition, Ronnie performed traffic signal tasks related to maintenance after damage from collisions or extreme weather. While employed the city, Ronnie was tasked with maintaining over 300 signals that included DOTD intersections. Ronnie started his career at the City of Ba Rouge as a Technician, then Traffic Signal Technician, then Foreman and finally a supervisor. Ronnie was also responsible for programm traffic signal controllers while at the City.									

7.		D: : 1E :				-			
CONTROL CONTRO		Digital Engineeri	2-190			20			
Name	Frank	Liang, P.E., PTO	E		Years of relevant experience with this employer	28			
Title	Sr. Vice	President, Princi	pal		Years of relevant experience with other employer(s)	0			
Degree(s) / Years / Specialization				BS	/ 1994 / Civil Engineering				
Active registration number / state / expiration date				PE.0028549 / LA / Exp. 03/2024; PTOE #3362 / LA / Exp. 11/2024					
Year registe	ered	1993	Discipline	Civil Engineering					
Contract role(s) / brief description of responsibilities				SME for Roadway, Geometrics, Constructability Review					
5-3-3-4-7-5-8-900 (4-3-6-3-6-3-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6-3-4-6			- East Style - Education - Francisco - Fra	Meets MRP No. 1, 2, 3					
Mr. Frank Liang oversees the Transportation Division at Digital Engineering. His experience includes transportation engineering, construction management, civil engineering, and project management for the LADOTD, the Regional Planning Commission, and local government agencies. Frank has been involved with SRTS/SRTPPP and LRSP Programs – which evolved into LADOTD Safety Design IDIQ – since the inception of the program nearly 15 years ago. He has served as lead engineer for traffic and transportation analysis, safety studies and design improvements in accordance with ASSHTO, MUTCD and									
					schedule, and progress of all projects within the company.				
Experience of mm/yy-mm/	Control of the Contro				oposed contract; <i>i.e.</i> , "designed drainage", "designed girders' <pre>Experience</pre> specified in the applicable MPR(s).	', "designed intersection".			
01/18 - 03/2	0 B	Bridge Inspections, Load Ratings and Repairs for City of New Orleans, LA							

Experience dates	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection",
mm/yy-mm/yy	etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/18 - 03/20	Bridge Inspections, Load Ratings and Repairs for City of New Orleans, LA
	Sr Tech Advisor for the development of the plans and specifications for the repair of five off systems bridges. He monitored daily
	construction activity and addressed issues as they arose. During construction, he evaluated a value engineering option which utilized
	new pile repair technologies utilizing epoxy resins, synthetic carbon fiber and fiberglass mats to repair the damaged piles. For this
	synthetic repair, he had to evaluate the theory and bridge load rating calculations developed for this system to ensure compliance with
	LADOTD load rating requirements.
01/15 - 05/19	LADOTD H.0011276: New Orleans Airport Connector Road North Terminal Access Road, Kenner, LA
	Sr Tech Advisor for design of new Access Road to the new North Terminal. Scope included the construction of a 4 lane divided
	concrete roadway along existing Aberdeen Street to the Airport property. Improvements included the removal of the fire station for
	the installation of more improvements (lanes) in addition to what was already proposed. Provided value engineering services resulting
	in a change order to the existing road construction project and to redesign the roadway geometry, drainage, lighting, and traffic signal
	system for the installation of additional lanes south of Veterans.
03/04 - 06/13	Huey P. Long Bridge Improvements, Jefferson DPW, Jefferson Parish, LA
	Project Manager responsible for evaluation of traffic impacts to local infrastructure as part of the widening of the existing bridge and
	reconstruction of roadway approaches/intersections. He performed value engineering for the proposed alignments of approaches and
	major interchanges for both banks of the river. Keeping the State's design guidelines and requirements in mind, these alignments were
	reviewed for the viability of the development of adjacent properties upon completion of the project, property acquisitions, and access
	to adjacent properties. He concluded that significant changes were needed to the westbank approach and proposed a new alignment.
	Upon review by all project stakeholders, this proposed alignment was ultimately adapted by LADOTD.

Firm employe	ed by: Digital Engineering			
Name A	Alan Krouse, P.E.		Years of relevant experience with this employer	3
Title S	Senior Project Manager		Years of relevant experience with other employer(s)	43
Degree(s) / Ye	ears / Specialization	BS / 1	977 / Civil Engineering	
	ntion number / state / expiration date	PE.00	19391 / LA / Exp. 09/2024	
Year registered			Engineering	
	s) / brief description of responsibilities		for Roadway, Geometrics, Constructability Review Meets M.	
	3 0 1		nagement of complex infrastructure projects, and QAQC. Hi) -
The state of the s		C. Committee and C.	vate consulting companies. As a Coordinating Squad Leader is	A SECURITY OF THE PROPERTY OF
			(LADOTD), Alan managed projects in excess of \$100 million	
		· Control of the Cont	areas. Following his tenure at LADOTD, Alan entered th	
	•	_	managing transportation projects for LADOTD and other pu	~
A CONTRACTOR OF THE STATE OF TH	그리트 아이들은 아이들은 아이들은 이렇게 되었다. 이 그리트를 바라지 않는데 그 아이들은 그리트를 받는데 그리트를 하는데 그리트를 하는데 그리트를 하는데 그리트를 하는데 그렇게 되었다.		lies, design of safety improvements, Environmental Inventor	ies, along with
Experience date			Louisiana Complete Streets Advisory Council.	2 ((1) 1
mm/yy-mm/yy			roposed contract; i.e., "designed drainage", "designed girder	
	intersection, etc. Experience dates should	na cove	er the <mark>years of experience</mark> specified in the applicable MPR(s).	
04/14 - 12/19	LADOTD: US 425 Roundabout Design, S	Sigma (Consulting Group, Inc., Rayville, LA	
			surance of design submittals, drainage, and geometric reviews	
			5 and Grimshaw Street and Christian Drive and relocation	of an existing
			ntity calculations, cost estimates, and drainage design.	
00/13 - 01/16				
			assurance reviews for all design submittals for environme	ental clearance
			well as roadway design and plans, and right-of-way plans.	
03/88 - 07/91	LADOTD: 2 miles of new five-lane urban			
			w five lane road with curb and gutter and subsurface drainage	
			norizontal and vertical geometric design, development of ro	
			meet current safety design requirements, design of all road	
	LADOTD design specifications and general	-	g plans, calculation of all quantities for bidding purposes	s according to
	LADO 1D design specifications and general	pran p	тераганоп.	

04/89 - 10/92	LADOTD: 1.2 miles of new five-lane urban roadway on US 79 in Minden, LA
	The scope of this project was for the design of a new five lane section in the town of Minden. The design included all intersection
	improvements. For the new roadway Mr. Krouse performed all horizontal and vertical geometric design, development of
	roadway typical sections, design of all cross section elements to meet current safety design requirements, design of all roadway
	drainage, development of construction signage and phasing plans, calculation of all quantities for bidding purposes according
	to LADOTD design specifications and general plan preparation.
08/90 - 10/93	2 miles of new city streets adjacent to and under I-49 in Alexandria, LA
	The scope of this project was for the design of two access roads parallel to I-49 which was elevated through town along with
	five crossroads. Four of the crossroads required an underpass below the existing railroad. All roads were multi-lane curb and
	gutter with subsurface drainage. For the new roadways Mr. Krouse performed all horizontal and vertical geometric design,
	development of roadway typical sections, design of all cross-section elements to meet current safety design requirements,
	design of all roadway drainage, development of construction signage and phasing plans, calculation of all quantities for bidding
	purposes according to LADOTD design specifications and general plan preparation.
07/96 - 10/98	, o .
	The scope of this project required the design of a rural four lane highway with open median and ditches to replace an existing
	two-lane highway. For the new roadway Mr. Krouse performed all horizontal and vertical geometric design, development of
	roadway typical sections, design of all cross-section elements to meet current safety design requirements, design of all roadway
	drainage, development of construction signage and phasing plans, calculation of all quantities for bidding purposes according
	to LADOTD design specifications and general plan preparation.
10/95 - 11/99	· · · · · · · · · · · · · · · · · · ·
	The scope of this project required the design of new Interstate access ramps and frontage roads to provide connectivity. The
	ramp construction required the reconstruction of the interstate acceleration and deceleration lanes, the gore areas on I-10 along
	with ramps and frontage roads. For the new roadway Mr. Krouse performed all horizontal and vertical geometric design,
	development of roadway typical sections, design of all cross section elements to meet current safety design requirements, design
	of all roadway drainage, development of construction signage and phasing plans, calculation of all quantities for bidding
	purposes according to LADOTD design specifications and general plan preparation.

Firm employ	yed by: Digital Engineering	Ş					
Name K	urt Evans, P.E., FITE, FA	CEC		Years of relevant experience with this employer 30			
Title C	hief Executive Officer, Prince	eipal		Years of relevant experience with other employer(s)	45		
Degree(s) / Y	Years / Specialization		BS / 1	979 / Civil Engineering			
Active regist	ration number / state / expira	tion date	PE.00	19391 / LA / Exp. 09/2024			
Year register	red 1983	Disciplin	Civil 1	Engineering			
		e					
	 			for Roadway, Geometrics, Constructability Review Meet			
				perience in roadway design and construction. He held lea			
				, and Florida, overseeing project management, quality cor			
				ineering, program management, disaster recovery, and ext			
				Crossing No 2 Bridge and Interstate 49 Opelousas to Sh	-		
STATE GROWTH STATE OF SHORT SHORT STATE OF SHORT SHORT SHORT STATE OF SHORT SH	es work on complex interstat ransportation field.	e systems, m	ajor hig	ghways, state routes, and bridges across multiple states, m	aking him a valuable		
Experience			to the	numbered contracts in "decisioned during any "decisioned	Laindana" "dagian ad		
dates (mm/yy-				proposed contract; <i>i.e.</i> , "designed drainage", "designed ver the years of experience specified in the applicable M			
mm/yy)	intersection, etc. Experie	nce dates sn	ouiu co	iver the <u>years of experience</u> specified in the applicable ive	r K(8).		
Constitution (Constitution Constitution Constitution Constitution Constitution Constitution Constitution Const							
01/15 -	LADOTD H.0011276: Nev	w Orleans A	irport	Connector Road (Segment A) North Terminal Access	Road, Kenner, LA		
05/19	Senior Technical Advisor,	QAQC for d	lesign o	of new Access Road serving as the official entrance to t	he Louis Armstrong		
		The state of the s		h Terminal. Scope included the construction of a four-la			
				Airport property. Improvements included the removal of			
) in addition to what was already proposed. DE provid			
				sting road construction project, requiring DE to redesign			
				system for the installation of additional lanes south of Vet			
01/95 –				Villiams Boulevard Intersection Improvements, Kenn	0.1		
07/97	_		_	g diamond interchange at I-10 and Williams Boulevard t			
02/04				the urban interstate system and major urban arterial road	way crossings.		
03/04 -				on Parish DPW, Jefferson Parish, LA	1 7		
06/13				he widening of the existing Huey P. Long Bridge crossin			
				s on both banks of the river. During development of the			
				eture and traffic operations including compilation of VIS	SIIVI traffic model to		
	simulate niture traffic cond	mons with th	ie prop	osed improvements in place.			

Page 33 of 52

Firm Experience:

Firm name	TriCoeur Services, L.L.C.				Past Performance Evaluation Discipline(s)* V			Value Engineering		
Project name I-49South @ Verot School Road						Firm responsibility (prime or s			rime or sub?)	Prime
Project number Project No.: H.011235.5 Owner's name LaDOTD							5000	1 29		
Project location Baton Rouge, Louisiana Owner's Project Manager Mr. Charles Nickel							l, PE			
Owner's address	ss, phone, email	Value Engir	neering D	irector,	LaDOTD,	1201 Capitol	Access Rd, Bate	on Rou	ige, LA 70802	2,
		Ph: (225) 37	9-1078;	Email: (Charles.Nic	ekel@la.gov			//	
Services commenced by this firm 06/23				Total	Total consultant contract cost (\$1,000's)			90		
Services completed by this firm 07/23				Cost of consultant services provided by this firm (\$1,000's)			000's) 65			

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

A VE Workshop was facilitated with TriCoeur as Prime Consultant and supported by Vectura. TriCoeur provided VE Team Lead, Structural/Bridge/Geotechnical, Process Review, and QA-QC/Risk Management and efficiently collaborating with LaDOTD throughout the Value Engineering Workshop. Recommendations included alternative interchange framing configurations, phase constructions, evaluations of MSE wall, drilled shaft, and driven pile foundations, and elevated intersection performance. Review also considered constructability, vibration tolerance, and anticipated cost considerations for installations in close proximity to BNSF railway.

During the course of the VE workshop, the team developed 15 VE Alternatives and Design Suggestions. It was estimated that \$15

million savings might be reasonable to expect from the implementation of these alternatives.

Consultant Team Members:

Ramesh Kalvakaalva, PE, CVS – VE Co-Facilitator (TriCoeur)

Les Thomas, PE, CVS - - VE Co-Facilitator (TriCoeur)

Barry P. Gahagan, PE – VE Task

Manager/Structural/Bridge/Constructability Team Member (TriCoeur)

Bruce Khosrozadeh, PE – VE Bridge/Geotechnical/Constructability Team

Member (TriCoeur)

Brin Ferlito, PE, PTOE – VE Planning/Traffic/Signals Team Member

(Vectura)

Aileen Foley, CPA – Administrative (TriCoeur)



Firm name	TriCoeur Services, L.L.C.				Past Performance Evaluation Discipline(s)* Valu			e Engineering	
Project name	ILA 3213: Gram	ercy Bridge I	Painting a	nd Rehabilitation	8	Firm responsibility (prime or sub			Prime
Project number Project No.: H.012066.5 Owner's name LaDOTD									-24
Project location Baton Rouge, Louisiana Owner's Project Manager Mr. Charles Nickel, Pl							, PE		
Owner's address	ss, phone, email	Value Engir	neering D	eering Director, LaDOTD, 1201 Capitol Access Rd, Baton Rouge, LA 70802					,
		Ph: (225) 37	79-1078; 1	Email: Charles.N	ckel@la.gov				
Services commenced by this firm				Total consultant contract cost (\$1,000's)			71		
Services completed by this firm				Cost of consultant services provided by this firm (\$1,000's)			60		

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

A VE Workshop was facilitated with TriCoeur as Prime Consultant. TriCoeur provided VE Team Lead, Structural/Bridge/Geotechnical, Process Review, and QA-QC/Risk Management and efficiently collaborating with LaDOTD throughout the Value Engineering Workshop. Recommendations included alternative methods for truss span damage repairs, concrete bulb tee approach span resetting, and bent fixity rehabilitations.

During the course of the VE workshop, the team developed 21 VE Alternatives and Design Suggestions. It was estimated that \$2 million savings might be reasonable to expect from the implementation of these alternatives.

Consultant Team Members:

Ramesh Kalvakaalva, PE, CVS – VE Co-Facilitator (TriCoeur)

Les Thomas, PE, CVS - - VE Co-Facilitator (TriCoeur)

Barry P. Gahagan, PE – VE Task Manager/Structural/Bridge/Constructability Team Member (TriCoeur)

Bruce Khosrozadeh, PE – VE Bridge/Geotechnical/Constructability Team Member (TriCoeur)

Aileen Foley, CPA – Administrative (TriCoeur)



Firm name	TriCoeur Services, L.L.C.				Past Performance Evaluation Discipline(s)* Value Engineering				ering	
Project name	I-10: LA 415 to	Essen on I-10	and I-12				Firm responsib	ility (prime or s	ub?)	Sub
	PHASE 1: West	of Washingto	n Street to	o Essen	ı			S. 50-	2.000	
Project number	Project No.: H.	004100.5	Owner's	name	LaDOT	D		20		
Project location	Baton Rouge,	Louisiana				Owner's Pro	ject Manager	Mr. Charles N	Nickel, PE	
Owner's address	ss, phone, email	Value Engin	eering Di	rector,	LaDOTD,	1201 Capitol	Access Rd, Bato	on Rouge, LA 7	0802,	
		Ph: (225) 37	9-1078; E	Email: C	Charles.Nic	ckel@la.gov				
Services commenced by this firm 02/21 To				Total consultant contract cost (\$1,000's)			75			
Services compl	eted by this firm		02/21	Cost o	f consultar	nt services pro	ovided by this fir	m (\$1,000's)	38	

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

A VE Workshop was facilitated with TriCoeur provided Bridge / Structural experience and efficiently collaborating with LaDOTD throughout the Value Engineering Workshop. The VE Workshop activities were undertaken during the week of February 08th – 12th, 2021. The subject of the study was the I-10: LA 415 to Essen on I-10 and I-12; PHASE 1: WEST OF WASHINGTON STREET TO ESSEN LANE; S.P. No. H.004100.5.

The construction cost estimate indicated that the project would be delivered at a cost of approximately \$715 million.

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

Consultant Team Members:

Ramesh Kalvakaalva, PE, CVS – VE Facilitator (TriCoeur)
Barry P. Gahagan, PE – VE Structural Team Member (TriCoeur)
Aileen Foley, CPA – Administrative (TriCoeur)



Firm name	TriCoeur Services, L.L.C.				Past Performance Evaluation Discipline(s)* Value E			ue Engine	ering	
Project name	Project name I-10 Overpass over US 165 & MP R.R					Firm responsibility (prime or sub?) Su			Sub	
Project number Project No.: H.002980.5 Owner's name LaDOTD								42		
Project location	Baton Rouge,	Louisiana				Owner's Pro	ject Manager	Mr. Char	les Nickel,	PE
Owner's address	ss, phone, email	Value Engir	neering D	irector,	LaDOTD,	1201 Capitol	Access Rd, Bate	on Rouge,	LA 70802,	,
		Ph: (225) 37	9-1078;]	Email:	Charles.Ni	ckel@la.gov				
Services commenced by this firm 05/2				Total	Total consultant contract cost (\$1,000's)			54		
Services completed by this firm 05/21 C				Cost	of consultar	nt services pro	ovided by this fir	m (\$1,000	's) 38	

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

A VE Workshop was facilitated by Prime with TriCoeur Bridge/Structural support and LaDOTD engagement for and efficient collaboration of the Value Engineering Workshop setting. The VE Workshop activities were undertaken during the week of May 10th – 14th, 2021. The subject of the study was the I-10 Overpass over US 165 & MP R.R; S.P. No. H.002980.5.

The construction cost estimate indicated that the project would be delivered at a cost of approximately \$53 million.

During the course of the VE workshop, the team developed 17 VE Alternatives and 14 Design Suggestions. In addition, 16 Alternatives were thoroughly explored, and it was found that they were neither cost effective nor technically feasible. One of the goals of the VE Team was to identify opportunities through which cost savings might be realized while indicating ways in which the resulting savings might be invested back into the project to realize added value. It was estimated that about \$4 million in cost avoidance might be reasonable to expect from the implementation of these alternatives.

Consultant Team Members:

Ramesh Kalvakaalva, PE, CVS – VE Facilitator (TriCoeur)
Barry P. Gahagan, PE – VE Structural Team Member (TriCoeur)
Aileen Foley, CPA – Administrative (TriCoeur)



Firm name	TriCoeur Services, L.L.C.			Past Performance Evaluation Discipline(s)* Value E			alue Engine	ering		
Project name	oject name I-20 MRB At Vicksburg Overlay and Rehab				Firm responsibility (prime or sub?)			ne or sub?)	Sub	
Project number Project No.: H.012739.5 Owner's name LaDOTD						-22				
Project location Baton Rouge, Louisiana					Owner's Project Manager Mr. Charle		arles Nickel	Nickel, PE		
Owner's address	Owner's address, phone, email Value Engineerin			irector,	LaDOTD,	1201 Capitol	Access Rd, Bate	on Rouge	, LA 70802	,
		Ph: (225) 37	79-1078;]	Email: (Charles.Ni	ckel@la.gov				
Services commenced by this firm			10/18	Total	tal consultant contract cost (\$1,000's)			54	Ž	
Services completed by this firm			10/18	Cost of consultant services provided by this firm (\$1,000's)			0's) 8			

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

A VE Workshop was facilitated by Prime with TriCoeur Bridge/Structural support and LaDOTD engagement for and efficient collaboration of the Value Engineering Workshop setting at the LaDOTD Headquarters in Baton Rouge along with a site visit to Vicksburg. The VE Workshop activities were undertaken during the week of October 15th - October 19th, 2018. The subject of the study was the I-20 MRB At Vicksburg Overlay and Rehab", State Project H.012739.5; Federal Project H012739.

The construction cost estimate indicated that the project would be delivered at a cost of approximately \$44 million.

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

Consultant Team Members:

Ramesh Kalvakaalva, PE, CVS – VE Facilitator

Barry P. Gahagan, PE – VE Structural Team Member (TriCoeur)

Aileen Foley, CPA – Administrative (TriCoeur)









Firm name	Vectura Consulting Services, LLC			Past Performance Evaluation Discipline(s)* CE&I						
Project name	EBR Computerized Traffic Signal, PH VB			/B		Firm responsibility (prime or st			b?) Sub)
Project number	H.007160		Owner's	name	DOTD	20		Mr.		
Project location East Baton Rouge					Owner's Pro	ject Manager	Desmond Sam,	PE		
Owner's address	Owner's address, phone, email 8100 Airline Highway, Baton Rouge, LA 70815, (225) 231-4123, Desmond.Sam@LA						A.GOV			
Services commenced by this firm			01/21	Total consultant contract cost (\$1,000's)			603.989)		
Services completed by this firm			current	Cost	Cost of consultant services provided by this firm (\$1,000's)			rm (\$1,000's)	93.368	

Vectura is a sub-consultant to provide traffic signal equipment inspection for 24 traffic signals under the following scope:

- 1. Signal Equipment Inspection (2 visits per intersection), Tracking the Sampling and Testing of required Traffic Signal Materials / Attend and Review Fiber Optic Test Results
- 2. Coordinate Review and Approval of all Shop Drawings
- 3. Provide Traffic Signal Support Services / Troubleshoot traffic signal equipment related problems such as foundation / utility conflicts / Field visits (10 months)
- 4. Assist in preparing Change Orders for DOTD / City Parish (2 Separate Forms)
- 5. Attend Monthly Progress Meetings Assist with Monthly Progress Meeting Agenda & Minutes (10)
- 6. Compile As-built Plans from Contractor
- 7. Final Inspection Field Visit to all intersections / Assist with developing punch list / Final Field Visit verification

Firm name	Vectura Consulting Services, LLC			Past Performance Evaluation Discipline(s)* Traffic &			CE&I		
Project name	Belle Chasse Bridge & Tunnel Replacement I			nent PP	PP Firm responsibility (prime or s		ib?) sub		
Project number	H.004791	2.5	Owner's	name	DOTD	587	S Kalin	12 10 20	No 48
Project location Belle Chasse, LA Owner's Project Manager Nickolas						Nickolas Olivie	as Olivier, PE		
Owner's address	Owner's address, phone, email 1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1133, Nicholas.olivier@la.gov						@la.gov		
Services commenced by this firm			04/19	Total consultant contract cost (\$1,000's)			Unknown		
Services completed by this firm			current	Cost of consultant services provided by this firm (\$1,000's)			irm (\$1,000's)	211.890	

Vectura is providing the traffic engineering services for the Belle Chasse Bridge & Tunnel Replacement Project for improvements along LA 23. Vectura is responsible for the following tasks:

- 1. Preliminary and final traffic studies
- 2. Temporary and final traffic signal plans
- 3. Assist the Prime with Traffic Management Plan (TMP)
- 4. Response to request for information (RFI's)
- 5. As-built plans for the traffic signals

Approach and Methodology:

TriCoeur, LLC is pleased to submit this Technical Proposal to provide Statewide Value Engineering (VE) Support Services to LaDOTD (Contract Nos: 4400027920 - 4400027921). For over a decade TriCoeur has offered Design services to the LaDOTD, has added Value Engineering (VE) & Cost/Schedule/Risk Assessment (CSRA) as a core service to various clients nationwide and, specifically, to LaDOTD. We maintain a robust team with Digital Engineering and Imaging, Inc. (DEII) and Vectura Consulting Services, LLC, our familiar partners on similar transportation design and VE projects. The track record of a significant number of successful VE Studies by the TriCoeur Team, associates, and personnel to date brings the advantage and reliability to support LaDOTD again in maintaining and strengthening its VE Program.

Camaraderie: TriCoeur personnel have worked with Digital Engineering and Vectura personnel in the past and, in-turn, interacted with LaDOTD personnel during similar project executions. Our inter-resource working relationships benefit performance as teamwork is critical to the success of these VE tasks.

AWARENESS OF PROJECT ISSUES

Understanding our Transportation Infrastructure serves a critical component in the economic health of Louisiana and our nation. Smart growth and development of improvements are necessary. The geographic location of the State makes it a critical region to keep the infrastructure lifeline of the Nation operational. The **TriCoeur** Team understands that meeting infrastructural demand requires innovations and judicious maintenance of project budgets, realizing maximum value from allocated resources. This is what we do best - help clients get the most out of each dollar spent.

Scope of Services

This contract will involve applying VE principles on Transportation Projects, Department Standards, Specifications, Processes and may include Training of personnel. Tasks may also include performing CSRA, should the magnitude of the project exceed the LaDOTD/FHWA threshold on construction value. Our execution of the VE tasks will adhere to LaDOTD Standards and SAVE International® promulgated VE principles including the Six-Step Job Plan. Our execution of CSRA adheres to the FHWA Cost Estimate Reviews (CER) using their Major Project Program Cost Estimating Guidance, incorporating the best processes into the workshops we facilitate. We are aware that Projects subject to VE may be of the design-bid-build (at the Stage 0 Feasibility, Stage 1 Development of Design Alternatives, or During Stages 2 & 3) or design-build types. Also, we have Facilitated VE & CSRA Workshops as: i) Stand Alone VE Study; ii) Stand Alone CSRA Study; and iii) Combined VE & CSRA Study. Our Facilitators have led VE & CSRA studies with teams that were comprised of: 1) Personnel appointed by the Department; 2) A combination of Personnel appointed by the Department and provided by the Consultant; 3) All Personnel provided by the Consultant.

VE Training (optional): For VE Workshops, we have always made the effort to educate the Team Members on the Six-Step Job Plan to generate their interest in the process, thereby ensuring productivity. Our VE Facilitators are SAVE International® Certified VMF1 and VMF2 trainers, have conducted numerous Training Workshops and can provide this opportunity to LaDOTD Team Members as part of a VE Study or standalone sessions. We can also guide Team members through the process of VMA & CVS certification, if desire and provide Team Leader training.

APPROACH TO PROJECTS

TriCoeur delivers the best results for our clients by sheer merit and the passion to exercise our competencies. With this underlying principle, our vision has realized success, as testified by numerous satisfied repeat clients nationwide. This passion, with a combination of **aptitude & attitude**, will bring added value to LaDOTD on this Value Engineering contract. The TriCoeur Team Difference is highlighted above.

A. APPROACH

Experienced Lead Facilitator(s): Ramesh Kalvakaalva, brings 32+ years of experience not only inclusive of Facilitating VE and CSRA but also of his involvement on various Roadway/Bridge/Rehabilitation projects from Concept through Design & Construction adhering to various DOT's **Plan Development Processes**. The supporting

THE TriCoeur TEAM DIFFERENCE

- 1. Criteria for Team Member selection
- 2. Emphasis on Function Analysis
- 3. Innovative Analytical Methods
- 4. Wealth of resources for flexibility
- 5. Capable of forming multiple teams at short notice
- 6. Emphasis on Function Analysis

VE Leads, Charles McDuff and Les Thomas have similar backgrounds on DOT Projects nationwide. All dedicated VE Leads are nationally recognized and have received awards and recognition for their work: ACI Georgia Chapter Award for Ramesh's innovative Bridge Design, Charles' Fellowship in SAVE

International[®] and David's FHWA award for VE and Cost Risk Assessment on a GDOT project. Adding depth to the VE Leadership is Les Thomas, to be called upon as required. While all of them are well rounded in experience, their assignments to Facilitate VE Studies will be tailored to their specific expertise on **Roadway, Bridge, Traffic and/or Construction** sensitive projects. **TriCoeur's** focused VE and CSRA Facilitation practice has provided these services to numerous transportation clients such as the LaDOTD, and including: FDOT, GDOT, TxDOT and CDOT.

The **TriCoeur** team's approach to VE studies is founded on the premise that the goal is to *Improve Value*, which does not always translate to reduced cost. This improvement results from professionally facilitated application of the VE Job Plan, to optimize the relationship between **Cost, Function, and Quality** to meet the client's and stakeholders' goals and objectives. All VE studies will be conducted in accordance with standards established by **SAVE International**[®], while also meeting the specific requirements set forth by LaDOTD and/or FHWA. This approach has proven to be an effective tool in achieving VE goals of numerous agencies.

We bring a highly **effective VE process** and the most technically qualified staff to focus on identifying alternatives related to **specific project issues**. Identifying and evaluating many ideas to select the best, reduces costs, minimizes ROW acquisitions, eliminates utility conflicts, expedites delivery, and minimizes environmental impacts, without compromising **safety and quality**. Our **facilitators** are highly effective at executing this process due to their mastery of the subjects.

As staunch believers and supporters of the Six-Step VE job plan, **TriCoeur**'s CVS Facilitators are best prepared to customize the process for a specific VE study. Each project has its own unique goals, objectives, constraints, and challenges, and various stakeholders driving those interests. These distinctive characteristics often demand **adapting VE tools**. In the past, where competing interests were strong influences, we created an **evaluation matrix** for the team to measure each idea relative to both the function(s) supported and the effect(s) on **performance criteria**.

The experience of our Facilitators allows us to evaluate projects that may be suitable for an Alternate Design/Construction method. Additionally, we encourage the VE Team to incorporate tried and tested **innovations** in Design/Construction methods from individual experiences. We keep abreast of the state-of-the-art and ever evolving infrastructure industry standards. High Risk factors requiring advanced mitigation or other potential constraints are focused upon. Projects in dense Urban areas with premium property acquisition requirements are evaluated by our Right-of-Way experts for Alternate acquisition techniques. MOT Is another challenge that our VE Team Constructability experts evaluate and help overcome.

TriCoeur presents results in a fashion that encourages all stakeholders to consider alternatives as tools crafted specifically to help achieve desired project goals including cost containment, minimization of life cycle costs and **enriching functionality** and **end user experiences**.

B. - METHODOLOGY

Innovative techniques and standardized templates are utilized at various stages of the six-step Job Plan streamlining VE Workshop execution and capturing the VE Process in a usable VE Report. All processes are made interactive, utilizing visual aids to build camaraderie within the Team during VE Workshops to ensure better results.

- 1.) Information Phase: Cost Models are developed during Pre-Study efforts by the Facilitators along with Key Project features shared with the VE Team. Information is captured on Flipcharts for continuous display during Workshops. Site visits or the use of Google Earth Pro for a "fly by" view of the project alignment with provided KMZ files as part of this phase.
- 2.) Function Analysis Phase: By far the most critical process in the six-step Job Plan, it serves as a powerful communications tool that enables VE participants to focus on key project elements. Developing a Function Analysis System Technique (FAST) diagram, or Function Cost/Worth Matrix, the underlying logic helps the VE Team reach a consensus on project goals and objectives. Our process enables the team to brainstorm alternative ways to perform functions, as opposed to alternative ways to design a project element. Other analytical methods (paired comparisons, matrix evaluations) may also be employed. Qualitative or quantitative risk analysis is an additional tool to help identify high risk functions, and mitigation challenges when appropriate.
- <u>3.) Creative Ideas Phase</u>: The large volume of Creative Ideas that emanate from "Out of the Box" brainstorming during this session are captured on flip charts or recorded on our electronic templates. The Design experience of our Facilitators is a great advantage here.

- **4.) Evaluation Phase:** The Team's Evaluation of the Creative Ideas, using a Ranking Scheme by consensus, or weighted average based on FHWA criteria (Safety; Operations; Construction; Environmental), is captured on the flip charts and template listing the Creative Ideas.
- <u>Mid-point Review</u>: A meeting with the owners and stakeholders is usually performed at this time as an additional vetting process to ensure that the VE Alternatives are within the project constraints.
- 5.) Development Phase: Customized Word and Excel templates enable the Team members to efficiently develop the highly ranked Creative Ideas (Alternatives/Design Suggestions). Opportunities & Risks are clearly described along with technical narratives, illustrations, capital, and life cycle costs developed for comparison with the original Design. The Cost Avoidance (Savings) or Value Addition are clearly listed on the documents.
- 6.) Presentation Phase: The Team presents findings in an informal Outbrief to the owners and stakeholders on the last day of the VE Workshop. Concise PowerPoint templates are used to present the Alternatives. The Quantitative (Alternatives) and Qualitative (Design Suggestions) are presented in a Summary of Results table.

The streamlined execution of the VE Workshop enables us to deliver a Draft VE Report within a short duration, usually 7 days following conclusion of the VE Workshop. The multi-step QA/QC process that the deliverables undergo is mentioned in the following pages.

C. Technical Approach

The **TriCoeur Team's personnel** delivered more than 16 VE Studies for LaDOTD between 2012 and 2022. Projects that were the subject of VE included Urban Arterials, Rural Corridors, Interstates, Steel Bridges, Bascule Bridge, and Resurfacing LaDOTD VE Studies the same Team delivered in the past 10 years that include: 1) Almonaster Blvd over IHNC Rolling Lift Bascule Bridge Replacement; 2) I-10 Corridor Improvements from Lafayette to Atchafalaya Bridge; 3) I-10 Corridor Improvements from East Baton Rouge to Gonzalez; 4) LA 1 Phase 2 from Leesville to Golden Meadow; 5) LA 1 – I-10 Connector; 6) Causeway Boulevard Improvements; 7) McArthur Interchange Reconstruction From Harvey Canal to Manhattan Boulevard; US90 WB, Jefferson Parish; 8) *I-10: LA 415 (East of Mississippi River Bridge) to Essen Lane on I-10/I-12spllit; 9) -10 Overpass over US 165 & MP R.R.*

TriCoeur's CVSs emphasize **pre-workshop preparation**, including meeting with workshop sponsors and, if appropriate, stakeholders to define goals and objectives. They have a demonstrated ability for listening to all who participate in their workshops, and assimilation into meaningful and useful reports. Our facilitators represent **third party neutrality**, providing the opportunity for everyone involved to have an equal voice, promoting active involvement of workshop participants, as opposed to providing answers for them, so that they leave the session with a sense of **pride and ownership of the results**.

Team Approach: Our Facilitators guide VE Team members through a respectful review of the design as delivered by the project design team, in a manner that conforms to the VE job plan. From the outset of a VE effort, our CVSs will partner with LaDOTD, its stakeholders, and its project design team to facilitate the most favorable achievement of project goals.

Key Considerations for Assembling a VE Team:

- Job Knowledge. Technical skills and relevant experience suited to the subject VE study.
- Availability. Offices near LaDOTD rendering easy team mobilization.
- **Team Refreshment.** Constructive rotation of team to keep the creative processes open and not repetitive of previous efforts.
- Lack of Bias. The prospective team member must not have significant ties to ongoing design process.
- Practical. Ability to deploy the latest practical technology.
- Life-cycle Savvy. Awareness of basic life-cycle cost concepts, including cost ownership.

UNIQUE APPROACH 1. Effective VE process through adaptation. of the 2. Measured ideas. 3. Collaborative team approach. 4. VMF1 & VMF2 SAVE-I certified trainers. 5. Collaborative team approach. 6. Effective VE process through adaptation. 7. Schedule management. RETURN ON the SAVINGS INVESTMENT 8. Cost and Risk management. 9. Respectful of LaDOTD's budget constraints. 10. Dedicated resources. 11. Effective communication. of

<u>Risk Registers</u>: Our Facilitators create **Risk Registers** when appropriate to identify risks to the project components or Functions. This serves as a guide to the VE Team helping to identify and mitigate Risks via Alternative Design or Construction techniques.

<u>Cost & Schedule Risk Analysis (CSRA)</u>: Our VE Facilitators are **FHWA** approved to conduct CSRA Workshops and are well versed in utilizing the **Monte Carlo** modeling for risk reviews, Oracle **Crystal Ball** and customized resources for modelling and generating reports.

PROJECT MANAGEMENT

A. Project Management Approach

Our designated Contract/Task Order Manager, Barry Gahagan, has an intimate knowledge of LaDOTD's VE Program from past and current experience. He will be in constant communication with the State VE Coordinator (VEC) to ascertain Fiscal Year VE Study requirements to minimize Team response time. Upon being awarded a Task Order, Barry can respond to VE workshop requirements within 5 days. He will coordinate with the VEC to confirm the disciplines, experience, and qualifications of participants, ensuring necessary



resources are available to address the technical issues. Our Facilitators will ensure appropriate project documents are available for the Team's use during the VE Workshop.

Resource Allocation: We are committed to dedicating the strongest local technical staff to support LaDOTD's VE studies. Our key VE Team members have over 50% availability. Given the depth and strength of our resources, from Facilitators to SMEs, we would be able to easily form multiple teams to respond to simultaneous or back-to-back VE Studies.

<u>Schedule Management</u>: From Task Order initiation through VE Report deliverables, Barry will ensure adherence to a set schedule. He will also ensure that appropriate VE Team Member commitments are made through continuous communications with the TriCoeur Team members and coordinate with the LaDOTD VEC.

TriCoeur can conduct the VE studies at LaDOTD facilities, project site, off-site locations, design team's office, our local offices, or via **Virtual Video Conference** based on the preference and convenience of the LaDOTD. Our PM and identified VE Facilitator will coordinate all logistics of the VE study. Pre-VE workshop and post-workshop activities will primarily be performed from TriCoeur office.

STAFFING

<u>Local Resources</u> TriCoeur has committed to **staffing this team of strong technical experience** with the goal of **improving the efficiency and performance** of our VE team. Prior LaDOTD project experiences allow our team to **integrate with LaDOTD's VE Program quickly and effectively**.

B. Staffing Experience on Similar Projects

Resources: The key to a VE contract of this nature is having an ample roster of qualified and experienced personnel in the disciplines needed, so multiple qualified teams can be staffed in the required time frames, particularly for concurrent studies. TriCoeur's experienced staff is augmented by DEII's capacity and by Vectura's depth and respectability in their field of traffic and ITS.

Resources for multiple VE Studies

The TriCoeur Team's PM, and nationally recognized/award winning Facilitators will monitor the execution and delivery of every Task Order through completion.



SECTION 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)	Past Performance Evaluation	Contract Number		Remaining
ALL FIRMS MUST BE	Discipline(s) *	and State Project	Project Name	Unpaid
REPRESENTED IN THIS TABLE		Number		Balance**
TriCoeur Services, L.L.C.	Bridge	4400013405	Off System Bridge Program, Vernon Parish	\$9,228
		H.013098.5	Jim Cryer Road Bridge, Stage 3 – Part IV Final Plans	
TriCoeur Services, L.L.C.	Bridge	4400013386	Off System Bridge Program, Ouachita Parish	\$7,668
		H.013122.5	Sligo Road Bridges, Stage 3 – Part IV Final Plans	
TriCoeur Services, L.L.C.	Bridge	4400025191	Off System Bridge Program, Plaquemines Parish	\$94,231
		H.015051.5	Martin Lane over Drainage Canal	
TriCoeur Services, L.L.C.	Other (VE Study)	4400024148	Contract for Value Engineering Services TO2	\$1,976
		H.012066.5	LA 3213: Gramercy Bridge Rehabilitation	
TriCoeur Services, L.L.C.	Other (VE Study)	4400024148	Contract for Value Engineering Services TO3	\$96,616
		H.014266	I-210 Widening	
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	Morgan City Sidewalks and Shared Use Path	\$219,957
	, ,	H.013722	,	
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	US 167: Camellia Blvd Churchill Dr. (LAF)	\$101,218
		H.013716		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	Lake Charles SRTS Proj Barbe Elementary	\$20,336
		H.011196		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400015487	Local Road Striping & Signing (Bossier)	\$43,303
		H.015010		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400015487	Broad St Read Blvd. Ped Improvements	\$82,924
		H.013094		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	US61 @ I-10 EB Off Ramp Ped Impr (NO)	\$130,281
		H.013719.5		4
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	LA 428 Gen DeGaulle - Old Behrman	\$170,579
		H.013753.5		

Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400015487	Local Road Striping & Signing, Bossier, LA	\$43,303
		H.015010.5		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400015487	S. Carrollton Ave. Ped & Bike Impr., New Orleans, LA	\$3,534
		H.015198.5		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	Pinhook @ Verot Pedestrian Improvements, Lafayette, LA	\$3,808
		H.015203.5		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400015487	Judge Tanner Blvd Sidewalk, St. Tammany Parish, LA	\$3,593
		H.015210.5		
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400015487	Bugess Ave Sidewalk - Phase 4, Walker, LA	\$3,683
		H.015211.5		. ,
Digital Engineering & Imaging, Inc.	Other (Safety Program – SRTPP)	4400019870	NOLA Ped Safety Improvements (Phase2)	\$819,534
2 ig.u. 2 ig.u. g.u. g.u. g.u. g.u. g.u. g.u. g.u	Similar (Suresy 110grunn Sittiff)	H.015487.5	1 (2111 ou surely improvements (1 mass2)	\$313,00.
Vectura Consulting Services, LLC	Traffic	4400017293	I-20: LA 544 Overpass Replacement	\$74,429
vectoral comparing per vices, EEC	Traine	H.010616	1 20. Er 13 11 6 verpuss replucement	Ψ7.,.29
Vectura Consulting Services, LLC	Traffic	4400005484	New Orleans Rail Gateway Jefferson Highway EA	\$14,200
v cetara Consulting Services, ELC	Truffic	H.005168.2	The Great Star Gateway Series on Thighway 121	ψ1 1,200
Vectura Consulting Services, LLC	Traffic	4400005484	New Orleans Rail Gateway Avondale EA	\$123,988
vectura Consulting Services, ELC	Traffic	H.005168.2	Trew Officials Rail Gateway Tryolidate Err	Ψ123,700
Vectura Consulting Services, LLC	CE&I	4400020018	EBR Computerized Traffic Signal, Ph VB	\$36,576
vectura Consulting Services, ELC	CLAI	H.007160	EDIC Computerized Traine Signal, I'll VD	Ψ30,370
Vectura Consulting Services, LLC	Traffic	4400023943	Belle Chasse Bridge & Tunnel Replacement PPP	\$14,740
vectura Consulting Bervices, ELE	Tranic	H.004791	Bene Chasse Bridge & Tulmer Replacement 111	\$17,770
Vectura Consulting Services, LLC	Traffic	4400021519	KCS RR Overpasses HBI	\$2,001
vectura Consulting Services, LLC	Tranic	H.012030.5	RCS RR Overpasses IIBI	\$2,001
Vectura Consulting Services, LLC	ITS	4400016364	Alexandria ITS Phase 2	\$14,305
vectura Consuming Services, LLC	115	H.011504.5	Alexandra 113 Fliase 2	\$14,303
Vectura Consulting Services, LLC	ITS	4400017922	Connected & Autonomous Vehicles (C/AV) Team and	\$16,932
vectura Consulting Services, LLC	115		` '	\$10,932
Water Caratin Carin II C	T CC .	H.012845.1	Working Group Support	¢0.110
Vectura Consulting Services, LLC	Traffic	4400024187	CCC Decorative Lighting	\$9,110
T	LTDG.	H.015504	N. D. AGEA	#27.4 51
Vectura Consulting Services, LLC	ITS	4400020058	Monroe Phase 3 SEA	\$37,461
		H.011507.1		

DO NOT SUM

^{*} The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify). If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation 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: ALL FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

Page **49** of **52 SECTION 20**



Certifications/Licenses:

CVS & VMA (formerly AVS) licenses of key personnel.

Ramesh Kalvakaalva, PE, CVS



Charles R. McDuff - CVS-Life



SECTION 21 Page 50 of 52

QA/QC Plan:



• Sub-consultant information:

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 (Name must match as registered with	Address	Point of Contact and email address	Phone Number
Louisiana's Secretary of State)			
Digital Engineering & Imaging, LLC	527 W. Esplanade Ave., Ste. 200	Frank Liang, P.E., fliang@deii.net	504.468.6129
	Kenner, LA 70065		
Vectura Consulting Services, LLC	8000 Innovation Park Drive	Brin Ferlito, PE, PTOE	225.223.6685
	Baton Rouge, la 70820	Email: bferlito@vecturacs.com	

SECTION 23

Location:

