DOTD FORM: 24-102

(Revised March 1, 2022)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

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

1. Contract title as shown in the advertisement	IDIQ Contract for Roadway Design Services
2. Contract number(s) as shown in the advertisement	4400023943
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	Lazenby & Associates, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	Engineering 416 Land Surveying 68 Duns 062921036
6. Prime consultant mailing address	2000 North 7th Street, West Monroe, LA 71291
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	2000 North 7th Street West Monroe, LA 71291
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Paul D. Fryer, P.E., P.L.S., Senior Vice-President Tel: (318) 387-2710 or (318) 237-1203 (cell) e-mail: pfryer@lazenbyengr.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Jerry G. Lazenby, P.E., P.L.S., President Tel: (318) 387-2710 or (318) 237-1201 (cell) e-mail: jlazenby@lazenbyengr.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	Signature (shall be the same person as #9): Jerry G Lazenby Date: June 15, 2022
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): Vectura Consulting Services, LLC Firm(s)' %: 10%

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. The crosswalk from the old categories to the new categories can be found at the link below:
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/General%20Information/CPPR%20Crosswalk%20to%20New%20Evaluation%20Disciplines.pdf. (same link as in the advertisement)

Evaluation Discipline(s)	% of Overall Contract	Prime Lazenby & Associates, Inc.	Sigma Consulting Group, Inc.	Vectura Consulting Services, LLC	Each Discipline must total to 100%
Road	60%	75%	25%		100%
Survey	30%	33.3%	66.7%		100%
Traffic	10%			100%	100%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.					
Percent of Contract	100%	55%	35%	10%	-------

13. Firm Size:

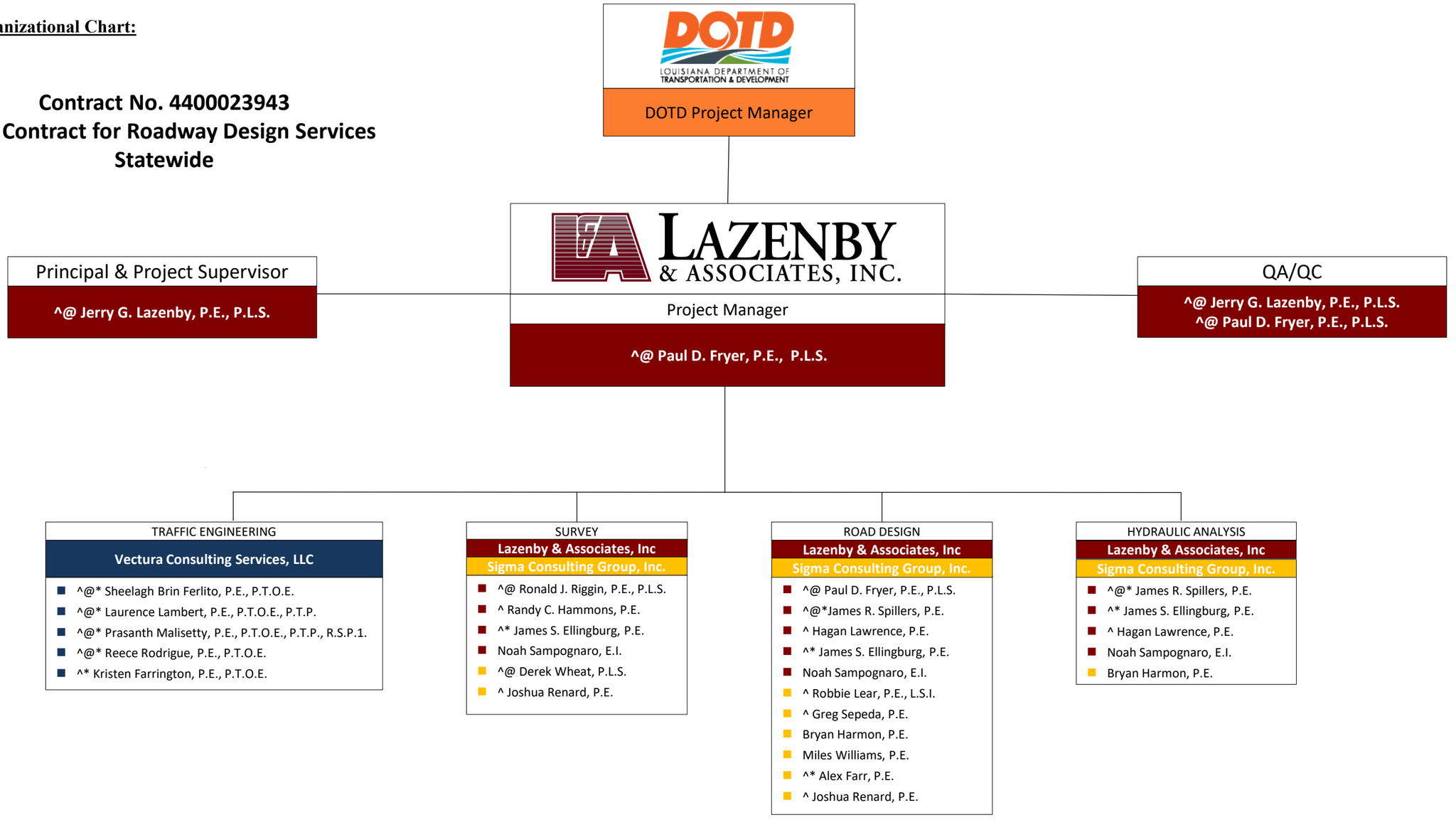
For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (xxxx)" and include the classification title inside the parentheses. The DOTD Job Classification(s) to be used can be found at the following link: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Lazenby & Associates, Inc.	CADD Drafter	1	3
	CADD Operator	2	2
	Clerical	0	3
	Engineer	5	6
	Engineer Intern	1	1
	Survey Instrumentman	2	2
	Survey Party Chief	2	2
	Principal	1	1
	Survey Rodman	2	3
	Supervisor Engineer	1	3
	Surveyor	1	1
	Inspector Certified	0	2
	Inspector	0	1
	Sub-Total	**18**	**30**
Vectura Consulting Services, LLC	Supervisor	2	2
	Engineer	3	5
	Sub-Total	**5**	**7**

Sigma Consulting Group, Inc.	Principal	1	1
	Supervisor – Eng.	3	4
	Engineer	3	4
	Surveyor	1	1
	Engineer Intern	5	5
	CADD Operator	2	2
	CADD Technician	3	3
	Party Chief	1	1
	Insrument Man	2	2
	Sr. Technician	0	2
	Clerical	1	4
	Sub-Total	**22**	**29**
	Total	**45**	**66**

14. **Organizational Chart:**

Contract No. 4400023943
IDIQ Contract for Roadway Design Services Statewide



LEGEND

- Lazenby & Associates, Inc.
- Sigma Consulting Group, Inc.
- Vectura Consulting Services, LLC

^ Completed work zone training requirements.
@ Meets MPR
* Completed traffic engineering analysis process and report training through LTRC.

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.

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 / certification & number	State of license	License / certification expiration date
1	Jerry G. Lazenby, P.E., P.L.S.	Lazenby & Associates, Inc.	Civil P.E.# 12104	LA	03/31/2024
2	Jerry G. Lazenby, P.E., P.L.S.	Lazenby & Associates, Inc.	Civil P.E.# 12104	LA	03/31/2024
3	Paul D. Fryer, P.E., P.L.S.	Lazenby & Associates, Inc.	Civil P.E.# 23426	LA	09/30/2023
3	James Ryan Spillers, P.E.	Lazenby & Associates, Inc.	Civil P.E.# 28574	LA	09/30/2023
4	Ronald J. Riggin, P.E., P.L.S.	Lazenby & Associates, Inc.	P.L.S.# 05119	LA	03/31/2023
4	Derek Wheat, P.L.S.	Sigma Consulting Group, Inc.	P.L.S.# 05213	LA	09/30/2023
5	Sheelagh Brin Ferlito, P.E., P.T.O.E.	Vectura Consulting Services, LLC	P.E.# 0025383	LA	09/30/2023
5	Laurence Lambert, P.E., P.T.O.E., P.T.P.	Vectura Consulting Services, LLC	P.E.# 0029901	LA	03/31/2024
5	Prasanth Malisetty, P.E., P.T.O.E., P.T.P., R.S.P.1.	Vectura Consulting Services, LLC	P.E.# 0035792	LA	03/31/2023
5	Reece Rodrigue, P.E., P.T.O.E.	Vectura Consulting Services, LLC	P.E.#0042074	LA	03/31/2024

(Add rows as needed)

16. **Staff Experience:**

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

See attached sheets for Résumés.

Firm employed by Lazenby & Associates, Inc.					
Name	**Ellingburg, James S. P.E.**		Years of experience with this firm/employer	14	
Title	Project Engineer		Years of experience with other firm(s)/employer(s)	0	
Degree(s) / Years / Specialization			BS / 2008 / Civil Engineering		
Active registration number / state / expiration date			P.E. 0037236 / Louisiana / 09/30/2022		
Year registered	2012	Discipline	Civil Engineering		
Contract role(s) / brief description of responsibilities			Road Design, Hydraulic Analysis & Design, Topographic Survey		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Mr. Ellingburg has over 14 years of experience in developing roadway plans on both LDOTD and local roadway projects. Mr. Ellingburg is familiar with the LDOTD Roadway Design Procedure and Details Manual and the LDOTD Hydraulics Manual, as well as AASHTO design standards for roadway design. Mr. Ellingburg has assisted in hydraulic analysis and design, as well as roadway design and preparation of roadway plans, on a variety of roadway projects. Mr. Ellingburg has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher) Designing Streets for Pedestrians and Bicyclists Workshop, 2016 Highway Safety Manual Workshop, 2016 Roundabout Design Workshop, 2013 Traffic Engineering Analysis Process & Report Class Module 1, 2 & 3, 2021 One-Dimensional Modeling of River Encroachments with HEC-RAS Class, 2022
08/08 – 05/16	State Project No. H.002622: Arkansas Road (LA 616), Ouachita Parish. Mr. Ellingburg served as a project staff engineer, assisting the project engineer with development of existing drainage maps, drainage design maps, utility adjustments, and developing roadway plans. Mr. Ellingburg also assisted with roundabout designs, and sequence of construction in both Preliminary and Final plan development. This project consisted of widening a 3.2-mile portion of LA 616 from a two-lane section to a five-lane urban roadway, and included four multi-lane roundabouts that required extensive geometric design and graphical grade development in order to meet AASHTO and LDOTD standards and requirements for safety.
12/10 – 10/12	State Project No. H.003854: Bossier North-South Corridor Roadway and Bridges (I-220/Swan Lake Road Interchange to Crouch Road), Bossier Parish. Mr. Ellingburg served as a project staff engineer, working on development of existing drainage maps, design drainage maps, roadway drainage plans, and assisting with roadway and bridge design and plan development for both Preliminary and Final plans. This project consisted of reconstruction and realignment of a 3.7-mile section of Swan Lake Road and construction of a new 4.2 mile roadway connecting Swan Lake Road and Crouch Road. The southern portion of the project contains an urban three-lane section, while the northern segment is a rural, two-lane roadway. There are three bridge sites on the project.
11/11 – 01/12	State Project No. H.004684: El Camino East/West Corridor, Route LA 6, Natchitoches Parish. Mr. Ellingburg served as a project staff engineer, developing existing drainage maps for a DOTD Topographic Survey.
09/16 – Present	State Project Nos. H.004774 & H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Ellingburg served as a project staff engineer, developing existing drainage maps for the topographic survey portion of the project. During the design and plan preparation portion of the project, Mr. Ellingburg has performed drainage design, developed design drainage maps, and assisted with design of five multi-lane roundabouts, developing graphical grades and assisting with geometric design. This urban project includes five multilane roundabouts

	and interstate ramp modifications that required extensive geometrics and graphical grades in order to meet AASHTO and LDOTD standards and requirements for safety. The final plans are currently 98% complete.
01/17 – Present	Ouachita Parish Police Jury Road Program. Mr. Ellingburg is an integral team member of the Ouachita Parish Police Jury Road Program. His duties consist of evaluating parish roadways and developing pavement preservation construction plans, including hydraulic design of cross drain structures, to preserve and extend the life of Ouachita Parish roadways, some of which are design and constructed under the DOTD Urban Systems program. Mr. Ellingburg has also served as project engineer during construction, ensuring that the projects are built in accordance with the plans and specifications. Some of the Ouachita Parish Urban System projects that Mr. Ellingburg has provided professional services on include the following: State Project No. H.011743 – 40 Oaks Farm Road (Mill, Patch and Overlay) State Project No. H.011742 – Ole Hwy 15 (Reconstruction) State Project No. H.011783 – Parker Road (Mill, Patch and Overlay) State Project No. H.011747 – Edwards Road (Reconstruction) State Project No. H.013804 – Wall Williams Road (Mill, Patch and Overlay and includes a segment of Reconstruction) State Project No. H.013805 – Finks Hide-A-Way Road (Mill, Patch and Overlay and includes a segment of Reconstruction)

Firm employed by Lazenby & Associates, Inc.					
Name	**Fryer, Paul D. P.E., P.L.S.**		Years of experience with this firm/employer	36	
Title	Senior Vice-President		Years of experience with other firm(s)/employer(s)	2	
Degree(s) / Years / Specialization			B.S. / 1984 / Civil Engineering		
Active registration number / state / expiration date			P.L.S. 0004806/ Louisiana / 09/30/2023 P.E. 0023426 / Louisiana / 09/30/2023		
Year registered	1987 1997	Discipline	Professional Engineer (Civil and Environmental) Professional Land Surveyor		
Contract role(s) / brief description of responsibilities			Project Management, Road Design, and QA-QC		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Mr. Fryer has over 36 years of experience in planning, surveying, designing, inspecting, and construction administration of transportation facilities. Mr. Fryer is familiar with LDOTD and AASHTO design standards for roadway design and plans development. Mr. Fryer has performed professional engineering and land surveying services on a variety of projects involving line and grade studies, major investment studies, location and Stage "0" studies as well as topographic surveys, property surveys, development of ROW maps. Mr. Fryer also has extensive experience in developing preliminary and final roadway plans on a variety of LDOTD projects. Mr. Fryer is familiar with the LDOTD Location and Survey Manual for conducting topographic surveys, property surveys and developing right-of-way maps. He is also familiar with the design requirements of LDOTD and has extensive experience in the development of preliminary and final roadway plans. Mr. Fryer has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher) National Environmental Policy Act (NEPA) and Transportation Decision Making On this project Mr. Fryer meets the MPR Requirement Nos. 2 and 3.
01/96 – 09/96	State Project No. 038-03-0022: US 425 (Bastrop – Log Cabin), Morehouse Parish. Mr. Fryer prepared preliminary roadway and bridge plans for expanded line and grade study. This project involved widening a 3.2-mile segment of US 425 to four lanes.
04/96 – 12/96	State Project No. 038-03-0024: US 425 (Log Cabin – Junction LA 142), Morehouse Parish. Mr. Fryer prepared preliminary roadway and bridge plans for expanded line and grade study. This project involved widening a 5.2-mile segment of US 425 to four lanes.
04/95 – 03/00	State Project No. 043-01-0017: Dugdemona River and Relief Bridges, Jackson Parish. Mr. Fryer prepared preliminary and final roadway plans. This project consisted of the construction of two voided slab span bridges (main bridge and relief structure) and roadway approaches on new alignment.
11/95 – 06/00	State Project No. 172-01-0011: Bayou DeGlaise Bridge, Morehouse Parish. Mr. Fryer prepared preliminary and final roadway and final roadway plans. This project consisted of the construction of a slab span bridge and roadway approaches on new alignment.
01/97 – 10/99	State Project No. 026-05-0017: LA 15 (Sicily Island – Jct. LA 913), Catahoula Parish. Mr. Fryer was responsible for preparation of preliminary and final roadway and bridge plans. This project consisted of widening a 4.5 mile segment of LA 15 to four lanes as part of the LA TIMED Program.

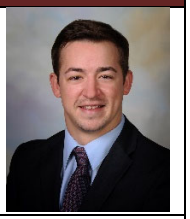
01/04 – 05/07	State Project No. 700-30-0061: US 167, Lillie to Arkansas State Line, Union Parish. Mr. Fryer served as project manager, roadway designer, and surveyor responsible for development of final roadway plans, and right-of-way maps. This project consisted of the conversion of a 7.2-mile section of a rural two-lane arterial route to a four-lane divided arterial route under the LA TIMED Program.
10/07 – 04/16	State Project No. H.002622: Arkansas Road (LA 616), Ouachita Parish. Mr. Fryer served as project manager, was responsible for QA-QC of the plans, and was surveyor in charge of right-of-way maps. This project consisted of widening a 3.2-mile portion of LA 616 from a two-lane section to a five-lane urban roadway, and included four multi-lane roundabouts.
07/10 – 05/18	State Project No. H.003854: Bossier North-South Corridor from Route I-220/Swan Lake Road Interchange to Crouch Road, Bossier Parish. Mr. Fryer served as project manager, was responsible for QA-QC of the plans, and was the surveyor in charge of right-of-way maps. This project consisted of reconstruction and realignment of a 3.7-mile section of Swan Lake Road and construction of a new 4.2-mile roadway connecting Swan Lake Road and Crouch Road. The southern portion of the project contains an urban three-lane section, while the northern segment is a rural, two-lane roadway. There are three bridge sites on this project.
02/18 - Present	State Project No. H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Fryer serves as project manager, is responsible for QA-QC of the roadway plans, and prepared right-of-way maps for the widening of a section of Garrett Road crossing I-20 and connecting to Kansas Lane north of Millhaven Road and the KCS Railroad track to a four-lane arterial route. This project includes the design of five-multi lane roundabouts as well as interstate highway ramp improvements and frontage road realignments and improvements. Final plans for this project are currently 98% complete.
05/08 – 05/12	State Project No. H.004780.5 – Kansas Lane Connector (Route US 80 to Route US 165) City of Monroe Urban systems, Ouachita Parish. Mr. Fryer served as project manager and surveyor responsible for conducting topographic surveys, property surveys, and developing right-of-way maps as a sub-consultant to Denmon Engineering Co., Inc. This project involves construction of a four-lane urban arterial route around the University of Louisiana at Monroe connecting US 80 on the south end and US 165 on the northern end.
11/10 – 05/13	Project Surveyor for Contract No. 4400000685: Retainer Contract for Professional Surveying Services - Statewide. This retainer contract authorized 23 task orders for topographic surveys, property surveys and ROW maps over a 3-year period.
03/08 – 04/11	Project Surveyor on Contract No. 4400000638: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract authorized 15 task orders for topographic surveys, property surveys and ROW maps over a 3-year period.
11/11 – 01/15	Project Surveyor on Contract No. 4400001328: Retainer Contract For Professional Surveying Services – Statewide. This retainer contract authorized 25 task orders for topographic surveys, property surveys and ROW maps over a 3-year period.

Firm employed by Lazenby & Associates, Inc.					
Name	**Hammons, Randy C., P.E.**			Years of experience with this firm/employer	21
Title				Years of experience with other firm(s)/employer(s)	8
Degree(s) / Years / Specialization			B.S. / 1993 / Civil Engineering		
Active registration number / state / expiration date			P.E. 0029504 / Louisiana / 09/30/2023		
Year registered	2001	Discipline	Civil Engineering		
Contract role(s) / brief description of responsibilities			Topographic Survey		

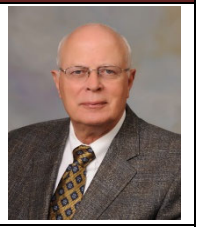
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc.
	Mr. Hammons has in excess of 25 years of experience in planning and designing highways and bridges on transportation projects in Arkansas, Mississippi, Tennessee and Louisiana. Mr. Hammons has approximately 15 years of experience supervising and processing topographic survey data, including creating digital terrain models (DTM's) and developing existing drainage maps, for LDOTD projects. Mr. Hammons has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher)
10/14 – 06/17	Project Engineer processing topographic survey field data and development of topographic survey maps and images for State Contract No. 4400004541: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract contained eight task orders to perform topographic surveys for various projects at a cost of $811,513 over a 3-year period. Some of the task orders for Topographic Surveys were as follows: State Project No. H.002059.5 – LA 384 @ LA 385 Intersection Improvements in Calcasieu Parish. (12/08/2014 – 02/06/2015). Topographic survey using GPS receivers and robotic total stations. State Project No. H.004774.5 – Kansas Lane – Garrett Road Connector & I-20 Interchange Improvements, in Ouachita Parish. (06/18/2015 – 06/17/2016). Topographic survey using GPS receivers and robotic total stations. State Project No. H.012316 – I-20 Pedestrian Overpass Replacement Project on Route I-20 in Caddo Parish (07/11/2016 – 11/30/2016). Topographic survey of a damaged pedestrian overpass using GPS receivers, robotic total stations, and a TX-8 terrestrial scanner. State Project No. H.001270.5 – LA I-X: Natchitoches By-Pass on Keyser Avenue and the Cane River in Natchitoches Parish. (04/03/2017 – 07/30/2017). Topographic Survey of road and bridge replacement project using GPS receivers, robotic total stations and a TX-8 terrestrial scanner. State Project No. H.009997.5 – US 167: Johnston Street Improvements on Route US 167 in Lafayette Parish. (04/12/2017 – 09/29/2017). Topographic survey of a heavily traveled urban system route in Lafayette, Louisiana using GPS receivers, robotic total stations and a SX-10 terrestrial scanner.
01/10/2017 – 01/10/2020	Project Engineer processing topographic survey field data and developing topographic survey maps and images for State Contract No. 4400009384: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract contained six task orders to perform topographic surveys for various projects at a cost of $989,478 over a 3-year time frame. Some of the task orders for Topographic Surveys were as follows: State Project No. H.003370.5 – I-220/I-20 Interchange and BAFB Access, Route I-220 & I-20 in Bossier Parish (04/16/2018). Topographic survey of the proposed I-220/I-20 Interchange and BAFB Access roadway in Bossier Parish using GPS receivers, robotic total stations, and a SX-10 terrestrial scanner.

	State Project No. H.007300.5 & H004774.5 – Kansas Lane – Garrett Road Connector and I-20 Interchange in Ouachita Parish (3/16/2018) Topographic Survey of the proposed Kansas Lane - Garrett Road Connector and I-20 Interchange using GPS receivers, robotic total stations and a SX-10 terrestrial scanner. State Project No. H.012036.5 – US 80: Boeuf River Bridge in Richland Parish (03/19/2019). Topographic survey for a bridge replacement project at the US 80 crossing of the Boeuf River using GPS receivers, robotic total stations and a SX-10 terrestrial scanner.
10/20 – 06/22	Project Engineer processing topographic survey field data and developing topographic survey maps and images for State Contract No. 4400015236: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract contained fifteen task orders to perform topographic surveys for various projects at a cost of $1,647,265 over a 5-year time frame. Some of the task orders for Topographic Surveys were as follows: State Project No. H.011706.5 – BNSF Several RR Xings (Baldwin) in St. Mary Parish (01/2021-08/2021). Topographic survey of the BNSF RR and several local urban routes and crossings in the town of Baldwin, Louisiana using GPS receivers and robotic total stations. State Project No. H.012030 – US 371: KCS RR Overpass HBI, Route LA 159 and US 371 in Webster Parish (10/2020-04/2021). Topographic survey of two bridge replacements over KCS RR using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate bridges. State Project No. H.012032.5 – LA 2: Bridges Near Mer Rouge, Route LA 2 in Morehouse and West Carroll Parishes (02/2021-04/2021). Topographic survey of two bridge replacement sites using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate bridges. State Project No. H.013832.5 – LA 6: Grand Ecore Bridge Deck Repair, Route LA 6 in Natchitoches Parish (04/2021-06/2021). Topographic survey of the existing deck, barrier rails & river pier top of cap elevations for the Grand Ecore Bridge across the Red River using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate complete bridge deck & barrier rails. State Project No. H.008220.5 – LA 406 @ F.E. Hebert Roundabout, Route LA 406 in Plaquemines Parish (03/2021-07/2021). Topographic survey of a proposed roundabout site located at the intersection of LA 406 and Keating Dr and F.E. Hebert Blvd using GPS receivers and robotic total stations. State Project No. H.014554.5 – LA 3025: Coulee Mine Scour Repair, Route LA 3025 in Lafayette Parish (04/2021-07/2021). Topographic survey of a bridge located near the intersection of LA 3025 & West Bayou Parkway using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate bridge, roadway and intersection. State Project No. H.012541.5 – LA 594: Overpass I-20, Route LA 594 in Ouachita Parish (01/2022-06/2022). Topographic survey of a bridge replacement near the intersection of I-20 and LA 594 (Texas Ave) using GPS receivers, robotic total stations and SX-10 terrestrial scanner. Terrestrial mobile lidar used to locate 4,200 LF of I-20 mainline and two bridge decks over interstate. State Project No. H.014646.5 – I-20: US 165 – E. of Garrett Road, Route I-20 in Ouachita Parish (08/2021-01/2022). Topographic survey of a proposed 2.49 mi interstate widening near the intersection of Garrett Road and I-20 using GPS receivers, robotic total stations and SX-10 terrestrial scanner. Terrestrial mobile lidar used to locate 7,130 LF of I-20 mainline.

Firm employed by Lazenby & Associates, Inc.					
Name	**Lawrence, Hagan H., P.E.**			Years of experience with this firm/employer	5
Title	Assistant Project Engineer			Years of experience with other firm(s)/employer(s)	2
Degree(s) / Years / Specialization				B.S. / 2015 / Civil Engineering	
Active registration number / state / expiration date				P.E. 0043645 / Louisiana / 03/31/2024	
Year registered	2019	Discipline		Civil Engineering	
Contract role(s) / brief description of responsibilities				Road Design, Hydraulic Analysis & Design	



Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Mr. Lawrence has 6 years of experience in performing drainage design, hydraulic analysis, and development of roadway plans on both LDOTD and local roadway projects. Mr. Lawrence is familiar with the LDOTD Roadway Design Procedure and Details Manual and the LDOTD Hydraulics Manual, as well as AASHTO design standards for roadway design. Mr. Lawrence has assisted in hydraulic analysis and design, as well as roadway design and preparation of roadway plans, on a variety of roadway projects. Mr. Lawrence has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 LA Specific Traffic Control Supervisor Course, 2020 Traffic Engineering Analysis Process & Report Class Module 1, 2 & 3, 2021 One-Dimensional Modeling of River Encroachments with HEC-RAS Class, 2022
1/16 – 8/17	State Project No. H010287: Well Road Roundabout, Ouachita Parish. Mr. Lawrence Assisted with Hydraulic Study, Plan Preparation, as well as quantity calculations (with previous employer). This project involved the construction of a roundabout at the I-20 westbound ramp terminal with Well Road.
02/18 – Present	State Project No. H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Lawrence has assisted with hydraulic study and design, and assisted with development of drainage plan-profile sheets and design drainage maps. This urban project includes five multilane roundabouts and interstate ramp modifications. The final plans are currently 98% complete.
12/17 – Present	Ouachita Parish Police Jury Road Program. Mr. Lawrence is an integral team member of the Ouachita Parish Police Jury Road Program. His duties consist of developing pavement preservation roadway plans, including hydraulic design of cross drain structures, to preserve and extend the life of Ouachita Parish roadways, some of which are constructed under the DOTD Urban Systems program. Some of the Ouachita Parish Urban Systems projects that Mr. Lawrence has provided professional services on include the following: State Project No. H.011745 – Sandal Street (Reconstruction) State Project No. H.011784 – Stubbs-Vinson Road (Mill, Patch and Overlay)(Project included 8' x 8' RCB) State Project No. H.013791 – Hadley Street (Mill, Patch and Overlay and includes a segment of Reconstruction) State Project No. H.013776 – Well Road (Mill, Patch and Overlay) State Project No. H.013802 – Garrett Road (Mill, Patch and Overlay)

Firm employed by Lazenby & Associates, Inc.					
Name	**Lazenby, Jerry G. P.E., P.L.S.**		Years of experience with this firm/employer	41	
Title	President		Years of experience with other firm(s)/employer(s)	16	
Degree(s) / Years / Specialization			B.S. / 1965 / Civil Engineering		
Active registration number / state / expiration date			P.L.S. 0002313/ Louisiana / 03/31/2024 P.E. 0012104 / Louisiana / 03/31/2024		
Year registered	1970 1970	Discipline	Professional Land Surveyor Professional Engineer (Civil and Environmental)		
Contract role(s) / brief description of responsibilities			Principal-In-Charge, Project Supervisor and Contract Management, QA-QC		

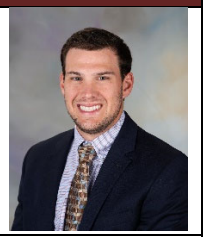
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Mr. Lazenby has over 50 years of experience in planning, surveying, designing, inspecting, and construction administration of transportation facilities. The first 9 years of Mr. Lazenby's career were spend with the U.S. Bureau of Public Roads/Federal Highway Administration at various locations in the United States as a Highway Engineer reviewing and assisting state highway officials with transportation projects utilizing Federal-Aid transportation funding from project inception through construction. Mr. Lazenby has designed and supervised numerous projects for LDOTD over the past 45 years. He has been responsible for the firm's growth as well as the reputation of the firm. He has instilled in each member of the firm to provide a professional product and to deliver on time. Mr. Lazenby has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher) National Environmental Policy Act (NEPA) and Transportation Decision Making On this project, Mr. Lazenby meets the MPR Requirements No. 1 and No. 2.
06/04 – 03/05 01/06 – 06/09	State Project No. 700-37-0102: US 165 (Jct. LA 841 – Rilla), Ouachita Parish. Mr. Lazenby was Principal-in-Charge of this project and performed QA-QC reviews of the plans. On this project Lazenby & Associates performed topographic surveys, property surveys, ROW maps, alignment studies, and prepared preliminary and final roadway plans on a 4.5-mile section of US 165 being widened and upgraded to a four-lane divided arterial route under the Louisiana TIMED Program.
05/00 – 05/04	State Project No. 700-99-0237: Retainer Contract for Professional Surveying Services, Statewide. Mr. Lazenby was Principle-in-Charge responsible for 15 Task Orders to perform topographic surveys, property surveys, and develop ROW maps on various LDOTD projects in northern Louisiana.
01/04 – 05/07	State Project No. 700-30-0061: US 167 (Lillie to Arkansas State Line), Union Parish. Mr. Lazenby was Principle-in-Charge on this project. On this project, Lazenby & Associates developed final roadway plans, final bridge plans, and ROW maps on a 7-mile section of US 167 that was widened to a four-lane rural and urban arterial route under the Louisiana TIMED Program.
07/10 – 12/13	State Project No. H.003854: Bossier North-South Corridor Roadway and Bridges (I-220/Swan Lake Road Interchange to Crouch Road), Bossier Parish. Mr. Lazenby was Principle-in-Charge and performed QA-QC reviews of the plans. On this project, Lazenby & Associates developed topographic surveys, property surveys, right-of-way maps, preliminary roadway and bridge plans and final roadway and bridge plans along a 7.8-mile corridor being developed as an Urban Systems Project by the Bossier Parish Police Jury.

12/07 – 05/16	State Project No. H.002622: Arkansas Road (LA 616), Ouachita Parish. Mr. Lazenby was Principle-in-Charge and Project Manager. On this project, Lazenby & Associates performed topographic surveys, property surveys and developed right-of-way maps, preliminary roadway plans and final roadway plans for the widening of a 3.2-mile section of LA 616 from a two-lane rural roadway section to a five-lane urban roadway section including four multi-lane roundabouts. The project also included the hydraulic analysis of an existing timber bridge site in which the bridge was replaced with a reinforced concrete box culvert.
09/16 – Present	State Project Nos. H.004774 & H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Lazenby is Principle-in-Charge. On these projects, Lazenby & Associates performed topographic surveys, developed preliminary roadway plans, and is currently developing final roadway plans for the widening of a section of Garrett Road crossing I-20 and connecting to Kansas Lane north of Millhaven Road and the KCS Railroad track to a four-lane arterial route with five multi-lane roundabouts. The project includes hydraulic and drainage studies and the development of drainage plans to improve drainage within the project area. Final plans for the transportation project are currently 98% complete.
04/95 – 03/00	State Project No. 043-01-0017: Dugdemona River and Relief Bridges, Jackson Parish. Mr. Lazenby was Principal-in-Charge, Project Manager, and provided QA-QC plan reviews for the project, which consisted of the construction of two voided slab span bridges (main bridge and relief structure) and roadway approaches on new alignment.
11/95 – 06/00	State Project No. 172-01-0011: Bayou DeGlaise Bridge, Morehouse Parish. Mr. Lazenby was Principal-in-Charge, Project Manager, and provided QA-QC plan reviews for the project, which involved the construction of a slab span bridge and roadway approaches on new alignment.

Firm employed by Lazenby & Associates, Inc.					
Name	**Riggin, Ronald J., II, P.E., P.L.S.**			Years of relevant experience with this employer	11
Title	Project Surveyor			Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization			B.S. / 2006 / Civil Engineering		
Active registration number / state / expiration date			P.L.S. 0005119/ Louisiana / 03/31/2023 P.E. 0036016 / Louisiana / 03/31/2023		
Year registered	2014 2011	Discipline	Professional Land Surveyor Professional Engineer (Civil)		
Contract role(s) / brief description of responsibilities			Topographic Survey		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Mr. Riggin is familiar with the requirements of the LDOTD Location and Survey Section for conducting topographic surveys, property surveys and hydrographic surveys. Mr. Riggin is responsible for quality control of all survey data obtained by survey crews in conducting topographic surveys, property surveys, and hydrographic surveys. Mr. Riggin has over five (5) years of experience in conducting and performing topographic surveys, property surveys, and developing right-of-way maps. Mr. Riggin has successfully completed following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher) ATSSA Course for Traffic Flagger, 2020 On this project, Mr. Riggin meets the MPR Requirement No. 4.
07/14 – 06/16	Retainer Contract No. 4400003471 – Retainer Contract for Professional Surveying Services – Statewide. Project Surveyor responsible for coordination and supervision of survey field crews performing topographic surveys and property surveys on 14 Task Orders for an accumulated value of $436,473.00 for LDOTD State Projects at various locations in northern Louisiana.
04/13 – 06/16	Project Surveyor for Contract No. 4400002862, S.P. # H.008768 – Hydrographic Survey Monitoring of Existing Bridges – Statewide (North Region). Performed hydrographic surveys on 14 Task Orders for monitoring scour at major bridge sites in north Louisiana. Duties included supervision of survey crews, analysis of survey data, and the development of required hydrographic survey reports at the various bridge locations.
04/14 – Present	Professional Surveyor of Record for developing topographic surveys and Property Surveys for private clients on residential developments and commercial developments in Ouachita Parish and northern Louisiana. Professional Engineer of Record for the overall design of residential and commercial developments.
03/15 – 08/17	State Project No. H.011742: Ole Highway 15 Improvements, Ouachita Parish. Mr. Riggin performed a topographic survey of a 2.2-mile section of Ole Hwy 15 from US 80 to LA 616 and then was the project engineer responsible for roadway design. This project consisted of pavement reconstruction under the DOTD Urban Systems program. (Note that we typically perform a full topo survey, within existing right-of-way, on pavement preservation projects on Ouachita Parish roadways. This is not always done on pavement preservation projects in other parts of the state.)
05/16 – 02/18	Project Surveyor on the Steep Bayou Sewer Main project of the West Ouachita Sewerage District No. 5. Mr. Riggin performed a topographic survey of the alignment for a sewer main trunk line from I-20 to New Natchitoches Road along Steep Bayou in Ouachita Parish. He also conducted a boundary survey of the right-of-way parcels along this route and developed the necessary ROW maps and legal descriptions.
09/18 – Present	Retainer Contract No. 4400012668 – Retainer Contract for Professional Surveying Services – Statewide (North Region). Performing hydrographic surveys on major bridge structures in northern Louisiana for monitoring channel scour. Duties include supervision of field

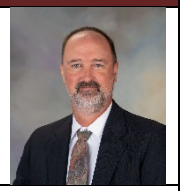
	crews, analysis of survey data and development of required hydrographic survey reports at the various bridge locations for submission to the LDOTD.
10/17 – 06/18	Project Surveyor on L & A, Inc. Project No. 17E035.00, 17E036.00, 17E036.01 and 17E036.02, WOSD No. 5 Force Main Project from Lift Station "S-1" on Steep Bayou and LA 837 to the Ouachita River Flood Protection Levee performing alignment surveys and topographic surveys for a 18" sewer force main, a distance of 3.5± miles. Duties include supervising and scheduling of survey crews, analysis of survey data and development of survey field roll for use in project design.
06/18 – 09/18	State Project No. H.013776, Well Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 0.8-mile segment of Well Road from LA 838 to I-20 under the DOTD Urban Systems program.
08/18 – 11/18	State Project No. H.013798: Harrell Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 1.8-mile segment of roadway from US 80 to LA 616 under the DOTD Urban Systems program.
12/18 – 02/19	State Project No. H.013802: Garrett Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 0.4-mile segment of roadway from LA 15 to Austin Street under the DOTD Urban Systems program.
01/19 – 04/19	State Project No. H.013804: Wall Williams Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of segments of mill, patch, and overlay and segments of reconstruction of a 1.6-mile segment of roadway from Good Hope Road to LA 143 under the DOTD Urban Systems program.
04/19 – 07/19	State Project No. H.014348: Lee Avenue, City of Monroe, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 1.2-mile segment of roadway from Jackson Street to Standifer Avenue under the DOTD Urban Systems program.
07/19 – 09/19	State Project No. H.013796: Tanglewood Drive, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of roadway reconstruction a 0.3-mile segment of roadway from LA 15 to Dellwood Drive under the DOTD Urban Systems program.
02/20 – 04/20	State Project No. H.014347: South Grand Street, City of Monroe, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 1.8-mile segment of roadway from Orange Street to Standifer Avenue under the DOTD Urban Systems program.

Firm employed by Lazenby & Associates, Inc.					
Name	**Sampognaro, Noah J., E.I.**		Years of experience with this firm/employer	1.5	
Title	Engineer Intern		Years of experience with other firm(s)/employer(s)	0	
Degree(s) / Years / Specialization			B.S. / 2020 / Civil Engineering		
Active registration number / state / expiration date			E.I. 0034746 / Louisiana / 09/30/2023		
Year registered		Discipline	Civil Engineering (E.I.)		
Contract role(s) / brief description of responsibilities			Road Design, Hydraulic Design & Analysis, Topographic Survey		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Mr. Sampognaro has 1 ½ years of experience in performing drainage design, hydraulic analysis, and development of roadway plans on both LDOTD and local roadway projects. Mr. Sampognaro is familiar with the LDOTD Roadway Design Procedure and Details Manual and the LDOTD Hydraulics Manual, as well as AASHTO design standards for roadway design. Mr. Sampognaro has assisted in hydraulic analysis and design, as well as roadway design and preparation of roadway plans, on a variety of roadway projects, and has also assisted in developing digital terrain models (DTM's) and existing drainage maps for LDOTD topographic surveys. Mr. Sampognaro has successfully completed the following continuing education classes, workshops, and seminars: TOPO Dot User Conference, 2022 One-Dimensional Modeling of River Encroachments with HEC-RAS Class, 2022
08/21 – 11/21	North Frontage Road – Phase 2, Ouachita Parish. Mr. Sampognaro assisted in the development of roadway plans, including hydraulic design and analysis of cross drains and developing existing and design drainage maps. Mr. Sampognaro also assisted with quantity calculations and preparation of a construction cost estimate. This project, which was prepared for the City of Monroe I-20 Economic Development District, consists of a 0.6-mile frontage road on new alignment north of Interstate 20, east of Garrett Road, in Monroe, Louisiana.
01/21 – Present	State Project No. H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Sampognaro has assisted with quantity calculations during final plan development, as well as assisting with preparation of a construction cost estimate. This urban project includes five multilane roundabouts and interstate ramp modifications. The final plans are currently 98% complete.
01/21 – Present	Ouachita Parish Police Jury Road Program. Mr. Sampognaro has assisted with the Ouachita Parish Police Jury Road Program. His duties consist of developing pavement preservation roadway plans, including hydraulic design of cross drain structures, to preserve and extend the life of Ouachita Parish roadways, some of which are constructed under the DOTD Urban Systems program. Some of the Ouachita Parish Urban Systems projects on which Mr. Sampognaro has assisted include the following: State Project No. H.013805 – Finks Hide-A-Way Road (Mill, Patch and Overlay and includes a segment of Reconstruction) State Project No. H.014397 – Rowland Road (Mill, Patch and Overlay)

06/21 - Present	City of Monroe, Louisiana roadways. Mr. Sampognaro has assisted with City of Monroe roadways designed under the LDOTD Urban Systems program. His duties consist of developing pavement preservation roadway plans, including hydraulic design of cross drain structures. Some of the City of Monroe Urban Systems projects on which Mr. Sampognaro has assisted include the following: State Project No. H.014347 – South Grand Street (Mill, Patch and Overlay) State Project No. H.014348 – Lee Avenue (Mill, Patch and Overlay)

Firm employed by Lazenby & Associates, Inc.					
Name	**Spillers, James R., P.E.**			Years of experience with this firm/employer	27
Title	Chief Roadway Design Engineer			Years of experience with other firm(s)/employer(s)	0
Degree(s) / Years / Specialization			B.S. / 1994 / Civil Engineering		
Active registration number / state / expiration date			P.E. 0028574 / Louisiana / 09/30/2023		
Year registered	1999	Discipline	Professional Engineer (Civil)		
Contract role(s) / brief description of responsibilities			Road Design, Hydraulic Analysis & Design		



Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc.
	Mr. Spillers has 27 years of experience in planning and designing highways, streets and bridges and related components on LDOTD projects. He has also served as designer and Project Engineer on several federal-aid Urban System projects for the Ouachita Parish Police Jury and City of Monroe. He is familiar with the LDOTD Roadway Design Procedures and Details Manual and the LDOTD Hydraulics Manual, as well as the AASHTO "Green Book", AASHTO Roadside Design Guide, and the Manual on Uniform Traffic Control Devices. Mr. Spillers has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2018 (refresher) LA Specific Traffic Control Supervisor Course, 2018 (refresher) One-Dimensional Modeling of River Encroachments with HEC-RAS, 2022 Traffic Engineering Analysis Process & Report Class Module 1, 2 & 3, 2021 Bridge Backwater Computer Program (WSPRO), 1996 National Environmental Policy Act (NEPA) and Transportation Decision Making, 2008 Roundabout Design Workshop, Level 1, 2008 Roundabout Design Workshop, Level 2, 2009 Fundamentals of Planning, Design, & Approval of Interchange Improvements to the Interstate System, 2009 Highway Safety Manual Workshop, 2011 Access Management, Location and Design, 2014 Road Safety 365: A Safety Workshop for Local Governments, 2016 Mr. Spillers has in excess of 10 years of experience in preparation of roadway plans and development of roadway design projects. On this project, Mr. Spillers meets the MPR Requirement No. 3.
04/95 – 03/00	State Project No. 043-01-0017: Dugdemona River and Relief Bridges, Jackson Parish. Mr. Spillers performed a bridge hydraulic study, and assisted with preliminary and final roadway and bridge plans for two voided slab span bridges and roadway approaches on new alignment.
11/95 – 06/00	State Project No. 172-01-0011: Bayou De Glaise Bridge, Morehouse Parish. Mr. Spillers performed a bridge hydraulic study, and assisted with preliminary and final roadway and final roadway and bridge plans for a slab span bridge and roadway approaches on new alignment.
01/96 – 09/96	State Project No. 038-03-0022: US 425 (Bastrop – Log Cabin), Morehouse Parish. Mr. Spillers performed hydraulic studies for multiple slab span bridge sites, performed drainage design of cross drains, and assisting with preliminary plan preparation as part of expanded line and grade study for widening a 3.2-mile segment of US 425 to four lanes.
04/96 – 12/96	State Project No. 038-03-0024: US 425 (Log Cabin – Jct. LA 142), Morehouse Parish. Mr. Spillers performed a hydraulic study for twin girder bridges, performed drainage design for cross drains, and assisted with preparation of preliminary plans as part of expanded line and grade study for widening a 5.2-mile segment of US 425 to four lanes.

01/97 – 10/99	State Project No. 026-05-0017: LA 15 (Sicily Island – Jct. La 913), Catahoula Parish. Mr. Spillers performed a hydraulic study for twin slab span bridges, performed drainage design for cross drains, and assisted with the preparation of preliminary and final roadway and bridge plans for widening a 4.5-mile segment of LA 15 to four lanes as part of TIMED program.
04/99 – 07/00	State Project No. 038-04-0008: Route LA 142 (Junction US 425 – North of DeButte Creek), Morehouse Parish. Mr. Spillers performed a hydraulic studies, and prepared preliminary roadway and bridge plans for reconstruction of a 3.5-mile segment of a rural two-lane roadway. Project included a slab span bridge and an RCB.
01/01 – 09/04	State Project No. 002-01-0041: DeSiard Street (Monroe)(Louisville Avenue – Gilbert Street), Ouachita Parish. Mr. Spillers performed a hydraulic study for subsurface drainage, and prepared preliminary and final roadway plans for widening a 1.2-mile segment of US 80 to five lanes.
07/05 – 01/08	State Project No. 015-08-0026: US 165 (LA 841 – Rilla), Ouachita Parish. Mr. Spillers performed a hydraulic study and prepared preliminary and final roadway plans for widening a 6.5-mile segment of US 165 to four lanes as part of TIMED program.
05/07 – 05/10	State Project No. 713-33-0110: Steve Ogden Road Bridge Over Bayou Macon, Madison Parish. Mr. Spillers performed a bridge hydraulic study and prepared preliminary and final roadway plans for a girder bridge on new alignment. This project was successfully constructed with no change orders.
12/07 – 05/16	State Project No. H.002622: Arkansas Road (LA 616), Ouachita Parish. Mr. Spillers assisted with the hydraulic study of subsurface drainage systems and prepared preliminary and final roadway plans for widening a 3.2-mile segment of LA 616 to five lanes, including four multilane roundabouts. The project included one bridge site, where an existing timber bridge was replaced with a RCB.
02/11 – 05/17	State Project No. H.003854: Bossier North-South Corridor from Route I-220/Swan Lake Road Interchange to Crouch Road, Bossier Parish. Mr. Spillers performed hydraulic studies for two bridge sites, and prepared preliminary and final roadway plans on this project. The project consisted of the reconstruction and realignment of a 3.7-mile section of Swan Lake Road and construction of a new 4.2-mile roadway connecting Swan Lake Road and Crouch Road. The southern portion of the project contains an urban three-lane section, while the northern segment is a rural, two-lane roadway.
03/14 – 09/16	State Project No. H.004608: Choudrant I-20 Service Road, Lincoln Parish. Mr. Spillers performed a bridge hydraulic study and also performed design of a subsurface drainage system, and prepared preliminary and final roadway plans for a 1.1-mile two-lane service road on new alignment.
02/18 – Present	State Project No. H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Spillers prepared preliminary roadway plans and is currently preparing final plans for the widening of a section of Garrett Road crossing I-20 and connecting to Kansas Lane north of Millhaven Road and the KCS Railroad track to a four-lane arterial route. This project includes the design of five-multi lane roundabouts as well as interstate highway ramp improvements and frontage road realignments and improvements. Final plans for this project are currently 98% complete.
08/21 – 11/21	North Frontage Road – Phase 2, Ouachita Parish. Mr. Spillers was in responsible charge of the development of roadway plans for a 0.6-mile frontage road north of Interstate 20 in Monroe. The owner on this project is the I-20 Economic Development District.
12/16 – 07/17	State Project No. H.011743: 40 Oaks Farm Road, Ouachita Parish – Mr. Spillers performed hydraulic studies for cross drain replacement and replacement of an existing timber bridge with a RCB as part of a LDOTD Urban Systems pavement preservation project.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**ALEX D. FARR, PE**		Years of relevant experience with this employer	**8**	
Title	**Project Engineer**		Years of relevant experience with other employer(s)	**2**	
Degree(s) / Years / Specialization		**BS / 2011 / Civil Engineering**			
Active registration number / state / expiration date		**40426 / LA / 9-30-2022**			
Year registered	**2016**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities		**Road Design / Maintenance of Traffic**			

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2019 2018	**Traffic Control Supervisor (TCS) course** **Traffic Engineering Analysis Process and Report Course (Modules 1, 2 & 3)**
10/2020 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5) CMAR DELIVERY** Mr. Farr was responsible for developing the proposed vertical profiles along the I-10 mainline corridor, service roads, surface streets, entrance, and exit ramps. This included determining existing vertical clearance along the corridor and adjusting the profile to meet the minimum vertical clearance per LA DOTD minimum design guidelines. This was performed along this corridor by using as-builts pertaining to their respective locations. Mr. Farr was also responsible for calculating the roadway and bridge construction costs for the Project Opinion of Probable Costs for the I-10 Corridor Environmental Assessment.
02/17 - 06/20	**I-10: Highland Rd to LA73 Design-Build Project, East Baton Rouge/Ascension Parishes. H.009250 D-B DELIVERY** Mr. Farr was responsible for preparing the Transportation Management Plan (TMP) and Safety Analysis for this project. The safety analysis was prepared to determine what safety concerns related to the construction and maintenance of traffic phasing. Mr. Farr was also responsible for designing and preparing the suggested sequence of construction, guardrail design, and the quantity estimate for the above-mentioned project.
04/19 - Present	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA D-B DELIVERY** Mr. Farr was responsible for performing the design of the interchange ramp profiles, super elevation calculations, and graphical grades. Mr. Farr was also responsible for the permanent striping plans, clearing and grubbing plans, and the quantity estimates.
01/14 – 08/16	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** Mr. Farr was responsible for producing the Level 4 Transportation Management Plan (TMP) for the I-10 widening project from LA 347 to the Atchafalaya Floodway Bridge. The TMP pertained to alternate route analysis, public information, stakeholder involvement, traffic and safety data, temporary traffic control, and work zone impact management strategies. Mr. Farr was also responsible for the suggested sequence of construction, temporary signing, quantity computations and pay items using DOTD 2016 specifications.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**ALEX D. FARR, PE**	Years of relevant experience with this employer	**8**
Title	**Project Engineer**	Years of relevant experience with other employer(s)	**2**

2016 – Present	**I-10: LA 328 to LA 347, St. Martin Parish (H.010601)** Mr. Farr was responsible for producing the Transportation Management Plan (TMP) for the I-10 widening project from LA 328 to LA 347. The TMPs pertained to alternate route analysis, public information, stakeholder involvement, traffic and safety data, temporary traffic control, and work zone impact management strategies. Mr. Farr was also responsible for the suggested sequence of construction, temporary signing, quantity computations and pay items using DOTD 2017 specifications, permanent signing and roadway plan preparation. **He is currently providing construction support for the project which includes partnering, contractor coordination and plan changes.**
2014 – Present	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** Mr. Farr was responsible for producing the Level 4 Transportation Management Plan (TMP) for the I-10 widening project from I-49 to the LA 328. The TMPs pertained to alternate route analysis, public information, stakeholder involvement, traffic and safety data, temporary traffic control, and work zone impact management strategies. Mr. Farr was also responsible for the suggested sequence of construction design, temporary signing design, quantity/pay item computations, and roadway plan preparation.
2016 – 2018	**I-10: LA 30 to LA 22, Ascension Parish, LA (H.009276)** Mr. Farr was responsible for performing the Transportation Management Plan (TMP) as well as the Safety Analysis for this project to determine what safety concerns correlated to the construction of this segment. Mr. Farr was also responsible for the suggested sequence of construction design, diversion road design, guardrail design, and the quantity estimate.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**BRYAN K. HARMON, PE**		Years of relevant experience with this employer	**6.5**	
Title	**Vice-President / Special Projects Engineer**		Years of relevant experience with other employer(s)	**33**	
Degree(s) / Years / Specialization			**BS / 1981 / Agricultural Engineering** **BS / 1982 / Civil Engineering**		
Active registration number / state / expiration date			**22595 / LA / 3-31-2023**		
Year registered	**1987/1994**	Discipline	**Civil / Environmental**		
Contract role(s) / brief description of responsibilities			**Hydraulics / Road Design**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2008 2010	**NEPA and Transportation Decision Making Seminar** **Principles of Writing Hwy Construction Specifications**
10/20 - Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5) CMAR DELIVERY** Mr. Harmon is the lead hydraulics design engineer for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. He is responsible for developing the existing and design drainage maps, hydraulic calculations, and drainage outfall assessments. Drainage is being designed for both final conditions and interim construction phases consistent with limits defined for each GMP. In addition, he is coordinating with the CMAR contractor, DOTD, and East Baton Rouge DTD to orchestrate future improvements to Dawson's creek at the Acadian Thruway underpass at KCS RR
2016 – 2020	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250) D-B DELIVERY** Mr. Harmon served as the project Design & Construction Liaison and lead drainage engineer for the project. He was responsible for coordinating design and construction efforts for the D-B team to ensure a cost effective and efficient delivery process. His drainage design responsibilities included open ditch and subsurface drainage systems, box culvert and cross drain extension design, and flood elevation assessments to ensure that project features did not negatively affect base flood elevations along the 6.7 mile project corridor.
10/18 – 03/20	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA D-B DELIVERY** Mr. Harmon served as a drainage design engineer and was responsible for the evaluation and design of both the existing and proposed drainage systems for this new 4-lane rural arterial and roadway and urban freeway interchange. In addition to the standard DOTD drainage evaluations for storm drain systems (inlets, pipes, box culverts, and bridges) consideration of impacts to the surrounding floodplain storage basins and wetlands had to be considered. The floodplain area along the southern limits of the project is also bisected by the KCSRR and is subject to significant backwater and overbank flooding from Red Chute Bayou. Due to the floodplain complexities associated with this lateral overflow storage area, coordination with the Bossier Levee District was required which included utilizing elements of thier 2-D Unsteadey Flow Hec Ras Model for this region. Due to the lateral overflows and interchange of flows, consideration of bridge scour was evaluated for the KCSRR Overpass utilizing the HEC -RAS computer model.

Bryan Harmon (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**BRYAN K. HARMON, PE**	Years of relevant experience with this employer	**6.5**
Title	**Vice-President / Special Projects Engineer**	Years of relevant experience with other employer(s)	**33**

04/18 – Present	**Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791) PPP DELIVERY** Sigma is providing the drainage design for this major highway improvement that is being designed and constructed under this alternative delivery method. Mr. Harmon is serving as the lead drainage engineer and is responsible for the coordination and proper consideration of the impacts that the large multi-jurisdictional pumped drainage outfall systems have on the project drainage system performance. Project drainage considerations include bridge deck scupper design conforming to FHWA HEC-21 requirements, and standard storm drainage piping and inlet design for associated local roadway improvements. The drainage system design must account for the final full build conditions but must also function during the various construction sequences with the addition of temporary systems.
09/20 - Present	**Owner Verification Services - College Drive Flyover Ramp I-10/I-12 West, East Baton Rouge Parish (H.013897)** **D-B DELIVERY** Sigma is a technical subconsultant for owner verification services for this urban freeway alternative delivery project. Mr. Harmon is responsible for technical design and constructability reviews for definitive design and roadway hydraulic design units: Reviews include technical comments, design review meetings with the design consultant, builder, and DOTD, and concurrence reviews of D-B team responses.
01/22 – Present	**Hooper Road (LA 408) Improvements, East Baton Rouge Parish, LA (H.002316/CP No. 12-CS-HC-0017)** Mr. Harmon is the lead hydraulics engineer for the widening of an existing 2-lane roadway to a 4-lane boulevard to increase capacity. His responsibilities include development of the existing and design drainage maps, cross drain design, storm drain system design, open ditch design, and evaluation of impacts for open ditch vs storm drain system alternatives along the project corridor.
	Prior to joining Sigma, Mr. Harmon spent the previous year serving as the Interim Director of the Department of Public Works for the City of Baton Rouge and Parish of East Baton. Prior to his tenure as the Director, he served 9.5 years as the DPW Deputy Director/Chief Engineer and 15 years as the Assistant Chief and Drainage Engineer. As Deputy Director/Chief Engineer, one of his primary responsibilities included the over sight of all engineering functions and project construction for the Department. Specific duties included the administration of flood plain and storm water regulations, right of way acquisitions, standard plans and specifications, engineering studies and plan development, cost estimates, funding pursuits, bid phase services, and construction administration for several types of municipal infrastructure projects throughout East Baton Rouge Parish. As an owner's representative for EBR parish, he coordinated with contractors for construction projects, participated in project partnering, performed design and constructability reviews, evaluated value engineering proposals, and prepared independent cost estimates for project.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**ROBERT LEAR, JR., PE, LSI**		Years of relevant experience with this employer	**23**	
Title	**Vice-President / Sr. Project Manager**		Years of relevant experience with other employer(s)	**3**	
Degree(s) / Years / Specialization		**BS / 1996 / Civil Engineering**			
Active registration number / state / expiration date		**PE.0029394 / LA / 3-31-2023 & LSI.0000508 / LA / 9-30-2023**			
Year registered	**2001 / 2005**	Discipline	**Civil / Land Surveyor Intern**		
Contract role(s) / brief description of responsibilities		**Project Manager / Road Design**			

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2005 2021	**NEPA and Transportation Decision Making Seminar** **ATSSA Traffic Control Supervisor Certification #337850 (TCT/TCS)**
10/2020 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5) CMAR DELIVERY** Mr. Lear is a road design engineer for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. His responsibilities include road and drainage design, complex interchange geometric design, maintenance of traffic / sequencing plans, road plan preparation, coordinating with the CMAR contractor, design and constructability reviews, value engineering assessments, project phasing for GMP limit determination, proposed right of way and control-of-access limit determination and utility coordination.
10/16 – 06/20	**I-10: Highland Rd to LA73 Design-Build Project, East Baton Rouge/Ascension Parishes. H.009250 D-B DELIVERY** Mr. Lear was the Roadway Design Engineer for this LaDOTD Design Build Project. The project included widening I-10 for 6.6 miles to 3-lanes in each direction from the Highland Road Interchange to the LA73 Interchange. The I-10 bridges over Highland Road and approaching roadway are being replaced with a new structure and profile grade. Adjustments to the ramp gore areas were required to accommodate the new profile. A 54" median barrier is included for 3.6 miles, with additional detail required for superelevated curves through flat profile grades to ensure adequate drainage. Also, design considerations were necessary to minimize tree clearing through the 3-mile wooded median section of the freeway. A double exit with 2 dedicated exit lanes was design at the I-10 EB exit at Highland Road and a double exit with 1 dedicated exit lane and 1 shared exit lane was designed at the I-10 EB exit at LA73. Existing ramp acceleration and deceleration lanes were lengthened to address traffic queing problems at Highland Road. Mr. Lear was responsible for all road design components of the project.
01/14 – 07/16	**LA342: Roundabout @ LA 724, Lafayette Parish, LA (H.002163)** Mr. Lear served as the project manager and road design engineer for a 4-legged single lane roundabout in Lafayette Parish. He was responsible for the horizontal and vertical geometric design, typical sections, suggested sequencing, permanent pavement markings, permanent signing, quantities and opinion of probable costs for this project. He also supervised all survey and SUE efforts. Utility locates included QL-D and QL-C locates. Mr. Lear coordinated with District 03 for utility relocation requirements and needs.

Robert Lear, Jr. (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**ROBERT LEAR, JR., PE, LSI**	Years of relevant experience with this employer	**23**
Title	**Vice-President / Sr. Project Manager**	Years of relevant experience with other employer(s)	**3**

04/19 – Present	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA** **D-B DELIVERY** The project includes adding ramps to the existing I-20/I-220 Interchange and providing full access to the Barksdale Air Force Base via a new 4-lane rural arterial roadway. Mr. Lear is the Roadway Design Engineer for this LaDOTD Design-Build Project. He is responsible for preparing the geometric design criteria reports, design exceptions, horizontal and vertical geometrics for the interstate, diagonal and loop ramps, C-D road, and rural arterial; superelevation transitions, typical sections, plan profile sheets, geometric control, geometric layout, geometric details, cross sections, drainage design including cross drains, storm drains, side drains, roadside ditches, existing and design drainage maps, clearing and grubbing plans, and construction support. Mr. Lear also was responsible for QA/QC reviews and/or independent reviews of the Stormwater Pollution Prevention Plan, Interchange Modification Report re-evaluation, traffic control plans, signing and striping plans, and transportation management plan. He also participated in partnering and coordination with the contractor throughout the RFQ, RFP, design and construction phases of the project. As key personnel for the DB process, he participated in all of the required pre-construction project meetings as well as design-build team constructability reviews.
2013 - Present	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** **I-10: LA 328 to LA 347, St. Martin Parish (H.003014)** **I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Lear was the project manager and lead roadway engineer for replacing and upgrading 16.6 miles of I-10 and intersection safety improvements from Lafayette to near Henderson, LA, including and a new overpass on Melvin Dupuis Rd over I-10. He was responsible for all roadway design components of the project including typical sections, plan profiles, geometric details, sequencing, level 4 TMP, and cross sections. The project scope also included two roundabouts at the ramp termini points and intersection improvements to LA352/LA347 based on traffic data and access management. Mr. Lear was the road design engineer for these one-lane roundabouts and intersection improvements and attended public meetings for DOTD environmental clearance. Mr. Lear also coordinated the roadway lighting and utility conflicts with subconsultants, and bridge design with DOTD Bridge section, and assembled the multi-discipline construction plan set. **He is currently providing construction support for the project which includes partnering, value engineering proposal reviews and plan changes.**
12/03 - 01/12	**Sullivan Road Improvements, East Baton Rouge Parish, LA (255-30-0012)** Mr. Lear was the project manager for the design of a 4-lane / 5-lane suburban roadway in Central, LA. His responsibilities included designing all horizontal and vertical geometrics, geometric details, joint layouts and graphical grades, permanent pavement markings, cross sections, traffic control, determining right of way limits, right of way map preparation, quantity computations and cost estimating.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**JOSH K. RENARD, PE**		Years of relevant experience with this employer	**16**	
Title	**Project Manager**		Years of relevant experience with other employer(s)	**0**	
Degree(s) / Years / Specialization		**BS / 2006 / Civil Engineering**			
Active registration number / state / expiration date		**PE.0036015/ LA/ 3/31/2023**			
Year registered	**2010**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities		**Road Design / Utility Coordination**			

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2021	**Traffic Control Supervisor (TCS) course**
10/16 – 06/20	**I-10: Highland Rd to LA73 Design-Build Project, East Baton Rouge/Ascension Parishes. H.009250 D-B DELIVERY** Mr. Renard served as the utility coordinator for this interstate design build project. He communicated with and gathered information from utility owners to ensure that the road was designed with minimal utility conflicts. Mr. Renard coordinated efforts to have telecommunications, water, and gas lines marked in the field and then led efforts to have Level A test holes performed to ensure a successful no-conflict design.
08/19 – 10/19	**I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA D-B DELIVERY** This project will extend I-220 south at the I-220/I20 interchange with new roadway and bridges connecting and creating access to the Barksdale Air Force Base. Mr. Renard was responsible for all Subsurface Utility Engineering for this project, including utility conflict matrix development, utility coordination, utility relocation, Level D through A locates and test holes.
04/18 – Present	**Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791) PPP DELIVERY** Mr. Renard served as the drainage design Quality Control checker for this road design project. His efforts ensure that the project's drainage meets the requirements of the owner, parish and project specifications. This included technical checking for the existing and design drainage maps, HydroWIN calculation checks, drainage plan profile checking, and hydraulic computation book checking.
10/2020 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5) CMAR DELIVERY** Mr. Renard is a roadway and utility engineer for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. He prepared a utility conflict matrix for the project and designed a utility duct bank to expedite utility relocations with minimal construction conflicts. The duct bank design was an independent GMP for CMAR delivery. He is also designing drainage and roadway plans for surface streets between Washington Street and Acadian Blvd.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**GREGORY P. SEPEDA, PE**			Years of relevant experience with this employer	**24**
Title	**Vice President / Chief Engineer**			Years of relevant experience with other employer(s)	**5**
Degree(s) / Years / Specialization			**BS / 1990 / Civil Engineering** **MS / 2002 / Civil Engineering - Structural**		
Active registration number / state / expiration date			**26669 / LA / 9-30-2022**		
Year registered	**1996**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Project Manager / Road Design / QC**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2012 2016 2018	**NEPA and Transportation Decision Making Seminar** **Maintenance and Rehabilitation of Historic Bridges Course** **Traffic Control Supervisor (TCS) course**
07/12 – 10/18	**I-10 Widening, LA30 - LA22, Ascension Parish, LA (H.009276)** Mr. Sepeda served as project manager and lead bridge engineer for the widening of a 5 mile segment of I-10. He was responsible for the overall project management and coordination with the subconsultant team, road bridge design, and plan production. Sigma is also responsible for the design of a concrete slab span bridge, and the deck design of four girder-supported bridge structures. Under a contract supplement, Mr. Sepeda lead the design for a replacement of the LA 941 structure over the mainline interstate. LA 941 is a rural 2-lane roadway.
08/12 – Present	**Hooper Road (LA 408) Improvements, East Baton Rouge Parish, LA (H.002316/CP No. 12-CS-HC-0017)** Mr. Sepeda is the project manager for the widening of an existing 2-lane roadway to a 4-lane boulevard to increase capacity. The project began with an Environmental Assessment (E.A.) and NEPA environmental documentation. Mr. Sepeda worked with all technical team members and successfully obtained a FONSI. As the project continues into plan development, Mr. Sepeda is coordinating the topographic survey to identify major topography and existing utilities, as well as developing geometry consistent with MOVEBR and DOTD guidelines. With the route being a state highway, coordinating with LA DOTD is a necessity. Sigma is facilitating the development of a traffic study with a subconsultant, following criteria established by LA DOTD. Multiple roadway sections and intersection arrangements are being evaluated through a tiered approached.
12/14 – 04/19	**S. Acadian Thruway (Perkins Rd - LA 73), East Baton Rouge Parish, LA (H.011261)** Mr. Sepeda is the project manager for the safety project designed to reduce the number of accidents along the stretch of Acadian Thruway. The project includes replacing the asphalt overlay and improving the intersection design at Claycut Road. Mr. Sepeda is responsible for all project management, coordinating the design effort and quality control.

Gregory Sepeda (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**GREGORY P. SEPEDA, PE**	Years of relevant experience with this employer	**24**
Title	**Vice President / Chief Engineer**	Years of relevant experience with other employer(s)	**5**

10/16 – 06/20	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** **D-B DELIVERY** Mr. Sepeda served as the project Design Quality Manager (DQM) for all design efforts on the project. Mr. Sepeda developed a project specific Design Quality Plan as well as QA processes to ensure that the design activities comply with the Contract requirements. As a component of the QA process, he also performed design assessment reviews of every submittal to review for general compliance with the requirements of the Contract, taking into consideration the proposed method of construction, and covered areas such as: design criteria; codes and standards; constructability; and fatigue and durability performance. For critical structural members, Mr. Sepeda also performed an independent analytical design check using separate calculations to verify the structural adequacy and integrity of the members. This analytical check included the following: structural geometry & modeling; material and member properties; loads; and structural boundary conditions.
06/13 - Present	**I-10: East Jct. I-49 to Atchafalaya Floodway Bridge, Lafayette & St. Martin Parishes (H.003003/H.010601/H.003014)** Mr. Sepeda oversaw the development of all sequencing and the Level 4 Transportation Management Plan (TMP) for the I-10 widening project from I-49 to the Atchafalaya Floodway Bridge. This roadway improvement is split into three segments requiring three separate TMPs. The first 2 segments also required an Initial Financial Plan to be developed. Mr. Sepeda drafted this plan which included cost estimates, scheduling, and identifying risk.
04/12 – 12/12	**Jones Creek Road Improvements, East Baton Rouge Parish, LA (H.007137)** Mr. Sepeda was responsible for the quality control / quality assurance for the design of a 5-lane urban roadway from Tiger Bend Road to George O'Neal Road. With a special focus on the drainage, utility conflict points, and maintenance of traffic impacts, he helped produce a final deliverable with minimal disruptions to the local residents. He specially coordinated the design and placement of a large 36" sanitary sewer force main with the proposed roadway construction. Mr. Sepeda also prepared the safety performance computations per the Predictive Method of the Highway Safety Manual.
09/13 – 10/15	**US 171: J-Turns @ N. Perkins Ferry Road, Calcasieu Parishes (H.010197)** Mr. Sepeda was the project manager for the design of J-Turns and turn lanes at a 3-leg intersection north of Lake Charles, LA. He is responsible for the road design, drainage design, and plan production. All work for this project is being performed using CADConform and LA DOTD electronic plan delivery requirements.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**DEREK S. WHEAT, PLS**		Years of relevant experience with this employer	**7**	
Title	**Land Surveyor**		Years of relevant experience with other employer(s)	**4**	
Degree(s) / Years / Specialization			**BS / 2009 / Industrial Technology**		
Active registration number / state / expiration date			**5213 / LA / 9-30-2023**		
Year registered	**2019**	Discipline	**Survey**		
Contract role(s) / brief description of responsibilities			**Project Surveyor**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2019	**Traffic Control Supervisor (TCS) course**
2019-2020	**Hooper Road (LA 408) Blackwater Bayou – Joor Road, East Baton Rouge Parish (H.002316)** The project involved topographic surveying and engineering design for the upgrade of the existing 2-lane roadway with open ditches to a 4-lane boulevard with subsurface drainage. Mr. Wheat is the surveyor of record for the topographic survey of the 1.75 mile suburban arterial roadway. He was responsible for performing and managing the GPS control, digital leveling for vertical control, RTK survey, robotic total station survey, and scanning of the project corridor. The survey was conducted using DOTD surveying standards and CadConform deliverables.
2020	**Jones Creek Road / Airline Hwy, East Baton Rouge Parish** Mr. Wheat served as the Professional Land Surveyor and topographic survey manager of this proposed road extension through a wooded tract of land. All improvements at the proposed intersection locations within the Airline Highway and Jefferson Highway right-of-way were located including all drainage, utilities, and pavement limits. Mr. Wheat oversaw the collection of data via conventional, GPS, and scanning surveying methods. Mr. Wheat coordinated with utility owners in the area to ensure all known facilities were marked and surveyed. Mr. Wheat's deliverables to the client and MOVEBR Program Managers consisted of plan and profile sheets, topographic and utility CAD drawings, list of utility owners with contact information, and a Digital Terrain Model.
2015-2018	**I-10: LA 328 to LA 347, St. Martin Parish (H.010601)** Mr. Wheat served as a party chief for topographic surveying of existing features and utilities for pavement replacement of 6.8 miles of I-10 between Breaux Bridge and Henderson, LA. He was responsible for data collection, utility coordination with the SUE subconsultant, data processing and mapping. The survey was performed using DOTD codes and linework automation. Mr. Wheat also coordinated with utility companies for QL-C and QL-B locates for utilities along Melvin Dupuis Road, which is being removed and replaced with a structure over the interstate. Mr. Wheat also performed the supplemental topographic surveying along Melvin Dupuis Rd.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**DEREK S. WHEAT, PLS**	Years of relevant experience with this employer	**7**
Title	**Land Surveyor**	Years of relevant experience with other employer(s)	**4**

2013-2019	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Wheat served as a party chief for topographic surveying of existing features and utilities for pavement replacement of 2.7 miles of I-10 near Henderson, LA. He was responsible for data collection, utility coordination with the SUE subconsultant, data processing and mapping. He also performed the topographic survey along LA347 and the LA352 outfall canal. The survey was performed using DOTD codes and linework automation.
2018	**Town of Dubach Sidewalks, Lincoln Parish (H.011772)** Mr. Wheat served as a party chief for topographic surveying and SUE designations along 3 streets in the Town of Dubach. The survey included supplemental topography for utility, building lines, awnings, drainage features, sidewalks and misc. features. The survey was performed using DOTD codes and linework automation. He also was responsible for on-site traffic control.
2017-2018	**LA 675 & LA 87 Improvements New Iberia, LA (H.011781)** Mr. Wheat served as the QL-B designating and QL-A locates party chief subsurface utility engineering on S. Hopkins Rd in New Iberia, LA H.011781. The project included Quality Level A, B, C and D locates in accordance with CI/ASCE Standard 38-02 for underground utilities owned by 9 companies. The 0.8 mile urban roadway included constricted right of way with multiple utilities in the roadway and under sidewalks. Quality Level B locates were conducted using multiple geophysical scanning methods, and 40 QL-A test holes were performed by Sigma. Final SUE plans were prepared in accordance with CI/ASCE Standard 38-02 and DOTD standards. He was responsible for QL-B locates, shot count sheets, QL-A test hole data sheets, SUE plan preparation, coordinating with utility companies, unknown line research and traffic control for the project.
2015-2016	**Jacock Road Bridge Replacement, West Feliciana Parish (15-HMP-PW-01)** The project involved topographic surveying and engineering design for the replacement of the existing bridge on Jacock Road Bridge at Barrow Fork Creek. The work included topographic surveying, drainage design, geometric design, bridge design, and preparation of construction plans. Mr. Wheat set the project control and also collected the topographic data of the creek, road, and bridge structure.

Firm employed by: **SIGMA CONSULTING GROUP, INC.**					
Name	**MILES B. WILLIAMS, PE**		Years of relevant experience with this employer	**32**	
Title	**President / Principal-in-Charge**		Years of relevant experience with other employer(s)	**8**	
Degree(s) / Years / Specialization			**BS / 1983 / Civil Engineering**		
Active registration number / state / expiration date			**23094 / LA / 3-31-2024**		
Year registered	**1988**	Discipline	**Civil**		
Contract role(s) / brief description of responsibilities			**Principal-in-Charge / design reviews**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2004 1988 - Present	**NEPA and Transportation Decision Making Seminar** **34+ Years responsible charge for designing DOTD roadway projects**
10/20 – Present	**I-10: LA 415 to Essen Lane, West and East Baton Rouge Parish, LA (H.004100.5) CMAR DELIVERY** Mr. Williams is the Road Design Lead Professional for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge. His responsibilities include road and drainage design, complex interchange geometric design, maintenance of traffic / sequencing plans, coordinating with the CMAR contractor, design and constructability reviews, value engineering assessments, cost estimating, project phasing for GMP limit determination, proposed right of way and control-of-access limit determination, utility coordination, and public involvement.
2016-2020	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250) D-B DELIVERY** Mr. Williams served as the Project Design Manager for all design efforts for this urban freeway design-build project. He was responsible for leading and coordinating all disciplines: road design; bridge design; lighting; geotechnical investigation; and traffic control. He also is the responsible engineer for geometric design, roadway construction and traffic control plans. The project included coordinating with the D-B contractor and DOTD, partnering, design and constructability reviews, and cost estimating.
04/18 – Present	**Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791) PPP DELIVERY** Sigma is a design subconsultant providing drainage design for this alternative delivery project. Mr. Williams is serving as project principal and hydraulic design engineer. His work entails liaison with the prime consultant, builder, concessionaire and LADOTD. He is also assisting in the design of the drainage system for the roadways throughout the project including storm sewer design, drainage plans preparation and generation of quantities.
12/03 – 01/12	**Sullivan Road Improvements, East Baton Rouge Parish, LA.** Mr. Williams was the principal in charge for the design of a 4-lane / 5-lane suburban roadway in Central, LA. Miles also serves as a project engineer for the design study and roadway design, with an emphasis on Construction Sequencing and Traffic Control.

Miles Williams (continued)

Firm employed by: **SIGMA CONSULTING GROUP, INC.**			
Name	**MILES B. WILLIAMS, PE**	Years of relevant experience with this employer	**32**
Title	**President / Principal-in-Charge**	Years of relevant experience with other employer(s)	**8**

09/20 - Present	**Owner Verification Services - College Drive Flyover Ramp I-10/I-12 West, East Baton Rouge Parish (H.013897)** **D-B DELIVERY** Sigma is a technical subconsultant for owner verification services for this urban freeway alternative delivery project. Mr. Williams is responsible for technical design and constructability reviews for definitive design and the following design units: clearing and grubbing, roadway design, hydraulics/drainage design, and maintenance of traffic. Reviews include technical comments, design review meetings with the design consultant, builder, and DOTD, and concurrence reviews of D-B team responses.
03/13 – 10/20	**I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** Mr. Williams was the principal in charge for the roadway design for the three laning of the westbound lanes and rehabilitation of the two lanes eastbound for 2.7 miles of I-10 and intersection safety improvements near Henderson, LA. He supervised the plan preparation for all roadway design components of the project including typical sections, plan profiles, geometric details, sequencing, level 4 TMP, and cross sections. The project scope also included two roundabouts at the ramp termini points and intersection improvements to LA352/LA347. Sigma also provided construction support which included partnering, value engineering proposal reviews, and plan changes.
03/13 – 09/20	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** Mr. Williams was the principal in charge for the roadway design for the six laning of 6.7 miles of I-10 in Lafayette, LA. He supervised the preparation of the urban freeway design components of the project including typical sections, plan profiles, geometric details, sequencing and cross sections. The project included median barrier divided urban interstate with superelevation, bridge replacement and widening, and local road pier protection. Sigma also provided construction support which included partnering, value engineering proposal reviews, and plan changes.

Firm employed by	Vectura Consulting Services, LLC			
Name	Sheelagh Brin Ferlito, PE, PTOE		Years of experience with this firm/employer	6
Title	Principal		Years of experience with other firm(s)/employer(s)	27
Degree(s) / Years / Specialization			B.S. / 1988/ Civil Engineering	
Active registration number / state / expiration date			PE.0025383 / LA 9/30/2023	
Year registered	1993	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Traffic Signal Design and CE&I Supervisor / QC for TMP	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/21 - Current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge, Louisiana)** Brin is the task leaders for Vectura for the **Construction Engineering and Inspection** of 24 traffic signals. Brin oversaw the review of signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Brin and Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
07/19 – current	**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. She coordinated the detour plans based on the sequence of construction as part of the **Level 2 Transportation Management Plan (TMP**).
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish)** Brin is the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at the Tanger Boulevard. Vectura also developed **signal timing plans** for each phase of the construction to maintain progression along LA 30.
02/20 – 11/21	**H.010616 DOTD I:20 LA 544 Overpass Replacement (Ruston, LA)** Brin is the project manager for the **Transportation Management Plan (TMP)** as part of a design for a bridge replacement and three roundabouts in Ruston, LA. The TMP was a **Level 2** and included evaluation of 10 Sequence of Construction Phases. Detours included rerouting traffic to other interchanges at nighttime only, rerouting traffic from I-20 to the off ramp and on ramp at nighttime only, and rerouting traffic to service roads in vicinity of the project. Brin coordinated the queue analysis with DOTD to determine when lane closures would be allowed utilizing 24-hour tube counts. She will also coordinate the development of temporary traffic signal plans for this project as well.
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, 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.

04/14 – 12/14	**H.002301 Signal Design for N. Sherwood Forest Dr. Widening Project (Baton Rouge, LA)** As the project engineer, Brin **designed three signalized intersections** as part of a road widening project as per EBR DPW and DOTD requirements. Ms. Ferlito developed the traffic signal equipment, signal timing and communication construction plans, special provision specifications, quantities, and cost estimate. She also performed tasks to develop the striping plans and sequence of construction plans which included temporary signal equipment placement due to lane shifts during construction.
07/12-03/14	**EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction (Baton Rouge, LA)** Brin was the **Project Resident Engineer** on behalf of EBR **for performing CE&I services** for the construction of 11 traffic signals. She maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into interstate I-12 fiber backbone and ATM/EOC building. She processed all monthly tasks in EBR formats as well as well as all items on the EBR project closeout checklist.
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.
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 signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. Design also included **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 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 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 employed by	Vectura Consulting Services, LLC		
Name	Laurence Lucius Lambert, II, PE, PTOE, PTP	Years of experience with this firm/employer	6
Title	Supervisor	Years of experience with other firm(s)/employer(s)	18
Degree(s) / Years / Specialization		B.S./1997/Civil Engr. M.S./2006/Civil Engr. (Transportation focus) M.B.A./2010	
Active registration number / state / expiration date		PE.0029901 / LA / 3/31/2024	
Year registered	2001	Discipline	Civil
Contract role(s) / brief description of responsibilities		TMP Supervisor / Traffic Signal Design QC	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/21 – 02/22	**H.013267 Capital Area Pathways Project (Baton Rouge, LA)** Laurence was project manager for a traffic study to evaluate trail crossings at three state routes that required DOTD approval. The **traffic study** included traffic data collection, safety analysis, existing conditions analysis and alternative analysis. Laurence used the DOTD Traffic Engineering Manual, MUTCD, and FHWA guidance to develop the most effective trail crossing alternatives.
02/21 - 03/21	**H.013256.5 I-10 ITS Scott to Lake Charles (Southwest Louisiana)** Laurence was the lead traffic engineer for a Level 2 **Traffic Management Plan** (TMP) for the construction of ITS equipment along I-10. The plan included a safety strategy that included a CAT Scan, LOS determination utilizing Citrix data, lane closure recommendations based on a queue analysis and public information strategies.
04/18 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger & I-10 Gonzales (Ascension, LA)** Laurence provided a Quality Control review of the **temporary construction and sequence of construction plans**. Vectura also provided Quality Control review of **signing and striping plans** at 30% and 60% plan sets to ensure the **roundabouts** conformed to the Pavement Markings Details Sheet PM-09 and the MUTCD details on roundabouts.
04/18 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish)** Laurence provided a Quality Control review of the **temporary construction and sequence of construction plans**. Vectura also provided Quality Control review of **signing and striping plans** at 30% and 60% plan sets to ensure the **roundabouts** conformed to the Pavement Markings Details Sheet PM-09 and the Manual on Uniform Traffic Control Devices (MUTCD) details on roundabouts.
02/20 – 09/21	**College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA)** Laurence was the project manager to develop Chapter 1 (Data Collection), Appendix A (Initial Data Collection), and Appendix B (Final Data Collection) for proposed improvements College Drive. Since the I-10 interchange was included in the study, **approval from DOTD was required**. After the 7-day, 24-hour counts were collected in March of 2020, DOTD stopped all data collection due to the impacts of COVID-19. After a pause of a year, Vectura closely worked with the City of Baton Rouge and DOTD to provide sufficient data that traffic patterns were returning to pre-COVID conditions and allowed PM peak hour data to be collected. Vectura collected, turning movement counts, 85% speed data, travel time runs, queue measurements, field observations, verification of Traffic Signal Inventories, and bicycle / pedestrian / transit observations.
10/17 - 10/18	**H.013025 LA 182 (University Avenue) Corridor Planning Study (Lafayette, LA)** Laurence was the lead transportation engineer for a **Corridor Planning Study** for LA 182. The scope focused on improving safety and mobility for pedestrian, bicycle, and transit users. Laurence collected AM & PM peak vehicle turning movement counts as well as pedestrian and bicycle counts. Laurence coordinated with the Acadiana Planning Commission to **develop growth rates and design year volumes**. Laurence then performed Highway Capacity Manual analysis for 5 intersections along the intersection analyses for the signalized and roundabout controlled alternatives. Included in the study was a **safety analyses** of five intersections and the intermediate segments. Based on the results of the safety analysis, Laurence provided design criteria to the design team for improving safety of pedestrians, bicycles, and vehicles.
09/16 - 04/17	**H.004957.5 I-12 To Bush - LA 3241 (I-12 – LA 36) Corridor Study (St. Tammany Parish, LA)** Laurence was the lead traffic engineer for a **DOTD traffic study** for the new LA 3241 alignment with the purpose of obtaining both existing and projected future traffic variables in accordance with standard operating procedures typically performed in these types of analyses. Laurence worked closely with

	the NORPC and District 62 to develop design year volumes using data the TransCAD model. The traffic study examined concepts that improved the safety and efficiency of the roadway consistent with the latest DOTD policies related to access management. Laurence, along with Brin, **collected 7-day, 24-hour counts** w/ classification on mainlines, turning movement counts for morning and evening peak periods and speed data for mainlines. Laurence also developed a VISSIM **traffic simulation model** of the preferred alternative.
07/16-01/17	**Federal Highway Administration Intersection & Interchange Geometrics (IIG): Innovative Design Considerations for All Users** At the request of the FHWA division office for Virginia, Laurence was asked to **review a set of design plans** for a Displaced Left Turn (DLT) in Norfolk, VA. The plans were part of a design-build project that included widening a corridor, modifications to an interchange and the implementation of a DLT. Vectura specifically reviewed and commented on the intersection geometry, pavement markings and signage. The findings were summarized in a technical memorandum as well as "red line" comments were scanned and submitted to the FHWA Virginia Division office for their use.
04/11 - 09/11	**SPN 424-04-0032 US 90 at Louisiana 85 Design-Build Maintenance of Traffic Plan (Iberia Parish, LA)** Laurence developed a **Maintenance of Traffic** plan that accommodated the bridge and road widening, but also maintain passage of large trucks and freight through the heavily travelled corridor crucial for agricultural goods and farming. Laurence was the Lead Traffic Engineer for one of the first design-build projects undertaken by DOTD, which included the construction of a grade separated, diamond interchange to replace the existing US 90 intersections with Louisiana 85 in Iberia Parish to upgrade this future I-49 corridor to interstate standards.
06/10 - 10/10	**SPN 454-02-0071 I-12 Widening Design-Build Amite River Bridge to Juban Road Maintenance of Traffic Plan (Livingston Parish, LA)** Laurence was responsible for designing a **Maintenance of Traffic** plan that would keep drivers informed of real time traffic situations through a comprehensive traffic management system. Four lanes (two lanes in each direction) were to remain open during peak travel times throughout the length of the project. Temporary lane closures only occurred at night.
09/06-09-07	**EBR 06-CS-HC-00012 Downtown Baton Rouge Signal Project (Baton Rouge)** Laurence was the Project Manager to develop **construction plans to upgrade 29 signals** in downtown Baton Rouge as part of the EBR Green Light Plan. He coordinated numerous utility conflicts during construction since current utility plans were not readily available in an old part of town. He made several signal pole foundation location adjustments based on numerous field visits with utility companies.

Firm employed by Vectura Consulting Services, LLC					
Name	Prasanth Malisetty, PE, PTOE, PTP, RSP1			Years of experience with this firm/employer	1
Title	Senior Project Engineer			Years of experience with other firm(s)/employer(s)	17
Degree(s) / Years / Specialization			B.E. / 2003/ Civil Engineering; M.S. / 2004/ Civil Engineering		
Active registration number / state / expiration date			PE.0035792 / LA / 3/31/2023		
Year registered	2010	Discipline	Civil		
Contract role(s) / brief description of responsibilities			Senior Project Engineer for Traffic Control Design, Signal CE&I and TMP		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/20 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish)** Prasanth was the lead design engineering for temporary signal design associated with the **sequence of construction** for the roundabout at US 171 at Boone St.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish)** Prasanth was the lead design engineering to produce the temporary signal design associated with the **sequence of construction** for the roundabouts on LA 30 in Gonzales, LA. This project consists of eight proposed construction phases.
02/21 – 02/22	**MOVEBR LA 67 (Plank Road) Enhancement Project, Baton Rouge, LA, 2020-2021** Prasanth was a senior project engineer to enhance transit, bicycle, and pedestrian mobility on LA 67 (Plank Road) that required City-Parish and **DOTD approval**. Laurence and Prasanth developed traffic operations evaluation of the traffic study which included traffic signal timing evaluations.
01/21 – 05/21	**H.013256 - I-10 ITS Scott to Lake Charles (Lafayette, Acadia, and Jefferson Davis Parishes)** Prasanth and Reece were responsible for measuring anticipated construction quantities and producing a cost estimate for fifteen sites along I-10 where CCTV cameras were being installed by using **DOTD's Bid Tabulation and Cost Estimating Tool**.
12/18 – 7/20	**H.002297 LA 37 Sullivan Road to Liberty Road (Baton Rouge)** Prasanth was the project manager to **develop feasible roadway improvements** that will improve operation and increase safety along the LA 37 corridor. The project included data collection, development of growth rates, existing and future traffic analyses. Prasanth was responsible for traffic forecasting for no-build and future alternatives using the CRPC travel demand models. Also, performed the existing and future traffic analysis and propose potential alternatives to mitigate existing deficiencies.
11/17 – 12/18	**H.013264 District 08 Safety Investment Plan (Louisiana)** Prasanth was the project engineer responsible for preforming districtwide safety analysis and preliminary **engineering studies** for various locations considered high potential for safety improvements. Responsible for evaluating crash statistics to identify possible roadway issues by using appropriate safety analysis tools and recommend potential operation safety countermeasures. Developed Countermeasure Evaluation Tool (CET) tool which aid in determining total crash reduction for each proposed countermeasure with associated cost savings and perform benefit / cost analysis.
10/16 – 12/18	**H.012685 LA 385 Ryan Street Feasibility Study (Lake Charles, LA)** Prasanth was the project engineer responsible for **developing feasible alternatives** to preserve / enhance mobility and safety along the corridor. The 1.8-mile corridor study area includes 22 intersections and 133 driveways. The project included data collection, safety / crash review, traffic forecasting, developing alternatives, analysis of existing and proposed conditions and benefit / cost analysis. The future year traffic for the proposed roadway alternatives was forecasted utilizing IMCAL travel demand model.
8/10 – 2/18	**DOTD Traffic Engineering Contracts (Statewide, LA)** As a project engineer for numerous task orders for **Traffic Signal Timing Studies and Designs**, Prasanth was responsible for coordinating data collection tasks, intersection analysis, crash analysis, developing coordinated signal timing plans and field implementation / fine tuning along 27 corridors throughout statewide which involved 264 intersections. Following are the list of corridors

	• District 04; LA 1, LA 526 & US 171, Shreveport, LA; LA 3, LA 3105 & LA 72, Bossier, LA – 110 intersections, 7 corridors • District 02; LA 3040 & LA 57, Houma, LA; LA 20, Thibodaux, LA; US 61, New Orleans, LA – 44 intersections, 4 corridors • District 62; US 11, Slidell, LA; LA 19, Baker, LA; LA 44, Gonzales, LA; LA 3124 & LA 60, Bogalusa, LA; LA 10 Franklinton, LA; LA 16, Amite, LA; LA 38, Kentwood, LA; LA 25, Folsom, LA – 68 intersections, 9 corridors • District 58; US 425, Vidalia & Ferriday, LA – 11 intersections, 2 corridors • District 08; LA 1208-03, US 71 & LA 28 – 21 intersections, 3 corridors District 07; US 190 & US 171, DeRidder, LA – 10 intersections, 2 corridors
09/10 – 02/12	**S.P. No. 700-99-0447 US 190 Superstreet Study (Covington, LA)** Prasanth was the project engineer responsible for performing **corridor study** and develop solutions to improve mobility along the corridor. The alternatives analyses included R-CUT and signalized intersection using Synchro and SimTraffic. Responsible for data collection, travel time runs and intersection analysis.

Firm employed by Vectura Consulting Services, LLC					
Name	Reece Rodrigue, PE, PTOE			Years of experience with this firm/employer	2
Title	Project Traffic Engineer			Years of experience with other firm(s)/employer(s)	7
Degree(s) / Years / Specialization			B.S. / 2013/ Civil Engineering		
Active registration number / state / expiration date			PE.0042074 / LA / 3/31/2024		
Year registered	2017	Discipline	Civil		
Contract role(s) / brief description of responsibilities			Project Engineer for Traffic Control Design, Signal CE&I and TMP		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/21 – Current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge)** Reece is part of the team responsible for **Construction Engineering and Inspection**. Reece has reviewed the signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
01/21 – 05/21	**H.013256 - I-10 ITS Scott to Lake Charles (Lafayette, Acadia, and Jefferson Davis Parishes)** Reece was a member of the subconsultant team who was tasked with reviewing the ITS plans for 15 sites along I-10 where CCTV cameras were being installed. Reece was responsible for measuring anticipated construction quantities and producing a cost estimate for said quantities by using **DOTD's Bid Tabulation and Cost Estimating Tool**.
09/20 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish)** Reece was a project engineer, who participated in the production of the temporary **signal design** associated with the **sequence of construction** for the roundabout at US 171 at Boone St. He conducted a thorough analysis of the US 171 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish)** Reece was a project engineer, who assisted in the production of the temporary **signal design** associated with the **sequence of construction** for the roundabouts on LA 30 in Gonzales, LA. This project consists of eight proposed construction phases. He assisted in calculating the temporary pole heights, determining the placement location for the temporary poles for each phase, measuring and calculating clearance intervals. Reece conducted a thorough analysis of the LA 30 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
04/20 - Current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project (Belle Chasse)** Reece is the project engineer who **designed the temporary traffic signal** for the intersection of LA 23 at Engineers Rd. The design of the temporary signals is set for eight phases of construction per the anticipated sequence of construction. Temporary pole location and heights were recommended for placement for use for all construction phases. Vehicle clearance interval calculations were conducted for each phase in accordance with DOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan, which were also used in planning for the permanent and temporary signal timing plans. Reece was also responsible for the production of permanent signal plans for the LA 23 intersections at Engineers Road and at Burmaster Street. He evaluated STOP bar locations, calculated vehicle, and pedestrian clearance intervals, designed the railroad preemption sequence for both at-grade crossings, designed the wiring layout, and developed the interconnect plan. Reece maintains correspondence with the fellow design engineering team for product consistency. In addition, Reece was responsible for reviewing and approving shop drawings that were submitted by the contractor for use in construction.

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.
02/16 - 12/16	**H.005733.5 US 190 Superstreet Task Order (St. Tammany Parish)** Reece was a team member responsible for the layouts for the US 190 Superstreet signal designs. He created the **preliminary plans using CAD** software program MicroStation V8i. He aided in the technical design of each intersection. He conducted field inspections to verify locations of existing equipment as well as observing the area for feasible proposed utility locations. He attended project team meetings to discuss the project details as well as the plan-in-hand walk-through.
01/16 – 11/17	**Ochsner Main Campus Traffic Signals (Jefferson Parish)** Reece served as a design engineer for the **traffic signal plans** for the two Ochsner Main Campus access traffic signals with US 90 (Jefferson Hwy). The goal of the design was to implement updated pedestrian timings as well as optimize progression through the US 90 corridor. He reviewed traffic data and assigned time of day coordination timing parameters for the two intersections so that they may be included in the coordinated system west of the intersections. He used TruTraffic 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.

Firm employed by Vectura Consulting Services, LLC					
Name	Kristen Gahagan Farrington, PE, PTOE			Years of experience with this firm/employer	1
Title	Project Traffic Engineer			Years of experience with other firm(s)/employer(s)	7
Degree(s) / Years / Specialization			B.S. / 2014/ Civil Engineering		
Active registration number / state / expiration date			PE.0042785 / LA / 3/31/2023		
Year registered	2016	Discipline	Civil		
Contract role(s) / brief description of responsibilities			Project Engineer for Traffic Control Design, Signal CE&I and TMP		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/21 – 02/22	**H.013267 Capital Area Pathways Project (Baton Rouge, LA)** Kristen was a project engineer for a traffic study to evaluate trail crossings at three state routes that required DOTD approval. The **traffic design study** included traffic data collection, safety analysis, existing conditions analysis and alternative analysis. Laurence used the DOTD Traffic Engineering Manual, MUTCD, and FHWA guidance to develop the most effective trail crossing alternatives.
03/19 – 11/19	**H.012311 LA 429 Connector Stage 0 (Ascension Parish)** 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.
09/17 – 09/18	**H.011160 LA 73 Corridor Study Stage 0 (LA 74 to LA 621) (Ascension Parish)** 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.
04/18 – 04/19	**H.011243.1 I-49 at US 190 and LA 31 Interchange Improvements Stage 0 (St. Landry Parish)** 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.
04/19 – 6/21	**H.013817.1 A 117 Improvements Stage 0 (Vernon and Natchitoches Parishes)** 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 purpose and need of project is met.

03/19 – 11/19	**H.012311 LA 429 Connector Stage 0 (Ascension Parish)** 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.

17. Firm Experience:

Firm name	Lazenby & Associates, Inc.		Past Performance Evaluation Discipline(s)*	Road, Survey	
Project name	Arkansas Road (West Monroe) LA 616		Firm responsibility (prime or sub?)	Prime	
Project number	S.P.N. H.002622	Owner's name	Louisiana Department of Transportation and Development		
Project location	Ouachita Parish		Owner's Project Manager	Fred Borne, P.E. (Retired)	
Owner's address, phone, email	P.O. Box 94245, Baton Rouge, LA 70804-9245 Telephone (225)379-1388 e-mail: Fred.Borne@la.gov				
Services commenced by this firm (mm/yy)	12/07	Total consultant contract cost ($1,000's)	$1,611		
Services completed by this firm (mm/yy)	06/15	Cost of consultant services provided by this firm ($1,000's)	$1,512		

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

Lazenby & Associates, Inc. was the prime consultant on this project, which involved the widening of a 3.2-mile segment of Arkansas Road (LA 616) from a two-lane arterial to a five-lane arterial with subsurface drainage. The project included replacing four signalized intersections with multi-lane roundabouts to improve safety. An existing timber bridge site was replaced with a 4 – 7'x 7' RCB as part of this project.

Lazenby & Associates, Inc., performed topographic surveys and property surveys, and prepared preliminary plans, final plans, and right-of-way maps. Major design components were road design, hydraulic analysis and design, geometric design, signing and striping, and sequence of construction. Challenges encountered include developing a logical suggested sequence of construction while maintaining through traffic, and design of the roundabout finished grades due to the grades of the approach roadways at three of the roundabouts. Lazenby & Associates also assisted LDOTD in the environmental clearance process, preparing exhibits for and assisting with the public meetings and preparing permit drawings. Lazenby & Associates, Inc., also prepared utility relocation plans for water and sewer relocations within the project limits.

Key personnel involved in the project include the following:

- Jerry G. Lazenby, P.E., P.L.S.
- Paul D. Fryer, P.E. P.L.S.
- Kevin E. Crosby, P.E., P.L.S.
- Ronald J. Riggin, P.E., P.L.S.
- James R. Spillers, P.E.
- James S. Ellingburg, P.E.
- Randy C. Hammons, P.E.

17. Firm Experience:

Firm name	Lazenby & Associates, Inc.			Past Performance Evaluation Discipline(s)*	Road
Project name	Kansas Lane – Garrett Road Connector and I-20 Improvements			Firm responsibility (prime or sub?)	Prime
Project number	S.P.N. H.007300	Owner's name	Louisiana Department of Transportation and Development		
Project location	Ouachita Parish		Owner's Project Manager	Catherine Mastin, P.E.	
Owner's address, phone, email	P.O. Box 94245, Baton Rouge, LA 70804-9245 Telephone (225)379-1652 e-mail: Catherine.Mastin@la.gov				
Services commenced by this firm (mm/yy)	09/17	Total consultant contract cost ($1,000's)		$2,997.4	
Services completed by this firm (mm/yy)	current	Cost of consultant services provided by this firm ($1,000's)		$1,436.3	

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

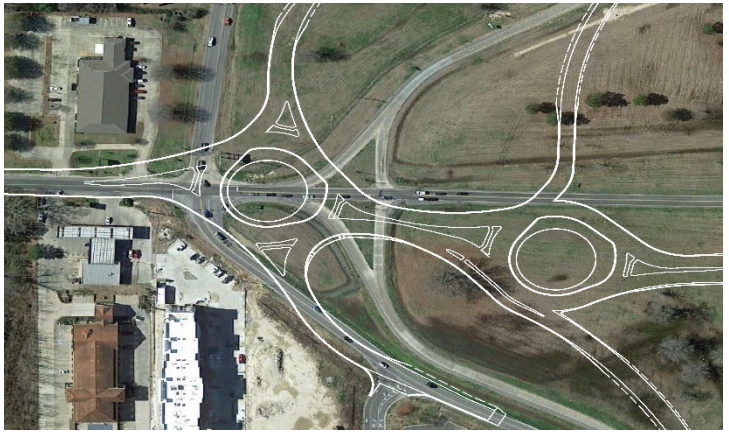
Lazenby & Associates, Inc. is the prime consultant on this project, which involves widening Garrett Road to four lanes in the vicinity of the I-20/Garrett Road interchange, and constructing a new roadway and bridge over LA 594 and the KCS Railway to connect Garrett Road to Kansas Lane in Monroe. The project also includes a new overpass over Garrett Road, five multi-lane roundabouts, and geometric modifications to the existing interstate ramps. The project also includes lighting, an MSE wall, and a traffic signal.

Lazenby & Associates, Inc., prepared preliminary roadway plans and are currently developing final roadway plans. As the prime consultant, Lazenby & Associates, Inc., is also coordinating the geotechnical engineering services, the development of bridge plans, the development of lighting plans, and traffic management plans (Level 4 TMP) by other firms retained as sub-consultants. Major design components being performed by Lazenby & Associates, Inc., include road design, hydraulic analysis and design, geometric design, signing and striping, and sequence of construction. One major challenge is to construct the project while maintaining traffic as much as possible, with minimum interference with I-20 traffic, which has resulted in a suggested sequence of construction that consists of 8 phases. Lazenby & Associates also assisted in the environmental clearance process, preparing exhibits for and assisting with the public meetings and preparing permit drawings.

Key personnel involved in the project include the following:

- Jerry G. Lazenby, P.E., P.L.S.

- Paul D. Fryer, P.E. P.L.S.
- Ronald J. Riggin, P.E., P.L.S.
- James R. Spillers, P.E.
- James S. Ellingburg, P.E.
- Randy C. Hammons, P.E.
- Hagan Lawrence, P.E.
- Noah Sampognaro, E.I.



17. Firm Experience:

Firm name	Lazenby & Associates, Inc.		Past Performance Evaluation Discipline(s)*	Road, Survey	
Project name	US 165 (LA 841 – Rilla)		Firm responsibility (prime or sub?)	Sub	
Project number	S.P.N. 015-08-0026	Owner's name	Louisiana Department of Transportation and Development		
Project location	Ouachita Parish		Owner's Project Manager	LA TIMED Managers	
Owner's address, phone, email	P.O. Box 94245, Baton Rouge, LA 70804-9245				
Services commenced by this firm (mm/yy)	02/00	Total consultant contract cost ($1,000's)		$2,063.6	
Services completed by this firm (mm/yy)	07/07	Cost of consultant services provided by this firm ($1,000's)		$1,558.6	

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

Lazenby & Associates, Inc. was the prime consultant on this project, which was a Louisiana Timed Managers (LTM) project that widened US 165 in Ouachita Parish for a distance of 6.5 miles. The existing roadway was restriped and used to accommodate northbound traffic and a new roadway was constructed to accommodate southbound traffic. The project included redesign of the interchange between US 165 and US 165 Business, near the US 165 overpass of the Union Pacific (UP) railway.

Lazenby & Associates performed a line and grade study and assisted with the Environmental Assesment process, including preparing exhibits for the public meeting, conducting a formal presentation at the public meeting, and preparing permit drawings. Upon approval of the preferred alternative, Lazenby & Associates, Inc. performed topographic surveys and preliminary and final plans, including hydraulic design of cross drains and median drains, and prepared right-of-way maps for the project. One of the more important aspects of design on this project involved conducting a study of the existing interchange and determining the feasibility of constructing a new interchange at this location, which is bounded on the west by the Ouachita River levee and the on the east by the UP railway.

Key personnel involved in the project include the following:

- Jerry G. Lazenby, P.E., P.L.S.
- Paul D. Fryer, P.E. P.L.S.
- Kevin E. Crosby, P.E., P.L.S.
- James R. Spillers, P.E.
- Randy C. Hammons, P.E.

17. Firm Experience:

Firm name	Lazenby & Associates, Inc.			Past Performance Evaluation Discipline(s)*	Road, Survey
Project name	Cheniere Spillway & Bridge Replacement (LA 3033)			Firm responsibility (prime or sub?)	Sub
Project number	S.P.N. H.008226	Owner's name	Louisiana Department of Transportation and Development		
Project location	Ouachita Parish		Owner's Project Manager	Sarah Moss, P.E.	
Owner's address, phone, email	P.O. Box 94245, Baton Rouge, LA 70804-9245 Telephone (225)379-1727 e-mail: Sarah.Moss@la.gov				
Services commenced by this firm (mm/yy)	08/14	Total consultant contract cost ($1,000's)		$1,269.5	
Services completed by this firm (mm/yy)	07/20	Cost of consultant services provided by this firm ($1,000's)		$261.1	

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

Lazenby & Associates, Inc. was a sub-consultant to The Riley Company of Louisiana, Inc., on this project, which involved replacement of the existing Cheniere Lake spillway and bridge on LA 3033 in Ouachita Parish. The project replaces a structurally deficient concrete spillway and bridge with a new fixed-weir spillway and bridge structure approximately 400 feet northeast of the existing structure. The existing bridge and spillway are being removed and replaced with embankment which will become part of the Cheniere Lake earthen dam. LA 3033 is located on top of the Cheniere Spillway earthen dam along the southeast side of Cheniere Lake. The project was re-designed in 2020 due to the cost of the proposed spillway and also due to funding constraints. The revised plans were expedited to meet an aggressive letting schedule, and were delivered on time.

The original topographic survey was performed by DOTD, but Lazenby & Associates, Inc., performed additional topographic survey work, as well as property surveys and right-of-way maps. Lazenby & Associates, Inc., also performed all roadway design for the project., and established locations for the required cofferdams which are required to dewater the site. This project is currently under construction and is progressing nicely.

Key personnel involved in the project include the following:

- Jerry G. Lazenby, P.E., P.L.S.
- Paul D. Fryer, P.E. P.L.S.
- Kevin E. Crosby, P.E., P.L.S.
- Ronald J. Riggin, P.E., P.L.S.
- James R. Spillers, P.E.
- Randy C. Hammons, P.E.

17. Firm Experience:

Firm name	Lazenby & Associates, Inc.		Past Performance Evaluation Discipline(s)*	Road, Survey	
Project name	Bossier North-South Corridor		Firm responsibility (prime or sub?)	Prime	
Project number	S.P.N. H.003854	Owner's name	Bossier Parish Police Jury – Northwest Louisiana Council of Governments.		
Project location	Bossier Parish		Owner's Project Manager	Joe E. Ford, Jr., P.E.	
Owner's address, phone, email	P.O. Box 70, Benton, LA 71006 Telephone (318)965-2329 e-mail: jefbosseng@aol.com				
Services commenced by this firm (mm/yy)	07/10	Total consultant contract cost ($1,000's)		$1,624.9	
Services completed by this firm (mm/yy)	11/17	Cost of consultant services provided by this firm ($1,000's)		$1,339.1	

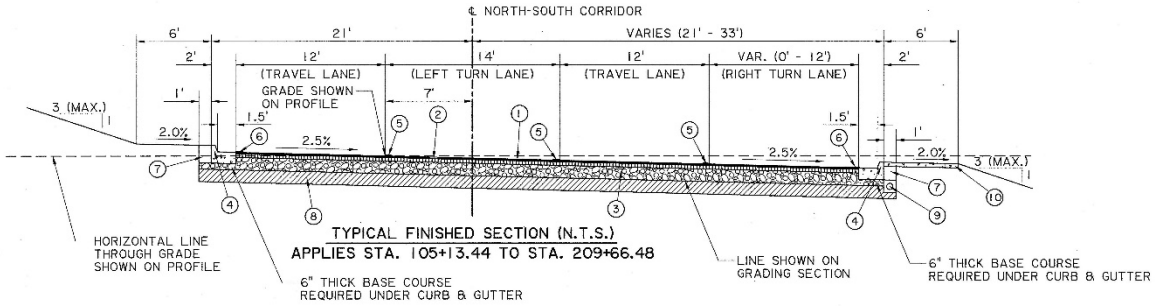
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Lazenby & Associates, Inc. was the prime consultant on this project, which involved reconstruction, widening, and realignment of a 3.7-mile segment of Swan Lake Road north of I-220, and construction of a new 4.2-mile roadway on new alignment from Swan Lake Road north to Crouch Road. The southern portion of the project is a three-lane section with subsurface drainage, while the remainder of the project is a two-lane roadway with open ditch drainage. There are three bridge sites included in the project. An existing timber bridge was replaced with a 5 – 10' x 10' RCB, and an existing slab span bridge was widened. The project was ultimately split into two jobs, and the north section which will soon let, includes a new quad beam girder bridge.

Lazenby & Associates, Inc., performed topographic surveys and property surveys, and prepared preliminary plans, final plans, and right-of-way maps. Major design components were road design, bridge design, hydraulic analysis and design (including hydraulic modeling of bridges), geometric design, and sequence of construction. Lazenby & Associates also assisted in the environmental clearance process, preparing exhibits for and assisting with the public meetings and preparing permit drawings.

Key personnel involved in the project include the following:

- Jerry G. Lazenby, P.E., P.L.S.
- Paul D. Fryer, P.E. P.L.S.
- Ronald J. Riggin, P.E., P.L.S.
- James R. Spillers, P.E.
- James S. Ellingburg, P.E.
- Randy C. Hammons, P.E.



17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Road**	
Project name	**Hooper Rd. Widening (LA 408) Blackwater - Joor**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.002316 / H.002317**	Owner's name	**EBR Dept. of Transportation and Drainage**		
Project location	**East Baton Rouge Parish**		Owner's Project Manager	**Tom Stephens, PE**	
Owner's address, phone, email	**P.O. Box 1471, Baton Rouge, LA 70821 | (225) 389-3186 | TStephens@brla.gov**				
Services commenced by this firm (mm/yy)	**10/12**	Total consultant contract cost ($1,000's)		**$1,818.0**	
Services completed by this firm (mm/yy)	**ongoing**	Cost of consultant services provided by this firm ($1,000's)		**$1,111.4**	

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

Sigma was contracted by East Baton Rouge Parish DTD, in cooperation with the FHWA and LADOTD, to provide NEPA environmental documentation, planning, and preliminary engineering for the improvements to the Hooper Road existing 2-lane rural roadway from Blackwater Road to Sullivan Road in Central, LA. DTD is proposing capacity and safety upgrades to the corridor using a 4-lane urban boulevard, subsurface drainage and pedestrian accessibility.

As part of the NEPA Environmental Assessment, Sigma performed the roadway planning, natural and human environment data assimilation, determining cumulative impacts, conceptual relocation plans, alternative development, public involvement, and NEPA document preparation. Sigma ran public meetings to gather community input on the project. A Finding of No Significant Impacts (FONSI) was issued for this project in December 2018. Sigma performed preliminary, conceptual design for roundabouts at several intersections along the corridor: Blackwater Road, Lovett Road, and Joor Road.

Sigma is now developing final design and construction plans for the segment from Blackwater Bayou to Joor Road, including the final geometrics of a new roundabout at Lovett Road. With a dynamic DTM of the proposed corridor, Sigma can make adjustments to minimize impacts. **Full roadway plans for the 4-lane boulevard with a raised**

Construction Cost = $18.3M (est)

Environmental Assessment (NEPA Compliant)

- Lead Environmental Consultant
- Alternative Alignments / Line & Grade
- Alternative Conceptual Sections
- Right-of-Way, Environmental & Residential Impacts
- Public Involvement

Surveying

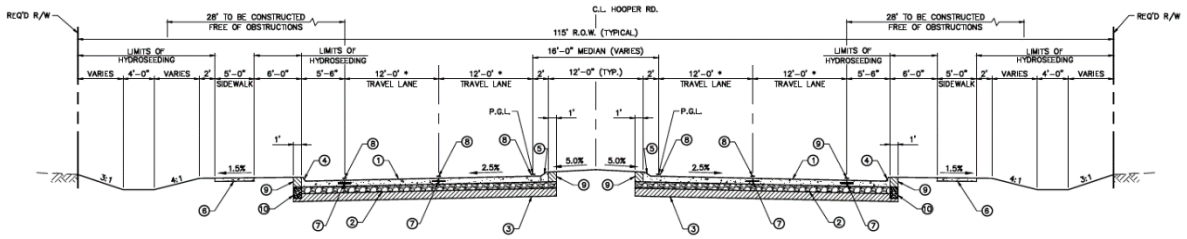
- Topographic Survey
- Property Survey
- Right of Way Maps

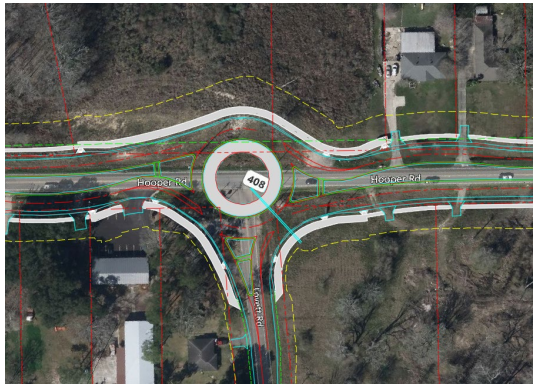
Plan Development

- Roundabout Design
- Road Design
- Drainage Design
- Utility Relocation
- MOT
- Signing & Striping

Sigma Firm Members Involved:

In Charge: Greg Sepeda
Bryan Harmon
Miles Williams
Robbie Lear
Josh Renard





17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Survey, Road**	
Project name	**I-10: East Jct. I-49 to LA 328**		Firm responsibility (prime or sub?)	**Prime**	
Project number	**H.003003**	Owner's name	**LA DOTD**		
Project location	**Lafayette & St. Martin Parishes**		Owner's Project Manager	**Brent Waguespack, PE**	
Owner's address, phone, email	**P. O. Box 94245, Baton Rouge, LA 70806, 225- 379-1524, Brent.Waguespack@la.gov**				
Services commenced by this firm(mm/yy)	**06/13**	Total consultant contract cost ($1,000's)		**$847.7**	
Services completed by this firm (mm/yy)	**Ongoing**	Cost of consultant services provided by this firm ($1,000's)		**$847.7**	

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

Sigma is the prime consultant for surveying, road design and plan preparation for capacity and pavement replacement on Interstate 10 in Lafayette. The project includes full replacement of the existing roadway and adding one lane in each direction to the inside of I-10, a median barrier, bridge widening (designed by DOTD), W-I-M system relocations, and traffic management/sequencing to maintain two lanes of traffic throughout construction.

Sigma performed the control survey for the project which included establishing five GPS Static Points and 17 RTK/TBM points over 5 miles of freeway. Sigma also performed topographic surveying and coordinated with DOTD's SUE Contractor. All topo of the utilities was performed by Sigma and are shown in the plan and profile sheets of the construction plans. Sigma prepared a utility conflict matrix and coordinated with DOTD District 03 for utility relocation needs.

The road design components include typical sections for both asphalt and concrete alternatives, horizontal and vertical geometrics with existing bridge structures constraining the design parameters, design report forms, geometric details, subsurface and open ditch drainage, pavement markings, cross sections and a detailed analysis of the sequence of construction that will maintain two-lanes of traffic in each direction. Interstate ramp terminals at 5 interchanges were redesigned. Also, upgrades to the exit ramps at LA328 were designed for added turning movement capacity at LA328. A Level 4 TMP and Financial Plan were also developed by Sigma. Sigma was responsible for all meeting minutes, preparation of disposition of comments, and maintaining the overall project schedule through coordination with DOTD Project Management.

Sigma was responsible for coordinating the multi-discipline project and preparing the final plan package. This included subconsultants, DOTD in-house staff, and consultants through other contracts who were responsible for bridge design, permanent signing, weigh-in-motion, roadway lighting, geotechnical borings, and SUE designations. Sigma also prepared permit sketches for LADOTD and attended public meetings for environmental clearance.

Sigma determined roadway pay items and calculating all roadway quantities. The final summary of estimated quantities and estimated construction cost was prepared by Sigma. This included collecting pay items and quantities from all disciplines and incorporating the plans into one complete set. Sigma is currently providing construction support on this project.

Sigma Firm Members Involved:

In Charge: Robbie Lear

Greg Sepeda	Miles Williams
Alex Farr	Bryan Harmon
Derek Wheat	Josh Renard

17. **Firm Experience**

Firm Name	**SIGMA CONSULTING GROUP, INC.**		Past Performance Evaluation Discipline(s)	**Survey, Road**	
Project name	**LA 342: Roundabout @ LA 724 Route LA 342**			Firm responsibility (prime or sub?)	**Prime**
Project number	**H.002163**	Owner's name	**LA DOTD**		
Project location	**Lafayette Parish**		Owner's Project Manager	**Tim Nickel, PE**	
Owner's address, phone, email	**P.O. Box 94245, Baton Rouge, LA 70806, 225-379-1110, Timothy.Nickel@la.gov**				
Services commenced by this firm (mm/yy)	**01/14**	Total consultant contract cost ($1,000's)		**$282.8**	
Services completed by this firm (mm/yy)	**07/16**	Cost of consultant services provided by this firm ($1,000's)		**$282.8**	

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

This project included full topographic surveying, right of way mapping, and road design for a new single lane roundabout in Lafayette, LA.

Sigma designed a roundabout at the intersection of Ridge Road and Fieldspan Road. The intersection geometry includes an urban two-lane highway to the east (LA 342), a local two lane road to the west (Ridge Rd.), and an urban two lane highway to the north (LA 724) and south (LA 342 / LA 724). The design of the project is in conformance with EDSM VI.1.1.6, along with all recommendations from the project roundabout study. The project included subsurface and open ditch drainage through and area with minor historic flooding and very little hydraulic fall.

The topo survey included topography of the existing roadway, drainage features, existing utilities and roadside features. Sigma coordinated with the DOTD District 03 Utility Coordinator and utility owners for utility impacts to the project. Right of way maps were also prepared by Sigma in accordance with DOTD Location & Survey requirements.

Sigma Firm Members Involved:

In Charge: Robbie Lear
Josh Renard
Greg Sepeda
Bradley Roberts
Alex Farr
Miles Williams
Lance Amedee
Donnie Thymes

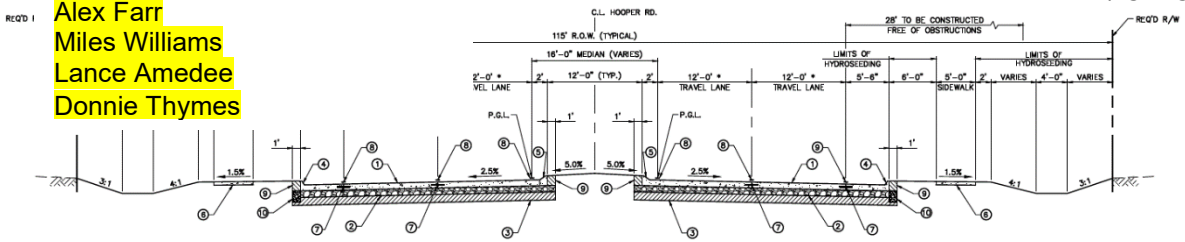
Topographic / Property Survey & R/W Maps

- GPS Control Sketch
- Field Topography
- Property Survey
- Title Research Reports
- Right of Way Maps
- Utility Coordination: QL-D and QL-C
- Topographic Mapping with INROADS Survey

Road Design (Preliminary & Final Plans)

- Horizontal & Vertical Geometry
- Design Report
- Typical Sections
- Geometric Details
- Plan / Profiles
- Drainage Design
- Cross Sections
- Permanent Signing & Striping
- Construction Sequencing
- Engineer's Construction Cost Est.
- Microstation / CadConform Plan

Construction Cost = $1.75M



17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Category(ies)*	TM
Project name	I-10 ITS Scott to Lake Charles		Firm responsibility (prime or sub?)	sub
Project number	H.013256.5	Owner's name	DOTD	
Project location	I-10 (District 07)		Owner's Project Manager	Roy Esteven, PE
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-2527, Roy.Esteven@LA.gov			
Services commenced by this firm	01/21	Total consultant contract cost ($1,000's)		unknown
Services completed by this firm	03/21	Cost of consultant services provided by this firm ($1,000's)		$20,162

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

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

100% of the work on this Project was performed in Louisiana.

Key personnel involved in the project include the following:

- Laurence Lambert
- Prasanth Malisetty
- Reece Rodrigue
- Kristen Farrington

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Discipline(s)*	Traffic & CE&I	
Project name	Belle Chasse Bridge & Tunnel Replacement PPP			Firm responsibility (prime or sub?)	sub
Project number	H.004791	Owner's name	DOTD		
Project location	Belle Chasse, LA		Owner's Project Manager	Nickolas Olivier, PE	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1133, Nicholas.olivier@la.gov				
Services commenced by this firm (mm/yy)		04/19	Total consultant contract cost ($1,000's)		unknown
Services completed by this firm (mm/yy)		current	Cost of consultant services provided by this firm ($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:

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

100% of the work on this Project was performed in Louisiana.

Key personnel involved in the project include the following:

- Brin Ferlito
- Laurence Lambert
- Prasanth Malisetty
- Bridget Robicheaux
- Reece Rodrigue

17. Firm Experience:

Firm name	Vectura Consulting Services, LLC		Past Performance Evaluation Category(ies)*	TM
Project name	Roundabout: US 171 at Boone St.		Firm responsibility (prime or sub?)	sub
Project number	H.011909.5-4	Owner's name	DOTD	
Project location	Vernon Parish, LA		Owner's Project Manager	Josh Harrouch
Owner's address, phone, email	PO Box 94245 Baton Rouge, LA 70804-9245, (225) 242-4640, Joshua.Harrouch@LA.GOV			
Services commenced by this firm	11/20	Total consultant contract cost ($1,000's)		unknown
Services completed by this firm	12/21	Cost of consultant services provided by this firm ($1,000's)		$82.045

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

Roundabout Pavement Marking QC Review
Staff from Vectura provided a Quality Control review of the temporary construction and sequence of construction plans. Vectura also provided Quality Control review of signing and striping plans at 30% and 60% plan sets to ensure the roundabouts conformed to the Pavement Markings Details Sheet PM-09 and the MUTCD details on roundabouts.

Temporary Traffic Signal Design
Vectura performed following design tasks to develop temporary traffic signal plans:

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

100% of the work on this Project was performed in Louisiana.

Key personnel involved in the project include the following:

- Brin Ferlito
- Prasanth Malisetty
- Reece Rodrigue
- Laurence Lambert
- Bridget Robicheaux

18. Approach and Methodology:

1.0 - Understanding of Contract Scope:

The contract is an Indefinite Delivery/Indefinite Quantity (IDIQ) contract for Road Design services statewide. While it is unknown specifically what task orders might be issued as part of this contract, Lazenby & Associates, Inc., has assembled an exceptional team (which includes Sigma Consulting Group, Inc. and Vectura Consulting Services, LLC) that is capable of addressing a wide variety of roadway and traffic projects, from simple roadway approaches on a rural bridge replacement to a much more complex project in an urban environment. Note that the design team that we have assembled has a presence in both North Louisiana (West Monroe) and South Louisiana (Baton Rouge), which will allow us to better serve LADOTD's needs in fulfilling the requirements of the IDIQ contract.

In the course of performing the necessary work, the **Lazenby Team will utilize all standard design guidelines typical for these types of projects**, including, but not limited to, the following:

- LADOTD *Location and Survey Manual*
- LADOTD *Roadway Design Procedures and Details Manual*
- LADOTD Minimum Design Guidelines
- LADOTD *Hydraulics Manual*
- LADOTD *Bridge Design and Evaluation Manual*
- LADOTD *Sign Manual*
- LADOTD *Pavement Markings Manual*
- LADOTD *Traffic Signal Manual*
- LADOTD *Traffic Engineering Manual*
- LADOTD Transportation Management Plans (EDSM VI.1.1.8)
- AASHTO's *A Policy on Geometric Design of Highways and Streets*
- AASHTO's *Roadside Design Guide*
- *Manual on Uniform Traffic Control Devices for Streets and Highways*

2.0 - Project Approach:

2.1 – Topographic Survey

One of the first steps in the typical design process is to perform a topographic survey of the project area. Lazenby & Associates, Inc. will conduct topographic surveys for the parishes north of, and including, Vernon Parish, Rapides Parish, Avoyelles Parish, and Concordia Parish. Sigma Consulting Group, Inc. will conduct topographic surveys south of these parishes.

The initial step in conducting topographic surveys will be to set GPS control points for the project. After GPS control points have been established, a GPS control sketch will be submitted to LADOTD Location and Survey section for review and approval prior to performing a detailed topographic survey. **3D terrestrial scanning will be utilized** as necessary for bridges and other hard surface areas (i.e., pavement surface), to minimize disruption to motorists and to increase the safety of the survey field crews. For high ADT roadways, such as interstates, **mobile LIDAR scanning will be utilized** as required. The remainder of the project limits will be surveyed using both GPS and conventional surveying methods. The surveyed alignment will be established for the existing roadway by performing regression analysis on existing topographic survey shots of roadways and bridges. Existing drainage maps will be developed as part of the topographic surveying services.

Existing utility owners will be identified via Louisiana One-Call. It is recognized that not all utilities are members of Louisiana One-Call. To this end, we will contact local municipalities as necessary to determine the presence of any additional utilities, as well as contacting water companies that operate within the project limits if no water company shows up on the One-Call ticket. It is unknown at this time if SUE services will be required. However, **Sigma Consulting Group, Inc., has the capability to conduct SUE services under this contract** if necessary.

It should be noted that both **Lazenby & Associates and Sigma Consulting Group survey crew personnel have obtained the required ATSSA Flagger and Traffic Control Technician work zone training certifications.**

2.2 – Traffic Control Design, Traffic Signal Analysis and Design

Vectura Consulting Services, LLC will perform all necessary traffic engineering services under this contract in accordance with current LADOTD requirements and in accordance with the previously noted documents. Vectura employs seven Professional Engineers who have successfully completed the LADOTD Traffic Engineering Process and Report (TEPR) class, six of which are also registered as Professional Traffic Operations Engineers (PTOE's). The Vectura team has a thorough understanding of the data collection, safety analysis, and alternatives analysis process required to develop the most appropriate traffic control devices, including traffic signal analysis and design.

2.3 – Preliminary and Final Roadway Design, Plan Development, and Cost Estimates

Lazenby & Associates, Inc., and Sigma Consulting Group, Inc., will be responsible for roadway design, with Vectura Consulting Services, LLC, assisting as needed for traffic related issues. The Lazenby team has a long history of successful performance of road design services for LADOTD and other clients and is prepared to deliver a quality product for a wide range of roadway projects, from a simple roadway approach design for a rural bridge replacement or an intersection improvement project such a traffic signal or a roundabout, to a more complex project such as a capacity improvement project along a busy corridor in an urban setting.

After a topographic survey has been completed, and, if necessary, a Type, Size, and Location report has been prepared and accepted by LADOTD (in the case of a bridge replacement project), roadway plans will be developed. **Appropriate roadway design criteria for each project will be established based on the LADOTD Minimum Design Guidelines.** The existing alignment will be analyzed for conformance to current design standards based on the selected design criteria, and necessary improvements will be made as warranted. R**oadway design will be performed in accordance with LADOTD standards and the previously mentioned manuals and publications.** The individual projects and sites will be designed to minimize right-of-way and environmental impacts to the extent possible.

It is understood that this IDIQ contract is for road design services; therefore, we assume that any bridge design and bridge plans will be prepared by others. The Lazenby team will closely coordinate with LADOTD, or its consultant, to ensure an efficient work flow and timely delivery of milestone submittals.

An important aspect of roadway design on any project is **maintenance of traffic** during construction, and projects issued under this IDIQ contract will be no different. Obviously, the cheapest way to construct a project is via road closure, and this is sometimes feasible on smaller rural projects where reasonable off-site detours are available. However, often times this is not the case, and traffic must be maintained throughout the project limits. The Lazenby team will closely evaluate each project to determine the most efficient method of construction while keeping in mind the needs of the traveling public, and is prepared to prepare Suggested Sequence of Construction plans which balance the needs of the contractor and the public to the extent possible.

Where roadway closure is not a feasible option, on-site diversion roadways with temporary drainage structures are often required. We recognize that temporary diversion roadways, especially through wetland areas, could have potential environmental impacts, but these will be minimized as much as possible**.** For example, for a bridge replacement which involves **a Reinforced Concrete Box as the preferred alternate, a Three Phase Diversion Construction process as outlined in Figure 4-12 of the LADOTD Roadway Design Procedures and Details Manual can be utilized.**

Opinion of Probable Construction Cost (OPCC) estimates will be prepared for each project. Typically, the initial OPCC will be submitted as part of the Plan-in-Hand submittal, when sufficient work has been done to have a good idea of pay items and quantities. The OPCC will then be updated for each subsequent submittal. The cost estimates will typically be prepared using the Cost Estimating Tools that are available on the LADOTD website.

2.4 – Hydraulic Analysis and Design

The Lazenby Team will perform necessary hydraulic analysis and design for each project as required, and will utilize the analysis methods outlined in the **LADOTD Hydraulics Manual.**

2.4.1 – Type, Size and Location Reports

A Type, Size, and Location Report will be prepared for bridge replacement projects. Peak runoff will be determined using either the USGS Method or the NRCS Method, as applicable based on the size of the drainage basins. A hydraulic model of the existing and proposed bridges will be created based on the peak runoff analyses using WSPRO or HEC-RAS software. Proposed box culverts will be analyzed utilizing LADOTD's HYDRWIN software. A comparison in hydraulic performance will be made in the Type, Size and Location Report between the existing structure and any feasible alternates, and a recommended structure will be included in the report.

Where no stream gage data is available, as is typically the case, **local residents and LADOTD officials will be interviewed as part of the hydraulic analysis process** in an attempt to obtain historic water surface elevations. Additionally, we will research news archives and available parish/city data on recent high-water events. The **information gathered from the interviews and research will be used to calibrate the models** as necessary. If USGS stream gage data is available, this information will be used to calibrate hydraulic bridge models.

2.4.2 – Other Hydraulic Analysis and Design

Cross drains will be analyzed and designed in accordance with the LADOTD Hydraulics Manual using LADOTD's HYDRWIN software. Peak runoff for cross drains will typically be calculated using the NRCS Method and HYDR1130. HYDR1120 will then be used to perform hydraulic analysis of various alternates to determine the most cost-effective drainage structure that satisfies the design criteria and any site-specific requirements.

Subsurface storm drain systems will be analyzed using the Rational Method and LADOTD's HYDRWIN software. HYDR6000 will typically be used to determine catch basin types and locations, and HYDR6020 will be used to size storm drain pipes. In locations where analysis using HYDR6000 is not feasible, such as where the roadway geometry is not a consistent width or for area catch basins that are located behind the curb, analysis by hand calculations or Excel spreadsheets will typically be performed.

The methodology and results of hydraulic analysis and design for each project will be documented in a Hydraulic Design Report which will be submitted to LADOTD for review and approval.

2.5 – Road Design Services During the Environmental Process

It is understood that the Lazenby team will not be responsible for obtaining environmental approval for projects under this contract. However, we have experience in assisting LADOTD with the environmental clearance process on numerous past projects and will prepare drawings, exhibits, and PowerPoint slides as necessary, including preparing permit drawings for USACE permits. The Lazenby team will also assist LADOTD in conducting public meetings and hearings as necessary.

2.6 – Special Provision Write-Ups

Whenever possible, the Lazenby team will use standard LADOTD pay items, or non-standard items for which a special provision already exists. However, we realize that there are instances where this is not possible on certain projects. We have experience writing special provisions for non-standard items on LADOTD projects, and are familiar with the desired general format of such special provisions. We are prepared to write special provisions for LADOTD review and approval as necessary under this contract.

Lazenby & Associates, Inc., recently wrote special provisions for certain utility relocation items as part of State Project No. H.007300, Kansas Lane – Garrett Road Connector and I-20 Improvements. These special provisions have been approved by the LADOTD Specifications Unit.

2.7 – Transportation Management Plans (TMPs)

Vectura Consulting Services, LLC, will be responsible for Traffic Management Plans under this contract. **Vectura will closely follow EDSM VI.1.1.8** for TMP's, and will coordinate with LADOTD to obtain traffic volume and safety data to perform safety analyses and alternative route analyses. If historic data is not available, the Traffic Study Scope of Services as outlined on the LADOTD Traffic Engineering website will be followed. Vectura's staff have worked closely with LADOTD through the development and implementation of the TEPR process, and will utilize this experience to successfully navigate the TEPR process as required under this contract. **Vectura will closely coordinate with the roadway design team to implement a Work Zone Impact Management Strategy document to minimize risk and delays to the traveling public.**

2.7 – Quality Plan Reviews

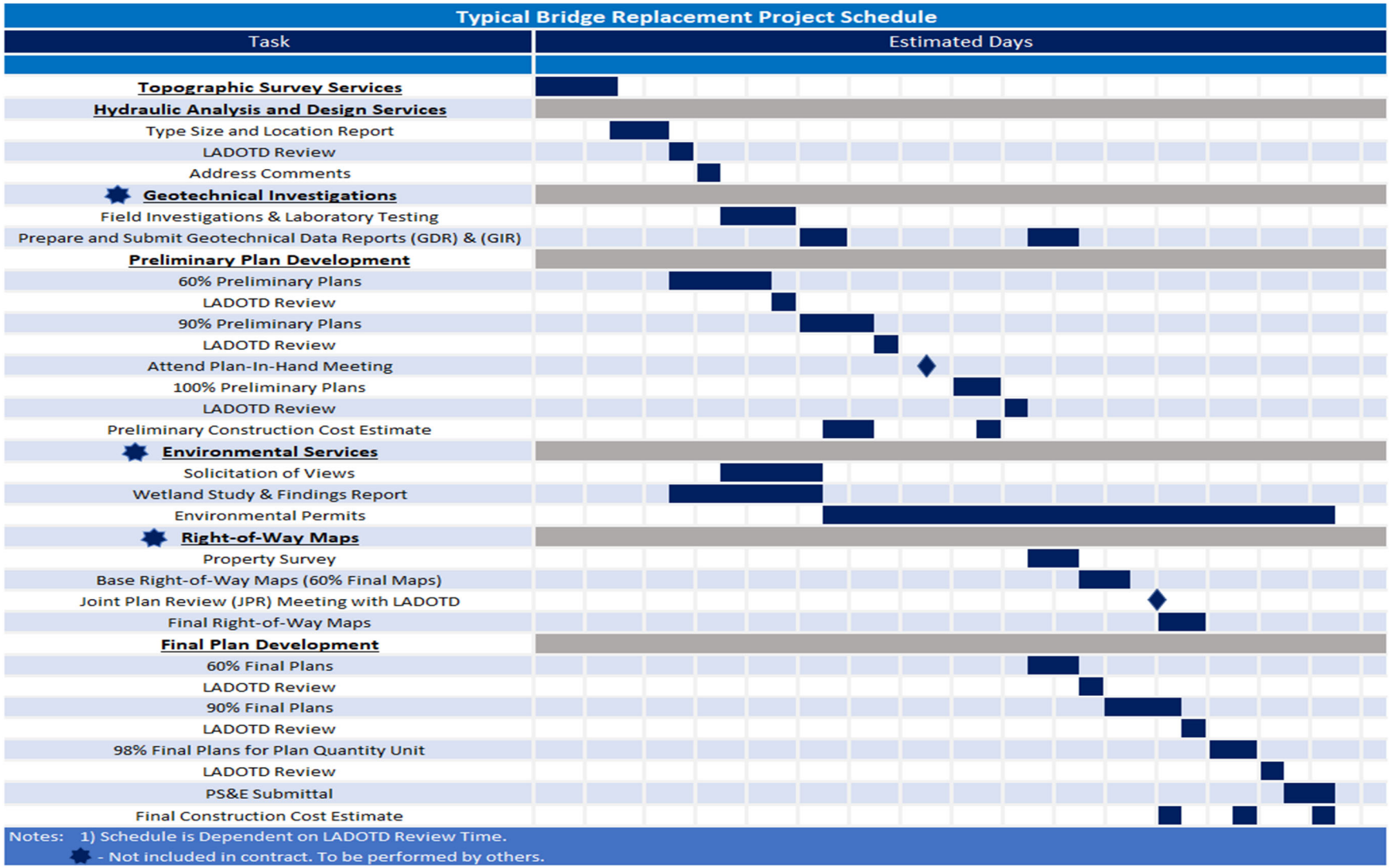
The Lazenby team is well versed in design and plan preparation on LADOTD projects, including the preparation of cost estimates and special provisions. As a standard of practice, we perform QA-QC of our own work, and are prepared to provide reviews of plans, estimates, and special provisions prepared by others. Lazenby & Associates routinely performs plan reviews of work done by others on transportation projects for the City of Monroe and the I-20 Economic Development District. As an example, **Lazenby & Associates, Inc., is currently providing this service to the City of Monroe, and is reviewing plans on behalf of the City for State Project No. H.007289, Kansas Lane Extension.**

2.8 – Construction Support

The Lazenby team is prepared to provide construction support to LADOTD as necessary to address construction issues for projects that are designed under this contract, including addressing Requests for Information (RFI's) from the construction contractor. **Lazenby & Associates, Inc., is currently providing construction support services on State Project Nos. H.002622, Arkansas Road (Caldwell Road - LA 143) and H.008226, Cheniere Spillway & Bridge Replacement**, both of which are located in LADOTD District 05, and has provided construction support on several other LADOTD projects in the past.

3.0 – Schedule:

Since no task orders have been issued under this contract, it is obviously not possible to prepare a specific schedule at this time. However, a generic sample schedule has been prepared to demonstrate that the Lazenby team has a working knowledge of the typical work flow on a LADOTD project. The sample schedule prepared below would be applicable to a rural bridge replacement project. Project specific schedules will be prepared for each task order issued under this contract, and the Lazenby team will devote the necessary resources to ensure the timely delivery of milestone submittals.



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 Discipline(s) *	State project number	Project name	Remaining Unpaid Balance**
Lazenby & Associates, Inc.	Survey	4400012667 (L&A 18S008.00)	Retainer Contract for Professional Surveying Services – Statewide (Property Surveys and ROW Maps)	
		H.012033.5	T.O. #14: LA 143 & LA 594: Cross Bayou & Caney Creek Bridges, Ouachita Parish (30.00% Complete) Time Suspended	$20,847
		H.010616.5	T.O. #16: I-20: LA 544 Overpass Replacement, Lincoln Parish (60.00% Complete) Time Suspended	$11,913
		H.012842.5	T.O. #20: LA 3102 @ Larto Lake & LA 124 (Seg 2 & 3), Catahoula Parish (40.00% Complete) Time Suspended	$49,879
		H.008230.5	T.O. # 21: LA 838: Steep Bayou Bridge Replacement, Ouachita Parish (60.00% Complete) Time Suspended	$9,697
		H.012032.5	T.O. #22: LA 2: Bridges Near Mer Rouge, Morehouse & West Carroll Parishes (60.00% Complete) Time Suspended	$15,119
		4400012668 (L&A 18S040.00	IDIQ Contract for Hydrographic Surveying Services – Statewide (Districts 04, 05, 08 & 58)	
		H.008768.5	T.O. #15 Hydrographic Survey Monitoring of Existing Bridge (25% Complete)	$65,371

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining Unpaid Balance**
Lazenby & Associates, Inc.	Survey	4400015236	IDIQ Contract for Topographic Surveys – Statewide (Districts 04, 05, 08 & 58)	
		H.012541.5	T.O. #12: LA 594: Overpass – I-20, Ouachita Parish (85% Complete)	$26,424
		H.012541.5	T.O. #15: LA 594: Overpass – I-20 (Additional) Ouachita Parish (85% Complete)	$6,244
		H.011428.5	T.O. #16: Green acres to LA 72 Corridor Study Bossier Parish (0.0% Complete) No P.O. to Date	$275,386
		4400017710 (L&A 19S056.00)	IDIQ Contract for Topographic Surveys - Statewide	
		H.015052.5	T.O. #1: I-20 Widening and Improvement (Vancil Road to LA 34) Ouachita Parish	$393,871
		4400019714 (L&A 20S038.00)	IDIQ Contract for Hydrographic Surveys – Statewide (Districts 04, 05, 08 & 58)	
			No Task Order Issued To Date	N/A
	Road	440010428 H.004774.5 (L&A 17E051.00)	Kansas Lane – Garrett Road Connector & I-20 Improvement, Ouachita Parish (98% Complete) (Road Design – Urban & Road Design – Controlled Access)	$17,583
Sigma Consulting Group, Inc.	Survey		(we have no current survey work with DOTD)	$0
	Road	H.014415	LA 352 Drainage Improvements	$46,318
		H.004791	Belle Chasse Bridge & Tunnel Replacement	$5,307
		H.003370	I-220/I-20 Interchange IMP & BAFB Access	$30,000
		H.004100	I-10: LA 415 to Essen Lane on I-10 and I-12	$1,655,178
		H.013797	LA 30: EBR PL – I-10 (Environmental Assessment)	$92,955
		H.010652	LA 73: US 61 (airline) – Essen Lane	$164,793
	Road, Bridge	H.002868	Ambassador Caffery & US 90 Interchange	$512
	Bridge	4400019338	Rural Bridge Replacement Initiative Phase II (South)	
		H.012061	LA 1	$83,661

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining Unpaid Balance**
Sigma Consulting Group, Inc.	Bridge	H.012565	LA 963	$96,772
		H.012891	LA 300	$46,976
		H.014213	LA 700	$90,881
		H.014215	LA 20	$125,094
		H.014216	LA 682	$176,853
		H.014241	LA 10	$64,804
		H.014251	LA 422	$71,307
		H.014252	LA 1054	$51,014
		H.014253	LA 421	$46,625
		H.014254	LA 955	$211,943
		H.014256	LA 952	$161,463
		H.014257	LA 68	$86,839
		H.014276	LA 975	$68,450
		H.014278	LA 85	$99,094
		H.014279	LA 35	$74,181
	Environmental	H.004256.5	Leeville – Golden Meadow (Ph. 2 Permits)	$214,603
	CE&I / OV	H.003003	I-10 (East Jct. I-49 to LA 328) Construction Support	$4,312
		H.010601	I-10 (LA 328 – LA 347) Construction Support	$2,536
		H.013897	Owner Verification Services for College Drive Flyover Ramp I-10/I-12 West	$54,368
Vectura Consulting Services, LLC	Traffic	H.010616	I-20: LA 544 Overpass Replacement	$4,959
		H.005168.2	New Orleans Rail Gateway Jefferson Highway EA	$52,436
		H.005168.2	New Orleans Rail Gateway Avondale EA	$209,504
		H.004791	Belle Chasse Bridge & Tunnel Replacement PPP	$21,999
		H.012030.5	KCS RR Overpasses HBI	$28,026
	CE&I / OV	H.007160	EBR Computerized Traffic Signal, Ph VB	$58,309

20. Certifications/Licenses:

If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

PLEASE SEE ATTACHED SHEETS.

Certificate of Completion

presented to

James Ellingburg

for completing the

Traffic Engineering Analysis Process & Report Class
Module 1, 2 & 3

Date: August 11 – 12, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 8.50

Authorized Instructor

Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Ryan Spillers

for completing the

Traffic Engineering Analysis Process & Report Class
Module 1, 2 & 3

Date: August 11 – 12, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 8.50

Authorized Instructor

Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report
Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 1

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

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 2

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Prasanth Malisetty

for completing the

Traffic Engineering Analysis Process & Report
Module 1

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

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Prasanth Malisetty

for completing the

Traffic Engineering Analysis Process & Report
Module 2

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Prasanth Malisetty

for completing the

Traffic Engineering Analysis Process & Report
Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 1

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

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 2

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

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

If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank.

22. 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 (as registered with Louisiana's Secretary of State)	**Address**	**Point of Contact and email address**	**Phone Number**
Vectura Consulting Services, LLC	800 Innovation Park Drive, Baton Rouge, LA 70820	Brin Ferlito, bferlito@vecturacs.com	225-223-6685
Sigma Consulting Group, Inc.	10305 Airline Hwy. Baton Rouge, LA 70816	Greg Sepeda gsepeda@sigmacg.com	225-298-0800

(Add rows as needed)

23. Location:

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