



Tuesday, February 6, 2024

Louisiana Department of Transportation and Development 1201 Capitol Access Road, Room 405-E Baton Rouge, LA 70802-4438

Subject: Contract No. 4400028434

State Project No. H.015568.5 Federal Aid Project No. H015568

LA 44: Pelican Point Roundabout and Widen

Route: LA 44

Ascension Parish, LA

Dear Project Evaluation Team,

10352 Plaza Americana Drive Baton Rouge, Louisiana 70816

Phone: 225 292 1004 Fax: 225 218 9677

www.arcadis.com

Arcadis and its teaming partners would like to express an interest in the above referenced advertisement. The Arcadis traffic and design teams have provided dedicated and dependable support to the Louisiana Department of Transportation and Development (LADOTD) through our intimate knowledge of design policies and practices with extensive project experience. Arcadis has shown it's commitment to LADOTD by continuing our organic growth of our roadway, drainage and bridge design teams to compliment our traffic services, who are a leader in the state.

Additionally, Arcadis is a national thought leader in multi-lane roundabout design, assisting FHWA in the development of the "turbo" roundabouts in the US, co-writing the TRB synthesis on Turbo Roundabout Design. Arcadis used their knowledge and experience to help the Georgia Department of Transportation (GDOT) in writing the GDOT Roundabout Design Guide, which takes the best portions of the turbo roundabout and blends them into standard US roadway design practice. Arcadis has extensive experience designing numerous roundabout projects worldwide. Our dedicated national roundabout experts at Arcadis will contribute their expertise in collaboration with the design team and LADOTD in selecting an optimal roundabout geometry and design that balances safety, efficiency, and functionality.

Arcadis has strategically added teaming partners that have the depth of staff to support the project's drainage and geotechnical needs. Team members Bonton Associates and APS have worked together with Arcadis on multiple projects in the past and will continue these successful partnerships. The Arcadis team has extensive experience with bridge inspection and bridge design nationally as well as with LADOTD. With the combined understanding of the project, national expertise in roundabout design and experienced teaming relationship, the Arcadis team will provide unparalleled level of service on this project for the LADOTD.

Perhaps most importantly, the Arcadis Team lives, works, and travels through the communities that will be served by this important project. We are committed to **improving quality of life** for these communities and the Louisiana traveling public. We look forward to the opportunity to continue partnering with LADOTD to improve the safety, service, and reliability of Louisiana's transportation system through sustainable solutions. Thank you for your time and consideration.

Sincerely, Arcadis

> Akhil Chauhan PE, PTOE, PTP, PMP Senior Vice President, Transportation Services

Jose Rodriguez PE

Project Manager, Principal Roadway Manager

In Kodyne





DOTD FORM: 24-102

PROPOSAL TO PROVIDE CONSULTANT SERVICES

(Revised January 1, 2023)

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

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

1.	Contract Name as shown in the advertisement	LA 44: PELICAN POINT ROUNDABOUT AND WIDEN ROUTE: LA 44 ASCENSION PARISH
2.	Contract Number(s) as shown in the advertisement	CONTRACT NO. 4400028434
3.	State Project Number(s), if shown in the advertisement	STATE PROJECT NO. H.015568.5 F.A.P. NO. H015568
4.	Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	ARCADIS ARCADIS U.S., 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)	EF.0002808 DUNS 057690414
6.	Prime consultant mailing address	10352 Plaza Americana Drive Baton Rouge, LA 70816
7.	Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	10352 Plaza Americana Drive Baton Rouge, LA 70816
8.	Name, title, phone number, and email address of prime consultant's contract point of contact	Jose L. Rodriguez, PE Project Manager P. 504-648-3600 E. Jose.L.Rodriguez@arcadis.com
9.	Name, title, phone number, and email address of the official with signing authority for this proposal	Akhil Chauhan, PE, PTOE, PTP, PMPs Senior Vice President P. 225 368 6563 E. akhil.chauhan@arcadis.com

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

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.

155

Akhil Chauhan, PE, PTOE, PTP, PMP

Date: February 6, 2024

11. If a Disadvantaged Business I	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):	<u>Firm(s)' %:</u>
APS	5%
Bonton	6%



Sections 12-14



Arcadis used their knowledge and experience to help the Georgia Department of Transportation writing of the GDOT Roundabout Design Guide, which takes the best portions of the turbo roundabout and blends them into standard US roadway design practice.

12. Past Performance Evaluation Discipline Table:

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

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

Past Performance Evaluation Discipline(s)	% of Overall Contract	ARCADIS	+ APS Engineering and Testing	BONTON ASSOCIATES	Each Discipline must total to 100%	
Road	40%	85%	-	15%	100%	
Traffic	15%	100%	•	•	100%	
Bridge	40%	100%	•	•	100%	
Geotech	5%	-	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%	89%	5%	6%	100%	

13. Firm Size:

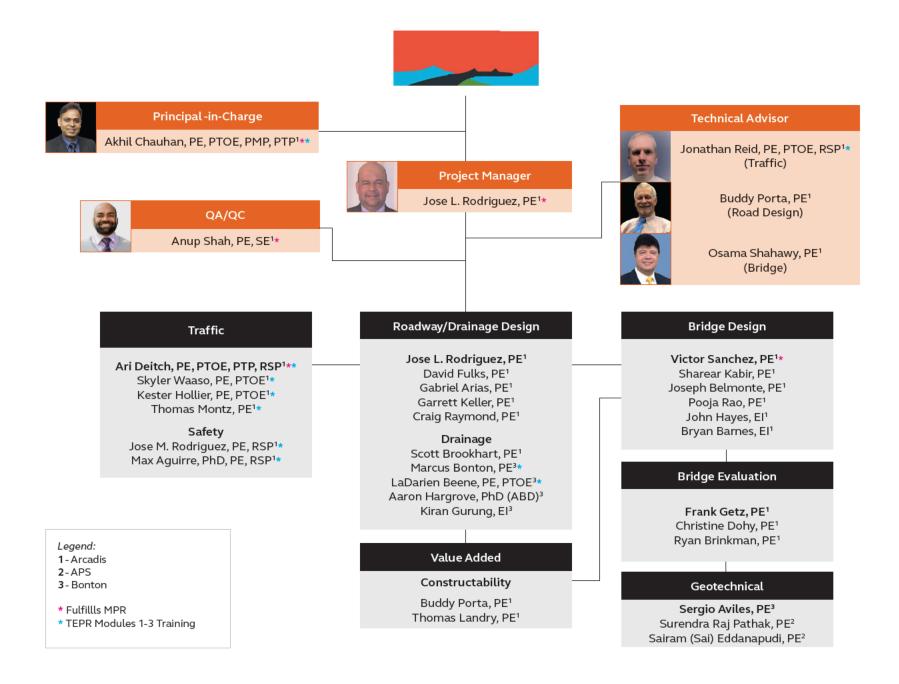
For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included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

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

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)
	Principal	2	6
ARCADIS	Supervisor Engineer	3	7
ARUADIS	Engineer	17	22
	Engineer Intern	5	7
	Engineer	3	3
<u> </u>	Driller	5	5
APS Engineering and Testing	Engineer Intern	1	1
and resting	Technician	12	12
	Administrative	2	2
PONTON	Principal	1	3
BONTON ASSOCIATES	Engineer	2	6
ASSUCIATES	Engineer Intern	1	3

14. Organizational Chart







15. Minimum Personnel Requirements:

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

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license
1	Akhil Chauhan, PE, PTOE, PTP, PMP (20 years' experience)		PE. 33703 / 09/30/2024 – Civil	LA
2	Anup Shah, PE, SE (25 years' experience)		PE. 46446 / 09/30/2024 – Civil	LA
3	Jose L. Rodriguez, PE (25 years' experience)	ARCADIS	PE. 30492 / 03/31/2025 – Civil	LA
4	Osama Shahawy, PE (33 years' experience)		PE. 35652 / 09/30/2024 – Civil	LA
5	Victor Sanchez, PE (21 years' experience)		PE. 33976 / 09/30/2024 – Civil	LA
6	Ari Deitch, PE, PTOE, PTP, RSP (20 years' experience)		PE. 41842 / 03/31/2024 – Civil	LA

	16. Staff Experience:					
Firm employed by			,	Meets MPR No. 1		
Name Akhil Cha	auhan, PE, PTOE, PTP	, PMP	Years of relevant experience with this employer	15		
Title Principal	Traffic Engineer		Years of relevant experience with other employer(s)	6		
Degree(s) / Years	/ Specialization		MS / 2003 / Transportation Engineering, Massachuset	ts Institute of Technology		
			BS / 2001 / Civil Engineering, Indian Institute of Techno	ology		
Active registration	n number / state / ex	piration date	PE.033 7 03 / LA / Exp. 09/2024; PTOE #2544 / USA / Ex	p. 11/2025		
			PTP #246 / USA / Exp. 12/2024; PMP #1444676 / USA ,	PTP #246 / USA / Exp. 12/2024; PMP #14446 7 6 / USA / Exp. 08/2024		
Year registered	2008	Discipline	Civil Engineering			
Contract role(s) /	brief description of r	esponsibilities.	Principal-in-Charge			
Experience dates	Experience and qu	alifications relev	ant to the proposed contract			
	Mr. Chauhan is a P	rincipal Traffic E	ngineer with over 20 years of applied research and indu	stry experience in the fields of traffic		
	engineering, traffic	modeling and s	simulation, transportation planning, demand modeling/fo	orecasting, intersection/corridor		
	analysis, warrant a	nalysis, signal de	esign, safety studies, transportation management plans,	and access management. Akhil has		
	successfully led, m	anaged, and me	ntored numerous projects and personnel related to tran	sportation modeling, simulation, and		
	planning for public	agency clients l	ocated across the nation including several state Departn	nents of Transportation. He is		
	proficient in the us	se of many macr	o-, meso-, and microscopic traffic simulation software pr	ograms such as Highway Capacity		
	Software, Vistro, S	ynchro, Sidra, Vi	ssim, MITSIM, Dynameq, DynaMIT, TransCAD, Visum, an	d OREMS. Has completed the		
	LADOTD Traffic Engineering Process and Report Training.					
12/16 - 02/20			OOTD, Statewide, LA. Contract/Project Manager. Provide	_		
			rders issued under this IDIQ. Services provided included			
including traffic data collection, traf			iffic modeling and analysis, signal timing optimization, tra	affic signal inventory, traffic signal		
			imates, and quantities.			
11/20 – Ongoing		-	rvices, LADOTD, East Baton Rouge Parish, LA. Contract/F			
	contract manager and technical advisory of all traffic engineering tasks including development of permanent signing plans,					
	signal design and timing plans, Interchange Modification Reports, and Transportation Management Plans for the widening of					
	Interstate-10 from LA 415 to Essen Lane and improvements to interchanges along this segment. One critical component of the					
	project is maintaining traffic during the construction of new bridge structures. Multiple scenarios are being evaluated using a					
	calibrated mesoscopic model using Dynameq to determine the impacts during construction and mitigations that will be					
necessary to minimize delay.						
05/19 – 11/22			nts and BAFB Access Design-Build, LADOTD, Bossier Pari			
	Responsible for overseeing the development of addendum to Interchange Modification Report, Transportation Management					
		_	sign plans, Temporary Traffic Control Plans, and Permanent S			
			t. The design-build project includes the modification of the			
	with additional ran	nps and extension	on of I-220 to provide access to Barksdale Air Force Base.			

06/19 – 12/19	EBR Signal Upgrades and Design, LADOTD, East Baton Rouge Parish, Louisiana. Contract Manager. Responsible for technical
	oversight and supervision of the development of design and timing plans for upgraded signal detection at 39 signalized
	intersections from video detection systems to wireless vehicle detection systems (magnetometers).
08/13 - 01/20	Traffic Engineering IDIQ Contracts, LADOTD, Statewide, LA. Contract/Project Manager. Provided contract management and
	served as lead technical advisor for task orders issued under two traffic engineering IDIQs. Services provided included a range of
	traffic engineering services including traffic data collection, intersection and corridor studies, traffic modeling, signal warrant
	analysis and timing optimization, alternative development and conceptual design, signal design, traffic signal inventory, and
	safety analysis / improvements. Arcadis developed the first mesoscopic models using Dynameq for the state of Louisiana.
01/18 – Ongoing	I-20 Mesoscopic Model and TMP Using Dynameq, LADOTD, Bossier Parish, LA. Contract Manager. Responsible for supervising
	development of mesoscopic traffic model using Dynameq to predict queueing, delay and alternate travel patterns due to
	planned construction on I-20 to replace pavement. The project scope includes development and calibration of mesoscopic
	model, analysis of alternative routes, safety analysis, operational analysis, assistance with public outreach, development of a
	Level 4 TMP, and development of work zone mitigation strategies.
04/13 – 12/13	LA 1 at Rondinaud Lane Signal Upgrades, City of Donaldsonville, Ascension Parish, LA. Project Manager. Produced traffic signal
	design and timing plans and traffic signal inventory (TSI) forms according to LADOTD standards. The signal modification was
	necessary as a new approach was added to the intersection of LA 1 at Rondinaud Lane. The updated signal required new timing
	parameters, intersection sketches, wiring diagrams, quantity estimates, and logging signal modifications.
08/14 - 03/21	Safety Studies IDIQ Contracts, LADOTD, Statewide, LA. Contract/Project Manager. Provided contract management and served as
	lead technical advisor for task orders issued under two safety studies IDIQs. Services provided included a range of engineering
	services including safety and traffic studies, historical crash analysis, collision diagram development, identification of safety
	deficiencies, traffic data collection, development of safety countermeasures, Highway Safety Manual predictive methods, Stage
	O feasibility studies and documentation, traffic modeling and analysis, intersection and corridor studies, and access
	management improvements.
01/14 – Ongoing	Pete's Highway Traffic Study and Environmental Assessment, LADOTD, Denham Springs, LA. Principal Engineer. Responsible for
	contract management and deliverables for the project which included traffic and safety analysis, signal timing and warrant
	analysis, alternative screening and analysis, preliminary roadway and bridge design, line and grade, Interchange Modification
	Report, and Environmental Assessment. Purpose of the project is to improving operations and safety along Range Avenue.
08/14 – 05/15	Highland-Burbank Connector, City of Baton Rouge - Green Light Program, East Baton Rouge Parish, LA. Project Manager.
	Responsible for design study to evaluate north-south connector and capacity and access management improvements.
	Alternatives considered restricted intersection types in addition to conventional treatments. Conducted signal warrant analysis
	and developed signal timings and design plans, including cycle lengths, green times, and clearance intervals.

16. Staff Experience					
Firm employed by	ARCADIS		Meets MPR No. 2		
Name Jose L. R	odriguez, PE	Years of relevant experience with this employer	1		
Title Senior C	ivil Engineer	Years of relevant experience with other employer(s)	24		
Degree(s) / Years	/ Specialization	BS / 1992 / Civil Engineering, University of New Orlean	ns		
Active registration	n number / state / expiration date	PE.0030492 / LA / Exp. 03/31/2025			
Year registered	2003 Discipline	Civil Engineering			
Contract role(s) /	brief description of responsibilities.	Project Manager			
Experience dates	Experience and qualifications relev	ant to the proposed contract			
	roadway design, bridge design, pro- estimating, and project implement close relationship with the Federal Department of Transportation (LAI experience with Bentley Inroads, A	ears of experience with roles of progressive responsibility ject management, hydraulic analysis, utility coordination ation for various clients in Louisiana, Texas, Georgia, and Highway Administration (FHWA), U.S. Army Corps of En DOTD), local parish governments, and regional planning utodesk Civil 3d, and Leap Bridge for Concrete Bridge De Board, becoming president of the Louisiana Chapter in 2	n, construction supervision, d North Carolina. Jose has worked in gineers (USACE), Louisiana commissions. He has extensive esign. Served on the American		
07/09 – 07/15	Peters Road Expansion, Phases I-III, LADOTD, Plaquemines, LA. Project Designer. Responsible for the geometric design, plan preparation and wetland delineation of Peters Road Phases I, II and III. The projects consisted of a new roadway, elevated crossing over the Intracoastal Waterway, approach roadways in Jefferson and Plaquemines Parishes to tie Peters Road to Louisiana 23 near Barrier Road. During the environmental phase of the project, Jose actively contributed to the preparation of plans and exhibits required for securing permits from the U.S. Coast Guard and the USACE. These projects were executed in close collaboration with Plaquemines Parish, the LADOTD, and the USACE.				
environmental issues and developing		II (EIS), LADOTD, St. Tammany Parish, LA. Project Designing design alternatives in accordance with the National Ex, working in coordination with the environmental team, ts for the project.	nvironmental Policy Act (NEPA) for		
03/19 – 05/20	Eastern Federal Lands Highway Division (EFLHD), Puerto Rico. Assessment Roadway Lead: Responsible for reviewing, prepari reports, and coordinating repairs at over 70 roadway sites damaged by Hurricane Maria. Provided technical assistance to loc engineering firms to ensure the project adhered to the client's guidelines and strict schedules. Jose ensured that all fieldwor and plan development were aligned with Puerto Rico's horizontal and vertical datums for integration with GIS systems.				
04/21 - Ongoing	coordinating and developing conce improvements, and anticipated right opportunities along the project. Also	s) Final Design Study Report, MOVEBR Baton Rouge, LA. ept drawings to evaluate the geometric feasibility of differ ht-of-way needs. Provided technical guidance to help ide so assisted in the implementation of Complete Street re- ducts cost estimates to evaluate and select the preferre	erent roadway alternatives, proposed entify green infrastructure gulations for the corridor. During the		

01/06 – 09/09	New Orleans Submerged Roadway Program Management, LADOTD / New Orleans Regional Planning Commission, New Orleans,
	LA. Project Designer and Quality Control Reviewer for the program management team for the LADOTD and the FHWA. Jose
	helped develop design guidelines and processes for the standardization of engineering work for the repair of roadways
	damaged by Hurricane Katrina in the City of New Orleans and other parishes. Responsible for conducting quality control reviews
	on roadway plans prepared by other engineering firms for compliance with LADOTD and FHWA design standards.
02/10 - 06/11	I-10 from Veterans to Clearview, LADOTD, Metairie, LA. Project Designer. Responsible for roadway plan preparation for
	widening 1.2 miles of I-10 from three lanes to five lanes in each direction. The project also included bridge work to
	accommodate the interstate widening. Jose was also responsible for the alignment and design of concrete sound walls along
	the corridor. He helped implement an innovative two-sided concrete stamp process for the noise wall precast concrete panels.
05/12 – 12/15	Earhart Boulevard-Causeway Interchange, LADOTD, New Orleans, LA. Project Designer. Responsible for the geometric design
	and roadway plan preparation for the Earhart Boulevard-Causeway Interchange. The Earhart Boulevard Causeway Interchange
	purpose was to assist in traffic congestion relief for the east-west flow of traffic for the New Orleans Metro Area. It consisted of
	the development of roadway and bridge ramps for the creation of an elevated signal-controlled interchange. Responsible for
	development of all horizontal and vertical alignments for this project as well as roadway plan preparation, developing all
	roadway cross sections, drainage design, utility conflict resolution and cost estimating for the project.
06/04 - 01/11	Causeway Boulevard Interchange Improvements Phases I and II, LADOTD, Metairie, LA. Project Designer. This project consisted
	of widening Causeway Boulevard elevated structure at Veterans Boulevard and the construction of new at-grade and elevated
	ramps to provide better accesses, improve safety and ease congestion at this heavily traveled interchange. Responsible for
	evaluating existing girders, the design of new precast concrete girders and the roadway plan preparation for this project. Also,
	responsible for evaluating and design of new sewer and water lines for the project as well as coordinating the removal and
	replacement of all utilities affected by the new roadways and/or structure foundations.
01/20 - 05/20	NC Highway 73 (NC 73) Widening, North Carolina DOT, Mecklenburg County, North Carolina. Project Engineer. Responsible for
	the Temporary Traffic Control Plan preparation for the widening of NC 73. A principal arterial roadway, NC 73 was widened from
	a two-lane undivided roadway into a four-lane divided highway with a 30-foot wide median. The project presented many
	challenges due to the high traffic volumes, time restrictions for lane closures, and all NASCAR events at Charlotte Motor
	Speedway for the duration of the project. To mitigate traffic disruption and enhance roadway safety, assisted in preparing the
	Transportation Operation Plans and sequence of construction for the project. All design work was performed following NCDOT
	and the latest MUTCD standards.
04/18 - 09/20	Texas High-Speed Rail, Texas Central Railway, Dallas to Houston, Texas. Project Designer. Assisted with establishing flood
	elevations for the alignment of over 240 miles of rail tracts. Also responsible for the realignment of at-grade roadways impacted
	by the High-Speed rail.
10/17 - 03/18	Traffic Turn Lanes on Highway LA 3127, Yuhuang Chemical Inc., St. James, LA. Quality Control (QC). Review for the design of two
	turn lanes into the Yuhuang Chemical Methanol plant in St. James, Louisiana. During construction, Jose provided the owner with
	construction design services for the duration of the construction phase.
12/15 - 01/16	Magnolia Ridge Levee Project, City of New Orleans, St. Charles Parish, LA. Quality Control (QC). QC review and plan preparation
	for the Magnolia Ridge Levee project for St. Charles Parish.

Firm employed by ARCADIS				
Name Jonathan R	leid, PE, PTOE, RSP-1	Years of relevant experience with this employer	8	
Title Principal Tr	raffic and Safety Engineer	Years of relevant experience with other employer(s)	21	
Degree(s) / Years / S	specialization	MS / 1999 / Civil Engineering, North Carolina State Uni	versity	
		BS / 1994 / Civil Engineering, Lawrence Technological I	nstitute	
Active registration n	number / state / expiration date	PE #02 7 930/ NC / Exp. 12/31/2024; PTOE #1588 / USA	/ Exp. 03/2026; RSP #104 / USA /	
_	<u> </u>	Exp. 12/2024		
Year registered	2008 Discipline	Civil Engineering		
Contract role(s) / br	ief description of responsibilities.	Technical Advisor (Traffic)		
Experience dates	Experience and qualifications rele	evant to the proposed contract		
	Mr. Reid has more than 29 years	of traffic and safety engineering experience. His backgro	ound includes safety studies, traffic	
	modeling, intersection design, fe	asibility studies, traffic impact studies, IMR/IJRs, Road Sa	fety Assessments (RSAs), corridor	
To all the second		oout design, express and toll road projects, transit projec		
		ng, signal warrants and design, and traffic calming studie		
	and planning projects for state, fe	ederal and municipal clients and developers across the U	J.S. and abroad.	
05/16 – Ongoing	Traffic Safety Design Services, Regi	on B, (Districts 3 & 6), GDOT, Georgia. Project Manager of	three-year, \$12M project to provide	
	safety analysis and design service s	support for GDOT Districts 3 and 6. Responsibilities are to a	ndvance safety projects through	
	1.	Concept Report phases and complete preliminary and fina		
	1	tion & recommendation of safety countermeasures, and p		
	1	Projects have included intersection conversion to a roundal		
	1	loped Intersection Control Evaluation (ICE) tool to automa ive intersection control type improvements.	te the evaluation and recommendation	
01/18 – 05/18		irline Hwy), LADOTD, East Baton Rouge Parish, LA. Technica	al Advisor Responsible for supervisory	
01/16 03/16	1	idy. The purpose of the study is to assess traffic operations		
	_	way. Scope of services included traffic data collection and a		
		ridor growth rates, assessment of access management improvements (implementing		
	"Superstreet" concept), and evalua	ation of concept using HCM and HSM methodologies.		
03/17 – Ongoing	03/17 – Ongoing I-49 South (Ricohoc to Berwick) Supplemental Environmental Impact Statement (SEIS), LADOTD, St. Mary Parish, LA. Technical			
	Advisor. Assisted with the development of Tier 1 Analysis and alternative concept analysis to identify a range of feasible alternatives			
	and determine the impacts with respect to traffic operations, safety, and cost.			
05/16 – Ongoing	75/16 – Ongoing Traffic Safety Design Services, Region B, (Districts 3 & 6), GDOT, Georgia. <i>Project Manager</i> of three-year, \$12M project to provide			
	safety analysis and design service support for GDOT Districts 3 and 6. Responsibilities are to advance safety projects through			
	preliminary traffic engineering and Concept Report phases and complete preliminary and final design. Typical safety projects include Road Safety Audits, evaluation & recommendation of safety countermeasures, and project initiation and plan preparation			
	Tior salety improvement projects. P	rojects have included intersection conversion to a roundal	bout, DDI or other saler intersection	

for the safest and most cost-effective intersection control type improvements. Feasibility Studies Limited Services Contract for NCDOT. Project Manager. Responsible for managing team in providing array of services including traffic and safety data collection and forecasting, alternative development and analysis, project scoping, concept development layout and design, environmental, hydraulic, utility, and structural reviews, cost estimating and project programmin and prioritization. Also performing express design services to expedite project delivery. SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia. Project Manager. Developed and modeled Innovative intersection concepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Manager development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IJR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. O9/09 – 03/11 Roswell Historic Gateway Transportation Improvement Project City of Roswell, Georgia, Project Manager.	10. Stall Expellence	
Feasibility Studies Limited Services Contract for NCDOT. Project Manager. Responsible for managing team in providing array of services including traffic and safety data collection and forecasting, alternative development and analysis, project scoping, concept development layout and design, environmental, hydraulic, utility, and structural reviews, cost estimating and project programmin and prioritization. Also performing express design services to expedite project delivery. SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia. Project Manager. Developed and modeled innovative intersection concepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IJR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental s		forms. As part of this project, developed Intersection Control Evaluation (ICE) tool to automate the evaluation and recommendation
services including traffic and safety data collection and forecasting, alternative development and analysis, project scoping, concept development layout and design, environmental, hydraulic, utility, and structural reviews, cost estimating and project programmin and prioritization. Also performing express design services to expedite project delivery. SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia. Project Manager. Developed and modeled innovative Intersection concepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a II-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. O9/09 – 03/11 Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street betwe		
development layout and design, environmental, hydraulic, utility, and structural reviews, cost estimating and project programmin and prioritization. Also performing express design services to expedite project delivery. SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia. Project Manager. Developed and modeled innovative intersection cancepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on 1-75 a 1-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Manager development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IJR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial pro	07/18 – Ongoing	
and prioritization. Also performing express design services to expedite project delivery. SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia. Project Manager. Developed and modeled innovative intersection concepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on 1-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Manager development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IJR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjace		
SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia. Project Manager. Developed and modeled innovative intersection concepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Manager development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IJR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. 109/09 – 03/11		
innovative intersection concepts to improve one of the worst intersections in North Fulton County. Provided concept design for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IIR development to support ElS document for \$834 million managed lane corridor to improve 26 miles on 1-75 a 1-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Manager development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. 109/09 – 03/11		
both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/IJR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection	10/14 – 03/15	
results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. 8 Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. 8 NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		, , ,
requirements. Concept is awaiting funding. 1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		
1-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia. Lead Task Manager. Traffic analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way
analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 a I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		requirements. Concept is awaiting funding.
I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway	07/07 – 10/08	
intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		analysis and IMR/IJR development to support EIS document for \$834 million managed lane corridor to improve 26 miles on I-75 and
development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		I-575. Supervised the traffic forecasting using ARC 20-county model projections, traffic analysis of study area roadway and
modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		intersections (using Synchro / Vissim), and evaluation of impacts and proposed mobility and safety mitigation measures. Managed
because FHWA had no comments to address from the first submittal package. Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		development of the largest IMR/IJR project ever undertaken in the state, which included microsimulation analysis of all new and
O9/09 – 03/11 Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was approved months ahead of schedule
perform public involvement, traffic analysis, design concept, environmental study and EA document preparation, and preparation of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. O1/19 – 03/20 NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		because FHWA had no comments to address from the first submittal package.
of preliminary plans to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway	09/09 – 03/11	Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia. Project Manager. Study to
reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		
non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and histo properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		
properties while enhancing business development opportunities in this important historic corridor. Project received the 2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts,
Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation. NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		non-traditional interchange concepts and context sensitive design to minimize impact to adjacent National Park Service and historic
01/19 – 03/20 NCDOT Congestion Management /Innovative Intersection Guide project. Lead Author in development of the Quadrant Roadway		properties while enhancing business development opportunities in this important historic corridor. Project received the 2012
		Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation.
	01/19 – 03/20	
		Intersection Informational Guide published by FHWA through a partnership with NCDOT. Guide is the 5th in a series on innovative
		intersection designs and highlight national experience with this emerging new intersection form, designed to reduce congestion at
bottleneck intersections. There have been four Quadrant Roadways built in the US, and the Guide draws on experience and		, , , , , , , , , , , , , , , , , , ,
operational analysis of this new intersection form to encourage other DOT's to implement where appropriate.		operational analysis of this new intersection form to encourage other DOT's to implement where appropriate.

16. Staff Experience	<u> </u>						
Firm employed by							
Name Lloyd "Buddy" Porta, Jr., PE			Years of relevant experience with this employer	12			
Title Principal	l Engineer		Years of relevant experience with other employer(s)	37			
Degree(s) / Years	/ Specialization		BS / 1973 / Civil Engineering, Louisiana State University				
Active registration	n number / state / exp	oiration date	PE.016425 / LA / Exp. 09/2025				
Year registered	19 77	Discipline	Civil Engineer, Environmental Engineer				
Contract role(s) /	brief description of re	esponsibilities.	Technical Advisor (Road Design)				
Experience dates	Experience and q	ualifications rele	evant to the proposed contract				
Mr. Porta brings more than 49 ye practiced highway design for 11 y years of his career in project/programs. In 2001 he was Development (TIMED) Program Maighways as well as construct through			vears with 8 of those years in responsible charge of a design gram management. He managed the Off-System Bridge Reptasked with being the LADOTD Transportation Infrastructur Manager. This \$5 billion program was developed to multi-lare new bridges; two of these bridges cross the Mississippi Fee Road Design Engineer Administrator.	n squad. He spent the next 21 placement Program and the Urban re Model for Economic ne over 500 miles of state			
07/15 – 05/19	roundabout in Co	US 190B at Jefferson Ave. Roundabouts, LADOTD, Covington, LA. QA/QC Reviewer. Supported the construction of a new roundabout in Covington as a quality assurance/quality control reviewer. Plans reviewed included the construction of sidewalk for use by pedestrians.					
06/84 – 07/10	Off-System Bridge Program, LADOTD, Statewide, LA. Program Manager. DOTD's First Program Manager for OSBRP. Replaced/rehabilitated existing bridges located on nonfederal routes in the cities and/or parishes in Louisiana. Provided the project and program management. Responsible for the selection of the qualifying sites, the distribution of the federal funds to the participating parishes, the selection of the design consultant, the coordination with the parishes and the consultants, the development of the scope of services and fee for each project, the technical review of the topographic surveys and construction plans and providing comments to the consultants and parishes, and the approval of all invoices.						
10/16 – 02/18	Off-System Highway Bridge Replacement Program, LADOTD, North Bayou Black Drive Bridge, Terrebonne Parish, LA. QA, Reviewer. Reviewed plans for the replacement of an off-system highway bridge. Detailed design effort included field surveying, right of way adjustments, crash barrier selection, hydraulic analysis, preliminary and final plan preparation, an quantity estimation.						
04/12 - 01/14	Reviewer. Respon the Norfolk South alignment and typ issues included th	sible for LADOT ern Railroad. Th be alternatives f e bridge's immi	ent and Corridor Improvements Environmental Assessment, D guideline compliance for the replacement and widening one project included evaluating partial and full-access interse for the heavily skewed and long steel span bridge in this urbush nent historic status, commercial parking impacts and adapted as following the construction.	of the US 11 roadway overpass of ection options and bridge oan area of Slidell, Louisiana. Key			

10. Stall Expellence	
09/12 – Ongoing	US 165 Connector and Ouachita River Bridge - Environmental Impact Statement, Line and Grade and Toll Study, LADOTD,
	Monroe, LA. QA/QC Reviewer. Responsible for LADOTD guideline compliance. Three alternatives were developed and
	evaluated along with various tolling scenarios. All alternatives traverse substantial tracts of wooded wetlands associated with
	Chauvin Swamp near the Russell Sage Wildlife Management Area.
01/14 – Ongoing	Pete's Highway Environmental Assessment and Alternatives, LADOTD, Livingston Parish, LA. QA/QC Reviewer. Responsible for LADOTD guideline compliance for the high-priority project completing an Environmental Assessment and traffic engineering services related to improving congestion and operations along Range Avenue in the vicinity of I-12. Alternatives include two split diamond interchange options with roundabout, partial clover leafs, and c-d road components at both Range Avenue and the next existing, eastern overpass at Pete's Highway (LA 16) and a diverging diamond interchange alternative at Range Avenue.
04/12 - 01/14	LA 434 Corridor Stage 1 Environmental Assessment, New Orleans Regional Planning Commission, Lacombe, LA. QA/QC
	Reviewer. Responsible for LADOTD guideline compliance. Environmental Assessment for the widening and improvements of
	LA 434 between LA 36 and the anticipated new junction with LA 3241 near LaCombe, LA in St. Tammany Parish. The project
	involved stream permit application coordination.
10/90 – 10/10	Urban System Program, LADOTD, Statewide, LA. Program Manager. Responsible for consultant selection, coordinating with
	metropolitan planning organizations (MPOs) and city/parish officials, coordinating with LADOTD Planning Section, developing
	the scope of services and fee for the projects, reviewing construction plans and providing comments to the consultants and
	city/parish, and approving all invoices. Responsible for developing the Urban Systems Program Seminar, which provided
	information on the processes and procedures used in the program. Served as project manager for signal projects in St.
	Bernard, Orleans, St. Tammany, and Ouachita Parishes
09/01 – 05/06	Transportation Infrastructure Model for Economic Development (TIMED) Program, LADOTD, Statewide, LA. LADOTD TIMED
	Program Manager. Worked and coordinated on a daily basis with the TIMED Program Manager (LTM) to develop training,
	procedures, policies, and guidelines for this Louisiana Constitution mandated program. Monitored program progress and
	approved consultant invoices as a member of the TIMED Program Executive Committee, reporting directly to the Secretary of
	the LADOTD. There were 16 projects recognized throughout the state wit bonds sold to finance and accelerate the program.
05/06 – 07/10	Road Design Engineer Administrator, LADOTD, Statewide, LA. Responsible for transitioning section focus from project
	management to roadway design as desired by the Chief Engineer. To support this mandate, organized and coordinated
	training with FHWA and the Louisiana Transportation Training Education Center to assist with design staff development.
	Developed a legal seminar in collaboration with the state Attorney General's Office designed for Road Design and other
	LADOTD sections representing LADOTD in court depositions presented in several LADOTD offices. Responsible for the
	development of design criteria for Offset Left Turn Lanes and design guidelines for the replacement of bridges on state routes.

Name		ployed by	ARCADIS		Meets MPR No. 4			
Degree(s) / Years / Specialization MS / 1991 / Civil (Structures), Florida State University BS/1983/Civil Engineering PE.0035652 / LA / Exp. 09/30/2024 Year registered 2001 Discipline Civil Engineering Contract role(s) / brief description of responsibilities. Experience dates Experience and qualifications relevant to the proposed contract Mr. Shahawy has over 33 years of structural bridge engineering experience working on various projects throughout Louisiana and the Southeast. He served as PM or TL on 100+ projects with extensive bridge plan, specification and estimate, rehabilitation and bridge replacement. His experience includes coordinating teams of engineers and other technical personnel on the preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP, Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. 08/22 – Ongoing Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing Hol CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Le	Name	Osama Sh	nahawy, PE	Years of relevant experience with this employer	3			
Active registration number / state / expiration date Near registered 2001 Discipline Civil Engineering PE.0035652 / LA / Exp. 09/30/2024 Year registered 2001 Discipline Civil Engineering Experience Auxiliation And bridge Experience and qualifications relevant to the proposed contract Mr. Shahawy has over 33 years of structural bridge engineering experience working on various projects throughout Louisiana and the Southeast. He served as PM or TL on 100+ projects with extensive bridge passoned and estimate, rehabilitation and bridge replacement. His experience and publication submored on tracture Task Lead, engineers and other technical personnel on the engineering experience working on various projects throughout Louisiana and the Southeast. He served as PM or TL on 100+ projects bridge personnel on treation and estimate, rehabilitation and bridge replacement.	Title	Bridge Pr	actice Manager	Years of relevant experience with other employer(s)	30			
Active registration number / state / expiration date PE.0035652 / LA / Exp. 09/30/2024	Degree(s	s) / Years /	['] Specialization	MS / 1991 / Civil (Structures), Florida State University				
Vear registered 2001 Discipline Civil Engineering Technical Advisor (Bridge)				BS/1983/Civil Engineering				
Experience dates Experience and qualifications relevant to the proposed contract Mr. Shahawy has over 33 years of structural bridge engineering experience working on various projects throughout Louisiana and the Southeast. He served as PM or TL on 100+ projects with extensive bridge plan, specification and estimate, rehabilitation and bridge replacement. His experience includes coordinating teams of engineers and other technical personnel on the preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. O8/22 – Ongoing Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing 10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, an	Active re	gistration	number / state / expiration date	PE.0035652 / LA / Exp. 09/30/2024				
Experience dates Experience and qualifications relevant to the proposed contract Mr. Shahawy has over 33 years of structural bridge engineering experience working on various projects throughout Louisiana and the Southeast. He served as PM or TL on 100+ projects with extensive bridge plan, specification and estimate, rehabilitation and bridge replacement. His experience includes coordinating teams of engineers and other technical personnel on the preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing 10				<u> </u>				
Mr. Shahawy has over 33 years of structural bridge engineering experience working on various projects throughout Louisiana and the Southeast. He served as PM or TL on 100+ projects with extensive bridge plan, specification and estimate, rehabilitation and bridge replacement. His experience includes coordinating teams of engineers and other technical personnel on the preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing	Contract	role(s) / k	prief description of responsibilities	Technical Advisor (Bridge)				
and the Southeast. He served as PM or TL on 100+ projects with extensive bridge plan, specification and estimate, rehabilitation and bridge replacement. His experience includes coordinating teams of engineers and other technical personnel on the preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual, Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in t	Experien	ice dates	Experience and qualifications rele	evant to the proposed contract				
and bridge replacement. His experience includes coordinating teams of engineers and other technical personnel on the preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all			Mr. Shahawy has over 33 years o	f structural bridge engineering experience working on vario	ous projects throughout Louisiana			
preparation of bridge PS&E design/ management including on/off-system bridges in rural/urban areas with heavy utilities & complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing 10/20 – Ongoing 1-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD			and the Southeast. He served as	PM or TL on 100+ projects with extensive bridge plan, spec	ification and estimate, rehabilitation			
complex TCP. Mr. Shahawy has a design background that provides for solid construction capabilities—a benefit that ensures constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. O8/22 — Ongoing Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 — Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
constructible technical solutions and more complete construction documents. Leveraging his decades of experience, he will check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace-Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
check accuracy, verify compliance to review comments, and will ensure that agency and stakeholder comments and concerns are addressed. Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. In CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve Inthrough widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
O8/22 – Ongoing Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.	1	P						
O8/22 – Ongoing Cross Bayou Bridge Replacement, Shreveport, LA. Project Manager and Structure Task Lead. Develop a Feasibility study to replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.		200		e to review comments, and will ensure that agency and sta	keholder comments and concerns			
replace US71 bridges at Cross Bayou. An in-depth structural, roadway, and Traffic analysis was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.	00/22	<u> </u>						
effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I- 10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.	08/22-0	Ongoing						
Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
were using average cost information per the LADOTD Project Delivery Manual. Provided the final recommendation for bridge replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I- 10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
replacement. Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support. 10/20 – Ongoing I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I- 10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
I-10 CMAR Segment 1, LADOTD, Baton Rouge, LA. Structure Task Lead, Engineer of Record (EOR) for CMAR project to improve I-10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.					_			
10 through widening and reconstruction of the main line from three to four lanes in each direction, including bridge replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.	10/20							
replacement and rehabilitation, interchange and ramp modification, shoulder widening, and auxiliary lane(s) from LA 415 to Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.	10/20 - 0	Ongoing	_					
Essen Lane on I-10 and I-12. Responsibilities include designing the substructure for the Terrace- Washington bridges, including temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
temporary and permanent bridge widening. Participates in task force meetings and works with the CMAR Contractor and DOTD to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
to develop preferred bridge concepts. Responsible for QC/QA of all designs, plans, and estimated quantities per LADOTD guidelines.								
guidelines.								
				epts. Responsible for Qe, Qr or all designs, plans, and estin	lated qualitities per ENDOTE			
1 03/20 - 11/20 Alphonise rollines dringe replacement, city of daton rouge/east daton rouge ransh, LA. Structure widhough for replacing the	05/20 – 3	11/20		nent, City of Baton Rouge/East Baton Rouge Parish. LA. Stre	ucture Manager for replacing the			
Alphonse Forbes Road Bridge over Sandy Creek in Central Louisiana. The project will replace an existing bridge with a nine-span		ŕ						
flat slab bridge on pile bents. The project was designed to fit within the existing right-of-way and meet the required hydraulic				,				
opening while minimizing roadway alignment and profile changes. I reviewed bridge plans and calculations, provided red lines,								
reviewed comments, and estimated quantities per LADOTD guidelines.			reviewed comments, and estimate	ted quantities per LADOTD guidelines.				

07/11 – 05/13	MacArthur Drive Bridge Interchange, Rapides Parish, LA. Structure Manager, Engineer of Record. Responsible for widening,
	revising, and redesigning the MacArthur Drive Interchange completing Phase 1. The design and plan production are related to
	the changes required for Ramps 7 and 8. Design deck slab for 18 spans, which include Trapezoidal girders & Bulb-T girders.
	Design Bearing Pads for all proposed Trapezoidal and Bulb-T girders. Designed inverted-T caps and special geometric columns
	for piers. Responsible for designing and producing geometric and span layout modifications, superstructures, and substructures.
	Review for accuracy and completeness of the plans and related designs prepared for the project. Ensures quality and adherence
	to established design policies, procedures, LADOTD BDEM, LSSRB, standards and guidelines in preparing and reviewing all design
	products for compliance and good engineering practice as directed by a Project Quality Control Plan.
07/11 – 05/13	LA 1 over I-19 Bridge Rehabilitation, Rapides Parish, LA. Project Manager, Engineer of Record. Provided professional inspection,
	rehabilitation design, and construction engineering services. The bridge is a four spans steel plate girder structure with uneven
	settlement and rotation at the abutments. It required rehabilitation to stabilize the movement and raise the bridge back to its
	original elevation as it was built. Responsibilities included directing the team and overall tasks involving preparing geometric
	layout plan development, bridge design, and final plans, specifications, and estimates for LA 1 Bridge over I-49, according to
	LADOTD BDEM. We performed QA/QC, prepared construction cost estimates, and reviewed/revised plans based on LADOTD
	comments.
08/20 - 03/22	I-10 New Orleans to Slidell Hard Shoulder Design and Feasibility, LADOTD, New Orleans, LA. Structure Manager. Conducting
	bridge design evaluation using Active Transportation and Demand Management (ATDM) strategies on 1-10 in Orleans and St.
	Tammany Parishes. The Project is to determine improvements in implementing shoulder lanes on Interstate 10 in the New
	Orleans East area. Responsibilities include preliminary bridge design to determine construction cost for structure widening of EB
	& WB I-10 based on four scenarios utilizing existing shoulders on 1-10 as one of the scenarios.
07/11 – 05/13	Mississippi River Bridge at Vicksburg, Mississippi, LA. Project Manager, Engineer of Record. Responsible for the four-lane
	continuous main steel-truss through-deck bridge covers a total length of 1,716 ft. and a width of 60 ft. The central truss consists
	of two symmetrical 640.5 ft. cantilever spans and one 435 ft. drop span. The approach spans consist of 101 prestressed
	concrete spans and reinforced concrete pier caps. Responsible for review of as-built plans and all rehab projects plans; indexed
	and developed inspection forms; supervised and reviewed results from the 3D computer model; model calibration; performed
	QA/QC according to LADOTD BDEM and assisted in developing the final report.
07/11 – 06/12	I-10 over Calcasieu River - Lake Charles Bridge, Lake Charles, LA. Project Manager, Engineer of Record. Responsible for bridge
	inspection that includes four steel deck trusses and a cantilever steel through-truss for the central span portion of the bridge,
	covering a total length of 6,617 ft. with a width of 62.67 ft. The east and west approach spans of the bridge consist of two bridge
	systems: first, a longitudinal girder system supported on steel bents; second, a fracture-critical span system consisting of a two-
	girder, floor beam, and stringer system. Responsible for review of the as-built and rehab project plans and indexing; developed
	inspection forms; supervised and reviewed the results from the 3D computer model; model calibration; performed load rating
	based on the present condition, capacity, and loading of the bridge; rated the gusset plate and connection systems following the
	Federal Highway Administration (FHWA)-IF-09-014; performed QA/QC and assisted in developing the final report.

16. Staff Experience							
Firm employed by	ARCADIS		Meets MPR No. 2				
Name Anup Shah	n, PE, SE	Years of relevant experience with this employer	5				
Title Principal S	Structural Engineer	Years of relevant experience with other employer(s)	20				
Degree(s) / Years /	Specialization	BS / 1998 / Civil Engineering, North Carolina State Univ	versity				
		MS / 2003 / Civil Engineering, North Carolina State Un	iversity				
Active registration	number / state / expiration date	PE. 0046446/ LA / Exp. 09/30/2024 (Also licensed in Al	L, DC, GA, MD, MS, NC, SC, TN, VA)				
Year registered	2022 Discipline	Civil Engineer					
Contract role(s) / b	rief description of responsibilities.	QA/QC					
Experience dates	Experience and qualifications rele	evant to the proposed contract					
	Mr. Shah brings over 25 years of	experience as a structural and geotechnical designing su	uccessful design-build projects				
	totaling over \$1B in design and co	onstruction fees all along the East Coast and will bring th	nis knowledge of accelerated				
	engineer designing various types	of prestressed concrete girders and cored slab beams, of	culverts, pile foundations, drilled				
	piers, retaining walls, noise barrie	ers, pedestrian bridges, and various other structural syst	ems. Additionally, he has provided				
	insight into projects for Departme	ents of Transportation of various states including South	Carolina, Virginia, Tennessee,				
	Georgia, Ohio, Louisiana, Texas a	Georgia, Ohio, Louisiana, Texas and Florida. While at the NCDOT, Anup Shah was the structural team leader for reviewing					
	structural designs for various new products to be implemented into the state system and structural team leader for						
		ardization of the structural connections for dynamic message signs installed in the state. He					
		various statewide standardization initiatives by the Geotechnical Engineering and Structures					
	Management Units. These experi	ences provide him with a unique understanding of the p	protocols and standards that DOTs				
	around the country expects of the	eir consultants.					
09/19 – Ongoing		LADOTD, Jefferson & Orleans Parishes, LA. Senior Struct	_				
	1	ad. Responsibilities included leading a team of structural engineers in the design and review of sign support structures that					
	1 -	mounted on existing US90. The 4-segment project required the design of reinforced concrete					
		e existing bridge at various locations. At the completion	_				
	structural design plan set, the design team supported post-design services for the client (DOTD). As the Structural Design						
	,	drawing submittals related to the structural elements a					
		pecifications. Also led a team in the development of eng	ineering alternatives and sketched				
	proposed and approved by the co						
10/20 – Ongoing		Rouge Parish, LA. Senior Structural Engineer. The scope					
	improvements to I-10 through widening and reconstruction of the main line from three to four lanes in each direction, bridge						
	replacement and rehabilitation along the corridor, interchange and ramp modifications, shoulder widenings, and construction						
	1	to Essen Lane on I-10 and I-12. Responsibilities leading a team of structural engineers include					
		ucture for the Terrace-Washington bridges, including temporary and permanent bridge					
		design team meetings. Ensured quality control of the milestone deliverables adhered to					
		cedures, standards and guidelines in the preparation and review of all design products for					
	compliance and good engineering	g practice as directed by a Project Quality Control Plan.					

Firm employed by	ARCADIS			Meets MPR No. 6			
Name Ari Deitch, PE, PTOE, PTP, RSP			Years of relevant experience with this employer	9			
	affic Engineer	1	Years of relevant experience with other employer(s)	2			
Degree(s) / Years			BS / 2012 / Biological Engineering, Louisiana State Uni				
Active registration number / state / expiration date PE.0041842 / LA / Exp. 03/2024; PTOE #4346 / USA / Exp. 11/2026							
Active registration	number / state / e	xpiration date	1	•			
2017			PTP #690 / USA / Exp. 07/2025; RSP #37 / USA / Exp. 1	.2/2024			
Year registered	2017	Discipline	Civil Engineering				
	brief description of	•	Technical Advisor				
Experience dates			ant to the proposed contract				
			eer and Project Manager specializing in <u>t</u> raffic engineeri				
			onceptual roadway design. Mr. Deitch has experience n				
			r LADOTD, and other DOTs and municipalities across the				
			t analysis, access management, pedestrian and bicycle ii				
			Stage 0 feasibility studies, NEPA studies, signal design, a software's and methods and is profisiont in Highway Co.				
			software's and methods and is proficient in Highway Ca				
12/16 – 02/20			ware. Has completed the LADOTD Traffic Engineering Provided a	<u> </u>			
12/16 - 02/20	Traffic Signal Engineering IDIQ, LADOTD, Statewide, LA. Senior Traffic Engineer. Provided a range of traffic engineering services						
	including traffic data collection, traffic modeling and analysis, signal timing optimization, traffic signal inventory, traffic signal design plans, construction cost estimates, and quantities. Served as engineer of record for traffic signal plans developed under						
	this IDIQ.	struction cost esti	mates, and quantities. Served as engineer of record for	traffic signal plans developed under			
11/20 – Ongoing		ic Engineering Se	rvices, LADOTD, East Baton Rouge Parish, LA. Senior Tra	ffic Engineer, Providing OAOC for			
11/20 011801118			development of permanent signing plans, signal design a				
	Modification Reports, and Transportation Management Plans for the widening of Interstate-10 from LA 415 to Essen Lane and						
	improvements to interchanges along this segment. One critical component of the project is maintaining traffic during the						
	construction of new bridge structures. Multiple scenarios are being evaluated using a calibrated mesoscopic model using						
	Dynameq to determine the impacts during construction and mitigations that will be necessary to minimize delay.						
05/19 – 11/22							
	Responsible for the development of addendum to Interchange Modification Report, Transportation Management Plan,						
	temporary sign timing and design plans, Temporary Traffic Control Plans, and Permanent Signing Plans to accommodate the						
	design and construction of the project. The design-build project includes the modification of the existing interchange at I-20/I-						
	220 with addition	al ramps and exte	ension of I-220 to provide access to Barksdale Air Force I	Base.			
04/19 – 12/19	EBR Signal Upgrad	les and Design Pla	ans, LADOTD, East Baton Rouge Parish, LA. Senior Traffic	Engineer. Responsible for			
	supervisory tasks	and oversight of t	his project involving field signal inventory and the creat	ion of updated signal design plans			
	and quantities for	39 intersections	in East Baton Rouge Parish.				

04/19 – 06/19	US 90 Traffic Signal Timing Upgrades, LADOTD, Lafayette Parish, LA. <i>Traffic Engineer</i> . Project tasks involved traffic data
	collection and analysis, traffic signal inventory, peak period determination and observations, warrant analysis, travel time runs,
	traffic signal timing analysis using Synchro 10 software, and development of updated TSI forms following latest LADOTD
04/45 40/40	standards
01/16 – 12/18	US 90 Business Signing Upgrades, LADOTD, Orleans Parish, LA. <i>Traffic Engineer</i> . Developed permanent signing plans and
	Transportation Management Plans for segments of US 90 Business and I-10 in the Central Business District of New Orleans. The
	project was divided into 4 separate plan packages. Separate Transportation Management Plans were developed and submitted
20/15 20/10	for each segment.
02/15 – 09/18	US 71 Corridor - Phase II and III Traffic and Safety Corridor Study, LADOTD, Rapides Parish, LA. Project Manager. Responsible for
	overseeing and managing project tasks including traffic data collection, signal warrant analysis, traffic analysis, crash analysis,
	alternative and countermeasure development, predictive safety analysis, and conceptual drawings.
08/19 – 02/20	US 61 Access Management and Corridor Study, LADOTD, East Baton Rouge Parish, LA. Senior Traffic Engineer. Project purpose
	was to evaluate the effectiveness of proposed access management improvements along US 61 and identify feasible alternatives
	to maximize operational and safety benefits. Provided technical oversight for traffic analysis using Highway Capacity Software
	7, signal warrant analysis, and predictive safety analysis. Assisted with the development of construction cost estimates and
, ,	benefit-cost analysis.
02/15 – 01/18	LA 3105 (Green Acres to LA 72) Corridor Study, LADOTD, Bossier Parish, LA. <i>Traffic Engineer</i> . Responsible for
	development/evaluation of existing and future year conditions using a calibrated microsimulation model (Vissim). Designed
	alternatives for phased implementation based on identified needs and input from local stakeholders including medians,
	restricted intersections, roundabouts, roadway widening, and signal timing enhancements.
04/16 – 09/18	New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA. Project Manager. Responsible for
	assessing existing and future safety deficiencies related to pedestrian and bicycle modes and selecting safety countermeasures
	for 20 high-risk locations. Developed design drawings for proposed short-term and long-term improvement phases and
	conducted benefit-cost analysis to inform project prioritization. Conducted signal warrant analysis and preliminary signal design
	and timing plans. Conducted safety analysis using Highway Safety Manual predictive methods. Organized and lead project
	stakeholder meetings to review alternatives, obtain feedback, and develop context sensitive solutions. Completed Stage 0
07/14	documentation including Preliminary Scope and Budget and Environmental Checklists for all 20 intersections.
07/14 – Ongoing	Pete's Highway Traffic Study and Environmental Assessment, LADOTD, Denham Springs, LA. Traffic Engineer. Responsible for
	traffic analysis of proposed alternatives using Vissim software. Played a key role in the development of preliminary roadway
	design drawings, incorporation LADOTD's Complete Streets Policy, and implementing enhanced pedestrian safety measures
	such as high visibility crosswalks. Work involves completing an Environmental Assessment and providing traffic engineering
	services related to improving operations and safety along Range Avenue at the I-12 interchange. Conducted signal warrant
	analysis and developed optimized timing plans for proposed improvements.

16. Staff Experience:							
Firm employed by	ARCADIS		,				
Name Skyler Waaso, PE, PTOE			Years of relevant experience with this employer	3			
	affic Engineer		Years of relevant experience with other employer(s)	11			
Degree(s) / Years /	Specialization		BS / 2009 / Civil Engineering, University of Louisiana at	Lafayette			
Active registration	number / state / exp	piration date	PE.00390 7 0 / LA / Exp. 09/2024; PTOE #4600 / USA / Ex	с р. 03/2025			
Year registered	2017	Discipline	Civil Engineer				
Contract role(s) / b	prief description of re	esponsibilities.	Traffic Engineering				
Experience dates	Experience and qua	alifications releva	ant to the proposed contract				
	Mr. Waaso is a Sen	ior Traffic Engine	eer with 13 years of experience in traffic modeling and st	udies. He is experienced with a			
Va all	range of traffic mod	deling software i	ncluding Highway Capacity Software, Vissim (microsimul	ation), Synchro, Vistro, and Sidra.			
			ng and delivering a wide range of traffic projects for LAD(
			and corridor studies, transportation management plans,				
	_		ns, Stage 0 feasibility studies, NEPA studies, and safety st	udies. Has completed the LADOTD			
	Traffic Engineering						
06/15 – 02/17			Study, LADOTD, St. Tammany Parish, LA. Traffic Engineer	-			
			n Covington, Louisiana. Main tasks included analyzing the	_			
		veloping alternatives that would improve the safety and capacity needs of the corridor. Performed the traffic analysis in					
	·		crash reports and summary the crash history. Develope				
presented our concept to the DOTD district office and parish representatives. Completed a stamped and signed roundabout							
01/10 06/10	report.						
01/18 – 06/19	I-20 Transportation Management Plan, LADOTD, Bossier Parish, LA. Traffic Engineer. Assisted with the development of						
	mesoscopic traffic model using Dynameq to predict queueing, delay and alternate travel patterns due to planned construction						
	on I-20 to replace pavement. The project is anticipated to disrupt traffic in this critical portion of I-20. The project scope includes development and calibration of mesoscopic model, analysis of alternative routes, safety analysis, operational analysis,						
	assistance with public outreach, development of a Level 4 TMP, and development of work zone mitigation strategies.						
04/19 – 06/19							
04/13 00/13	US 90 Traffic Signal Timing Upgrades/LADOTD, Lafayette Parish, LA. Senior Traffic Engineer. Project tasks involved traffic collection and analysis, traffic signal inventory, peak period determination and observations, warrant analysis, travel tire.						
	traffic signal timing analysis using Synchro 10 software, and development of updated TSI forms following latest LADOTD						
	standards						
11/20 – Ongoing		Engineering Ser	rvices, LADOTD, East Baton Rouge Parish, LA. Senior Trafj	fic Engineer. Assisting with traffic			
	engineering tasks including development of permanent signing plans, signal design and timing plans, Interchange Modification						
Reports, and Transportation Management Plans for the widening of Interstate-10 from LA 415 to Essen Lane and							
	improvements to interchanges along this segment. One critical component of the project is maintaining traffic during the						
	construction of new bridge structures. Multiple scenarios are being evaluated using a calibrated mesoscopic model using						
	Dynameq to determine the impacts during construction and mitigations that will be necessary to minimize delay.						

16. Starr experience:	
02/17 - 09/18	US 71 Corridor - Phase III Traffic and Safety Corridor Study, LADOTD, Rapides Parish, LA. Traffic Engineer. Responsible for
	conducting traffic study tasks including traffic data collection, signal warrant analysis, traffic analysis, crash analysis, alternative
	and countermeasure development, predictive safety analysis, and conceptual drawings.
02/17 – 02/18	US 165 Traffic and Corridor Study, LADOTD, Ouachita Parish, LA. Traffic Engineer. Responsible for traffic study tasks including
	traffic data collection and volume development, microsimulation modeling (Vissim) of existing and future conditions,
	developing capacity, access management and safety improvements, and study documentation.
09/19 – Ongoing	Innovate Mound Project, MDOT, Macomb County, MI. Senior Traffic Engineer. Responsible for traffic engineering tasks
	including conducting a corridor traffic study of Mound Road from I-696 to M-59. Traffic modeling and analysis was performed
	to develop proposed improvements including capacity, access management, safety, multi-modal and traffic signal
	improvements. Developed traffic study documentation and provided transportation management plans during construction.
04/16 - 02/17	I-110 to Terrace Avenue Interchange Modification Report, LADOTD, East Baton Rouge Parish, LA. Traffic Engineer. Prepared an
	Interchange Modification Report for FHWA on a future connection along 1-110 SB in downtown Baton Rouge. Main tasks
	included modeling of the existing, no build, and build alternative in Vissim and completing the written Interchange Modification
	Report that was submitted to FHWA.
02/17 – 02/18	Safety Studies IDIQ - I-49 Interchange Stage 0 Traffic and Safety Feasibility Study, LADOTD, Lafayette Parish, LA. Traffic
	Engineer. Responsible for conducting traffic study and associated tasks including data collection and analysis, traffic and safety
	analysis, and conceptual design drawings. Purpose of the project was to identify feasible improvement alternatives to address
	historical safety issues along the I-49 corridor and at 3 interchanges. Participated with meetings with LADOTD HQ and District
	03 team members to understand project needs and develop context sensitive solutions.
02/17 – 06/19	Pete's Highway Traffic Study and Environmental Assessment, LADOTD, Denham Springs, LA. Traffic Engineer. Responsible for
	traffic analysis of proposed alternatives using Vissim software. Work involves completing an Environmental Assessment and
	providing traffic engineering services related to improving operations and safety along Range Avenue at the I-12 interchange.
	Conducted signal warrant analysis and developed optimized timing plans for proposed improvements. An Interchange
	Modification Report was prepared to document results of the traffic study and proposed improvements.
02/20 – Ongoing	U-23 Flex Route Traffic Study, MDOT, Livingston County, MI. Senior <i>Traffic Engineer</i> . Responsible for traffic modeling and
	alternative analysis for US-23 between M-36 and I-96. Work includes analysis of build alternatives, including developing and
	calibrating existing Vissim models to FHWA/MDOT standards and using the models to compare the projected future traffic
	operations of build alternatives, including the extension of the existing US-23 Flex Route north of I-96. The US-23 Flex Route is a
	part-time dynamic hard shoulder use facility north of Ann Arbor. This study will evaluate if and how the Flex Route can be
	extended approximately five miles from 8 Mile Road to I-96. The study will include conducting traffic and geometric analyses,
	road and bridge scoping, conducting environmental surveys with appropriate reports and preparing National Environmental
	Policy Act (NEPA) documentation. The study will include traffic, road, bridge, ITS components, safety and drainage. There is also
	a public engagement aspect to the project that will involve two stakeholder meetings and two public meetings.

1	6	Sta	ıff	Fx	ner	iend	9
_	υ.	310		$ \wedge$	50		_

16. Staff Experience	ence_				
Firm employe					
Name Kester Hollier, PE, PTOE		Years of relevant experience with this employer	3		
Title Senior Traffic Engineer		Years of relevant experience with other employer(s)	16		
Degree(s) / Ye	ears / Specialization	BS / 2004 / Civil Engineering, Louisiana Tech University			
Active registra	ation number / state / expiration date	PE.034304 / LA / Exp. 03/2025; PTOE #3928 / USA / Exp	0. 11/2024		
Year registere	ed 2009 Discipline	Civil Engineering			
Contract role	(s) / brief description of responsibilities.	Traffic Engineering	Traffic Engineering		
Experience da	ates Experience and qualifications relev	ant to the proposed contract			
	intersection and corridor traffic stu- transportation management plans, inspection. Working on a wide vari phases, has given him the experier understand stakeholders ranging for	th of experience in traffic engineering studies and design adies, signal timing and design, roadway design, complete traffic modeling and analysis, transportation safety, and ety of projects from the planning and conceptual phases are to help identify the needs and requirements for projection local public agencies to state DOTs and helps provided that completed LADOTD Traffic Engineering Process and R	e street improvement projects, construction management and to the design and construction cts. This experience allows him to e expertise in achieving successful		
11/20 – Ongo	Responsible for traffic engineering modification reports, and transpor improvements to interchanges alon of the IMR and TMP. One critical costructures. Multiple scenarios are be	rvices, LADOTD, East Baton Rouge Parish, LA. Project Mar tasks including development of permanent signing plans, tation managemnet plans for the widening of I-10 from Lang this segment. Extensive historical crash and safety ana emponent of the project is maintaining traffic during the deeing evaluated using a calibrated mesoscopic model to divill be necessary to minimize delay.	traffic signal plans, interchange A 415 to Essen Lane and lysis is being performed in support construction of new bridge		
01/10 - 04/13 07/13 - 01/14	1, Stumberg Lane Extension, City of B the design of new traffic signals at	Stumberg Lane Extension, City of Baton Rouge Green Light Plan, East Baton Rouge Parish, LA. <i>Traffic Engineer</i> . Responsible for the design of new traffic signals at US 61 (Airline Highway) and LA 73 (Jefferson Highway) for the extension of Stumberg Lane in Baton Rouge, LA. Also, responsible for the design and layout of the fiber optic interconnect along the proposed extension.			
05/09 – 07/13	Responsible for the road design an Lapalco Blvd. (LA 428) and Enginee	gineers Rd.), LADOTD, Jefferson and Plaquemines Parished geometrics for the widening of LA 23 in Jefferson and Programmers Rd. (LA 3017). Developed traffic analysis for the traffic traffic signing plans, pavement marking layouts and tem	laquemines Parishes between signal timing and required turn bay		
05/14 – 08/20	of traffic control and construction of for a new interchange at LA 3139 (interchange traffic sign and traffic	nterchange, LADOTD, Jefferson Parish, LA. Senior Traffic Is sequencing, pavement marking layout, quantity analysis, Earhart Expwy.) and LA 3046 (Causeway Blvd.) in Jefferso signal timings and design. Identified all necessary design vided geometric layout design, typical section design and derpasses.	cost estimates, and quality control n Parish, LA. Provided review for the waivers and design exceptions		

16. Staff Experience	20 01 130
10/18 - 01/19	LA 22 Traffic Circulation and Corridor Analysis, NORPC, St. Tammany Parish, LA. Senior Traffic Engineer. Responsible for the development of three future alternatives along Northshore Boulevard between I-12 and US 190 in Slidell, LA. Managed the data collection process and peak period observations to determine existing traffic patterns as well as the safety analysis along the corridor. Developed three alternatives that used a combination of traffic signal retiming, J-turns, and roundabouts to provide better access management along Northshore Boulevard as well as improve traffic flow in the corridor for current and proposed future conditions with consideration given to proposed future developments using trip generation and land use analysis.
09/12 - 02/16	Traffic Study and Stage 1 EA for Replacing Belle Chasse Tunnel and Bridge, LADOTD, Plaquemines Parish, LA. Lead Traffic Engineer. Responsible for the feasibility study and traffic analysis along LA 23 (Belle Chasse Highway) between LA 428 (Behrman Highway) and LA 406 (Woodland Highway) for multiple 6-lane bridge alternatives that will be proposed to replace the existing Belle Chasse Tunnel and lift bridge over the Intercoastal Waterway. These alternatives included 3%, 4%, and 5% bridge grades that modified roadway geometry and intersection location. Responsible for the review of the roadway portion and costs for the Line and Grade Study along with the review of the construction sequencing and traffic maintenance of the constructability review.
11/17 – 07/20	LA 466 (5 th Street) Improvements Traffic Study, City of Gretna, Jefferson Parish, LA. <i>Project Manager / Senior Traffic Engineer</i> . Responsible for the traffic study and impacts for the proposed complete streets improvements along the LA 466 corridor between LA 23 and Richard St. in Gretna, Louisiana. Tasks included data collection along the corridor and at designated intersections, safety and crash analysis along the corridor, trip generation/land use and performing existing traffic analysis and future traffic analysis for proposed final alternative. The traffic study was prepared to follow the Louisiana Department of Transportation and Development's Traffic Engineering Process and Report Guidelines. The project also included a stand alone pedestrian study along the corridor at designated intersection and the design of traffic signals and accessible pedestrian signals at signalized intersections.
12/17 – 11/19	Causeway Boulevard Widening Traffic Study, Jefferson Parish, LA. <i>Project Manager / Senior Traffic Engineer</i> . Responsible for the traffic and safety study for the proposed widening of Causeway Boulevard between Metairie Rd. and West Esplanade Blvd. in Jefferson Parish, LA. Tasks included data collection, traffic volume redistribution, left-turn placement and turn bay storage length, and existing traffic analysis and future traffic analysis of a preferred alternative.
06/13-04/14	US 190 Stage 0 Feasibility Study, LADOTD, St. Tammany, LA. <i>Traffic Engineer</i> . Responsible for <i>roundabout geometric design and pedestrian and bike path design along the US 190 corridor in the City of Slidell and St. Tammany</i> Parish to improve safety for motorized and non-motorized roadway users.
10/10 - 07/15	Barriere Road Traffic Study, US Department of Defense, Plaquemines Parish, LA. Civil/Traffic Engineer. Responsible for the geometric layout and design of the realignment alternatives of Barriere Rd. between LA 23 to the US Naval Air Station. Developed and reviewed traffic analysis for arrival and departure patterns for the South US Naval Air Station entrance gates.
09/12 – 02/16	Stage 0 Feasibility Study and Stage 1 EA for Replacing Belle Chasse Tunnel and Bridge, LADOTD, Plaquemines Parish, LA. Traffic Engineer. Responsible for the feasibility study and traffic analysis along LA 23 (Belle Chasse Highway) between LA 428 (Behrman Highway) and LA 406 (Woodland Highway) for multiple 6-lane bridge alternatives proposed to replace the existing Belle Chasse Tunnel and lift bridge over the Intercoastal Waterway. These alternatives included 3%, 4%, and 5% bridge grades that modified roadway geometry and intersection location. Responsible for the review of roadway design and costs for the Line and Grade Study along with the review of the construction sequencing and traffic maintenance of the constructability review.

16. Staff Experience				
Firm employed by	ARCADIS			
Name Thomas Montz, PE		Years of relevant experience with this employer	9	
Title Senior Transportation Engineer		Years of relevant experience with other employer(s)	3	
Degree(s) / Years /	Specialization	MS / 2011 / Civil Engineering, Louisiana State Universi	ty	
		BS / 2009 / Civil Engineering, Louisiana State Universit	У	
Active registration	number / state / expiration date	PE.0039128 / LA / Exp. 09/30/2024		
Year registered	2014 Discipline	Civil Engineering		
Contract role(s) / b	orief description of responsibilities.	Traffic Engineering		
Experience dates	Experience and qualifications rele	vant to the proposed contract		
	modeling, safety, and design. He including Stage 0 feasibility studie management during construction	and Senior Transportation Engineer specializing in transpectation and transpectation and the solution of personer 12 years of experience leading a multitude of personers, safety studies, NEPA studies, traffic signal timing and and the specializes in traffic analysis and operations including imulation analysis. Has completed LADOTD Traffic Engires.	planning and engineering projects design, and transportation ing signal timing, signal design, ITS	
04/16 – Ongoing	Pete's Highway Interchange Alternatives and Environmental Assessment, LADOTD, Denham Springs, LA. <i>Traffic Engineer</i> . Responsible for assisting with traffic signal timing analysis tasks including volume development / projections, origin-destination study, VISSIM model development and calibration, and noise analysis. Work involves completing an Environmental Assessment and providing traffic engineering services related to improving operations and safety along Range Avenue at the I-12 interchange.			
04/13 – Ongoing	speed tabulations, intersection and of US 11 between US 190 (Gause	t, LADOTD, St. Tammany Parish, LA. Traffic Engineer. Resemble corridor analysis, alternative development, and noise Blvd) and I-12 in Slidell, LA. The proposed improvement is project includes analyzing several innovative alternation concepts.	e modeling for the proposed widening ts include replacing a bridge crossing	
04/19 – 12/19	US 90 Traffic Signal Timing Upgrades/LADOTD, Lafayette Parish, LA. Technical Lead of project tasks involving traffic data collection and analysis, signal inventory, peak period determination and observations, warrant analysis, travel time runs, traffic signal timing analysis using Synchro 10 software, and development of updated TSI forms following latest LADOTD standards			
02/15 – 08/17	preparation of a corridor feasibili tasks included traffic data collecti	Feasibility Study, LADOTD; Rapides Parish, LA. Project Maty study for the purpose of enhancing mobility and safe ion, signal warrant studies, traffic analysis, safety data a Completed Stage O documentation including Preliminar	ty on US 71 in Alexandria, LA. Main nalysis, alternative development, and	

16. Staff Experience	
04/16 – 09/18	New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA. <i>Traffic Engineer</i> . Responsible for traffic data collection, volume development, traffic analysis, and alternative screening. Purpose of the project was to identify safety improvement alternatives at 20 high-priority intersections in New Orleans with a history of pedestrian and bicycle safety issues. Assisted with the development of safety countermeasures for short-term and long-term alternatives. Assisted with the completion of Stage 0 documentation including Preliminary Scope and Budget and Environmental Checklists.
04/16 – 10/19	I-12 Hard Shoulder Running Feasibility Study and Preliminary Design, LADOTD, East Baton Rouge and Livingston Parishes, LA. <i>Traffic Engineer</i> . Conducted traffic analysis using a calibrated microsimulation model to evaluate the operational performance of HSR and HOV lane alternatives along I-12 between the I-10/I-12 split and Walker, LA. Developed a range of alternatives and made recommendations based on the alternatives that produced the greatest operational benefits and relieved major bottlenecks. Presented results to LADOTD project team and administration to inform the decision-making process and subsequent project stages.
02/18 – 06/21	Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments LADOTD, East Baton Rouge Parish, LA. <i>Traffic Engineer</i> . Responsible for assessing existing and future safety deficiencies related to pedestrian and bicycle modes at identified high-risk intersections and segments in East Baton Rouge Parish. Assisted with the development of screening criteria to identify high priority locations with a history of pedestrian and/or bicycle crashes.
12/13 – 05/15	Joe Sevario / Roddy Road Stage 0 Safety Feasibility Study, LADOTD, Ascension Parish, LA. <i>Traffic Engineer</i> . Evaluation of roundabouts at 10 stop-controlled intersections along Joe Sevario / Roddy Road, from US 61 to LA 42, a length of approximately 7.2 miles. Main tasks included traffic data collection, traffic signal warrants, crash analysis, capacity analysis, safety analysis, review of existing pipelines and other municipal <i>utilities</i> , <i>alternatives analysis</i> , <i>design development</i> , <i>and cost estimates</i> .
11/12 – 4/13	LA 594 (Millhaven Rd.) Stage 0 Feasibility Study and Preliminary Design, I-20 Economic Development Corporation, Ouachita Parish, LA. <i>Traffic Engineer</i> . Responsible for traffic data collection and traffic and safety analysis tasks. The project proposed roadway improvements to maintain operations and safety along Millhaven Road while accommodating projected increases in traffic demand and commercial development.
12/13 – 06/15	LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA. <i>Traffic Engineer</i> . Responsible for traffic and safety analysis as part of the Stage 0 feasibility study to develop improvement alternatives with the goal of enhancing mobility and safety on LA 3235. Main tasks included traffic data collection, signal warrant studies, traffic analysis, safety analysis, development of conceptual layouts, and public outreach. Intersections found to warrant signalization were also modeled in unconventional designs including U-turns, J-turns, and RCUTs. Purpose of the project was to address historical safety issues along the corridor resulting from high speeds and conflict points. Assisted with the completion of Stage 0 documentation including Preliminary Scope and Budget and Environmental Checklists.
11/20 – Ongoing	I-10 CMAR, LADOTD, East Baton Rouge Parish, LA. <i>Traffic Engineer</i> . Responsible for construction phasing modeling and evaluation to determine the impacts of various construction phasing scenarios and mitigation that will be required to minimize travel delays during construction. Construction phasing scenarios are being modeled using a calibrated mesoscopic model developed by Arcadis, which can estimate the effects of construction activities on the broader roadway network. Model results are being used to inform the Transportation Management Plan for the project.

16. Staff Experience					
Firm employed by					
Name Jose M. F	Rodriguez, RSP	Years of relevant experience with this employer	4		
Title Safety Ar	nalyst	Years of relevant experience with other employer(s)	4		
Degree(s) / Years	/ Specialization	MS / 2014 / Civil Engineering, LSU			
		BS / 2006 / Civil Engineering, Julio Garavito Colombian	Engineering School		
Active registration	n number / state / expiration date	RSP # 12 / USA / Exp. 12/2025			
Year registered	2019 Discipline	Road Safety Professional			
Contract role(s) /	brief description of responsibilities.	Safety Analysis			
Experience dates	Experience and qualifications re	levant to the proposed contract			
	Mr. Rodriguez's experience incl	udes safety & traffic analysis for corridor feasibility studies	on major highways and interstates,		
	as well as intersection feasibility	studies including pedestrian and bicycle considerations. N	Mr. Rodriguez has extensive		
4 SA	experience in crash analysis and	highway safety analysis using the Highway Safety Manual	, Crash Modification Factors, and		
	Safety Performance Functions for	or local and nonlocal conditions. He has summarized crash	and safety analysis results in		
	dynamic web dashboards using	the latest data visualization technology, including Power E	Я.		
02/17 - 08/17	LA 157 (US 80 to South of LA 61	4) Study, LADOTD, Bossier City, Louisiana. Traffic and Safe	ty Analyst. Performed benefit-cost		
	analysis including both operatio	ns and safety. A traffic study to evaluate existing, no-build	and proposed build alternatives for		
	LA 157 (Booker Rd. to south of I	A 614) for intermittent (five year) and 20-year plan using	VISSIM and Synchro.		
08/14 - 02/17	Traffic Engineering Retainer - US	571 Corridor Traffic & Safety Study - Phase 1, LADOTD, Ra	pides Parish, Louisiana. Safety		
	Analyst. Assisted in the prediction	on of future safety performance along the corridor. Respo	nsible for development of		
	conceptual design of intersectio	n and corridor build alternatives. Specific duties included	determining applicability of various		
intersection and corridor mitigation		tion, ensuring design features accommodate roadway attr	ibutes, and identifying extent of		
	ROW impacts.				
02/17 – 02/18	I-49 Interchange Safety Improve	ment Studies, LADOTD, Lafayette Parish, Louisiana. Safety	Analyst. Responsible for the		
	collection and evaluation of historical crash data, screening and selection of available safety improvement strategies that				
	typically include alternative intersection configuration, roundabouts, corridor geometry and lane configuration, and driver				
	awareness improvements. Safety analysis using HSM, IHSDM. Conceptual design of corridor/intersection safety				
	improvements.				
04/16 – 06/18		IMR, LADOTD, Denham Springs, Louisiana. Traffic and Safe			
	methodology development and overview of traffic analyses for a high-priority project. Work involves completing an EA and				
	providing traffic engineering services related to improving congestion and operations along Range Avenue at the I-12				
	interchange. Design alternatives included two split diamond interchange options with roundabout, cloverleafs, and collector				
		both Range Avenue and the next existing, eastern overpas	ss at Pete's Highway (LA 16); and a		
	diverging diamond interchange				
04/16 – Ongoing		SR) Safety Study - Safety Studies Retainer, LADOTD, East Ba			
		ved and summarized the current best practices and safety			
	shoulder running experience in	the U.S and Europe. Research included shoulder/median v	vidth and impacts to safety,		

desirable lengths for effective hard shoulder running, and CMFs to predict impacts to safety by reducing land widths. Produce a high-level technical memorandum that will assess various options of utilizing existing I-12 researching the best practices, analyzing the safety and operational benefits, and determining the likely cost	
researching the best practices, analyzing the safety and operational benefits, and determining the likely cost	shoulders,
	s. Evaluated
safety based on crash analysis, the HSM predictive methods and the ISATe tool for Freeways. Estimated cost	s and benefits of
operational and safety analysis for proposed alternatives.	
04/15 – 09/18 New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, Louisiana. Safety Traffic Ar	nalyst. Safety
analyses performed utilizing the Highway Safety Manual 2010 guidelines and Crash Modification Factors (CN	ЛFs) from other
sources. Analyses include developing two build alternatives that address safety and operational issues at each	ch intersection for
all road users and developing a Stage "0" Checklist.	
05/18 – Ongoing Baton Rouge Pedestrian Bicycle Safety Action Plan, LADOTD, Baton Rouge, Louisiana. Safety Analyst. Support	ted the
development and delivery of a Pedestrian and Bicycle Safety Action Plan for the City of Baton Rouge. Respon	nsibilities include
completing a review of crash data, identification of priority locations, and creation of targeted countermeasu	ures based on
roadway type. Responsible for reviewing the crash data in both GIS and PowerBI to identify 10 focus areas/lo	
greatest need for pedestrian/bicycle safety improvement. The second phase of the project will develop deta	iled studies at the
top 10 identified locations for safety countermeasures such as low-cost pedestrian and bicycle facility impro	vements.
2019 – Ongoing District 8 Systemic Safety Project, Pedestrians, ODOT, Columbus, Ohio. Safety Analysts. Responsible for the r	· ·
including crash, roadway inventory, and demographics. The project required the development of a PowerBI	dashboard and
use of GIS analytics to review crash data to identify over-represented metrics to locate crash occurrences an	nd areas where
crashes may not be occurring, but have similar environmental characteristics (i.e., speed limit, lane width, dr	river or pedestrian
age, presence of zero vehicle households, etc.). This will allow the project team to not only develop engineer	ring solutions, but
also target areas for enhanced education and enforcement.	
08/18 – Ongoing Local Road Systemic Safety Task Order Contract, ODOT, Statewide. Safety Analyst. Assisted with four concurr	
perform data driven systemic safety analysis for ODOT's current SHP initiative to promote regional safety thr	• ,
safety analysis. Each task order includes data collection/conflation/QAQC, database management, data evalu	
crash history, developing crash trees, identifying focus facilities, identifying risk factors, identifying segments	
that may be at risk for crashes, identifying and prioritizing safety improvements, and developing online web	applications to
clearly convey results to stakeholders using ESRI ArcMap and Microsoft PowerBI.	
01/20 – Ongoing Local Road Safety Plan Task Order Contract, ODOT, Statewide. Subconsultant Safety Analyst. Assisting in the	·
testing of ODOT's new SPAM Tool and completing a Local Road Safety Plan for the OMEGA MPO in east cent	tral Ohio. The
SPAM Tool which is a VBA macro-enabled Microsoft Excel workbook that will use the same data import form	nat as ODOT's
Crash Analysis Module (CAM) Tool and process crashes for given areas selected by users in the current ODO	
Information Mapping System (TIMS) interface. The OMEGA LRSP includes testing the SPAM Tool and leading	stakeholder
engagement to develop a regional local road safety plan and 8 counties specific LRSPs.	

Firm employed by	ARCADIS				
	irre, PhD, PE, RSP		Years of relevant experience with this employer	3	
Title Traffic and Safety Engineer			Years of relevant experience with other employer(s)	1	
Degree(s) / Years / Specialization			PhD / 2018 / Engineering Science, LSU; MS / 2015 / Co		
2 -8:(-) /	, - ,		BS / 2013 / Civil Engineering, LSU	,	
Active registration	n number / state / expi	ration date	PE. 0047579/ LA / Exp. 09/30/2025; RSP #636 / USA / I	Exp. 8/2024	
Year registered	2021	Discipline	Civil Engineering		
_	brief description of res	ponsibilities.	Traffic Engineering		
Experience dates	Experience and qual	ifications releva	ant to the proposed contract		
	pertaining to traffic a signal design, and NI AASHTO "Green Boo	and safety stud EPA studies. He k". Dr. Aguirre	on projects for Louisiana Department of Transportation lies, feasibility studies, pedestrian and bicycle improvem is also familiar with the Highway Capacity Manual, High is also knowledgeable in the application of several softw Station software. Has completed LADOTD Traffic Engine	nents, permanent signing design, nway Safety Manual, MUTCD, and ware programs including IHSDM,	
08/19 – 02/20	Baton Rouge Parish, improvements along for pedestrian and b	LA. Traffic Eng US 61 and ide icycle accomm	cess Management and Corridor Improvements (Airline Fineer. Project purpose was to evaluate the effectiveness ntify feasible alternatives to maximize operational and sodations based on historical crash data and adjacent larenefit-cost analysis to compare the effectiveness of the	s of proposed access management safety benefits. Evaluated the need and use. Assisted in conducting traffic	
09/19 – 06/21	Rouge Parish, LA. Tropedestrian and bicycodevelopment of screen Conducted Road Saf	affic and Safety le modes at id- ening criteria t ety Assessmen	Pedestrian and Bicycle Safety Action Plan and Road Safety Engineer. Assisted with the assessment of existing and entified high-risk intersections and segments in East Bat to identify high priority locations with a history of pedest (RSAs) at 10 priority locations to identify and evaluate a safety for pedestrians and bicyclists.	future safety deficiencies related to con Rouge Parish. Assisted with the trian and/or bicycle crashes.	
10/19 – 07/21	I-10 New Orleans to Safety Engineer. Pur bottlenecks and con	Slidell Hard Shopose of the progestion along c	oulder Running Traffic and Safety Feasibility Study, LADO oject was to evaluate the feasibility of implementing HSR critical segments of the corridor. Assisted in safety analyst coposed Hard Shoulder Running (HSR) alternatives on I-1	R lanes along I-10 to alleviate existing sis and development of conceptual	
11/20 – Ongoing	I-10 CMAR Traffic En engineering tasks ind Management Plans f	gineering Serv cluding develop for the widenin n the developm	ices, LADOTD, East Baton Rouge Parish, LA. Traffic and Soment of permanent signing plans, Interchange Modificate of I-10 from LA 415 to Essen Lane and improvements then to fexisting condition safety analysis including tasks to the condition of existing condition safety analysis including tasks to the condition of existing condition safety analysis including tasks to the condition of the conditi	Safety Engineer. Assisting in traffic ation Reports, and Transportation to interchanges along this	

16. Staff Experien

16. Staff Experience				
Firm employed by	ARCADIS			
Name David Fulks, PE		Years of relevant experience with this employer	15	
Title Roadway Design Engineer		Years of relevant experience with other employer(s)	12	
Degree(s) / Years / S	Specialization	MS / 2020 / Engineering Management, The George Wa	ashington University	
		BS / 1997 / Civil Engineering, Portland State University	,	
Active registration r	number / state / expiration date	PE.030151 / LA / Exp. 09/2024		
Year registered	2002 Discipline	Civil Engineering		
	ief description of responsibilities.	Roadway/Drainage Design		
Experience dates	Experience and qualifications rele			
		of experience in the design of roadways, flood protection		
AN 35 C		s and design of geometric and pavement design of highw		
		nterchanges; site hydrology and hydraulics; and traffic in		
		ring designs, reports, plans, and specifications; preparing	g and managing project schedules	
	and cost estimates; and providing	g construction administration.		
07/15 – 06/17	US 190B at Jefferson Ave Rounda	bout Design, LADOTD, St. Tammany Parish, LA. Roadwa	y Engineer. Geometric and roadway	
	design, preliminary plans preparation, and cost estimate for replacing an existing four-way signalized intersection with a			
	single-lane elliptical roundabout.			
04/13 - 07/14			ent, LADOTD, St. Tammany Parish, LA.	
	Lead Engineer. Geometry and roa	adway design, line and grade study development, and co	ost estimates for the replacement of	
an historic railroad overpass bridge and upgrading an existing two		ge and upgrading an existing two-lane rural highway to a	a four-lane divided highway with	
	access control.			
05/14 – 05/15	Joe Sevario/Roddy Road Roundabouts Stage 0 Feasibility Study, LADOTD, Ascension Parish, LA. Task Manager and Lead			
		y design and cost estimates for the replacement of ten ϵ	existing stop-controlled intersections	
04/44 02/47	with single-lane roundabouts.	LARGER III II I	/0:1	
01/14 – 03/17	4 – 03/17 Pete's Highway Environmental Assessment, LADOTD, Livingston Parish, LA. Lead Roadway/Bridge Geometrics and Cost Engineer. High-priority project completing an Environmental Assessment and traffic engineering services related to impro		-	
		Range Avenue in the vicinity of the I-12 interchange. De		
	diamond interchange options with roundabout, partial clover leaves, and collector-distributor road components at both Range Avenue and the next existing, eastern overpass at Pete's Highway (LA 16) and a diverging diamond interchange			
alternative at Range Avenue.		ing, eastern overpass at rete s riighway (LA 10) and a div	verging diamond interchange	
11/14 – 10/15		dabout, LADOTD, Ascension Parish, LA. Deputy Project N	Manager and Lead Engineer.	
	•	preliminary subsurface utility investigation, and cost esti	_	
		intersection with either a single-lane roundabout or two		
	in/right-out control at the existing intersection.			
	<u> </u>	-		

16. Staff Ex	perience
--------------	----------

12/13 – 06/15	Safety Studies Retainer - LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA. Lead Roadway Geometrics and Cost Engineer. Designed geometric layout of safety improvements including access management, restrictive intersections, and added turn lanes. Developed construction cost estimates for proposed improvements to assess feasibility of proposed
09/09 – 03/12	alternatives. I-20 – Kansas Lane/Garrett Road Connector Interchange Improvements, LADOTD, Ouachita Parish, LA. Lead Engineer. Geometry and roadway design of the new KCS Railroad overpass and connector between Kansas Lane and Garrett Road, including interstate interchange modifications to include two-lane roundabouts at ramp intersections, and three two-lane roundabouts along the corridor outside of the interchange. Improvements to the pedestrian and bicycle facilities were included in accordance with the LADOTD Complete Streets Policy. The compact project area required a detailed layout to confirm feasibility.
08/11 - 09/13	Chef Menteur Bridge and Approaches Replacement Environmental Assessment and Line and Grade Study, LADOTD, Orleans Parish, LA. Lead Roadway/Bridge Geometrics and Cost Engineer. Responsible for preparing the proposed geometric configurations of a bridge replacement at Chef Menteur Pass. Investigated four alignments as well as both low-level moveable and high-level fixed span bridge configurations. Performed detailed geometric layouts of both the mainline highway, bridge, and adjacent collector roadways to mitigate impacts to environmentally sensitive resources and local residential, commercial, and historical interests.
09/12 - 09/13	US 165 Connector and Ouachita River Bridge Environmental Impact Statement, LADOTD, Ouachita Parish, LA. Roadway Design Engineer. Responsible for preparing roadway and bridge general plan designs, line and grade report development, and cost estimates for a new five-mile elevated highway through Chauvin Swamp north of Monroe, LA. An in-town corridor was also developed which entailed upgrading Louisville Avenue and Hudson Lane in Monroe, the Lea Joyner Bridge over the Ouachita River, and Stella Street in West Monroe to function as a one-way couplet.
06/00 – 12/00	Hesper and Helios Avenue Street Rehabilitation, Jefferson Parish Engineering Department,, Harvey, LA. Roadway Engineer. Completed inspections and rehabilitation recommendations for eight blocks of local streets. Rehabilitation required demolition and replacement of concrete road panels, milling and overlay of asphalt surfaces, and installation of drainage inlets and subsurface drainage, as well as replacement of damaged and under-performing subsurface drainage. Performed inspections, collaborated with Parish representatives and utility companies, identified appropriate rehabilitation measures, and produced plans illustrating the rehabilitation recommendations.
2/09 – 4/10	US 90 – WBV 73 Western Tie-In Crossing Lake Cataouatche Area, United States Army Corps of Engineers (USACE) – New Orleans District, Jefferson Parish & St. Charles Parish, LA. Deputy Project Manager and Lead Roadway/Drainage Engineer. Responsible for development of preliminary and final design P&S for a 2,540-foot PPC girder/column bent bridge, highway approaches, and frontage roadways.
2/01 – 8/01	US 190 (Gause Boulevard) from LA 433 to US 11, LADOTD, Slidell, LA. Roadway/Drainage Designer. Alignment modification and capacity increase for a 3.5-mile stretch of this state highway. The project included two bridges, a transition from a rural minor arterial to an urban principal arterial, dozens of minor intersections with side streets, a railway crossing, and numerous drainage culverts. The roadway geometric and drainage designs were completed, and design plans were produced. This project required applying many geometric elements, such as super-elevation and multiple closely spaced horizontal curves that required a delicate balance of occasional conflicting requirements.

16. Staff Experience				
Firm employed by	ARCADIS			
Name Gabriel Arias, PE			Years of relevant experience with this employer	1
Title Transportat	tion Engineer		Years of relevant experience with other employer(s)	8
Degree(s) / Years / S	pecialization		BS / 2013 / Civil Engineering, Auburn University	
Active registration n	umber / state / exp	oiration date	PE. 0042599 / LA / Exp. 09/30/2025	
Year registered	2018	Discipline	Civil Engineering	
Contract role(s) / bri	ef description of re	esponsibilities.	Roadway/Drainage Design	
Experience dates	Experience and o	qualifications rel	evant to the proposed contract	
	vertical (H&V) al	ignment, hydrau	ears' experience performing complex geometric design of all complex geometric designs geometri	urn lane design, striping/signage,
06/16 – 02/17	LA 435 to LA 40/LA 41, LADOTD, St. Tammany Parish, LA. <i>Project Engineer</i> . The project calls for the construction of a new four-lane highway connecting I-12 to Bush, Louisiana, in St. Tammany Parish. The new roadway is approximately 19.8 miles length and begins at LA 434, north of the existing LA 434 interchange with I-12, and traverses in a northeasterly direction until encountering an abandoned rail corridor. It then follows the rail corridor terminating at the LA 21/LA 41 intersections near Bush, Louisiana. Assisted with roadway geometric design including H&V alignment, hydraulic design for storm drains, CDP's and open ditches, structural design analysis and QC, Traffic management plans and roadway plan production for the new 5.5 mile 4-lane RA-3 roadway from LA 435 to Bush, LA.			oadway is approximately 19.8 miles in verses in a northeasterly direction ng at the LA 21/LA 41 intersections , hydraulic design for storm drains,
07/13 – 06/16	Bayou Mercier Road/Berard Canal Bayou, LADOTD, St. Martin Parish, LA. <i>Project Engineer</i> . Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing offsystem bridge timber structure with a quad-beam concrete structure.			
07/13 - 02/17	Derrick Road Bridge, LADOTD, Iberville Parish, LA. <i>Project Engineer</i> . Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridge timber structure with a slab span, concrete structure.			
07/13 - 02/17	Jude & Placide Road Bridges, LADOTD, Vermilion Parish, LA. <i>Project Engineer</i> . Performed topographic field surveying and assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing off-system bridges timber structures with slab span, concrete structures.			
06/18 – 10/19	Mid-Barataria Di creation of the N	version Design, ⁄Iid-Barataria se	Plaquemines Parish, LA. Project Engineer. Planning, eng diment diversion basin to strategically reintroduce sedir tour roadway alignment creation/selection, TTC plannir	ment and freshwater inputs into the

ect required chip sealing, joint &
ns in the city of Thibodaux, LA. The
and/or rehabilitating the existing
ection of treatment type for
production.
ngineer. Performed topographic field
replacement of the existing off-
c field surveying and assisted with
off-system bridge timber structure
formed topographic field surveying
ent of the existing off-system bridge
pographic field surveying and
f the existing off-system bridge
<i>eer</i> . Performed topographic field
replacement of the existing bridge
edestrian/bicycle path and custom
nile relief route west of the city of
ne mile south of the intersection of
n creation including H&V alignment
realigned roadway.
oject Engineer. Contracted by AHTD,
gapproximately three miles of Hwy
y 270 to Black Snake Road, then 5
age design and plan production,
age design and plan production, s, developing hydraulic and

16. Staff Experience					
Firm employed by					
Name Garret Keller, PE		Years of relevant experience with this employer	11		
Title Design Er		Years of relevant experience with other employer(s)	0		
Degree(s) / Years ,	/ Specialization	MS / 2011 / Transportation Engineering; Louisiana Stat	•		
		BS / 2003 / Civil Engineering; Louisiana State University			
	n number / state / expiration date	PE.0409 77 / LA / Exp. 03/31/2025			
Year registered	2012 Discipline	Civil Engineering			
Contract role(s) /	brief description of responsibilities.	Roadway/Drainage Design			
Experience dates	Experience and qualifications relev	ant to the proposed contract			
	Mr. Keller began working with Arca	dis as a Technical Intern in the company's Metairie and	Baton Rouge offices, gaining		
	experience in civil and structural de	etailing and design. Immediately after graduating, he beg	gan working as a designer with		
	The state of the s	ansportation and Development (LADOTD) projects. His r			
	structural detailing, structural design	gn, civil design, geometrics, and cost estimating. He also	oversees implementation of CAD		
	systems and standards for Louisiana including MicroStation, InRoads, and CAD conform for LADOTD work.				
07/15 – 06/17	US 190B at Jefferson Avenue Round	dabout Design, LADOTD, St. Tammany Parish, LA. Roadv	way Engineer: Responsible for		
	geometric and roadway design for	replacing an existing four-lane signalized intersection wi	th a single-lane roundabout. The		
	project also included a Context Sen	sitive Solutions study to optimize benefit to the adjacen	t real estate and community needs.		
02/19 – Ongoing	NDRC Ohio Creek Watershed Proje	ct, City of Norfolk, VA . <i>Lead Civil Engineer:</i> Project consi	sts of earthen berms, reinforced		
	concrete floodwalls, and internal st	ormwater pump stations, as well as, upgraded existing t	transportation infrastructure to		
	provide better mobility and safety t	for pedestrians and bicyclists. These features include ele	vated roadways, new shared use		
	paths, upgraded culverts with storr	nwater closure structures, and various green infrastruct	ure treatments.		
09/12 - 04/14	US 165 Connector and Ouachita Riv	ver Bridge EIS, LADOTD, Ouachita Parish, LA. Roadway D	Designer: Responsible for roadway		
	design support on a project that pr	ovides needed transportation system linkage in the nort	h Monroe region.		
11/12 - 04/13	, ,	, I-20 Economic Development Corporation, Ouachita Par			
	1	vement alternatives for a LADOTD Stage 0 study. Two ro	oundabouts were evaluated in		
	compliance with LADOTD EDSM V.1	I.1.5 (Analysis) and EDSM V.1.1.6 (Design).			
08/11 - 09/13	Chef Menteur Bridge and Approach	nes EA, LADOTD, Orleans Parish, LA. Roadway Designer:	Responsible for geometry and		
	roadway design for a high-priority b	roadway design for a high-priority bridge replacement. Key issues included minimizing impacts to Bayou Sauvage National			
	Wildlife Refuge, Fort McComb, the	existing bridge that is eligible for the NRHP, and complia	ance with Complete Streets Policy.		
02/09 - 02/13	US 90 WBV 73- Western Tie-In Cros	ssing Lake Cataouatche Area (Bridge/Roadway Approach	/T-walls), USACE - New Orleans		
	District, Jefferson & St. Charles Pari	shes, LA. Project Designer: Preparation of Plans and Spe	cifications for new floodwall and		
	highway bridge in St. Charles Parish	n. Design of floodwalls, four-lane highway bridge, and de	tour roads to maintain traffic		
	traveling on US Highway 90. The pr	oject involved improvement layout and quantity calcula	tions in support of cost estimates.		

4	_	•	cc	
	n	NT3	TT.	Experience
_	υ.	Jua		Lybellelice

16. Staff Experience			
Firm employed by			
Name Craig Raymond, PE		Years of relevant experience with this employer	8
Title Roadway Design Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years /	/ Specialization	BS / 2013 / Civil Engineering, Louisiana State University	
Active registration	number / state / expiration date	PE.0042 7 15 / LA / Exp. 03/31/2025	
Year registered	2018 Discipline	Civil Engineering	
Contract role(s) / b	brief description of responsibilities.	Roadway/Drainage Design	
Experience dates	Experience and qualifications relev	ant to the proposed contract	
	highways, streets, roundabouts, an geometric design, line and grade, a	passes permitting application including sketches/drawings d aprons. He was worked on a wide range of roadway and nd typical sections to support LADOTD Stage 0 Feasibility signs, plans, and specifications. preparing cost estimates.	d civil design projects including Studies. Responsibilities have
04/13 – 07/14	Roadway Engineer. Environmental lanes to four lanes from US-190 no	Bridge Replacement, and Roadway Improvements, LADOT Assessment for replacement of the US-11 Bridge, which in the to 1-12. Responsibilities include providing alternative of plan preparation for two alternatives.	ncludes widening of US-11 from two
12/13 – 06/15	LA 3235 Stage O Safety Feasibility Study, LADOTD, Lafourche Parish, LA. Roadway Engineer. Responsible for collection of roadway information and road design to preserve and enhance safety/mobility of the corridor. The project includes improvement considerations such as median opening channelization, turn lane storage, median closure, among others.		
05/14 – 05/15		rio / Roddy Road Roundabouts, LADOTD, Ascension Parish ates for the replacement of ten existing stop-controlled in	
11/14 – 11/15	roadway design for the improveme	about Feasibility Study, LADOTD, Ascension Parish, LA. Root of existing roadway infrastructure at the intersection crating modern roundabouts to the interchanges to enhan ost estimate.	of LA-44 and Loosemoore Road. The
01/14 – 12/14	Environmental Assessment for the of I-12 along South Range Avenue.	ative and Environmental Assessment, LADOTD, Livingston improvement of I-12/South Range Avenue diamond inter Responsibilities include providing alternative developmer existing/required right of way and existing utilities.	change, as well as north and south
11/16 – 08/19	LA 88 Roundabouts Prelim Plans, LA plans to install two single-lane roun	ADOTD, Iberia Parish, LA. Roadway Engineer. Responsible idabouts at the US 90 ramp terminals where it intersects intersections and installing additional U-Turn locations to	LA 88. Plans include modifying
07/15 – 06/17	US 190B at Jefferson Avenue Round completing preliminary roadway de	dabout Design, LADOTD, St. Tammany Parish, LA. Roadwa esign plans based on comments from the client. This invol ment section and details, plan and profile sheets, and cor	y Engineer. Responsible for ved the development of

10. Staff Experience	<u>. </u>					
Firm employed by	ARCADIS					
Name Scott Bro	okhart, PE, CFM	Years of relevant experience with this employer	2			
Title Senior Hy	draulics Design Leader	Years of relevant experience with other employer(s)	29			
Degree(s) / Years /	/ Specialization	BS / 1989 / Civil Engineering, North Carolina State Univ	versity			
Active registration	number / state / expiration date	PE.0046177 / LA / Exp. 03/31/2024				
Year registered	2021 Discipline	Civil Engineering				
Contract role(s) / k	brief description of responsibilities.	Roadway/Drainage Design				
Experience dates	Experience and qualifications releva	ant to the proposed contract				
	Mr. Brookhart is a Senior Hydraulic	Design Manager with more than 31 years of experience	providing Hydrologic & Hydraulic			
	bridge design, stormwater manage	ment, erosion control, and floodplain management serv	ices for DOTs (NCDOT, GDOT, TDOT,			
	SCDOT), FEMA, and municipal/priva	ate clients. He has managed multiple On-Call contracts a	and individual projects for various			
	DOTs and municipalities. He has a t	horough understanding of hydrologic and hydraulic desi	ign of culverts and bridges including			
	HEC-RAS modeling (1D and 2D), de	ck drainage calculations, scour calculations and counteri	measures, and FEMA processes. He is			
	also familiar with current Federal H	ydraulic Design Series (HDS) guidance. He is experience	d in the use of HEC-2, HEC-RAS, HY-8,			
	Flowmaster, FHWA Hydraulic Toolb	oox, SWMM, ArcGIS, StormCAD, MicroStation, Geopak D	rainage, and Open Roads Designer.			
06/20 – 12/20	Bridge Replacement – I-40 over Bu	ffalo River, TDOT, Humphreys County, TN. QA/QC Engine	eer. Provided senior QA/QC review of			
	the bridge replacements for the WB and EB bridges on I-40 over the Buffalo River. Review covered items such as the HEC-RAS					
	modeling, deck drainage calculation	ns on the proposed structure, scour calculations, and rev	view of the Hydraulic Design File.			
09/99 – 08/04	On-call Hydraulic Design Services, SCDOT, Statewide, SC. Project Engineer. Provided hydraulic/hydrologic design services for					
	roadway projects throughout the state. Tasks included several bridge replacements and new location/widening projects.					
		d stream modelling (1D and 2D) were required. Some of				
		ning, Beaufort County; Pisgah Church Road (S-204) over	Twelve-Mile Creek, Lexington			
		ent over Turkey Creek, Edgefield County				
01/20 – Ongoing		Creek, GDOT, Wayne County, Georgia Senior Hydraulic E	_			
	the hydrologic and hydraulic design for this bridge replacement. The design consists of placing 250'+ dual bridges over Little					
	McMillan Creek. Hydrologic design utilized USGS StreamStats and the hydraulic design utilized HEC-RAS. Deck drainage design,					
	_	pleted, and the Hydraulic Report submitted to GDOT. W	ith the location in a FEMA Zone AE			
		dels were run for FEMA flows and USGS flows.				
01/16 – 10/16	, ,	d), Henderson County, NC. Senior Hydraulic Engineer. Re	-			
	upgrade a portion of SR 1690 to a paved roadway on new alignment along with the replacement of bridge #107 over McDowell					
	Creek. The project includes storm drainage design, bridge hydraulic design, a FEMA no-rise study, erosion and sediment control,					
00/22 0 :	and permit drawings.		11111			
08/22 – Ongoing		hreveport, LA. Senior Hydraulic Engineer Develop a Fea				
		ral, roadway, and Traffic analysis was performed to devi	-			
	bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM), and cost estimates for all alternatives were using average					
	-	roject Delivery Manual. Provided the final recommendation and final relationships for the final recommendations and final recommendations.				
	Currently working on Stage 3 Preliminary and final plan development, followed by Stage 5 construction support.					

Firm employed by	BONTON				
Name Marcus B	Bonton, PE	Years of relevant experience with this employer	3		
Title Transpor	tation Principal	Years of relevant experience with other employer(s)	12		
Degree(s) / Years	/ Specialization	BS / 2008 / Civil Engineering			
Active registration	n number / state / expiration date	PE. 40389 / LA / Exp. 9/30/2024			
Year registered	2016 Discipline	Civil Engineering			
Contract role(s) /	brief description of responsibilities.	Roadway/Drainage Design			
Experience dates	Experience and qualifications relev	ant to the proposed contract			
	 and planning projects for state and projects for design studies, LADOT pedestrian facility design, complete Training Certifications: NHI Course No. 142005: NEPA ATSSA Traffic Control Technicia Highway Safety Manual Trainin LADOTD Traffic Engineering Pro NE Roundabouts Level 1 and 2 	g Certification ocess & Report (Modules 1–3) Training	and supervised transportation pavement rehabilitation design,		
08/21 – 12/22	 CPTP SCS Cybersecurity WBT Training Course LADOTD, LA 73: US 61 (Airline) – Essen Lane, Baton Rouge, LA. Principal/Technical Lead. Provides technical oversight and QC- 				
00/21 12/22	of design plans for roadway rehabilitation, sidewalk repair, curb gutter repair/replacement, and installation of Americans				
11/22 Ongoing	· · · · · ·	inpliance with LADOTD design guidelines.	Drovides technical eversight for the		
11/22 – Ongoing		idewalks, Thibodaux, LA. Principal/Technical Advisor.			
01/21 – Ongoing		ng existing sidewalk facilities throughout downtown Thil			
	City of Baton Rouge-MOVEBR, Ardenwood-Lobdell Connector Design Study and Final Design, Baton Rouge, LA. Principal/Technical Advisor. Provided technical oversight and guidance for the preparation and completion of the project design study which included proposed line & grade alternatives, intersection improvements, access management, roadway widening, pedestrian facility design, safety considerations, drainage, green infrastructure, pond site analysis, and exhibits. Provides technical leadership for the final design phase which includes finalizing design plans that include roadway corridor design/modeling, intersection design signalization, drainage design, green infrastructure, and environmental.				
05/21 – 09/22	City of Baton Rouge-MOVEBR, S. Harrell's Ferry Rd. Multi-Use Path, Baton Rouge, LA. <i>Principal/Technical Advisor</i> . Prov technical oversight for Design Study that included preparing Preliminary & Final Plans for a new multi-use path, ADA comp facilities (curb ramps, crosswalks, etc.), drainage improvements, and green infrastructure. Currently providing technical overs and QA/QC for the final design plans for the multi-use path, ADA compliant facility implementation, striping modification increase pedestrian and bicycle mobility along S. Harrell's Ferry Rd. and connectivity to existing sidewalks.				
06/21 – 11/22	City of Baton Rouge-MOVEBR, ADA	Transition Projects, Baton Rouge, LA. Technical Advisor. Iopment of design plans (Preliminary and Final) for p	. Technical advisor for the ADA barrier		

	(sidewalk repair/replacement, curb and gutter, handicap ramps, crosswalks, etc.), site plan details, special provisions, repair
	schedule, and cost estimates.
15/15 – 02/17	St. Tammany-LADOTD, LA 59 @ Lonesome Rd. Roundabout, Mandeville, LA. Project Engineer. Responsible for developing
	preliminary and final design plans for a single lane roundabout. Design scope includes typical section, line & grade, existing &
	design drainage, suggested sequence of construction, geometric details, graphical grades, joint layout details, striping cross
	sections.
01/19 – 11/20	St. Tammany Parish Government, Harrison Avenue Improvements Project, Abita Springs, LA. Project Manager. Managed the
	preparation and submittal of design plans for various roadway improvements including roadway widening, intersection design,
	roundabout design, access management, drainage design, context sensitive solutions along Harrison Avenue.
11/19–12/20	City of New Orleans, Marlyville-Fontainebleau Group E, New Orleans, LA. Project Manager. Managed the preparation and
	submittal of design plans and specifications for full-depth roadway replacement, sidewalk/curb ramps repair; subsurface drainage,
	water, and sanitary sewer design, driveways adjustments under the Joint Infrastructure Program (JIRR).
01/16 - 03/17	Ascension Parish-Move Ascension, Parish Rd. 929 @ Parker Road Roundabout, Prairieville, LA. Project Manager. Managed the
	preparation of Preliminary and Final design plan for a single lane roundabout. Project Design included drainage design, curb &
	gutter, utility relocation, asphalt pavement design, pavement markings, pavement widening, and temporary construction detour
	sequencing, access management.
01/10 - 01/11	City of Baton Rouge, Green Light Plan - Highland-Burbank Connector Design Study, Baton Rouge, LA. Lead Designer. Responsible
	for the design of a proposed roadway extension from Highland Rd. to Burbank Drive. Design included line & grade development,
	drainage design, intersection improvements, access management, turn lane design, required right-of- way, impact, roadway
	widening, typical sections, design calculations, quantity takeoffs.
03/13 - 01/21	LADOTD, US 84 Widening Environmental Assessment (EA), Winnfield, LA. Lead Designer. Developed the line and grade design for
	the proposed alternatives included in the environmental assessment document. Evaluated and developed horizontal/vertical
	alignments, roundabout, intersection improvements, access management, safety, context sensitive solutions into proposed
	alignments.

Firm employed by	BONTON		
Name LaDarien	Beene, PE, PTOE	Years of relevant experience with this employer	2
Title Project N		Years of relevant experience with other employer(s)	8
Degree(s) / Years		BS / 2013 / Civil Engineering	
Active registration	n number / state / expiration date	PE. 45333 / LA / Exp. 9/30/2025	
		PTOE #500062 / LA	
Year registered	2021 Discipline	Civil Engineering	
Contract role(s) /	brief description of responsibilities.	Roadway/Drainage Design	
Experience dates	Experience and qualifications relevan	nt to the proposed contract	
11/22 – Ongoing	and data collection. He is adept at appear to all design projects. He also has extrecommendations for preliminary and roadway corridor design, and ADA control in the second seco	nd the Transportation Decision-making Process ess & Report (Modules 1–3) and Supervisor	OVEBR guidelines and compliance safety countermeasure gn, pedestrian facility design, a processes and procedures from perform all engineering services ies throughout Downtown
		avement striping structures associated with the sidewalk	
08/21 – 06/23	LA 73: US 61 (Airline) – Essen Lane, LADOTD, Baton Rouge, LA. <i>Project Manager</i> . Managed the preparation of design plans for roadway rehabilitation, sidewalk repair, curb gutter repair/replacement, and installation of Americans with Disabilities Act (ADA) facilities in compliance with LADOTD design guidelines.		
11/22 – Ongoing	Ardenwood-Lobdell Connector Final Design, City of Baton Rouge-MOVEBR, Baton Rouge, LA. <i>Project Manager</i> . The design includes developing the final plans for the roadway connector between N. Ardenwood Drive and Lobdell Avenue. LaDarien is responsible for managing the project team through the development and delivery of the final design plans, which includes topographic survey, subsurface utility engineering, proposed line & grade alternatives, intersection improvements, access management, bicycle lanes and sidewalks, roadway widening, pedestrian facility design and safety measures, drainage, green infrastructure, landscaping, roadway lighting, and pond site analysis.		
05/21 – 09/22	conducting a Design Study and prepa	City of Baton Rouge-MOVEBR, Baton Rouge, LA. Project Naring Preliminary & Final Plans for a new multi-use path, Asprovements, and green infrastructure. LaDarien is respon	DA compliant facilities (curb

	preparation of preliminary and final design plans for a multi-use path, ADA compliant facilities, and striping modifications to increase pedestrian and bicycle mobility along S. Harrell's Ferry Rd. and connectivity to existing sidewalks.
03/21 – 11/21	Fuqua St./Gracie St. Area ADA Transition, City of Baton Rouge-MOVEBR, Baton Rouge, LA. <i>Project Manager</i> . LaDarien was responsible for managing the preparation and delivery of design plans (Preliminary and Final) that provide solutions to address existing non-ADA compliant features by proposing ADA barrier improvements (sidewalk repair/ replacement, curb, and gutter, handicap ramps, crosswalks, etc.), site plan details, special provisions, repair schedule, and cost estimates.
07/21 – 03/22	Fairfields Ave. Area ADA Transition, City of Baton Rouge-MOVEBR, Baton Rouge, LA. <i>Project Manager</i> . LaDarien is responsible for managing the project delivery team to develop design plans (Preliminary and Final) for proposed ADA barrier improvements (sidewalk repair/replacement, curb, and gutter, handicap ramps, crosswalks, etc.), site plan details, special provisions, repair schedule, and cost estimates.
01/22 – Ongoing	Evangeline St. (West) Area ADA Transition, City of Baton Rouge-MOVEBR, Baton Rouge, LA. <i>Project Manager</i> . LaDarien is responsible for managing the project delivery team to develop design plans (Preliminary and Final) for proposed ADA barrier improvements (sidewalk repair/replacement, curb, and gutter, handicap ramps, crosswalks, etc.), site plan details, special provisions, repair schedule, and cost estimates.
11/17 – 11/18	S. Range Avenue Proposed Safety Improvements, LADOTD, Denham Springs, LA. Lead Engineer. Conducted analysis study to identify and provide recommendations for access management/safety improvements along S. Range Avenue to be carried forward into preliminary and final design plans. Design plans developed to implement raised median and other low-cost safety and access management measures along LA 3002.

Firm employed by	BONTON		
Name Aaron Ha	argrove, PhD (ABD)	Years of relevant experience with this employer	2
Title Project A		Years of relevant experience with other employer(s)	4.5
Degree(s) / Years	/ Specialization	PhD (ABD) / 2021/ Biological Engineering	
		BS / 2018 / Biological Engineering	
Active registration	n number / state / expiration date	N/A	
Year registered	N/A Discipline	N/A	
Contract role(s) /	brief description of responsibilities.	Roadway/Drainage Design	
Experience dates	Experience and qualifications relev	ant to the proposed contract	
	inspections, and data collection. He specialized in image processing me assessment and design initiatives, a infrastructure for both drainage an	If with extensive knowledge in drainage and grading design that have his expertise as a research fellow at Louisian thods using Python, CAD, and 3D visualization. Aaron played he is actively involved in conducting comprehensive disewer collection systems. His blend of academic reseate field of drainage and grading design.	na State University, where he ays a vital role in supporting drainage field data collection on existing
03/21 – 11/22	Lee Drive (Highland Rd. to Perkins Rd.), City of Baton Rouge, Baton Rouge, LA. <i>Project Associate</i> . Performs hydrologic and hydraulic analysis, pond siting analysis, drainage design, fill mitigation, evaluating survey data, and existing and proposed drainage mapping to support the proposed roadway improvements along Lee Drive.		
01/22 – 12/22	Supports the ARP Drainage Improvements completion of stormwater mainted Alert/311 database. Focuses on the culvert inspections to diagnose proadside drainage inspections, traverses.	ement Program Management Services, City of Baton Rouge ement Program, which aims to reduce flood risk and impance projects and closing outstanding stormwater sees MS4 compliance component, which involves observing roblems or damage, developing repair recommendativeling to 311 Requests for Service, inspecting the site, which involves and repair recommendations, and annotating the site, which is the site of the s	rprove public safety by expediting the rvice requests in the City-Parish's Qng closed-circuit TV (CCTV) footage of ions and cost estimates, performing evaluating its connection to adjacent
03/23 – Ongoing	Windrush Gardens and Environs Drainage Improvements, LSU, Baton Rouge, LA. <i>Project Associate</i> . Led the field data collection and design efforts for a drainage redesign project. Aaron performed the hydrologic analysis, prepared the existing and proposed drainage mapping, and designed the Preliminary and Final Plan documents.		
01/24 – Ongoing	implementation of the 2016 Master and help define the scope of the pe drawings for existing stormwater a	Services, University Lakes, Baton Rouge, LA. Project of Plan for revitalization of the University Lakes System. To ending Schematic Design Phase, the Bonton team develoind drainage infrastructure using selective topo and open cludes: two-way roadway design, pedestrian facility desements, and hydraulic analysis.	support the Conceptual Design Phase oped drainage maps, and plan/profile en-sourced surface data. Responsible

Firm employed by	, NIBONTO)N				
	ASSOCIATES					
Name Kiran Gu			Years of relevant experience with this employer	5		
Title Engineer			Years of relevant experience with other employer(s)	0		
Degree(s) / Years	/ Specialization		MS / 2017 / Environmental Engineering			
			BS / 2013 / Civil Engineering			
	n number / state / ex	piration date	EI. 35140/ LA / Exp. 09/30/2024			
Year registered	2022	Discipline	Civil Engineering			
Contract role(s) /	brief description of r	esponsibilities.	Roadway/Drainage Design			
Experience dates	Experience and qu	alifications relev	ant to the proposed contract			
	Ms. Gurung has ex	tensive experien	ce in hydrologic and hydraulic analysis of stormwater m	anagement, drainage analysis and		
	design, roadway d	esign, and pedes	trian facility design. She is skilled in AutoCAD Civil3D, HY	DRWN, hydrologic and hydraulic		
6 6	(H&H) modeling ar	nd design tools, s	uch as InfoWorks Integrated Catchment Modeling, ArcG	ils, ECGeoRAS, HEC-RAS, HEC-		
5	GeoHMS, and Civil					
	Training Certificati					
			tractor Certification			
11/22 – 11/23			al Design, City of Baton Rouge-MOVEBR, Baton Rouge,			
			nal plans for the roadway connector between N. Ardenwood Drive and Lobdell Avenue.			
			ogic and hydraulic analysis, pond siting analysis, drain			
			reen infrastructure in support of the proposed Ardenwo			
03/21 – Ongoing	Nicholson Segment 2 (Ben Hur to Bluebonnet Blvd.), City of Baton Rouge-MOVEBR, Baton Rouge, LA. Engineer Intern/Design Lead.					
			ne boulevard section with shoulders, converting the	_		
	1		ise path is proposed along the east side of the roadway	-		
			pond siting analysis, fill mitigation, evaluating surve	ey data, and development of green		
			posed Nicholson Segment 2 roadway improvements.			
02/21 – Ongoing		•	nwell Springs Rd. – Joor Rd.), City of Baton Rouge-N			
	_		project was a two-lane section with a paved shoulder and			
		_	nmodate future widening. Responsible for providing sup			
	green infrastructure design, drainage maps, and cost estimates with respect to the preferred roadway alternative.					
01/21 – Ongoing						
	implementation of the 2016 Master Plan for revitalization of the University Lakes System. To support the current Conceptu					
	Design Phase and help define the scope of the pending Schematic Design Phase, the Bonton team developed drainage maps,					
		_	tormwater and drainage infrastructure using selective			
	1		mpletion of Phase 1 (project discovery, due diligence,			
			nase 2 which includes: two-way roadway design, pedestr	ian facility design (sidewalk/multi-use		
	path), bicycle facility design, intersection improvements, and hydraulic analysis.					

03/21 – 01/22	Jones Creek Road (Jefferson Hwy. – Airline Hwy.), University Lakes, Baton Rouge, LA. Engineer Intern/Design Lead. The proposed
	project consisted of the construction of a four-lane boulevard, concrete curb and gutter roadway with sidewalks and subsurface
	drainage. Kiran was responsible for assisting in analyzing existing data (LIDAR, GIS data, etc.) for existing drainage analysis,
	identifying the proposed drainage design, developing drainage plan & profiles, and design drainage maps.
03/21 – 11/22	Lee Drive (Highland Rd. – Perkins Rd.), City of Baton Rouge-MOVEBR, Baton Rouge, LA. Engineer Intern. The project consisted of
	Engineering services for roadway drainage facilities in coordination with Lee Drive capacity improvements. Kiran was responsible
	for providing project support in performing hydrologic and hydraulic analysis, drainage and green infrastructure design, and
	existing and proposed drainage mapping.
01/14 - 01/15	N. Harrell's Ferry Rd. Pedestrian Improvements, City of Baton Rouge, Baton Rouge, LA. Engineer Intern/Design Lead. Kiran was
	responsible for project concept and design development for proposed pedestrian improvements. For the design milestones, the
	line and grade, typical sections, details, drainage analysis using the rational method new culverts and roadside ditches were
	developed. This project required the assessment of existing utility locations to confirm that no conflicts existed with the proposed
	improvements.
05/20 - 11/20	Claycut Road Pedestrian Improvements, City of Baton Rouge, Baton Rouge, LA. Engineer Intern/Design Lead. Kiran was responsible
	for developing the design alignment (horizontal and vertical), drainage improvements, and design plans for the proposed sidewalk
	in compliance with LADOTD and City of Baton Rouge design standards and guidelines. Developed vicinity maps, typical sections &
	details, project baseline alignment sheets, sidewalk plan sheets, and cross sections.
12/17 – 07/18	Harding Blvd. Pedestrian Improvements, City of Baton Rouge, Baton Rouge, LA. Engineer Intern/Design Lead. Kiran was responsible
	for developing design plans for new pedestrian facilities (5' sidewalks, curbs, and crosswalks). In addition, design scope included
	multimodal design elements, utility coordination, coordination with EBR Department of Transportation and Drainage.
L	

10. Staff Expe	rience_					
Firm emplo	yed by ARCADIS					
Name Th	omas Landry, PE	Years of relevant experience with this employer	1			
Title Se	nior Transportation Engineer	Years of relevant experience with other employer(s)	33			
Degree(s) /	Years / Specialization	1985 / B. S. Civil Engineering / LSU Baton Rouge				
Active regis	tration number / state / expiration date	PE.0023842 / LA / Exp. 09/30/2024				
Year registe	ered 1990 Discipline	Civil Engineering				
Contract ro	le(s) / brief description of responsibilities.	Value-Added (Constructability)				
Experience						
	Construction Engineer for LADOT	perience as a Project Engineer with LADOTD District 61, 6 D District 61, and 12 years of experience as an Area Engire stration on asphaltic concrete overlay projects, concrete placement projects.	neer with LADOTD District 62. He has			
10/15 – 12/	10/15 – 12/18 LA 447 / I-12 Interchange LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD on interchange improvement project that includes the construction of two roundabouts and ramp modifications construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documental required by LADOTD.					
01/17 – 07/	1/17 – 07/18 LA 10 Beaver Creek Bridge, LADOTD, St. Helena Parish, LA. Area Engineer. Provide construction management services for LADOTD on bridge replacement project. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.					
7/17 – 04/1						
7/14 – 12/1	LA 16 @ LA 22, Install Roundabout, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management service for LADOTD project including drainage improvements and roundabout construction. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor du construction, directing field inspectors, and maintaining project documentation required by LADOTD.					
06/16 – 07/	management services for LADOT overlay. As construction manage	ne – W. Jct. LA 16, LADOTD, Livingston Parish, LA. Area End D project including drainage improvements, full depth pa r, responsibilities include overseeing all aspects of constru- the contractor during construction, directing field inspec OTD.	tching and asphaltic concrete uction and inspection including			

07/15 – 06/17	LA 3002, LA 1034 – US 190, LADOTD, Livingston Parish, LA. <i>Area Engineer</i> . Provide construction management services for LADOTD project including drainage improvements, cold planning, asphaltic concrete overlay, and concrete patching. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
11/15 – 08/16	LA 1027, E. End W. Colyell Bridge – LA 447, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD project including drainage improvements, cold planning, and asphaltic concrete overlay. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
11/13 – 01/16	I-12, Walker to 0.5 West of Satsuma, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD project including drainage improvements, ramp modifications, interstate roadway & bridge widening, and median barrier. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
06/14 – 06/15	LA 444, Gum Swamp Road – LA 22, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD project including drainage improvements, base stabilization, and asphaltic concrete overlay. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
04/13 – 12/14	US 190, W. Jct LA 63 – Tangipahoa Line, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD project including drainage improvements, full depth patching, and asphaltic concrete overlay. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
10/11 – 02/14	I-12, LA 1026 – LA 447, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD project including drainage improvements, ramp modifications, interstate roadway & bridge widening, and median barrier. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
08/10 - 02/14	Amite River Bridge @ Magnolia, Route LA 64, LADOTD, East Baton Rouge and Livingston Parishes, LA. Area Engineer, Provide construction management services for LADOTD bridge replacement project. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.
06/12 – 01/14	LA 63, I-12 – US 190, LADOTD, Livingston Parish, LA. Area Engineer. Provide construction management services for LADOTD project including drainage improvements, full depth patching, base stabilization, and asphaltic concrete overlay. As construction manager, responsibilities include overseeing all aspects of construction and inspection including providing engineering support to the contractor during construction, directing field inspectors, and maintaining project documentation required by LADOTD.

16. Staff Experience						
Firm employed by	ARCAD	IS		Meet MPR No. 5		
Name Victor Sanchez, PE, MSCE			Years of relevant experience with this employer	1		
Title Principal Bi	ridge Engineer		Years of relevant experience with other employer(s)	20+		
Degree(s) / Years / S	Specialization		MS / Civil Engineering-Structures			
			BS / Civil Engineering with a major in Structures			
Active registration r	umber/state/ex	piration date	PE.0033976 / LA / Exp. 09/30/2024			
Year Registered	2008	Discipline	Civil Engineering			
Contract role(s) / br	ief description c	of responsibilities.	Bridge Design			
Experience dates	Experience an	d qualifications rele	evant to the proposed contract			
	Mr. Sanchez is	the Lead Bridge St	ructural Engineer for the Arcadis office in Baton Rouge. Vict	or is highly skilled with the design		
	and detailing o	of structures using a	AASHTO-LRFD, the Louisiana Department of Transportation	Bridge Design Manual, and		
(23)	software appli	cations such as Op	enBridge for the modeling and planning of bridges. He appli	es sound structural knowledge to		
	perform hand	calculations for bri	dge structural design and possesses strong management ski	lls and; a willingness to work		
	collaboratively	with different gro	ups inside the organizational team including clients, other d	isciplines' engineers, and project		
	managers with	nin the project orga	inization. His exceptional leadership skills, which combined v	with his knowledge of the		
	LADOTD polici	es, standards, and	manuals make him an ideal team builder to perform at its hi	ghest level of potential.		
06/14 – 07/15	I-10 Over Julia	Street, Girder Reh	abilitation Project, LADOTD, New Orleans, LA. Engineer of Re	ecord. This project was initiated		
	to correct a partial failure of the connecting plates that attach the girders to the straddle bents on one of the exit ramps to I-					
	10 in New Orleans. The scope of work consisted of the replacement of one existing steel cap beam in straddle bent number					
		•	onnecting plate elements on the adjacent steel cap 26w. Bo			
			New Orleans. Analysis and rehabilitation design focused on			
		-	bent and connection plates; this section is three-spans cont	•		
	·		tructure members that frame into a straddled bent (bent nu	•		
		•	ntermediate substructure elements, similarly to the rest of	• •		
	supported on concrete columns. Coordinated the preparation of contract documents, including plans, calculations, and cost					
			o work prepared by others in the team. Also, during the con			
			viewing and approving shop drawings and calculations subn	•		
05/16 – 05/17		-	, LADOTD, Rapides Parish, LA. Lead Engineer and Engineer o			
	is 950' and consists of a main span using steel plate girders as superstructure elements over three continuous spans (210'-					
	275'-210'); the bridge approaches to the main spans consist of two-spans 85' AASHTO type III prestressed concrete					
	continuous spans at the north side and one 85' AASHTO type III prestressed concrete span at the south side. The bridge					
	substructure consists of concrete piers caps supported on columns which are supported on drilled shafts and spread footings					
			Engineer and Engineer of Record (EOR), responsible for the	• •		
	_		cations, final plans preparation, structural calculations, load	rating, and coordination for		
04/16 13/16		, ,	partment of Transportation policies.	poor of Rosard The total bridge		
04/16 – 12/16		•	ches, LADOTD, Calcasieu Parish, LA. Lead Engineer and Engin ontinuous span units with a length of 225' with each unit usi	•		
			ts over three continuous spans (75'-75'-75'). The bridge sub			
	I girders as supe	erstructure eiemen	is over three continuous spans (75 -75 -75). The bridge sub	istructure consists of concrete		

16. Staff Experience piers caps supported on precast prestressed concrete piles. Served as Lead Engineer and Engineer of Record (EOR), responsible for the contract document preparation including cost estimating, specifications, final plans preparation, structural calculations, load rating, and coordination or project delivery per Louisiana Department of Transportation policies. 04/15 - 03/16UP Railroad Bridge at Sicard, LADOTD, Ouachita Parish, LA. (LADOTD) Lead Engineer. This bridge consists of a main span using steel plate girders as main superstructure elements over three continuous spans (102'-175'-102'); the bridge approaches consist of three 84' continuous spans at the north side and to the south side, three 84ft continuous spans for a total structure length of 883' located in a straight alignment and skew of 68 degrees concerning a line normal to the center line of the bridge. The main superstructure elements of the approaches are prestressed concrete AASHTO Type IV girders, and the bridge substructure consisted of multi-column bents on concrete footing supported on prestressed concrete piles. Completed plan quality reviews, prepared the bridge load rating report, and assisted the environmental section of the LADOTD in completing the environmental clearance for the project. In addition, I provided load rating, and construction support, reviewing the shop drawings submitted by the general contractor. 05/18 - 11/19I-485 from I-77 to US 74; I-485/Weddington Rd Interchange; and I-485 /East John St. - Old Monroe Rd. Interchange (designand-build), Mecklenburg County, North Carolina (WSP, 2019). Led structural design and project management for the replacement of two bridges in the project: STR#1 over Westinghouse Blvd. and widening of STR#12 over CSX railroads. STR#1 involves replacing the existing structure over I-485 with two prestressed concrete bridges of lengths 125ft and 132 ft, utilizing the 63" Florida-I Beam and integral end bents on steel piles. STR#12, over CSX railway, is a twin bridge on I-485 with a threespan continuous structure and a total length of 165ft. The substructure includes stub abutments on steel piles and multicolumn bents on spread footings. Managed structural design, coordination, and local staff to ensure budget control and timely delivery to NCDOT. 11/19 - 11/20Load Rating Project, South Carolina Department of Transportation, SC. Load Rating Quality Control Engineer (QC Engineer) for WSP which owned this project as part of a contract service for the South Carolina Department of Transportation. In this capacity, provided QC reviews to load rating deliverables for a variety of structures including prestressed concrete bridges, steel plate girder composite bridges, concrete box culverts, and concrete slab bridges. The project included approximately one thousand bridges scheduled for inspection and load rating. Reviewed an average of 200 bridges during that year. 04/22 - 06/22Danville Bridge Repairs – Structure SN 092-6034, Load Rating (LFR)-Illinois Department of Transportation (IDOT), IL. Lead Engineer. The SN 092-6034 is a three-span bridge located on County Highway I (F.A.U. 7000) over the North Fork Vermilion River. The bridge has a total length of 266'-10 5/8"; its main span is a tied arch structure with a total length of 170'-0" and the approaches consist of two simple span structures of 46'-6". that use steel rolled beams as main superstructure elements. The purpose of the project was to prepare a load rating analysis of the structure including the approaches and the main span. Responsible for preparing the load rating of the main span structure which consists of a tied arch. He prepared the structural analysis of the structure modeling all the structural elements of the main span using RM Bridge which is a finite element analysis software; and generated the full range of rating trucks suggested in the IDOT Structural Services Manual, to obtain

the controlling force effects (axial tension, flexure, and shears). In addition, calculated the capacities of the structural elements of the tied arch to be used in calculating the load rating (LFR) for the various components including the arches, hangers, and tie girders. The load rating followed the IDOT Bridge Design Manual, the IDOT Structures Services Manual, and

the Manual for Bridge Evaluation.

16. Staff Experience							
Firm employed by			<u>, </u>				
Name Sharear k	Kabir, PE		Years of relevant experience with this employer	5			
Title Structura	al Engineer		Years of relevant experience with other employer(s)	8			
Degree(s) / Years ,	/ Specialization		MS / 2008 / Civil Engineering, Louisiana State Universit	У			
			BS / 2000 / Civil Engineering / Khulna University of Eng	ineering and Technology			
Active registration	n number / state / ex	piration date	PE.37169 / LA / Exp. 09/30/2024				
Year registered	2012	Discipline	Civil Engineering				
Contract role(s) /	brief description of r	esponsibilities.	Bridge Design				
Experience dates	Experience and qu	alifications releva	ant to the proposed contract				
	Mr. Kabir is experi	enced in bridge c	lesign and analysis for LADOTD to construction managen	nent and field supervision for private			
A	industries. He poss	sesses good unde	erstanding of Louisiana Department of Transportation an	d Development (LADOTD), American			
	Association of Stat	e Highway and T	ransportation Officials (AASHTO), American Society of Ci	vil Engineers, American Conference			
2	Institute, and Ame	rican Institute of	Steel Construction design standards and has a demonst	rated proficiency in bridge design			
(6)			alculation, and documentation.				
07/16 - 04/18		_	er Hanson Canal, LADOTD, Terrebonne Parish, LA. Project				
	structural design and prepared CAD drawings for a 28 ft wide and 80 ft long slab span bridge to replace the structurally deficient						
	North Bayou Black Drive Bridge under the Off-System Bridge Replacement program of LADOTD.						
04/14 – 07/16	_	• .), St. Helena Parish, LA . <i>Bridge Design Engineer</i> . Respons				
	63 bridge with a 32 ft wide and 140 ft long new precast slab bridge utilizing a phased construction technology to expedite						
	construction. Served as LADOTD Bridge Design Representative and completed the 100% Final Plans that included the design of						
	1 '		panels, bent cap panels, foundation layout, and estimation				
	1	ad design, enviro	nmental and survey sections of LADOTD to establish the	final bridge alignment and final			
	taking lines.						
04/16 – 07/16			n Bridges, LADOTD, Caldwell Parish, LA. LADOTD Bridge				
		for replacing six existing bridges with new cast in place slab span bridges in accordance with the most current and applicable					
			specifications. Developed General Plans, foundation lay				
			d structural design and load ratings of various bridge con	nponents including slab spans, bent			
04/14 10/15	caps, and approac		TD Jefferson Device IA Company of Francisco Francisco				
04/14 – 10/15			TD, Jefferson Parish, LA. Structural Engineer. Four new b				
	constructed on US-165 to replace the existing bridges. Among the four bridges, Bridge 1 and 2 were proposed to be precast slab						
	span bridges. The concrete slab panels, approach slab panels, bent cap sections for slab panel bridges were fabricated off-site and brought to the site ready to be erected in-place to form the whole structure gradually. Conducted structural design and						
	load rating of the precast slab panels, bents, and approach slab panels for Bridges 1 and 2 as an LADOTD bridge design engineer.						
07/16 – Ongoing							
07/16 – Ongoing	0 0 . 0		etterson and Orleans Parisnes, LA. Project Structural Eng ctures following LADOTD and AASHTO design standards				
			nvestigated the as-built plans for the types, sizes and cle				
		•	ngs to specify the sign-support attachments.	arances of existing bridge griders,			
	L parrier, parapets, a	and deck overildi	igo to specify the sign-support attachments.				

10. Stail Experience.						
Firm employed by ARCADIS						
Name Joseph Belmonte, PE			Years of relevant experience with this employer	1		
Title Structural En	gineer		Years of relevant experience with other employer(s)	5		
Degree(s) / Years / Spe	ecialization		MS / 2020 / Civil Engineering			
			BS / 2018 / Civil Engineering			
Active registration nur	mber / state / ex	piration date	24GE0586 7 100 / NJ / Exp. 4/30/2024			
Year registered	2022	Discipline	Civil Engineering			
Contract role(s) / brief	description of r	esponsibilities.	Bridge Design			
Experience dates	Experience an	d qualifications rele	vant to the proposed contract			
	Mr. Belmonte	is a Structural Engin	eer for Arcadis in the Sewickley, PA office who has experience	with rail and catenary		
			experience in the design and analysis of steel and concrete str			
2	and design, ar	nd catenary structure	e design. Joseph is proficient with several software platforms, s	such as STAAD, RISA 3D,		
	and Microstat	ion.				
04/22 – 07/23	I-35E Widenin	g, Texas Departmen	t of Transportation (TxDOT), Dallas, TX. Structural Engineer. Th	e I-35E Phase 2 project will		
	reconstruct ar	nd widen a 6.39-mile	e southern section of I-35E in Dallas County from I-635 to Dente	on County Line. In support		
			design-build contract, work primarily involved the design of m			
			and non-standard reinforced concrete columns. There was a sp	•		
			vell as anchorage into the concrete columns. Was also heavily i	nvolved in the reinforced		
			aft design, and the connection detailing.			
01/21 – 11/21			ates, South Jersey Transportation Authority, Atlantic City NJ. St.			
			effort to transition to cashless toll collection and required sign			
	· ·	•	oseph was responsible for updating the structural design to be	•		
	1	•	or Highway Signs LRFD. Was the sole design engineer responsib			
connection design of various hollow structural section truss structures, including relevant detailed welding cor						
	between box-type hollow structural section members for single and double gantries ranging in spans from 61ft to 150ft.					
12/21 – 05/22 Connecticut River Moveable Bridge Replacement, Amtrak, Old Lyme, CT. Structural Engineer. The moveable bridge						
replacement project involved the replacement of a lift bridge along Amtrak's Northeast Corridor line. Modeled and						
	checked the design of approximately half of the catenary support structures in the project area. Performed the design an					
	_	wo truss structures t	hat carry significant dead-end loads of various wire types on ea	ach end of the replaced		
	bridge.					

10/19 – 12/20	Hudson Bergen Light Rail Extension, New Jersey Transit, Jersey City, NJ. Structural Engineer. The Hudson-Bergen Light Rail					
	(HBLR) Extension is an extension of the HBLR from its current terminal station at West Side Avenue to a new station located					
	at the Bayfront Development. The extension begins in a through-girder configuration but quickly changes to a deck girder					
	configuration for the rest of the bridge spans. Responsible for the design, modeling, and detailing of the deck along the					
	length of the entire viaduct extension. Worked on the design of the plate girders, diaphragms, pier caps, and piers located					
	in the Bayfront Station Viaduct area of the project. Used STAAD.Pro software to analyze the bridge components.					
06/18 - 09/19	Storage and Inspection Facility and County Yard Improvements, New Jersey Transit, New Brunswick, NJ. Structural Engineer					
	responsible for the design of one retaining wall, two wingwalls, and a wall pier in the Mile Run area. The County Yard					
	design consists of a complex rail bridge over Mile Run Stream. This unique multi-girder bridge will be supporting a					
	maintenance facility, two rail tracks and two access roads. The yard will provide additional storage of rail cars during an					
	extreme weather event, and the maintenance facility will serve as a main NJ Transit facility along the Northeast Corridor.					

16. Staff Experience			
Firm employed by	ARCADIS		
Name Pooja Rao Ma	dku, PE	Years of relevant experience with this employer	1
Title Structural Tra	nsit Engineer	Years of relevant experience with other employer(s)	8+
Degree(s) / Years / Spe	cialization	MS / 2015 / Civil Engineering	
		BTech /2012 / Civil Engineering	
Active registration num	ber / state / expiration date	PE. 244 7 3 / DE / Exp. 06/30/2024	
Year registered	2021 Discipline	Civil Engineering	
Contract role(s) / brief	description of responsibilities.	Bridge Design	
Experience dates	Experience and qualifications rel	evant to the proposed contract	
	design of new structures, conceptively rating of new and existing bridge and response to contractor's request. Madku has participated in the other local agencies. She is expensionable of various highway and ratio work collaboratively with different and project managers within the	· · · · · · · · · · · · · · · · · · ·	, retaining walls, load shop drawing reviews of design and drawings. T, DRJTBC, PANYNJ, and thCAD, AutoCAD and rform the analysis and ssed concrete; willingness ner disciplines' engineers,
06/17 – 06/21)	Structural Engineer. Responsible Amtrak's track between W36th a is a 2-span bridge with a total le girder with a series of steel strir piers, and two 45' long retaining clearance for the Amtrak train be	d Streetscape Improvements, Phase 2, Block 4 Between W36 for the design of the proposed bridge carrying Hudson Boulevand W37th Street Bridges from Schematic, Preliminary to Final Dongth of 143' and a width of 50'. The superstructure consists of agers with concrete deck on top. The substructure consists of government walls. The height of abutment wall is about 30' which will prelow the bridge. Provided support in the development of contractions and agencies at different stages of the project. Provided spectral of design and drawings.	vard West over the existing esign. The proposed bridge one major structural steel a 190' long abutment, two rovide an adequate underct drawings and addressing
DRJTBC, Scudder Falls Bridge Replacement, NJ/PA. Structural Engineer. The project tasks consisted of Preliminary and Design of two curved girder ramp bridges, 12,000 linear feet of noise walls, 3,000' of retaining walls and a 1,600 Compliant ramp and bridge from the mainline bridge to the tow path along the Delaware and Raritan Canal in New Various concepts for this ramp were investigated including a constant slope ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp were investigated including a constant slope ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp were investigated including a constant slope ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp were investigated including a constant slope ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp were investigated including a constant slope ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp were investigated including a constant slope ramp at 5% grade and an 8% sloped rate of the town path along the Delaware and Raritan Canal in New Various concepts for this ramp was a path along the Delaware and Raritan Canal in New Various concepts for the town path along the Delaware and Raritan Canal in New Various concepts for the town path along the Delaware and Raritan Canal in New Various concepts for the town path along the Delaware and Raritan Canal in New Various concepts for the town path along the Delaware and Raritan Canal in New Various concepts for the town path along the Delaware and Raritan Canal in New Various concepts for the town path along			ng walls and a 1,625' ADA- aritan Canal in New Jersey. nd an 8% sloped ramp with lesign of this ramp with the ify engineer's estimate for

10. Stail Expellence	astimate salaulations for mataining walls. Assumed sometimes with sadas and reviewed the sheet described by
	estimate calculations for retaining walls. Assured compliance with codes and reviewed the shop drawings. Involved in
	construction support services including but not limited to shop drawing reviews and response to contractor's request for
	information (RFI), quality assurance and quality control of design and drawings.
03/16 – 04/23	NJ Transit, County Yard Improvement Program, 6-Mile Run Railway Bridge, NJT Contract No 13-041, NJ. Structural
	Engineer. Project intends improvement of County Yard by addition of Service & Inspection Facility and tracks, design of 200
	ft long bridge at Six-mile Run Creek and 5 retaining walls. Responsible to develop structural plans and design of retaining
	walls. Prepared reports for the types of retaining walls that can be utilized. Responsible for design calculations for plate
	girders, floor beams and their connections, and load calculations for 6-Mile Run Railway Bridge in compliance with AREMA
	and NJ Transit manuals and guidelines.
05/15 – 03/21	NJDOT, Pulaski Skyway Rehabilitation, Contract #5 Rehabilitation of Broadway and Kearny Ramps, Essex/Hudson County,
	NJ. Structural Engineer. Responsible for evaluation, seismic analysis and load rating of bridge members. Responsibilities
	include design of steel and substructure repairs and design of new deck. Work is part of NJDOT's Pulaski Skyway
	rehabilitation capital program which includes re-decking and steel and substructure repairs of the entire viaduct carrying
	US 1/9 traffic between Newark and Jersey City.
04/15 - 08/21	PANYNJ, Raising the Roadway of the Bayonne Bridge, Hudson County, NJ. Structural Engineer. Primarily involved in
	construction support services including but not limited to shop drawing reviews and response to contractor's request for
	information (RFI), quality assurance and quality control of design and drawings, on this project to increase the navigational
	clearance from 151' to 215' above mean high water utilizing the existing arch superstructure. The New York and New
	Jersey approach substructures were replaced to support the new approach superstructures. The pedestrian access
	includes preliminary and final design of the sidewalk with an access hatch for maintenance, railings and anti-climbing
	fence.
09/19 – 04/23	NJDOT, River Road (CR 622) Bridge over NJ Route I-287, NJ. Senior Structural Engineer. Responsible for the preparation of
, ,	supplementary specifications (Special Provisions) as per NJDOT Standard Specifications and providing bid support services
	for the final design of this four-span superstructure replacement and substructure rehabilitation project. The bridge spans
	are about 27'-3", 90'-6", 90'-6" and 27'-3", a total span length of 235.5' and an out-to-out deck width of 72.75'. The existing
	substructure with two abutments and three piers will be rehabilitated to achieve a Condition Rating of 7 and a 45-year
	service life. Also responsible for assisting in development of structural plans, and preparation and review of Engineer's cost
	estimate.

16. Staff Experience:				
Firm employed by	ARCADIS			
Name John Hayes,	El		Years of relevant experience with this employer	1
Title Structural E	ngineer		Years of relevant experience with other employer(s)	3
Degree(s) / Years / Sp	ecialization		BS / 2019 / Civil Engineering	
Active registration nu	mber / state / ex	piration date	ET031494 / PA	
Year registered	2023	Discipline	Civil Engineering	
Contract role(s) / brie	f description of r	esponsibilities.	Bridge Design	
Experience dates	Experience and	d qualifications relev	vant to the proposed contract	
Mr. Hayes is a Structural Engineer for the Arcadis office in Philadelphia working as a member of the Bridge Team. Has a background in the analysis of existing structures through inspection and testing as well as experience with bracket Load Rating, quantity and cost estimates, and drafting. John is also proficient with design and modeling software including OpenBridge, Microstation, and STAAD.				s experience with bridge
07/23 – 01/24	I-10 & US90 Traffic Sign Structural Support, LADOT, Orleans Parrish, LA. Structural Engineer. The project consists replacement and/or installation of traffic signs along I-10 and US90 in Orleans Parrish, LA. Responsibilities include reviewing shop drawings for approval and providing engineering support in response to contractor RFIs. John als performed analysis and calculations for the anchor bolts for several overhead truss signs in response to proposed changes from the contractor.			
Cleveland-Cliffs Asset Evaluation, Cleveland-Cliffs, Coatesville, Conshohocken, and Steelton, PA. Lead Field Insperence Per client request, plant-wide structural inspections were performed at the Cleveland-Cliffs steel production factoatesville, PA, Conshohocken, PA, and Steelton, PA. Structures evaluated included bridges (rail, vehicle, and pedestrian), elevated walkways, crane runways and associated support structures, and buildings. Deficiencies are safety concerns were identified and quantified, then rated based on severity and danger to personnel safety and production using engineering judgement, under the guidance of a licensed Professional Engineer (PE). In instance where visual evaluations were not sufficient for condition assessment, Non-destructive testing including Ultrason Thickness Testing (UT) and Dye-Penetrance Testing (PT) were performed. Ultrasonic Thickness Testing was performed at Coatesville on two (2) rail bridges and one (1) vehicle bridge spanning the West Branch Brandywine Creek and Conshohocken on one (1) rail bridge spanning the Schuylkill River when it was determined that the bridge girder exhibited severe deterioration at the bearing locations and along the interface between the bottom flanges and This data was then modeled referencing AASHTO standards to determine the structural stability of the bridges a develop a repair plan. UT was also utilized sporadically throughout all three (3) plant locations on the overhead or runway support structures where the severity of the deterioration warranted. This data was then evaluated mathematically to determine the structural stability of the assets and to develop a proper repair plan. Additional where physical access was limited by either location or personnel safety issues, Unmanned Aircraft Systems (UA)				tel production facilities in il, vehicle, and igs. Deficiencies and resonnel safety and ter (PE). In instances including Ultrasonic Testing was performed dywine Creek and at the bridge girders of the bridges and webs. By of the bridges and on the overhead crane en evaluated iir plan. Additionally,

10. Stall Expellence.	utilized to perform visual evaluations. Across the three (3) client locations, UAS evaluations were performed on more
22/22 21/21	than 60 crane runways, buildings, and bridges.
09/23 – 01/24	MTA Culver Line Viaduct Wrap-Up, MTA, New York, NY. Structural Engineer. The project consists of general structural
	repairs to the structural supports and waterproofing system of the Culver Line rail viaduct in Brooklyn. The structure
	consists of an elevated four-track reinforced concrete viaduct supported by concrete-encased FRP wrapped structural
	steel support bents. Responsibilities include quantity estimation and drafting of project plans and details.
09/20 - 01/23	NRG OPO-217 Standard Inspections, NRG Energy, Dagsboro, DE, Dunkirk, NY, Tonawanda, NY, and Pekin, IL. Lead Field
	Inspector. Per the client's standards and specifications, developed based on ASCE-7 codes, plant-wide structural
	inspections were carried out at four (4) coal-fired power plant locations located in Dagsboro, DE, Dunkirk, NY,
	Tonawanda, NY, and Pekin, IL. The structures inspected included buildings, elevated walkways, crane runways, material
	handling equipment and supports, tanks, and piping. Detailed hands-on inspections were performed on all structures
	subject to deterioration from coal exposure, and Non-Destructive Testing in the form of both Ultrasonic Thickness
	Testing (UT) and Magnetic Particle Testing (MT) was performed on conveyor support trusses at the discretion of the
	inspector, based on sound engineering judgement. Deficiencies and safety concerns were identified and quantified,
	then rated based on severity and danger to personnel safety and production using engineering judgement, under the
	guidance of a licensed Professional Engineer (PE). Repair plans were then developed for each structure.
09/13 – 11/14	North American Stainless Asset Management System Implementation, NAS, Ghent, KY. Lead Field Inspector. Served as
	Engineering Support responsible for related functionality in the Department's Asset Management System (AMS).
	Responsibilities included cataloging more than 1500 on-site assets, performing general condition assessments, and
	performing a risk-based analysis to develop a program for standard inspections and maintenance across the facility.
07/23 – 09/23	Load Rating of Cooper Lake Road Bridge, Cobb County DOT, GA. Structural Engineer. The SN 067-5209-0-Z is a three-
	span bridge located on Cooper Lake Road. The bridge has a total length of 275', it's three spans consisting of pre-
	stressed concrete girders as main superstructure elements. The purpose of the project was to prepare a load rating
	analysis of the structure. John was responsible of preparing the load rating of the superstructure and substructure. He
	prepared the structural analysis of the structure modeling all the structural elements of the main span using
	OpenBridge and LEAP Concrete which is a finite element analysis software; and generated the full range of rating trucks
	suggested in the GADOT Structural Design Manual, to obtain the controlling force effects (axial tension, flexure, and
	shears). The load rating followed the GADOT Bridge Design Manual.
	1

Firm em	Firm employed by ARCADIS					
Name	Bryan D. Barnes; El			Years of relevant experience with this employer	1	
Title	Structural Engineer			Years of relevant experience with other employer(s)	1	
Degree(Degree(s) / Years / Specialization			BS / Civil Engineering		
Active r	Active registration number / state / expiration date		oiration date	EI.0034967 / LA / Exp. 3/31/2024		
Year registered 2021 Discipline		Discipline	Civil Engineering			
Contrac	Contract role(s) / brief description of responsibilities. Bridge Design					

Experience dates

Experience and qualifications relevant to the proposed contract



Mr. Barnes is a Junior Bridge Engineer with experience in structural design of prestressed concrete and steel plate girders bridges as per AASHTO LRFD using OpenBridge Modeler and Civil3D; also, foundation design including prestressed concrete piles and drilled shafts. He is familiar with the LADOTD policies, standards, and Bridge Design Manual. Alongside using the design tools available, he also uses structural knowledge to perform hand calculations for bridge structural design. His responsibilities include plans preparation, structural design for bridges, as well as CAD drawing.

08/22 - Ongoing

I-10 CMAR in Baton Rouge (H.004100.5) --East Baton Rouge Parish. *Bridge Engineer*. Responsible for part of the substructure design for the west bound main lanes, permanent widening, and the east bound ramp, doing structural design calculations for substructure components, creating CAD drawings, and coordinating with the project management section of the Department for the delivery of the project, per the Louisiana Department of Transportation and Development project delivery policies.

The complete bridge project has several separate components including the west bound main lanes, the east bound main lanes, as well as the east bound ramp, and the permanent widening portions of the bridge. The superstructure consists of either Prestressed Concrete Girders (LG54), steel plate girders, or rolled steel beams. The bridge substructure consists of concrete piers caps supported on columns which are supported on drilled shafts and spread footings on drilled shafts.

•	_			_			
1	h	N 11	att.	Ŀν	per	ıΔn	
_	•	-	-	-	,,,,		

L6. Staff Experience							
Firm employed by	Firm employed by ARCADIS						
Name Frank Ge	Frank Getz, PE		Years of relevant experience with this employer	18			
Title Senior Bridge Engineer			Years of relevant experience with other employer(s)	8			
Degree(s) / Years	/ Specialization		BS / 1997 / Civil Engineering				
Active registration	n number / state / exp	oiration date	PE #66992 / OH / Exp. 12/31/2024; PE #6201309066/ I	MI / Exp. 10/14/2024; PE #181 7 4 /			
v	2002	B	WY / Exp. 12/31/2025				
Year registered	2002	Discipline	Civil Engineering				
	brief description of re	<u> </u>	Bridge Evaluation				
Experience dates			ant to the proposed contract				
			f experience in structural/bridge design, project enginee				
last			ering experience includes cursory/in-depth/fracture crit				
			nalysis, bridge load rating, preparation of reports and stu				
			ng walls. He has prepared structure type studies, prelimi				
		ions, comprenei	nsive bridge inspection and evaluation reports, and cons	truction cost estimates for a variety			
	of bridge types.						
08/22 – Ongoing	I-10 CMAR in Baton	Rouge (H.0041	00.5)East Baton Rouge Parish . <i>Bridge Engineer.</i> Respoi	nsible for part of the substructure			
			ies, permanent widening, and the east bound ramp, doir				
			CAD drawings, and coordinating with the project manag				
	1		the Louisiana Department of Transportation and Develop				
			Il separate components including the west bound main l				
		-	he permanent widening portions of the bridge. The supe				
		• •	1), steel plate girders, or rolled steel beams. The bridge s				
		•	which are supported on drilled shafts and spread footings				
05/19 – Ongoing			Support, Cleveland Metroparks, OH. Project Bridge Engir				
	•		tion and engineering support services contract with the	-			
	1 .		ventoried vehicular bridges that require annual or fractu				
	·		and trail bridges are inspected on a 5-year recurring cyc	•			
	1	•	ection findings and includes recommendations for repair				
		•	levelops a 5-year Bridge Repair/Rehabilitation/Replacem	S			
	included bridge load ratings, emergency bridge visits, plan review, small project plan development, repair details, and						
24/44 42/42	training/coordination with reservation managers. Arcadis has held this contract numerous times over the last 25 years.						
01/14 – 12/16			m, Ohio Department of Transportation, Districts 4, 11 &				
	_	-	dge Inspection Team Leader on this 3-year bridge inspec				
			cipal owned bridges throughout ODOT Districts 4, 11 and				
	· ·		e ODOT Districts was required to obtain existing bridge d	•			
		_	included: annual NBIS routine bridge inspections, element level bridge inspections, fracture				
	critical bridge inspe	ections, underwa	ater bridge inspections, updates to bridge inventory info Prime Consultant Name Here: Arcadis	rmation in ODOT's Structure			

16. Staff Experience	<u>e</u>
	Management System (SMS), scour critical assessments, development of scour plan of actions, development of Fracture Control Plans, and bridge load ratings. All inspection data, photographs, and other information gathered are uploaded to ODOT's online Structure Management System.
01/17 - 01/19	Multi-Year Bridge Load Ratings, MP151.1 to MP 240.4, Ohio Turnpike and Infrastructure Commission, OH. <i>Project Bridge Engineer, and Lead Load Rating Engineer</i> on this 3-year bridge load rating project. Arcadis inspected and load rated bridges for the Ohio Turnpike, from mile post 151.1 to 240.4 (eastern half) utilizing AASHTOWare BrR software. Arcadis' assignment comprised over 200 bridges including both mainline and overpass structures. Bridge types include steel beam (plate girders and rolled beam), curved girders, thru-girders, steel straddle bents, earth-filled concrete arches, and culverts. The OTIC selected Arcadis as one of two consultants to complete the load ratings of the above noted bridges and culverts over a four-year period from 2016 to 2019.
02/19 – 02/20	W. 140th St. Bridge 01.82 and W. 150th St. Bridge 01.94 – Bridge Inspection and Evaluation, Cuyahoga County, OH. <i>Project Bridge Engineer, and Bridge Inspection Team Leader.</i> Oversaw a thorough inspection and evaluation project for two bridges spanning Northfolk Southern Railroad, Greater Cleveland Regional Transit Authority, local streets, drives, and private properties. The W. 140th Street Bridge, an 853 ft-long, 12-span continuous welded steel plate girder structure, and the W. 150th Street Bridge, a 708 ft-long, 10-span continuous rolled steel beam structure, underwent meticulous inspection using a snooper, manlifts, and ladders. The findings were documented in accordance with ODOT and AASHTO standards, leading to a comprehensive report outlining inspection results, material testing outcomes, and a capital improvement plan with recommendations and costs for short, mid, and long-term maintenance repairs and improvements.
01/16 - 07/22	CUY-90-24.10/24.63, Ohio Department of Transportation, District 12, Cleveland, OH. <i>Project Manager and QA/QC Engineer</i> for this bridge rehabilitation project. This project consisted of the replacement of bridge decks of two mainline bridges carrying Interstate 90 over E. 140 th and E. 152 nd streets in the City of Cleveland. The first phase of this project consists of a Feasibility Study, Safety Study, Noise Analysis, and MOTAA. Items that will be investigated in the feasibility study include: retrofit of existing moment plates vs. superstructure replacement, semi-integral conversion, bridge deck drainage, addition of structure mounted noisewalls, etc. to Complex phase construction will be utilized in order to maintain 4 lanes of traffic in the peak direction during peak hours.
01/18 – 12/18	Greater Cleveland Regional Transit Authority, Cleveland, OH. <i>Project bridge engineer</i> for the inspection and evaluation of GCRTA's largest bridge. The GCRTA engaged the services of the Arcadis team's qualified engineers to provide an in-depth bridge inspection (including fracture critical inspection of truss spans, underwater inspection, and stray current testing) and evaluation of the largest bridge on GCRTA's inventory, the 3,400-foot-long Cuyahoga Viaduct Bridge. Originally constructed in 1920 and rehabilitated in 1999, the Cuyahoga Viaduct Bridge consists of a riveted steel deck truss, riveted steel three-panel thru-truss and 29 simple spans of riveted steel plate girders. The bridge carries two Red Line GCRTA heavy rail train tracks, as well as two siding tracks along the north approach spans. The bridge spans over the Cuyahoga River, Cleveland Metroparks, rail/transit lines, businesses, and numerous streets.
01/21 – 12/23	General Engineering & Right of Way Acquisition and Environmental Services, Summit County, OH. Project Bridge Engineer, Lead Load Rating Engineer, and Bridge Inspection Team Leader for this 3-Year General Engineering Services Contract. Arcadis completed general engineering services for 15 bridge and roadway task orders including bridge inspections and bridge load ratings, bridge inventory updates, bridge rehabilitation design, bridge plan/shop drawing review, structural support, structure hydraulics, development of design/ build scopes, resurfacing plans, ecological and wetland mitigation assistance, air quality permitting, asbestos surveys, and preparation for successful and wetland mitigation assistance.



16. Staff Experience			
Firm employed by	ARCADIS		
Name Christine Dohy		Years of relevant experience with this employer	30
Title Senior Stru	uctural Engineer	Years of relevant experience with other employer(s)	26
Degree(s) / Years / :	Specialization	BS / 1994 / Civil Engineering University of Akron Main Ca	ampus
Active registration r	number / state / expiration date	PE E-62819/ OH / Exp. 12/31/2025	
Year registered	1998 Discipline	Civil Engineering	
Contract role(s) / br	rief description of responsibilities.	Bridge Evaluation	
Experience dates	Experience and qualifications rele		
08/22 – Ongoing	preparation of reports and studied type studies, preliminary and final bridge types. Her superstructure prestressed concrete I-beams, rowexperience includes stub and spill hammerhead piers and cap and obearing piles. She has also design and testing for structures as well I-10 CMAR in Baton Rouge (H.004) design for the west bound main is substructure components, creating for the delivery of the project, percomplete bridge project has seven well as the east bound ramp, and Prestressed Concrete Girders (LG piers caps supported on columns)	sperience includes both cursory and in-depth bridge conditions and the design of rehabilitation and replacement struct of contract plans, technical specifications, and construction design experience includes reinforced concrete slabs, predled steel beams, including horizontally curved steel beams. I through abutments, semi-integral abutments, wall-type scolumn piers. Her foundation design experience includes steed three-and four-sided concrete boxes. Finally, she has construction inspection and reviewed shop drawings to as construction inspection and reviewed shop drawings to an an an er the Louisiana Department of Transportation and Developeral separate components including the west bound main at the permanent widening portions of the bridge. The superstance is the plate girders, or rolled steel beams. The bridge which are supported on drilled shafts and spread footing.	ures. She has prepared structure in cost estimates for a variety of estressed concrete box beams, as. Her substructure design abutments, wall-type piers, spread footings and friction and end conducted condition inspections of maintain design accuracy. In sible for part of the substructure and structural design calculations for agement section of the Department opment project delivery policies. The lanes, the east bound main lanes, as erstructure consists of either substructure consists of concrete is on drilled shafts.
01/14 – 12/19	Rating Engineer, and Bridge Insper related tasks for 300+ municipal of municipalities in the three ODOT The various bridge tasks included bridge inspections, underwater b System (SMS), scour critical assess	ram, Ohio Department of Transportation, Districts 4, 11 8 ection Team Leader on this 6-year bridge inspection project owned bridges throughout ODOT Districts 4, 11 and 12. Con Districts was required to obtain existing bridge data and the samual NBIS routine bridge inspections, element level bridge inspections, updates to bridge inventory informations saments, development of scour plan of actions, development data, photographs, and other information gathered are updates.	ct that includes various bridge oordination with over 60 different to coordinate inspection activities. ridge inspections, fracture critical in in ODOT's Structure Management ent of Fracture Control Plans, and
02/19 – 02/20	Inspection Team Leader and Bridg	. 150th St. Bridge 01.94 – Bridge Inspection and Evaluation ge Engineer for this bridge inspection and evaluation projet sampling and testing, load rating, and evaluation of two	ect. This project consisted of in-

Prime Consultant Name Here: Arcadis

	Railroad, Greater Cleveland Regional Transit Authority, local streets, drives, and private properties. The W. 140th Street Bridge is a 853 ft-long, 12-span (excluding cellular abutment approach spans), continuous welded steel plate girder structure. The W. 150th Street bridge is a 708 ft-long, 10-span, continuous rolled steel beam structure. An up-close, hands-on, in-depth bridge condition inspection was completed, for each structure, in accordance with the latest editions of the ODOT Manual of Bridge Inspection and American Association of State Highway and Transportation Officials' manual for Condition Evaluation of Bridges. The bridges were inspected using a snooper, manlifts, and ladders. Upon completion of the bridge inspections, a comprehensive bridge inspection and evaluation report was prepared. The report detailed the inspection access requirements and documented the inspection findings and inspection ratings for each bridge element as well as results from material testing. The evaluation portion of the report consisted of a capital improvement/asset management plan that included
	recommendations and costs (initial and lifecycle) for short-term (2 to10 years), mid-range (10 to 20 years), and long-range (more than 20 years) maintenance repairs and capital improvements necessary to extend the useful service life of each bridge.
01/18 – 12/18	Greater Cleveland Regional Transit Authority, Cleveland, OH. Bridge Inspection Team Leader and provided QA/QC for evaluation of GCRTA's largest bridge. The GCRTA engaged the services of the Arcadis team's qualified engineers to provide an in-depth bridge inspection (including fracture critical inspection of truss spans, underwater inspection, and stray current testing) and evaluation of the largest bridge on GCRTA's inventory, the 3,400-foot-long Cuyahoga Viaduct Bridge. Originally constructed in 1920 and rehabilitated in 1999, the Cuyahoga Viaduct Bridge consists of a riveted steel deck truss, riveted steel three-panel thru-truss and 29 simple spans of riveted steel plate girders. The bridge carries two Red Line GCRTA heavy rail train tracks, as well as two siding tracks along the north approach spans. The bridge spans over the Cuyahoga River, Cleveland Metroparks, rail/transit lines, businesses, and numerous streets.
07/18 – Ongoing	Bridge Inspections, City of Kent, Kent, OH. <i>Bridge Inspection Team Leader</i> . Arcadis provides annual inspection services to the City of Kent. There are nine bridges within the City that require annual inspections. The routine inspections require the completion of ODOT's BR-86 forms and include determination of items that require repair or maintenance.
05/19 – Ongoing	Cleveland Metroparks – Bridge Inspection and Engineering Support, Cleveland Metroparks, Northeast Ohio. Bridge Inspection Team Leader and Load Rating Engineer. Arcadis is providing periodic bridge design and annual bridge inspection services to Cleveland Metroparks during this five-year contract. There are 49 ODOT inventoried bridges throughout the Cleveland Metroparks that require annual or fractural critical bridges inspections to be in compliance with FHWA requirements. An additional 60+ pedestrian, golf cart and trail bridges are inspected on a 5-year recurring cycle. Along with entering and approving bridge inspections reports within ODOT's AssetWise structure management system, an annual inspection report is prepared that summarizes the condition of each bridge and includes recommendations for maintenance, rehabilitation, or replacement. The reports also included a summary of the entire inventory in a spreadsheet that can be sorted by condition, reservation location, structure type, etc. Arcadis will also perform bridge load rating updates as necessary to reflect changes in the bridge's condition or changes in loading. Arcadis will also provide bridge/roadway design services for bridges that are programmed for repair, rehabilitation, or replacement.
2021 – Ongoing	VAR-D-11 Element Level Bridge Inspections, Ohio Department of Transportation, District 11, Ohio. Bridge Inspection Team Leader. Arcadis led a 4-consultant team consisting of IBI, AECOM, and Collins Engineering to complete numerous routine element level and underwater inspections in 2021 and 2022. District 11 determined that additional inspections were needed and the contract extended into 2024. A total of approximately 407 bridges and 1 wall were inspected. These included 52

Prime Consultant Name Here: Arcadis



16. Staff Experience	16. Staff Experience					
Firm employed by						
Name Ryan Brin	kman, PE	Years of relevant experience with this employer	10			
Title Project T	ransportation Engineer	Years of relevant experience with other employer(s)	5			
Degree(s) / Years /	['] Specialization	MS / 2012 / Civil and Environmental Engineering, Univ	ersity of Cincinnati			
		BS / 2011 / Civil and Environmental Engineering, Unive	ersity of Cincinnati			
Active registration	number / state / expiration date	PE. 81226/ OH / 12/31/2025				
Year registered	2016 Discipline	Civil Engineering	Civil Engineering			
Contract role(s) / I	orief description of responsibilitie	Bridge Evaluation				
Experience dates	Experience and qualifications	elevant to the proposed contract	evant to the proposed contract			
	Mr. Brinkman is a Design Struc	tural Engineer with 10 years of experience focused on the	bridge design, rehabilitation and			
	inspection. Mr. Brinkman is a I	Registered Professional Engineer in and Ohio and a Certifie	d Bridge Inspection Team Leader.			
	PROFESSIONAL QUALIFICATIO	NS:				
	OSE Bridge Inspection Part	1 and 2, 2014				
	ISI Envision, 2013					
	CSX Annual Certification, 2	0014 10 10 11 0014 0015				
	• e-RAILSAFE, 2014					
	OSHA Confined Space Entr	y Program - 2015				
08/22 – Ongoing	I-10 CMAR in Baton Rouge (H.	004100.5)East Baton Rouge Parish. Bridge Engineer. Resp	oonsible for part of the substructure			
, 0 0	design for the west bound main lanes, permanent widening, and the east bound ramp, doing structural design calculations for					
	_	ng CAD drawings, and coordinating with the project management section of the Department				
		per the Louisiana Department of Transportation and Deve	_			
	complete bridge project has se	ral separate components including the west bound main lanes, the east bound main lanes, as				
	well as the east bound ramp, a	the permanent widening portions of the bridge. The superstructure consists of either				
	Prestressed Concrete Girders	54), steel plate girders, or rolled steel beams. The bridge substructure consists of concrete				
	piers caps supported on colum	which are supported on drilled shafts and spread footings on drilled shafts.				
07/15 – 12/19	Ohio Municipal Bridge Inspection	n, ODOT, OH. Structural Engineer. Arcadis is responsible for i	nspecting a larger number of bridges in			
	· ·	te through the end of this contract. The FHWA requires all br	• • •			
			e Inspection Program (NBIS). Beyond routine bridge inspections including major, minor, and			
	underwater inspections, work includes inspections for section loss and load ratings, fracture critical inspections and plans,					
assessments, and gusset plate ratings. The routine inspections require the completion of ODOT's BR-86 forms and dete						
	items requiring repair or maintenance. Additionally, as required by ODOT, revisions to BR-87 forms are necessary for the bridges					
	-	or replacement. Ryan assisted the team leader in completing the bridge inspection. He also is the				
06/16 - 03/18	primary load rating engineer an	_	os of highway and highway artorios			
06/16 – 03/18 Highway Sign Replacement, LADOTD, New Orleans, LA. Structural Engineer. a total of 9.8 miles of highway and highway arteries needed to have signs replaced and new signs added. Arcadis was tasked with determining the sign type, sign location, and sign						
		0 corridor. Ryan was a design engineer on this project. His responsibilities included the design of				
	The state of the s		1			

20. Stan Experience	every sign support which was attached to a bridge along the corridor. This included small mile marker signs attached to parapets and large exit signs attached to overhead truss structures. Approximately nine design categories were used to cover hundreds of signs.
06/14 – 01/16	12th Street NW Bridges Replacement Project, City of Canton and Stark County, OH. Structural Engineer. An existing concrete arch bridge needed replacement. In addition, the city wanted to improve safety by changing the alignment of a jogging path to go under the bridge rather than over it. The single span arch bridge was replaced with a 73'-11" two span bridge structure. The concrete arch span was replaced a newer 54'-9.25" span concrete arch, and the second span is a 17'-6.625" slab bridge which spans the jogging trail. Responsibilities included design of the arch ribs, deck, and abutments.
08/15 – 12/16 and 05/17 – 03/18	Jefferson 164 Bridge Replacement and Roadway Realignment, Ohio Department of Transportation (ODOT), Bergholz, OH. Structural Engineer for an existing multi-span prestressed box beam bridge needed replacement. The alignment of the bridge and existing roadway were to be modified to improve drivability as well. After the full design was completed, the alignment was changed to better accommodate the nearby railroad and at grade crossing and a second full design was completed. Arcadis recommended a single span rolled steel I-girders with a composite concrete deck bridge with two of the exterior girders splayed to improve roadway alignment. It was determined that staged construction was appropriate for this project. Ryan was a design engineer on this project. Responsibilities included the design of the temporary shoring, abutments, and bridge components and details. In addition, the bridge was also load rated.
10/13 - 04/14	Albany Division – Second Main, Coxsackie Phase 1 and 2, CSX Transportation, Coxsackie, NY. Structural Engineer. The design included replacement of two bridges (one 107' long and one 187' long), extension of multiple culverts and cattle crossings, wetland impact minimization, and EMPAs. The project required removing an existing turnout at both ends of the alignment. The design included a new universal interlocking in each of the two phases. Responsible for the design of the piers and abutments for the Hannacrois Creek Bridge and various calculations for Coxsackie Creek Bridge.
03/14 - 07/14	Lock 3 Wall Repair, City of Akron, OH Structural Engineer. During a large rainfall storm, a section of wall of the Ohio and Erie Canal collapsed. This section of wall was near a frequently used greenspace used by the City of Akron, and it was important to repair the section of the wall as well as strengthen the other portions of the existing wall. A new wall section was designed, and the existing wall was retrofitted with a deadman anchor system and steel HP section struts which span wall to wall of the canal underneath a pedestrian bridge. Responsible for the design of the new wall section, the struts, and the deadman anchor system.
05/13 – 10/13	Woo-75-12.94, ODOT, District 2, OH. Structural Engineer. Responsible for the design of the temporary bearing and the temporary supports for new bridge This bridge replacement project was part of the 3rd lane widening of I-75 from Perrysburg, OH to Findlay, OH. The existing twin four-span rolled steel beam superstructure bridges carry I-75 over US-6 and were replaced with two-span prestressed concrete I-beam superstructures supported on stub abutments behind MSE walls and a cap and column pier supported on drilled shafts. Each span is 99' in length and the roadway width was widened from 41' to 60'. To achieve the required vertical clearance below I-75, US-6 was lowered over two feet. ODOT decided to implement a pilot project utilizing Accelerated Bridge Construction techniques for this project. The superstructures were to be slid into position during a weekend closure, one weekend for each bridge. The substructures were constructed under the existing bridges utilizing low headroom foundation and compaction equipment. To construct the piers, the existing superstructure was temporarily supported in a different location than the original center pier. The superstructures, including approach slabs, were supported on temporary steel supports adjacent to the existing bridges. The superstructures were slid on temporary elastomeric bearings coated with PTFE (Teflon). Traffic on I-75 was not impacted during construction except for the weekend closures.

16. Staff Experience:	<u> </u>				
Firm employed by	APS Ingreering and Testing				
Name Sergio Av	iles, PE	Years of relevant experience with this employer	12		
Title President	t	Years of relevant experience with other employer(s)	10		
Degree(s) / Years ,	/ Specialization	BS / 2001 / Civil Engineering, Louisiana State University	,		
Active registration	number / state / expiration date	PE.00335 7 1 / LA / Exp. 03/31/2024			
Year registered	200 7 Discipline	Civil Engineering			
Contract role(s) / l	prief description of responsibilities.	Geotechnical / Materials Testing			
Experience dates	Experience and qualifications relev	ant to the proposed contract			
	Mr. Aviles boasts over 20 years of expertise in geotechnical and civil engineering, including substantial experience at LADOTD involving slope stability analysis, embankment settlement calculations, mechanically stabilized earthen wall design, and sheet pile design. Additionally, he has a proven track record in pile testing. Having established A P S Engineering and Testing eleven years ago, Mr. Aviles has consistently collaborated with both government and private entities throughout Louisiana. His extensive background extends to the design and supervision of roadway projects in the region. Proficient in AutoCAD Civil 3D, he applies this skill in project design.				
11/19 – 06/22	Comite River Diversion Bridge at LA 67, LA 19 and LA 19 Railroad Bridge LA 67 and LA 19, Multiple Location, LA. <i>Project Manager</i> for the Project Design team. A P S was selected with the winning team for the design of the diversion CMAR project. A P S performed the Geotechnical Design for the project.				
09/19 – 05/23	I-10 Widening LA 415 to Essen LN, LA. <i>Project Manager</i> to the Geotechnical Investigations. A P S was tasked thru our DOTD Geotechnical retainer to drill and sample a total of 52 deep borings starting at the Washington Exit and ending at the LSU Lakes. A P S drilled a total of eight (8) over the waterborings and 44 land borings. Along with this drilling and sampling, A P S tested for strength and engineering characteristics of the soils with approximately 1000 Triaxial Compression, Unconsolidated Drained Or Undrained (UU) and Atterberg Limits.				
11/19 – 12/23	US 190 over Bogue Falaya River, LA . <i>Project Manager</i> for the Project Design team. A P S was selected with the winning team for the Geotechnical Investigation and Design for the proposed new overpass. A total of six (6) deep borings were drilled and tested for Geotechnical recommendation.				
03/19 – 05/19	US 90 Railroad Overpass SE of LA 85, LA. A P S was selected with the winning team for the Geotechnical Investigation and Design of the proposed new bridge. A total of 19 deep borings were drilled and tested for the foundation recommendation. Mr. Aviles was the Project Manager for the Project Design Team.				
08/16 – 10/19	I-110 Interchange Modification at Terrace Ave, LA. A P S was tasked thru our DOTD Geotechnical retainer to drill and sample a total of six (6) deep borings for the design of the Terrace Ave Exit. A P S tested for strength and engineering characteristics of the soils with approximately 100 Triaxial Compression, Unconsolidated Drained Or Undrained (UU) and Atterberg Limits performed by A P S Laboratory. Mr. Aviles was the Project Manager to the Geotechnical Investigations				
11/17 - 02/18 07/14 - 08/14	total of eight (8) deep borings for engineering characteristics of the sassigned for roads and bridges.	lacement, LA. A P S was tasked thru our DOTD geotechnic the replacement bridge at US 61 over Thompson Creek. soils. Mr. Aviles was the Project Manager to the Geotechn 9 corridor, LA. A P S performed all the preliminary drilling	A P S tested for strength and nical Investigations and Analysis		
07/14 00/14	1 00 00 elevated polition for the 1-4.	Prime Consultant Name Here: Arcadis	is, testing, and or is for os so and		

Highway 318 Intersection. A total of 46 borings and 11 CPTs along with all the testing required by LADOTD was completed. Mr.					
Aviles was the Project Manager to the Geotechnical Investigations and Analysis assigned for roads and bridges design.					
Earhart Expressway/Causeway Boulevard, LADOTD, Metairie, LA. Project Manager. Tasked A P S with developing the LRFD					
factors for both existing structures and the new elevated sections to connect to Causeway Blvd. Per the task order APS drill and					
tested 85 borings to 120 feet near the proposed and existing structures. APS engineering staff provided designer with pile tip					
elevations for five elevated ramps to connect Earhart to Causeway Blvd. Provided boring logs, information on site conditions,					
site preparation recommendations, and load- length curves. Project Manager to the Geotechnical investigations and analysis					
assigned to help calculating the resistance factors.					
The following list consists of projects that Mr. Aviles did the design or assisted on the design while at LADOTD. These projects					
include pile design, slope stability, settlement analysis, and construction services (PDA, CAPWAP, and WEAP).					
ONSYSTEM PROJECT LIST:					
Mr. Aviles served as the staff geotechnical engineer while at the Pavement and Geotechnical Section for the following projects below. Projects include Embank Design, Pile Design, Drilled Shaft Design, MSE Wall Design, and Construction Supervision. Major project costs estimated over one million dollars:					
015-04-0037 LA524-LA123 Route US165, 015-05-0035 LaSalle, 015-07-0044 (Route 165 Cadwell, 276-03-0016 Tangipahoa River Bridge, 3132 01-0029, 362-01-0009 Rat Bois, 452-01-0039 I-55 CrossOvers, 742-07- 0098 Susek Drive, Bayou Perrie and Sand					
Beach Bayou 103-01-0025, Broadway Ave.700-40-0127, Cameron Route La. 27 193-02-0042, Causeway Boulevard interchange					
Route I-10 450-15-0098, Clayton-Greenville 026-03-0025, Crescent City Connection 283-08-0143(46), Cross Bayou Bridge 090-					
01-0020, Flannery at Florida 742-17-0008.Innerloop 427					

16. Staff Experience:					
Firm employed by	APS Engineering and Testing				
Name Surendra	Raj Pathak, PE	Years of relevant experience with this employer	11		
Title Staff Eng	ineer	Years of relevant experience with other employer(s)	10		
Degree(s) / Years ,	/ Specializa2tion	MS / 2013 / Civil Engineering, MS / 2007 / Civil Enginee	ering		
		BS / 1998 / Civil Engineering University of Technology	BS / 1998 / Civil Engineering University of Technology		
Active registration	number / state / expiration date	PE. 43487/ LA / Exp. 09/30/2025			
Year registered	2019 Discipline	Civil Engineering	Civil Engineering		
Contract role(s) / I	orief description of responsibilities	Geotechnical Engineer			
Experience dates	Experience and qualifications rele	evant to the proposed contract	ant to the proposed contract		
	Mr. Pathak, a Staff Geotechnical	Engineer at APS, brings over 10 years of experience in Geo	otechnical and Civil engineering. His		
	expertise includes designing road	way, bridges, and levees, as well as shallow and deep four	ndations. He has extensive field		
	experience in QC inspection of au	iger cast piles, drilled shafts, soils, and concrete. Mr. Path	ak is proficient in various software,		
	including Slope/w, Seep/w, Drive	n 1.2, MicroStation V8, CWALSHT, FS004, Swell Potential,	Drilled Shaft Design, Auger cast pile		
En	design Analysis, AASHTO pavement, Slope analysis, and Differential Settlement Analysis.				
11/19 – 06/22	Comite River Diversion Bridge at LA 67, LA 19 and LA 19 Railroad Bridge LA 67 and LA 19, Multiple Location, LA. A P S was tasked				
	thru our DOTD geotechnical retai	ner to drill and sample a total of 12 deep borings for the n	ew and replacement bridges at		
	Highway 19, 67, and 964. A P S te	sted for strength and engineering characteristics of the soi	th and engineering characteristics of the soils. Mr. Surendra was a Design		
	Engineer for the Project Desing to				
09/19 – 05/23	I-10 Widening LA 415 to Essen LN, LA. A P S was tasked thru our DOTD geotechnical retainer to drill and sample a total of 52				
		nington Exit and ending at the LSU lakes. Along with this dr			
		cteristics of the soils with. A total of eight (8) over the waterborings and 44 land borings with			
	1	ession, Unconsolidated Drained Or Undrained (UU) and Atterberg Limits. Mr. Surendra was			
	an engineer to the Geotechnical I	_			
11/19 – 12/23	US 190 over Bogue Falaya River, LA. A P S was selected with the winning team for the Geotechnical Investigation and Design for				
	the proposed new overpass. A total of six (6) deep borings were drilled and tested for Geotechnical recommendation. Mr.				
	Surendra was an engineer for the				
03/19 – 05/19		85, LA. A P S was selected with the winning team for the G	_		
	of the proposed new bridge. A total of 19 deep borings were drilled and tested for the foundation recommendation. Mr.				
	Surendra was a Design Engineer for the Project Design team.				
08/6 – 10/19	I-110 Interchange Modification at Terrace Ave, LA. A P S was tasked thru our DOTD geotechnical retainer to drill and sample a				
	total of six (6) deep borings for the design of the Terrace Ave Exit. A P S tested for strength and engineering characteristics of				
			axial Compression, Unconsolidated Drained Or Undrained (UU)and Atterberg Limits		
44/47 00/40	performed by A P S Laboratory. Mr. Surendra was an engineer to the Geotechnical Investigations.				
11/17 – 02/18		placement, LA. A P S was tasked thru our DOTD geotechn	•		
	total of eight (8) deep borings for the replacement bridge at US 61 over Thompson Creek. A P S tested for strength and engineering characteristics of the soils. Mr. Surendra was an engineer to the Geotechnical Investigations.				
	engineering characteristics of the	soils. Ivir. Surendra was an engineer to the Geotechnical l	nvestigations.		

16. Staff Experience:					
Firm employed by	APS fragenering and festing				
Name Sairam Ed	ddanapudi, PE	Years of relevant experience with this employer	12		
Title Chief Engineer		Years of relevant experience with other employer(s)	9		
Degree(s) / Years /	['] Specialization	MS / 2002 / Civil Engineering			
		BS / 1999 / Civil Engineering			
Active registration	number / state / expiration date	PE.0035129 / LA / Exp. 03/31/2024			
Year registered	2008 Discipline	Civil Engineering	Civil Engineering		
Contract role(s) / l	prief description of responsibilities.	Geotechnical / Materials Testing			
Experience dates	Experience and qualifications relev	ant to the proposed contract			
	Mr. Eddanapudi is the Senior Geot	echnical Engineer for A P S. He has over 20 years of expe	rience in the Geotechnical and Civil		
	Engineering field. His professional	experience consists of the design of roadways, bridges, le	evees, and T-walls as well as the		
		tions. His field experience includes QC inspection of aug			
		ith the following software: Slope/w (2004 and 200 <mark>7</mark> vers			
		n 1.2 (for driven piles), MicroStation V8, CWALSHT and F			
Tion .		, Drilled Shaft Design software, Auger cast pile design Ar	nalysis, AASHTO pavement, Slope		
	analysis, and Differential Settlement Analysis.				
11/19 – 06/22		A 67, LA 19 and LA 19 Railroad Bridge LA 67 and LA 19, M			
Engineer for the Project Design team. Selected by the winning team for the diversion CMAR project,			R project, A P S performed the		
00/10 05/22	Geotechnical Design for the project		A D C to also dethans a sup DOTD		
09/19 – 05/23	I-10 Widening LA 415 to Essen LN, LA. <i>Project QA</i> . Responsible for Geotechnical Investigations. A P S was tasked thru our DOTD Geotechnical retainer to drill and sample a total of 52 deep boring's starting at the Washington Exit and ending at the LSU				
		(8) over the water borings and 44 land borings. Along wit			
	_	-			
	tested for strength and engineering characteristics of the soils with approximately 1000 Triaxial Compression, Unconsolidated Drained Or Undrained (UU) and Atterberg Limits.				
11/19 – 12/23		A. Senior Design Engineer for the Project Design team. A F	P S was selected with the winning		
11/13 12/23		ation and Design of the proposed new bridge. A total of	_		
	tested for the foundation recommendation.				
03/19-05/19		5, LA. <i>Chief Engineer</i> for the Project Design team. A P S w	vas selected with the winning team		
		and Design for the proposed new overpass. A total of six			
tested for Geotechnical recommendation.					
08/6 – 10/19	I-110 Interchange Modification at	Ferrace Ave, LA. <i>QA</i> to the Geotechnical Investigations. A	P S was tasked thru our DOTD		
Geotechnical retainer to drill and sample a total of six (6) deep borings for the design of the Terrace Ave Exit. A					
	strength and engineering characte	ristics of the soils with approximately 100 Triaxial Compression, Unconsolidated Drained Or			
Undrained (UU) and Atterberg Limits per-formed by A P S Laboratory. Mr. Sai was QA to the Geotechnical Investigations.					
11/17 – 02/18	US 61 Thompson Creek Bridge Rep	lacement, LA. QA to the Geotechnical Investigations. A P	S was tasked thru our DOTD		
		ample a total of eight (8) deep borings for the replaceme	ent bridge at US 61 over Thompson		
	Creek. A P S tested for strength and	d engineering characteristics of the soils.			





Firm name	ARCADIS			Past Performance Evaluation Discipline(s)*	Road, Traffic, Planning	
Project name	US 90 Ramps at LA 88 Ro	oundabouts		Firm responsibility (prime or sub?)	Sub	
Project number	4400004401 (H.011495)		Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	Iberia Parish, LA			Owner's Project Manager	Brent Domingue	
Owner's address, j	phone, email 428 Hugh V	Vallis Rd, Laf	ayette, LA 70508 / ⁻	T: 337 262 6210 / E: christopher.domingue@	Pla.gov	
Services commenced by this firm (mm/yy) 11/2016 Total consulta			Total consultant	contract cost (\$1,000's)	\$549	
Services complete				t services provided by this firm (\$1,000's)	\$505	

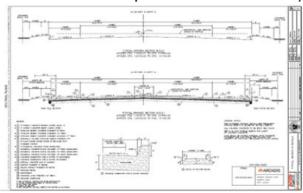
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

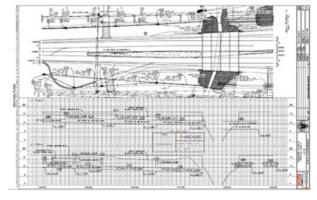
Firm's Role: Roundabout Geometric Design & Modeling; Pavement Marking and Signing; Preliminary and Final Plan Development; Drainage Design; Construction Sequencing and Signing; Construction Cost Estimate; Access Management Improvements, Engineer in Responsible Charge

Firm Members Involved: David Fulks; Buddy Porta

The LADOTD contracted Aucoin & Associates and its sub-consultant, Arcadis, to prepare preliminary and final roadway plans to install two single lane roundabouts at the US 90 ramp intersection with LA 88 in Iberia Parish. The project also includes modifying the LA 88 /Service Road intersections to J-turn intersections. The installation of the roundabouts is aimed at promoting mobility and safety along the corridor.

Arcadis is performing all engineering services for this task order to develop a full set of construction plans, including InRoads modeling of the roundabouts, as a pass-through from Aucoin & Associates under their safety design retainer contract. Arcadis has completed the 100% Preliminary plans and is currently developing the 95% Final Plan submittal.





The design is being prepared in accordance with the LADOTD Design Guidelines, Roadway Design Procedures and Details Manual and all applicable DOTD EDSMs, AASHTO and FHWA guidelines. The roundabouts are being designed to

accommodate the WB-67 design vehicle. As a best practice, the project team held several design review meetings throughout preliminary plan and final plan development to more closely coordinate with LADOTD District 03 and headquarters personnel prior to proceeding into subsequent design phases. The goal of this team coordination was to ensure all project team members agreed with proposed geometry prior to spending significant time proceeding into the subsequent design phases.

Relevant Services

- Roadway Geometric Design
- Typical Sections
- Drainage Design, Open channel and Sub-surface.
- Construction Signing and Sequencing
- Access Management
- Roadway Signing and Striping
- LADOTD Design Report (2017 Guidelines)
- LADOTD Plan Development and Review
- LADOTD Design Guidelines, EDSMs, and Roadway Design Manual.
- LADOTD Detailed Pay Item Construction Cost Estimate and Quantity Calculations.
- Coordination with LADOTD



Firm name	ARCADIS			Pa	st Performance Evaluation Discipline(s)*	Road, Traffic	
Project name	US 190B at Jefferson Ave	nue Rounda	about Design		Firm responsibility (prime or sub?)	Sub	
Project number	4400004401 (H.011260.5) Owner's name				Louisiana Department of Transportation and Development (LADOTD)		
Project location	St. Tammany Parish, LA				Owner's Project Manager	Jennifer Branton	
Owner's address,	phone, email 685 N Mori	rison Blvd, H	ammond, LA 70401	L/ T:	: 985 375 0165 / E: jennifer.branton@la.g	gov	
Services commenced by this firm (mm/yy) 06/15 Total consultan			Total consultant	con	tract cost (\$1,000's)	\$486	
Services complete					ervices provided by this firm (\$1,000's)	\$392	

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

Firm's Role: Roundabout Geometric Design; Urban Drainage Design; Pavement Marking and Signing; Construction Sequencing and Signing; Preliminary Plans Development; Construction Cost Estimate; Engineer in Responsible Charge; Independent Technical & Quality Reviews

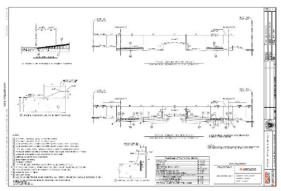
Firm Members Involved: David Fulks; Garret Keller; Craig Raymond; Buddy Porta

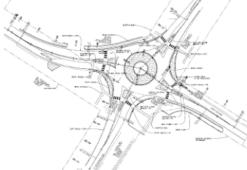
The LADOTD contracted Aucoin & Associates and its sub consultant, Arcadis, to prepare roadway construction plans for a single-lane roundabout to replace the existing traffic light at the intersection of US 190B and Jefferson Avenue located in the business district of Covington. The existing intersection includes an east-west urban two-lane highway (US 190B, locally named 21st Ave.) and a north-south local street (Jefferson Ave.). US 190B features a "dog-leg" at its intersection with Jefferson Ave. The installation of this roundabout is aimed at promoting mobility and safety along the corridor.

Arcadis performed all engineering services for this task order, including InRoads modeling of the roundabout, as a pass-through from Aucoin & Associates under their safety retainer contract.

The design was prepared in accordance with the LADOTD Design Guidelines and the Roadway Design Procedures and Details Manual. Although the route is signed to restrict through truck traffic, the roundabout was designed to accommodate the WB-67 design vehicle to allow for local deliveries. Also, the LADOTD Complete Streets policy was followed by including ADA-compliant ramps and crosswalks to incorporate the existing sidewalks and accommodate pedestrian traffic around the roundabout.

To arrive at the best Alternative, Arcadis performed a context sensitive solutions review of several different design layouts including both circular and oval shaped options for the roundabout. This exercised was aimed at carefully





balancing right-of way and utility impacts to help the LADOTD determine the best suited layout for the project site. Arcadis completed 100% Preliminary Plans and

Relevant Services

- Roadway Geometric Design
- Typical Sections
- Urban Drainage Design
- Construction Signing and Sequencing
- Limits of Construction and Required ROW
- Roadway Signing and Striping
- LADOTD Design Report (2017 Guidelines)
- LADOTD Plan Development and Review
- LADOTD Design Guidelines, EDSMs, and Roadway Design Manual.
- LADOTD Detailed Pay Item
 Construction Cost Estimate and
 Quantity Calculations.
- Coordination with LADOTD Design and Construction Staff.
- Pedestrian Accommodations.
- Signal Design for Temporary
 Signalization of Intersection

60% Final Plans. The project did not progress past the 60% Final Plan milestone, since LADOTD halted the project due to concerns over right-of-way.

Relevant Services

Preliminary and Final Plans

Intersection Improvements

Construction Cost Estimates

Access Management

Traffic Studies

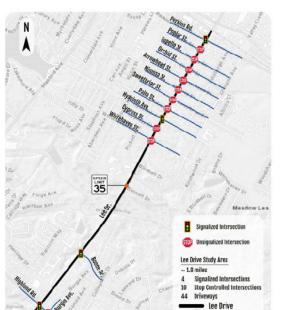
Roadway Design Traffic Signal Design

17. Firm Experience:

Firm name	ARCADIS			Pa	ast Performance Evaluation Discipline(s)*	Bridge, Road, Traffic, Env	
Project name	Lee Drive (Highland Road-Perkins Road)			Fi	rm responsibility (prime or sub?)	Prime	
Project number	City-Parish Project No. 20	20-CP-HC-0044 Owner's name			City of Baton Rouge/Parish of East Baton Rouge		
Project location	East Baton Rouge Parish, Louisiana				wner's Project Manager	Justin Schexnayder	
Owner's address, j	phone, email 8555 Unite	d Plaza Blvd., E	Baton Rouge, LA	708	09, (225) 761-3628, justin.schexnayder@c	srsinc.com	
Services commenced by this firm (mm/yy) 02/21 Total consultan			Total consultant	contract cost (\$1,000's)		\$2,568	
Services completed by this firm (mm/yy) Ongoing Cost of consulta			Cost of consultar	nt s	ervices provided by this firm (\$1,000's)	\$1,536	

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

Firm's Role: The purpose of this project is to widen Lee Drive from a 2-lane to a 3-lane section between Highland Road and Perkins Road. Arcadis is responsible for design study and design services, which include traffic study and report, topographic survey, hydraulic and drainage analysis, preliminary and final plans preparation, signal design, bridge design, construction cost estimate, and right-of-way maps.



Firm Members Involved: Jose L. Rodriguez, Ari Deitch, and Gabriel Arias.

Design Study Report and Preliminary Design

Arcadis provided traffic engineering studies and preliminary roadway and drainage design and evaluated alignment alternatives. The work was prepared in coordination with the City of Baton Rouge and the MOVEBR Program. A preferred alternative was presented to the City of Baton Rouge

based on findings from the traffic study, impacts to existing right-of-way, and a detailed *construction cost analysis*. Arcadis also assisted the City of Baton Rouge in obtaining public input by participating in public meetings and preparing exhibits for public display.

Final Design Plans and Cost Estimate For the Final Design Phase, Arcadis is tasked with preparing construction roadway plans, right-of-way maps, and construction cost estimates. The Lee Drive

project involves the complete reconstruction of Lee Drive from Highland Road to Perkins Road. The proposed typical section extends approximately 1.7 miles and is a three-lane urban section with a left-turn center lane. The project goal was to improve vehicular traffic capacity

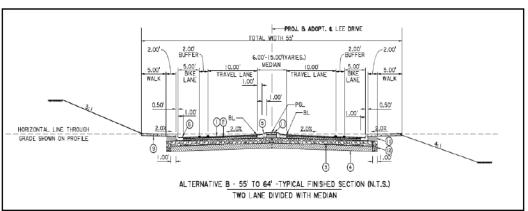


Figure: Proposed Typical Section Alternative on Lee Drive

and connectivity to all corridor users by delivering safe and efficient pedestrian/bicycle facilities while maintaining neighbourhood integrity. Improvements also include sidewalks and bike lanes, traffic signal upgrades, intersection capacity and safety improvements, and access management.

The design team gave special considerations to traffic and access maintenance, constructability, utility coordination and right-of- way requirements. Ensuring proper drainage during construction and overall drainage improvements was another major factor considered for the project.

Prime Consultant Name Here: Arcadis

Firm name	ARCADIS			Past Perfor	mance Evalu	ation Category(i	es)* Traffic	
Project name		y Blvd. Roundabo	out Interc		Firm responsibility (prime or sub?)			Prime
Project number	HSIP-0055-01	.(125)/109120-10	1000	wner's name	ne Mississippi Department of Transportation			
Project location	roject location McComb, MS – Lincoln County					Owner's Project Manager Mark B. Thomas, P.E.		
Owner's address	ss, phone, email	PO Box 1850 Jac	kson, MS	39215-1850, 6	501 359 1427	, mthomas@mo	lot.ms.gov	
Services comm	enced by this firm	(mm/yy) 0	9/22	Total consult	ant contract	cost (\$1,000's)		\$417
Services completed by this firm (mm/yy) Ongoing Cos			Cost of const	Cost of consultant services provided by this firm (\$1,000's)			\$417	
Describe the pr	oject including the	e firm's role and n	nembers i	involved. (Higl	nlight staff to	be used in this p	proposal.)	

Firm members involved: Akhil Chauhan, Ari Deitch, Skyler Waaso, Max Aguirre, Jonathan Reid

This project included conducting a traffic study of the I-55 at Brookway Boulevard interchange ramps and neighboring signals and cross streets and developing Phase A Final Right-of-Way Roadway Construction Plans. Prior to developing the roadway plans the traffic study was performed to assess to analyze the existing configuration and inform the design of roundabouts and associated improvements. The limits of the study included Brookway Boulevard from Depot Road to Magee Drive, and I-55 from Halbert Heights Road to W. Industrial Park Lane. Single and double lane roundabout configurations were developed and analyzed as part of this effort.

In developing the traffic study, the team collected traffic data including turning movement counts, conducting speed studies and geometric field checks, collecting travel times, and performing peak period observations. Travel time runs for roadway segments were conducted to calibrate microsimulation (VISSIM) models, using the "Average Car Method". Existing volumes were balanced, and future volumes developed using annual growth rates. From this data the existing, no-build, and build network analysis was conducted using calibrated microsimulation (VISSIM) models. The analysis results including the measures of effectiveness for delay, level of service and queue length were presented to MDOT and included in the final traffic study report. The study also included analyzing the safety of the existing, no build and build alternatives. Crash data was collected, analyzed and summarized in the report and a high-level safety analysis was performed to estimate the benefits on the proposed improvements. The study showed that the build alternative for the single lane roundabout alternative would:

- Reduce crashes by 4 per year
- Reduce the number of conflict points
- Eliminate crossing conflicts, which have a higher potential to result in injury crashes
- Reduce the southbound approach delay from 172.30 seconds/vehicle to 15.28 seconds/vehicle in the P.M. peak hour
- Reduce crashes by 17.8% for all crash types and severities

Roadway plans for the proposed improvements were also developed for this project. This work included development of Conceptual Plans, Field Inspection Plans and Final Right-of-Way plans inclusive of the

roadway design and roadway hydraulics for the interchange ramps, roundabouts at the ramp termini, and local roadway. These plans also include traffic control plans, lighting, signing, and pavement marking. The plans are currently in development using 3D design software.







Firm	name	ARCADIS			F	Past Performance Evalu					
Proje	ct name	Cross Bayou Brid	ge Replacemen	it		Firm responsibility (prime or sub?) Prime					
Proje	ct number	H.000413		Owner's na	ame	Louisiana Department of Transportation and Development					
Proje	ct location	Shreveport, L	A District 4			Owner's Pro	ject Manager	Hamed Babaizad	deh		
Owne	er's address	s, phone, email	1201 Capitol	Access Rd,	RM 60	2-L, Baton Rouge, LA 70	0802; 225.379.133	31			
Servi	ces comme	nced by this firm (mm/yy)	8/22	Total	Total consultant contract cost (\$1,000's)			\$2100		
				Cost	ost of consultant services provided by this firm (\$1,000's)			\$324			
Descr	ribe the pro	ject including the	firm's role and	members ii	nvolve	d. (Highlight staff to be	used in this prop	osal.)			

Firm's Role: Project Management, Feasibility Study Report, Site Visit, Right-of-way Determination, Environmental assessment, Hydraulic Analysis, Traffic study Preliminary Plans

Plans Preparation, Cost Estimation

Firm members involved: Osama Shahawy, Jose Rodriguez, Ari Deitch, Scott Brookhart

Project Information:

Arcadis provided all engineering and related services required for developing a comprehensive Stage 0 Feasibility Study, per the LADOTD Stage 0 Manual of Standard Practice. The study was conducted for bridge replacement on US 71 at Cross Bayou in Caddo Parish, Shreveport, LA.

Project Number	Recall Number	Latitude	Longitude	Existing Structure Type	Route	Crossing
H.000413	013500	32.518890	-9293.750700	LG Girder	US 71	Cross Bayou
п.000413	013510	32.519200	-9293.750700	LG Girder	US 7 1	Cross Bayou

Bridge and Roadway Evaluation and Design Alternatives - An in-depth analysis of structural and roadway approaches was performed to develop the most effective cost for bridge replacement land roadway improvement. Alternatives were developed per the ASHTO LRFD Bridge Design Specifications Manual and LADOTD Bridge Design and Evaluation Manual (BDEM).

Traffic Analysis / Alternative Development Traffic study was performed to establish existing and future conditions of the study area and to evaluate improvement alternatives that support the replacement of

bridge structures and enhance the operational efficiency and safety needs of the Market Street and Spring Street corridors. The proposed improvements for each alternative include improving traffic signal visibility and clarity of available and restricted vehicular movements, implementing alternative intersection types such as roundabouts, and enhancing pedestrian infrastructures.

Construction Cost Estimate: A cost estimate has been prepared for the alternatives using average cost information per the LADOTD Project Delivery Manual. The costs include construction, mobilization, and contingency. A benefit-to-cost ratio was calculated for each alternative to provide a meaningful comparison.

Recommendation: Replace existing bridges using prestressed concrete girder (LG 45). Using the LG 45 for superstructure replacement for both bridges will provide the following benefits: Fabrication cost reduction. Transportation cost saving due to lighter weight girder, The use of smaller crane size on the site, and Construction cost saving. Arcadi is currently working on LADOTD on developing Stage 3 Design and Stage 5 for replacing both bridges.

Relevant Services

- Feasibility Study
- Traffic Study and analysis
- Bridge and Roadway design Alternatives
- Construction Cost Estimate
- Benefits / Cost analysis



Firm name	BONTON ASSOCIATES			Past Performance Evaluation Discipline(s)*	Road		
Project name	Lee Drive (Highland Road-Perkins Road)			Firm responsibility (prime or sub?)	Sub		
Project number	City-Parish Project No. 20-CP-HC-0044 Owner's nan			e City of Baton Rouge/Parish of East Baton Rouge			
Project location	East Baton Rouge Parish, Louisiana			Owner's Project Manager	Jose Rodriguez, P.E.		
Owner's address, j	phone, email 8555 Unite	ed Plaza Blvd., B	aton Rouge, LA	70809, (504) 648-3600, justin.schexnayder@c	srsinc.com		
Services commenced by this firm (mm/yy) 02/21 Total consul			Total consultant	contract cost (\$1,000's)	\$168.2		
Services complete	d by this firm (mm/yy)	ongoing	Cost of consultar	nt services provided by this firm (\$1,000's)	\$168.2		

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

Firm's Role: Bonton Associates is responsible for conducting the existing drainage analysis, preparing existing drainage map(s), site investigations, develop proposed drainage network design, proposed drainage maps, and stormwater detention design associated with the preferred roadway alternative. Bonton Associates delineated existing and proposed watersheds resulting from proposed capacity improvements along Lee Drive. The Bonton team worked to accommodate proposed roadway improvements while minimizing upstream and downstream drainage impacts.

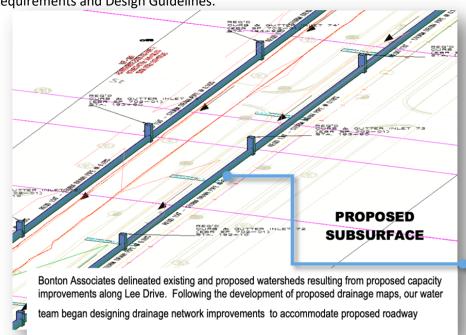
Firm Members Involved: LaDarien Beene, Kiran Gurung, Aaron Hargrove

The Bonton Team is conducting extensive coordination with Project Team to align the proposed roadway corridor improvements (and other design elements) with the proposed drainage network design and stormwater detention.

The Lee Drive (Highland Road-Perkins Road) project includes providing increased traffic capacity by widening the existing roadway to 3-lane section with two through lanes and a two-way left turn lane. Design components, such as sidewalk and ADA facilities, are incorporated to comply with the complete streets policy. All design components are developed in compliance with MOVEBR Consultant requirements and Design Guidelines.

Relevant Services

- Preliminary and Final Plans
- Stormwater
 Hydrologic/Hydraulic
 Analysis
- Drainage Network Design
- Watershed Delineation and Mapping
- Stormwater Detention
- Construction Cost Estimates



Firm name	BONTON ASSOCIATES			Pa	ast Performance Evaluation Discipline(s)*	Road	
Project name	Ardenwood-Lobell Connector Final Design			Fi	rm responsibility (prime or sub?)	Prime	
Project number	City-Parish Project No. 20-CP-HC-0017 Owner's name				East Baton Rouge Parish of Department of Transportation and		
					Drainage		
Project location	East Baton Rouge Parish,	Louisiana		Ó	wner's Project Manager	Fred Raiford	
Owner's address, j	phone, email 222 Saint L	ouis Street, 8th	n Floor, Baton Ro	uge	e, LA 225-389-3159 cohran@civilsolutio	nscgi.com	
Services commenced by this firm (mm/yy) 11/22 Total consulta			Total consultant	t contract cost (\$1,000's)		\$677.18	
Services complete				nt s	ervices provided by this firm (\$1,000's)	\$322.27	

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

Firm's Role: As the Project Prime, Bonton Associates is responsible for all roadway design elements and supporting details including developing roadway geometry for the proposed roadway corridor, intersection design, access management, sidewalk design, bicycle lane design, hydrologic and hydraulic analysis/design, mill/overlay, green infrastructure analysis/design, corridor/earthwork modeling, and road diet improvements/design.

Firm Members Involved: Marcus Bonton, LaDarien Beene, Kiran Gurung

As part of the MOVEBR program, Bonton Associates is preparing the final design plans for a new two-lane connector roadway between Ardenwood Drive and Lobdell Boulevard in Baton Rouge, LA. This new roadway will be part of the proposed Ardendale development and will provide increased traf-fic capacity, pedestrian facilities/connectivity, drainage improvements, green infrastructure, and access management.

In conjunction with the proposed roadway connector, other supporting analysis/design disciplines are involved to complete the overall design, including topographic survey, subsurface utility engineering, lighting design, traffic, geotechnical analysis, environmental/permitting, and landscaping. Design reports, design calculations and reports, preliminary and final construction

costs are submitted along with the design plans MOVEBR.

POST CONTROLLES SPORTS - VAND CONTROLLES SPORT

Relevant Services

- Preliminary and Final Plans
- Roadway Design
- Complete Streets Design
- ADA Design/Compliance
- Drainage Analysis & Design
- Green Infrastructure
- Access Management

to the City of Baton Rouge and

Firm name	BONTON ASSOCIATES			Pa	ast Performance Evaluation Discipline(s)*	Planning, Road	
Project name	Jones Creek Road (Jefferson Highway – Airline Highway)			Fi	rm responsibility (prime or sub?)	Sub	
Project number	City-Parish Project No. 19-CP-HC-0036 Owner's nam			East Baton Rouge Parish of Department of Transportation and			
				Drainage			
Project location	East Baton Rouge Parish,	Louisiana		Ó	wner's Project Manager	Alex Farr, P.E.	
Owner's address, j	phone, email 222 Saint L	ouis Street, 8th	n Floor, Baton Ro	uge	e, LA (225) 298-0800 tstephens@brgov.	com	
Services commenced by this firm (mm/yy) 03/21 Total consultant			Total consultant	contract cost (\$1,000's)		N/A	
Services completed by this firm (mm/yy) Q4 2024 Cost of consulta			Cost of consultar	nt s	ervices provided by this firm (\$1,000's)	\$57.7	

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

Firm's Role: Bonton Associates is responsible for developing the proposed drainage design, drainage plan and profiles sheets, and drainage map(s) in support of the design and construction of a new suburban four-lane roadway with complete streets facilities and green infrastructure elements. This work requires coordination and compliance with LADOTD and associated design guidelines for all design plan deliverables. Considerations for stormwater detention pond areas are also being developed.

In addition, extensive coordination is being conducted amongst the design team to align the proposed drainage the proposed roadway corridor and other elements design plans (plan & profiles, project quantities, quantity tables, details, specifications, cost estimates, etc.) over the course of the 30%, 50%, 60%, 90%, and 100% design milestones and submittals.

Firm Members Involved: LaDarien Beene, Kiran Gurung

Highway. The proposed roadway includes a four-lane boulevard with a shared use path on each side, roundabout, and intersection improvements.

Jones Creek Road is a proposed greenfield project connecting Tiger Bend Road and Airline Highway, crossing Jefferson

Relevant Services

- **Preliminary and Final Plans**
- Stormwater Hydrologic/Hydraulic Analysis
- Drainage Network Design
- Watershed Delineation and Mapping
- **Construction Cost Estimates**



Firm name	APS Softwaring and festing				Past Performance Evaluation Discipline(s)* Geotech		
Project name	I-10 Widening LA 415 to Essen LN				Firm responsibility (prime or sub?)		b
Project number	H.004100 Owner's name				Louisiana Department of Transformation and Development		
Project location	Baton Rouge				wner's Project Manager	Kri	sty Smith, P.E.
Owner's address, p	phone, email 1201 Capito	ol Access Road	, Baton Rouge, LA	4 70	0802, (443) 822-5379-1016, Kristy.Smith@	وla.إ	gov
Services commenced by this firm (mm/yy) 09/19 To			Total consultant contract cost (\$1,000's)			N/	A
Services complete	Services completed by this firm (mm/yy) 05/23 Cost of cons				ervices provided by this firm (\$1,000's)	\$4	00

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

Firm's Role: Geotechnical Investigation

Firm Members Involved: Sergio Aviles, Sairam Eddanapudi

Geotechnical investigation to provide client with the necessary information for planning and design I -10 widening. A P S was tasked thru our DOTD geotechnical retainer to drill and sample a total of 52 deep borings starting at the Washington exit and ending at the Isu lakes. Along with this drilling and sampling A P S will also test for strength and engineering characteristics of the soil s. A total of eight (8) over the water borings and 44 I and borings with approximate 1000 triaxial compression, unconsolidated drained or undrained limits.





Relevant Services

- Geotechnical Explorations (GE)
- Topographic Survey (LC)
- Contract Management (CM)

Firm name	APS ingracering and Testing			Past Performance Evalu	nation Discipline(s)	* Geotech	
Project name	US-90 Railroad Overpass	(S. East of LA-	85)	Firm responsibility (pri	Firm responsibility (prime or sub?)		
Project number	H.010155		Owner's name	Shread-Kurykendall & Associates, Inc			
Project location	Iberia Parish		Ov	vner's Project Manager	Nicci D.	Gill	
Owner's address,	phone, email 13016 Justi	ce Ave., Bator	n Rouge, LA 7 0816/ 2	25.296.1335/ ngill@skanger.cor	n		
Services commend	Services commenced by this firm (mm/yy) 11/19			ntract cost (\$1,000's)	N/A		
Services complete	d by this firm (mm/yy)	12/23	Cost of consultant services provided by this firm (\$1,000's)				

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

Firm Members Involved: Sergio Aviles, Sai Eddanapudi, Surendra Raj Pathak

APS Geotechnical Investigation aimed to equip the client with essential information for the planning and design of a 12 ft. x 10 ft. Reinforced Concrete Box (RCB), spanning 412 ft. A PS team drilled a total of twelve (12) borings, each reaching a depth of 120 ft. Undisturbed samples were consistently obtained from the ground surface to a depth of 20 feet, and thereafter at five (5) feet intervals. A laboratory testing program, conducted in-house by the PS laboratory, determined pertinent engineering characteristics of the subsurface materials. This program included visual description and classification, as well as the determination of moisture content. APS team performed over 60 Atterbergs and Unconfined Uniaxial Strength (UUS) tests, along with 18 consolidation tests.

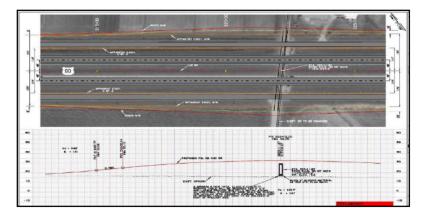
Relevant Services

- Geotechnical Explorations (GE)
- Geotechnical Design (GD)
- Geotechnical Construction (GC)
- Constructability
- Contract Management (CM)

The geotechnical report, generated by APS, encompassed MSE wall embankment settlement, stability analysis, pile capacity analysis, and provided design and general construction recommendations.







Firm name	APS Engineering and Testing				Past Performance Evalua Discipline(s)*	Geotech		
Project name	Comite River Div	ersion Br	idge at LA-67,	LA-19 and LA-19	Firm responsibility (prime or sub?) Sub			
Project number	H.001352; H.002	22 7 3		Owner's name	iates, Inc.			
Project location	East Baton Roug	e, LA			Owner's Project Manager			tles III, P.E.
Owner's address, p	phone, email 92	22 West D	on't des Mou	ton Rd,. Lafayette	, LA 7 050 7 / 33 7 .2	64.3 7 98/ tgattle@huvalass	soc.com	
Services commenced by this firm (mm/yy) 11/19			Total consultant	Total consultant contract cost (\$1,000's)				
Services complete	· · · · · · · · · · · · · · · · · · ·				Cost of consultant services provided by this firm (\$1,000's)			

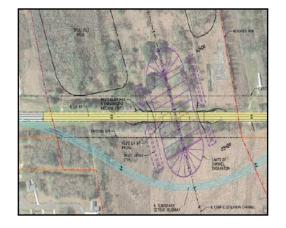
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

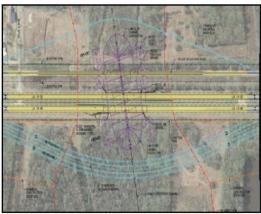
Firm Members Involved: Sergio Aviles, Sai Eddanapudi, Surendra Raj Pathak

APS provided the necessary information to plan and construct the LA-19 RR Bridge. The assessment covered slope stability (embankment), settlement and retaining wall of the LA-19 RR Bridge, PPC piles for the LA-19 Twin Bridges, and drilled shafts for the LA-67 Bridge. A PS team drilled and sampled a total of 19 borings, ranging between 50 ft. and 110 ft. in depth. APS laboratory, inhouse, conducted testing on collected soil samples. The testing schedule included visual classification as well as standard methods for determining moisture content, liquid limit, plastic limit and plasticity, unconsolidated-undrained triaxial compression, and one-dimensional consolidation.

Relevant Services

- Geotechnical Explorations (GE)
- Geotechnical Design (GD)
- Geotechnical Construction (GC)
- CMAR
- Constructability
- Contract Management (CM)









Sections 18-19



I-285 Riverside Drive project in Sandy Springs, Georgia

The Arcadis team has the precise experience in designing skewed and/or non-traditionally shaped roundabout intersections. At off-set intersections, roundabouts can be used to better align approach legs left of center to the roundabout, which leads to improved fastest-path speed control and lane alignments, improving roundabout safety and operations.



LADOTD has identified the need to widen LA 44 from two to four lanes from the north of Panama Canal to the shopping center south of Pelican Point Parkway, including a dual lane roundabout at Pelican Point. Arcadis understands our role to improve provide roadway, drainage, pavement markings, signing and transportation management plan while minimizing environmental and right-of-way (ROW) impacts throughout the study corridor. The project will include the assessment and replacement of a bridge over Panama Canal, which will include the hydraulic analysis and drainage on the structure, within the project limits.

Arcadis has assembled a highly qualified team, complemented by Bonton Associates for drainage design and APS for geotechnical services. This multidisciplinary team is led by **Project Manager Jose Rodriguez**, **PE** who is experienced on similar projects. Jose is prepared to work in partnership with LADOTD to deliver a complete, economical, and constructable project. Our primary goal is to develop a design that balances roadway safety and operations, structural, environmental, and hydraulic site constraints to produce the best value for LADOTD.

There are inherent challenges in designing and constructing dual lane roundabouts, including proper lane alignment and guidance such that motorists unfamiliar with dual lane roundabouts can safely enter and exit the roundabout without changing lanes within the roundabout. Challenges in bridge replacements over water include obtaining environmental permits, maintenance of traffic, utility coordination and FEMA coordination.

Our approach and strategy for successful delivery will be defined by proper roadway and roundabout design strategies that minimize and optimize traffic management during construction as well as develop strategies for the bridge replacement while minimizing the roadway profile change, ROW and environmental impacts and traffic disruptions. Early and continuous coordination between the design team and all pertinent stakeholders, including LADOTD, is critical to both making design alternative selections and keeping the project on schedule.

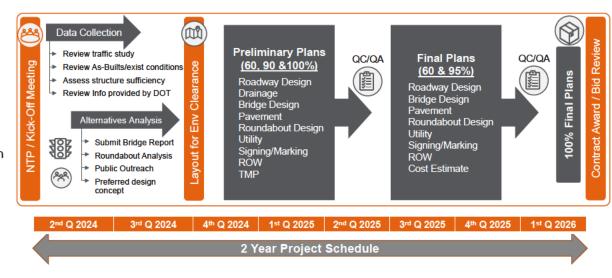


Upon selection, Arcadis will work with the LADOTD Project Manager to develop the full contract scope and develop a manhour estimate spreadsheet as well as a delivery schedule. This early coordination ensures that Arcadis and LADOTD have a full understanding of the project goals, deliverables, and expectations. Once hours and scope are agreed upon and a NTP is issued, a team project kickoff meeting will be held to review the project scope, critical delivery items, dates for milestone deliverables, and LADOTD review time estimates. The project design criteria, identified environmental constraints, and safety concerns will also be reviewed and documented, including any review of LADOTD services to be provided. Kick-off meeting minutes will be documented and distributed to all key team personnel.

After receiving the NTP, the Project Manager and task leads will meet with the LADOTD PM to mutually agree on the deliverables, procedures, and communication protocols. After collecting data, our team, in conjunction with LADOTD, will identify any required permits as well as any construction constraints due to site access issues. We will develop the Design Criteria in accordance with all applicable LADOTD policies, procedures, and manuals and submit to the LADOTD Project Manager for review and approval.

APPROACH TO PROJECT DELIVERY AND SCHEDULE:

Our Team will present the project design schedule for major work items at the kick-off meeting. We will provide a full detailed schedule with all dates and details for critical path tasks and deliverables and the milestone that constitutes each of the design submittals to the Department. Our proposed 730 -day schedule is illustrated in the figure below.





PUBLIC INVOLVEMENT

While the LADOTD will be responsible for the public engagement, we anticipate actively participating in the planning and execution of the public involvement for this project. Our typical public engagement plan consists of a community survey available during any public engagement or focus group meeting, then an open house forum to communicate priorities and project alternatives as defined though the process. This structure allows for multiple methods of engagement to ensure members of the community have ample opportunities to provide feedback and for the team to gather as much feedback as possible from targeted stakeholder groups including impacted communities and landowners.

We have significant public involvement experience for similar roundabout projects, beginning with educational experience for those unfamiliar with multi-lane roundabouts or apprehensive about operations or applicability of the design for this given location. For past projects, our team has developed: project sketches and concepts for many roundabout projects; GIS mapping and visualizations of the study area at the public meetings and external communications; animated traffic operation visualizations using VISSIM and Studio 3DS Max to demonstrate the operations of alternatives.



ROUNDABOUT CONCEPTS

Arcadis conducted an initial site assessment and review of the concept plan in order to determine the proposed roundabout at LA 44 and Pelican Point parkway will be a key first decision for this project. The concept plan shows the roundabout on LA 44 at Pelican Point Parkway, serving the Pelican Point residential community and Pelican Point Golf & Country Club west of LA 44, is only 250 feet south of the intersection of LA 44 and Pelican Crossing Drive, serving the Pelican Crossing residential community east of LA 44. In parallel, stakeholder communications and meetings will be held with both communities to discuss planning and operational analysis of the proposed roadway and intersection conditions. Arcadis will present to the LADOTD for consideration combining these closely spaced intersections into one multilane roundabout serving both residential communities.

A sketch below is included as a potential skewed intersection approach to combine Pelican Point Parkway and Pelican Crossing Drive into one multilane roundabout.



Potential design combining Pelican Point & Pelican Crossing Approaches into LA 44 Roundabout

Another variation to combine these two approaches would be a "peanut" shaped roundabout design that would center the roundabouts tangent to the two approaches but channel the roadway in between to control speeds for each approach. Arcadis has developed this type of roundabout across the country as well as the one shown below in Georgia.



"Peanut-shaped" roundabout Arcadis developed for GDOT

TRAFFIC ANALYSIS

The Arcadis team understands the importance of documenting the existing conditions as part of Stage 0 and using that understanding to estimate impacts to traffic during construction. Our approach to traffic analysis will require evaluation of all pertinent traffic and, roundabout analysis data as well as key information from the Roundabout Justification (LA 44 RJR_I-10 LA 22) report to determine the best fit design. We anticipate that the Tier 1 process will screen potential bridge replacement sequences to determine high-level impacts to the traffic network. Additionally, Arcadis will perform the required level of analysis to justify permanent roadway improvements. All of this combined data will be used as the basis for the Transportation Management Plan (TMP).



TRANSPORTATION MANAGEMENT PLAN (TMP)

Arcadis will develop a Level 3 TMP in accordance with LADOTD EDSM VI.1.1.8. We understand the importance of the TMP document to minimize impacts of construction on the traveling public without compromising site safety or work quality. This goal will be achieved through public and motorist information/outreach strategies, work zone impact management strategies, incident management, construction strategies, and clearly defining the project team's roles and responsibilities. Arcadis will work closely with the LADOTD District Traffic Operations Engineer and Project Engineer during the development of construction phasing / sequencing alternatives to better understand the potential impacts of temporary closures / detours and select appropriate mitigation strategies.



When designing a roundabout, it is essential to prioritize drainage considerations to maintain a functional and safe roadway. To achieve these goals, the Arcadis team will design the Pelican Point Parkway longitudinal grades and cross slopes in the roundabout to diverge water away from the roundabout lanes and provide positive drainage. The drainage team will strategically position inlets and catch basins as required, considering these drainage structures' capacity to capture and manage peak flow during intense rainfall. We will also implement erosion control measures, such as riprap or grass-lined channels, to prevent soil erosion around the roundabout. Our roadway engineers will collaborate closely with drainage

engineers to integrate roadway line and grade requirements with drainage considerations into the overall roundabout design.

The Arcadis design team will review the findings and information provided in the RJR and use it as the basis for the initial roundabout design. For the Pelican Point Parkway roundabout, maintaining access to existing properties will be carefully planned to minimize disruption to residential driveways. The Arcadis design team will also ensure that the proposed roundabout accommodates larger turning paths for vehicles entering and exiting, incorporating additional truck aprons or lane width where necessary and considering the unique characteristics of the location to aim to create a safe, efficient, and aesthetically pleasing traffic management solution.



BRIDGE DESIGN & EVALUATION

Arcadis performed an initial desktop assessment of the bridge over Panama Canal along LA 44 (Structure No. 610302650102371). Based on the December 2022 inspection, the deck, superstructure and substructure are in good condition requiring minor repair. Based off the bridge construction date of 2008 and the bridge condition information, latex overlay on the existing deck may be considered based on the friction number provided by the LADOTD. If replacement of the bridge is under consideration, Arcadis will explore the option of using LG-PPC Girders supported on PPC piling.

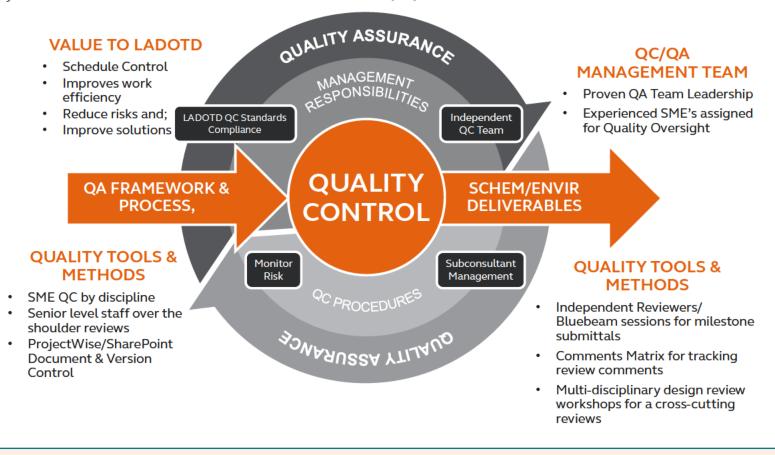
Upon selection, Arcadis will take these initial desktop review considerations and perform an in-depth evaluation of the existing bridge including a review of existing information provided by the LADOTD, an in-field inspection of all the elements of the bridge, and an LRFR load rating of the existing bridge evaluating the structure per the recommendations of the Department Bridge Design Manual and the AASHTO Manual for Bridge Evaluation. Following this evaluation, the Arcadis team will submit a Bridge Evaluation Report to the LADOTD for review. Upon approval of the evaluation report, Arcadis will request a meeting to discuss the most appropriate solution for the bridge.

Arcadis will develop the Preliminary Plans on the preferred alternative and approval of our design criteria. The Preliminary plans will include proposed geometric alignments, a viable bridge structure, minimizing impact on the public during staged construction, assessing potential detours, and ensuring the safety of both pedestrian and vehicle traffic. Arcadis will attend the scheduled Plan-in-hand meeting with the LADOTD Project Manager, the Bridge Design Section, and the DOTD District for a review of the plans, and comments responses before proceeding with Final Preliminary Plans.

The Arcadis Bridge Design team will develop detailed bridge construction plans for both, the substructure, and the superstructure of the bridge. After the submission and approval of the 60% Final Plans, the Arcadis team will move on to producing the 90% Advanced Check Prints, initialize the bridge load rating report, and the final QC/QA checklist, and complete the Constructability Form. The Project Manager will schedule the 98% Final Plans Review meeting. Additionally, the Arcadis team will prepare the As-Designed Load Rating for the structure following the latest LADOTD guidelines and procedures. During this time, Arcadis will prepare the final construction cost estimate, final pay items list, Summary of Quantities, and any special provision for the project.

QUALITY CONTROL / QUALITY ASSURANCE

A final key to project success is quality control. Arcadis has internal quality control processes and procedures we follow throughout the life of the project. Anup Shah, PE, SE has extensive years of experience performing QC/QA plan and calculation reviews for multiple state DOTs including LADOTD and will lead Arcadis' QC/QA team. The Arcadis QC/QA team will ensure every document and design submittal is reviewed for technical accuracy, quality of deliverable and correctness in plan preparation. A copy of our Quality Control / Quality Assurance Plan is attached with this proposal.



WHY ARCADIS? The Arcadis Team brings years of successful experience delivering the full scope of services for bridge evaluation and replacement projects. We have extensive LADOTD experience developing roadway and traffic engineering projects following the Roadway Design Manual and Bridge Design Manual. Our dedicated roundabout experts will contribute their national expertise to assist our local team in selecting an optimal roundabout geometry that balances safety, efficiency, and functionality. Our staff is familiar with the expectations and preferences of the LADOTD, and the approach discussed here will guide us in meeting those expectations and working collaboratively with the LADOTD, at every aspect of our work for this contract.

Prime Consultant Name Here: Arcadis

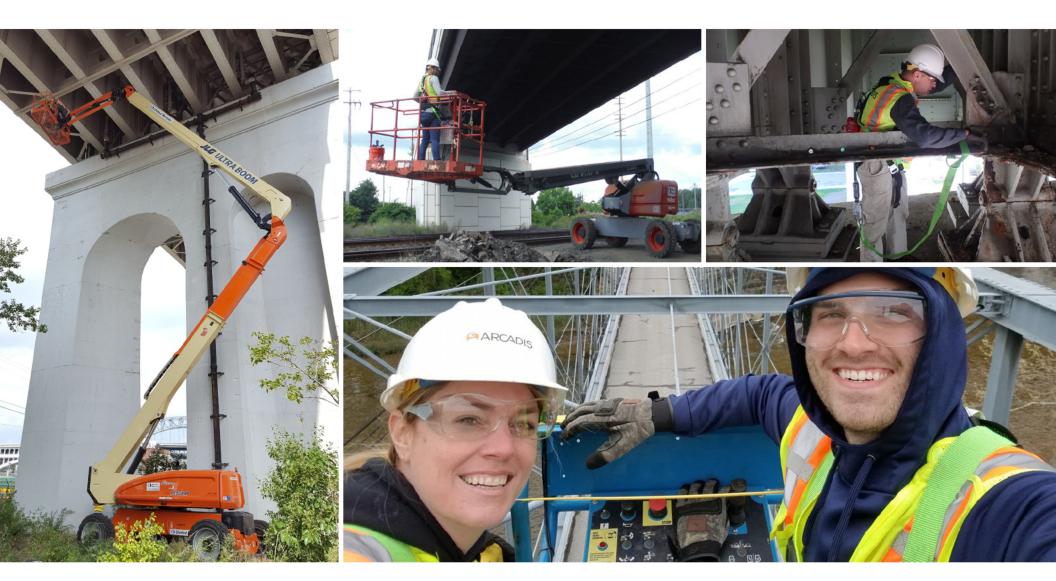
19. Workload:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
		4400009703 / H.000688.2	US 11 Norfolk Southern Railroad	\$3,008
		4400007175 / H.011328.2	I-49 South (Ricohoc to Berwick)	\$886,523
		4400019338 / Multiple State	Rural Bridge Replacement Initiative Phase II – Multiple State	\$81,772
		Project Numbers	Project Numbers – Districts 02, 03, 07, 61, and 62	
		4400009281 / H.009932	US 80 Widening: Vancil Road to Well Road EA	\$5,343
		4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	\$44,452
		4400025022 / H.015498.5	Park Road Over Lagoon	\$35,000
		Recall 102225		
		4400025022 / H.015500.5	Adema Lane Over Drainage Canal	\$41,762
	Environmental	Recall 103011		
		4400025022 / H.015499.5	Charles Drive Over 20 Arpent Canal	\$58,503
ARCADIS		Recall 000023		
		4400025022 / H.015334.5	9th Street Over St. Louis Canal	\$58,681
		Recall 200851		
		4400025022 / H.015497.5	Jack Egle Bridge Road Over Canal	\$30,000
		Recall 020146		
		4400025022 / H.015496.5	Sauvage Avenue And Caddy Drive Bridges	\$30,000
		Recall 100019		
		4400025022 / H.015496.5	Sauvage Avenue And Caddy Drive Bridges	\$30,000
		Recall 100020		
	Traffic	4400007175 / H.011328.2	I-49 South (Ricohoc to Berwick)	\$106,064
		4400018646 / H.004100.5	I-10: LA 415 to Essen Lane on I-10 and I-12	\$59,982
		4400017033 / H.005121	LA 1/LA 415 Connector	\$5,363
		4400019379 / H.013797	LA 30: EBR PL – I-10	\$232,048
		4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	\$120,020
		4400023690 / H.015213.5	District 04 Pedestrian Safety Improvements	\$116,365
		4400021325 / H.012837.5	I-10 New Orleans Master Plan	\$262,398
	Road	4400007175 / H.011328.2	I-49 South (Ricohoc to Berwick)	\$291,484
		4400016923 / H.012901.6,	US 90Z (Bodenger Blvd. – Stumpf Blvd.)	\$210,848
		H.010634.6		4
		4400019010 / H.010116.5	LA 1088: Soult and Trinity Roundabouts	\$70,778
		4400024084 / H.009300.5	CMAR Contract for Hooper Road Widening (LA 3034 – LA 37)	\$36,665
		4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	\$57,787
		4400018646 / H.004100.5	I-10: LA 415 to Essen Lane on I-10 and I-12	\$110,290

		4400025022 / H.015498.5	Park Road Over Lagoon	\$45,000
		Recall 102225		
		4400025022 / H.015497.5	Jack Egle Bridge Road Over Canal	\$40,000
		Recall 020146		
		4400025022 / H.015496.5	Sauvage Avenue And Caddy Drive Bridges	\$40,000
		Recall 100019		
		4400025022 / H.015496.5	Sauvage Avenue And Caddy Drive Bridges	\$40,000
		Recall 100020		
		4400025022 / H.015498.5	Park Road Over Lagoon	\$68,603
ARCADIS		Recall 102225		
		4400025022 / H.015497.5	Jack Egle Bridge Road Over Canal	\$62,067
	Bridge	Recall 020146		
		4400025022 / H.015496.5	Sauvage Avenue And Caddy Drive Bridges	\$62,540
		Recall 100019		
		4400025022 / H.015496.5	Sauvage Avenue And Caddy Drive Bridges	\$62,466
		Recall 100020		
		4400018646 / H.004100.5	I-10: LA 415 to Essen Lane on I-10 and I-12	\$23,219
		4400021325 / H.015193.1	LA 22: Tchefuncte Bridge Feasibility	\$180,253
	CE&I/OV	4400025046 / H.013710.6	I-10: US 61 to LaPlace ITS Deployment (CE&I)	\$30,066
	CERITOV	4400025665 / H.013482.6	D15498.5 Park Road Over Lagoon \$68, D15497.5 Jack Egle Bridge Road Over Canal \$62, D15496.5 Sauvage Avenue And Caddy Drive Bridges \$62, D15496.5 I-10: LA 415 to Essen Lane on I-10 and I-12 \$23, D15193.1 LA 22: Tchefuncte Bridge Feasibility \$180, D13710.6 I-10: US 61 to LaPlace ITS Deployment (CE&I) \$30, D13482.6 I-10 WBR Queue Warning System \$419, D12837.5 I-10 New Orleans Master Plan \$46, D15316.1 I-10 US 90 Bus. to Elysian Fields (NO) \$18, D13868.5 ITS Program Management and Operations (2023) \$381, D13868.6 (A) ITS Routine Maintenance Engineering and Inspection (ME&I) \$308, C13868.6 (B) ITS Responsive/Emergency Maintenance Engineering and \$98, Inspection (ME&I) \$98,	\$419,812
	Data Collection	4400021325 / H.012837.5	I-10 New Orleans Master Plan	\$46,306
	Data Collection	4400021325 / H.015316.1	I-10 US 90 Bus. to Elysian Fields (NO)	\$18,833
		4400016811 / H.013868.5	ITS Program Management and Operations (2023)	\$381,389
	ITS	4400016811 / H.013868.6 (A)	ITS Routine Maintenance Engineering and Inspection (ME&I)	\$308,301
			(2023)	
		4400016811 / H.013868.6 (B)	ITS Responsive/Emergency Maintenance Engineering and	\$98,062
			Inspection (ME&I)	
<u>+</u>		4400091011/ H.001271.5	Retainer Contract for Geotechnical Services- Cane River Bridge	_
APS Engineering and Testing	Geotech	4400017262/ H.012027	I-20: Union Pacific RR Overpass	\$61,644
		4400017262/ H.012545	Wiggins Bayou Bridge	\$14,646
BONTON ASSOCIATES	Road	4400023782 / H.013429.5	Downtown Thibodaux Sidewalks Entity Contract	\$6,975



Sections 20-23



Arcadis provides in-depth bridge design, inspection and evaluation services under one roof and throughout the U.S.

20. Certifications/Licenses:

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

CERTIFICATIONS		ARCADIS											APS (DBE)		BONTON ASSOCIATES (DBE)		
		Anup Shah	Jose L. Rodriguez	Victor Sanchez	Ari Deitch	Jonathan Reid	Skyler Waaso	Kester Hollier	David Fulks	Thomas Montz	Max Aguirre	Jose M. Rodriguez	Christine Dohy	Sergio Aviles	Surendra Pathak	Marcus Bonton	LaDarien Beene
Meeting Minimum Personnel Requirement	1	2	3	4, 5	6												
DBE Certification															•		•
Professional Engineer (LA)	•	•	•	•	•		•	•	•	•	•			•	•	•	•
Structural Engineer		•															
Professional Traffic Operations Engineer	•				•	•	•	•		•							
Professional Transportation Planner	•				•					•							
Road Safety Professional					•	•					•	•					
Project Management Professional	•																
ATSSA – Traffic Control Technician											•			•			•
ATSSA – Traffic Control Supervisor											•				•	•	•
LADOTD TEPR – Module 1	•				•	•	•	•		•	•	•				•	•
LADOTD TEPR – Module 2	•				•	•	•	•		•	•	•				•	•
LADOTD TEPR – Module 3	•				•	•	•	•		•	•	•				•	•
Roundabout Design Workshop	•								•	•							
Roundabout Analysis Workshop – SIDRA Intersection 6	•									•							
NHI Course No. 380075 – New Approaches to Highway Safety Analysis	•																
NHI Course No. 133121 – Traffic Signal Design and Operation	•				•												
FHWA NHI Course No. 130056 – Safety Inspection of In-Service Bridges for Professional Engineers													•				
FHWA NHI Course No. 130078 – Fracture Critical Inspection Techniques for Steel bridges													•				
FHWA – NHI Course No. 380071 – Interactive Highway Safety Design Model (IHSDM)	•																
FHWA – NHI Course No. 133078 – Access Management, Location and Design	•									•							
DOTD – Highway Safety Manual Workshop					•				•								
Louisiana Local Technical Assistance Program – Louisiana's Complete Street Peer Exchange	•																
LADOTD – Using Statistics in Highway Safety	•																



LOUISIANA PROFESSIONAL

ENGINEERING & LAND SURVEYING BOARD

(LAPEL

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

www.lapels.com

Mr. Akhilendra Singh Chauhan

License/Certificate Type - Number

Expiration Date

PE.0033703

09/30/2024

Status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.



Transportation Professional Certification Board Inc.

certifies that

Akhilendra Singh Chauhan

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Unless withdrawn by the Certification Board this certificate number 2544 issued in Washington, D.C. is subject to the provisions for renewal November 24, 2008

Steven D. Hofener



Terms Wyhler Executive Director

Transportation Professional Certification Board Inc.

certifies that

Akhilendra ≶ingh Chauhan

has met all of the requirements established by the Cortification Board to use the title of

PROFESSIONAL TRANSPORTATION PLANNER

Unless withdrawn by the berlification Board this certificate number 246 issued in Washington, D.C. is subject to the provisions for renewal December 1, 2009

Steven O. Hopener







National Highway Institute



Certificate of Training

Akhil Chauhan

has participated in

NHI Course No. 142005 - NEPA and Transportation Decision Making

hosted by

LA DOTD/LTRC

Date: May 28-30, 2014
Location: Baton Rouge, LA

Instructor Valerie Hours of Instruction: 18

LOCAL COORDINATOR

Richard Barnaby, Director



National Highway Institute

Certificate of Training Akhil Chauhan

has participated in

FHWA - NHI Course No. 380071 -Interactive Highway Safety Design Model (IHSDM)

hosted by

Louisiana Department of Transportation and Development

Date: May 9-10, 2012

Location: Baton Rouge, LA

Michael Demaruta

Instructor

Hours of Instruction: 12

Hours of Instruction: 12

Local Coordinator

Richard Barnaby, Director National Highway Institute



National Highway Institute

Certificate of Training Akhilendra Chauhan

has participated in

NHI Course No. 380075 – New Approaches to Highway Safety Analysis

hosted by

LA DOTD/LTRC

Date: October 9-11, 2012 Location: Baton Rouge, LA

Locusion. Batoli Rouge, LA

Instructor Jay Jas

Hours of Instruction: 18

Allogin H. Fandry
Local Coordinator

Richard Barnaby, Director National Highway Institute



National Highway Institute

Certificate of Training

AKHIL CHAUHAN

has participated in

FHWA-NHI-133121 Traffic Signal Design and Operation

LA DOTD/LTRC

Date: August 16-17, 2017

Location: Baton Rouge, LA

Instructor

Hours of Instruction: 11

Allison H. Landry Local Coordinator

Valerie Briggs, Director National Highway Institute



National Highway Institute

Certificate of Training

Akhil Chauhan

has participated in

FHWA - NHI Course No. 133078 Access Management, Location and Design (3 day)

LA DOTD/LTRC

Date: January 6-8, 2015

Locations Baton Danas L

Cha Hoffman Instructor

Jone Jamest

Hours of Instruction: 18

Allorn H. Landry

Valerie Briggs, Director National Highway Institute

Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date: Location: June 4, 2018

Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4





Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report Module 2

June 11, 2018

Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4



Certificate of Completion

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report Module 3

September 10, 2018 Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3









Introduction to Travel Forecasting FHWA Resource Center



Course: Introduction to Travel Forecasting

Offered by: FHWA Resource Center

Date: April 26, 2011

Contact Hours: 7

Student: Akhil Chauhan

Instructors: Eric Pihl and Jeff Frkonja, FHWA Resource Center



Certificate of Attendance

USING STATISTICS IN HIGHWAY SAFETY

PRESENTED BY

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TO CERTIFY THAT

Akhil Chauhan

HAS SATISFACTORILY COMPLETED 6 HOURS OF TRAINING

Dr. Helmut Schneider

Mighway Safety Remarch Group





LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

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

Mr. Anupam Dinesh Shah

License/Certificate Type - Number PE.0046446

Expiration Date 09/30/2024

status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

F------



STATE OF GEORGIA

BRAD RAFFENSPERGER, Secretary of State
State Board of Registration for Professional Engineers and
Land Surveyors

LICENSE NO.

SE000835

- Anupam Shah

51/10 Golden Leaf Court Ellicott City MD 21043

Structural Engineer

EXP DATE - 12/31/2024 Status: Active Issue Date: 02/11/2021



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

(LAPELS)

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

Mr. Jose Luis Rodriguez

License/Certificate Type - Number

Expiration Date

PE.0030492

03/31/2025

Status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

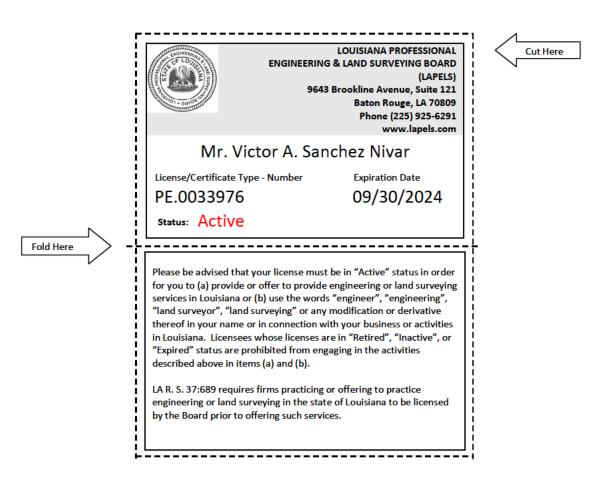
LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.





LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/5/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:



Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer

All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.



LOUISIANA PROFESSIONAL

ENGINEERING & LAND SURVEYING BOARD
(LAPELS)

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

www.lapels.com

Mr. Ari J. Deitch

License/Certificate Type - Number

Expiration Date

PE.0041842

03/31/2024

Status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Transportation Professional Certification Board, Inc.

certifies that

Ariel Jacob Deitch

has met all of the requirements established by the Certification Board to use the title of

Professional Transportation Planner

unless withdrawn by the Certification Board and subject to the provisions for renewal.

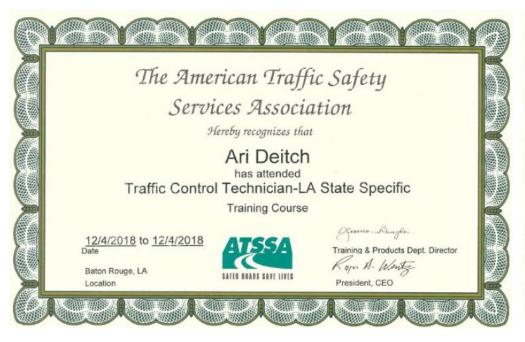
Certificate number 600 issued in Washington, DC, USA

07/17/12019













Transportation Professional Certification Board, Inc.

certifies that

Ari Jacob Deitch

has met all of the requirements established by the Certification Board to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 87 issued in Washington, DC, USA

12/2/12018







Transportation Professional Certification Board, Inc.

certifies that

Ariel Jacob Deitch

has met all of the requirements established by the Certification Board to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal. Certificate number 4846 issued in Washington, DE, USA







U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

ARI DEITCH

has participated i

FHWA-NHI-133121 Traffic Signal Design and Operation

LA DOTD/LTRC

Date: Augu Location: Bato

August 16-17, 2017

Baton Rouge, LA

2 Mist

Instructor

Hours of Instruction: 11

Local Coordinator

Valerie Briggs, Director National Highway Institute

Page 33 of 261

Prime consultant name: Arcadis

Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report Module 1

Location:

July 16, 2018

Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2





Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report Module 2

July 23, 2018 Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3



Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report Module 3

October 15, 2018 Date: Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3



Transportation Professional Certification Board, Inc.

certifies that

Jonathan David Reid

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Unless withdrawn by the Certification Board this certificate number 1588 issued in Washington, D.C. will remain valid for three years from March 22, 2005







Congratulations! Jonathan Reid

You have completed

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

Date: April 27-28, 2023

Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 8.50

Authorized Instructor





LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

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

Mr. Skyler James Waaso

License/Certificate Type - Number

Expiration Date

PE.0039070

09/30/2024

status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Transportation Professional Certification Board, Inc.

certifies that

Skyler James Waaso

has met all of the requirements established by the Certification Board to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal. Certificate number 4600 issued in Washington, DC, USA

3/27/19





Certificate of Completion

Skyler Waaso

for completing the

Traffic Engineering Analysis Process & Report Module 1

July 16, 2018 Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 2





Certificate of Completion

presented to

Skyler Waaso

for completing the

Traffic Engineering Analysis Process & Report Module 2

July 23, 2018 Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3





Certificate of Completion

Skyler Waaso

for completing the

Traffic Engineering Analysis Process & Report Module 3

October 29, 2018 Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3





LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

LAPELS

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

Mr. Kester Berk Hollier

License/Certificate Type - Number

Expiration Date

PE.0034304

03/31/2025

Status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Transportation Professional Certification Board Inc.

certifies that

Kester Berk Hollier

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 392.8 issued in Washington, D.C., U.S.W.

November 18, 2015







Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report Module 1

July 16, 2018 Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2



Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report Module 2

July 23, 2018

Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs), Awarded: 3



Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report Module 3

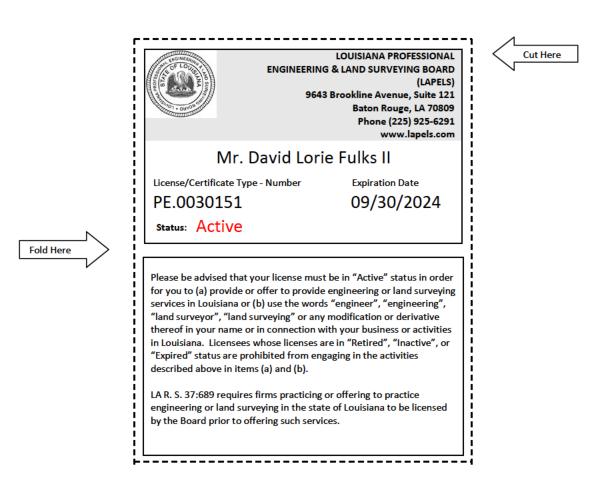
Location: Baton Rouge, Louisiana

October 15, 2018

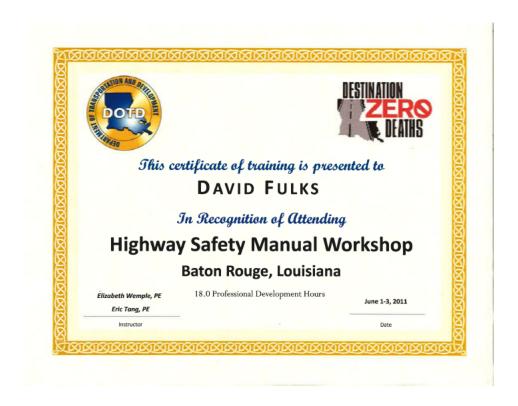
Professional Development Hours (PDHs) Awarded: 3

Authorized instructor





Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.





CERTIFICATE OF COURSE COMPLETION

This certifies that **David Fulks** has completed

ROUNDABOUT DESIGN WORKSHOP

Hours of Instruction: 13

Location: Baton Rouge, Louisiana

Date: September 10th & 11th, 2013

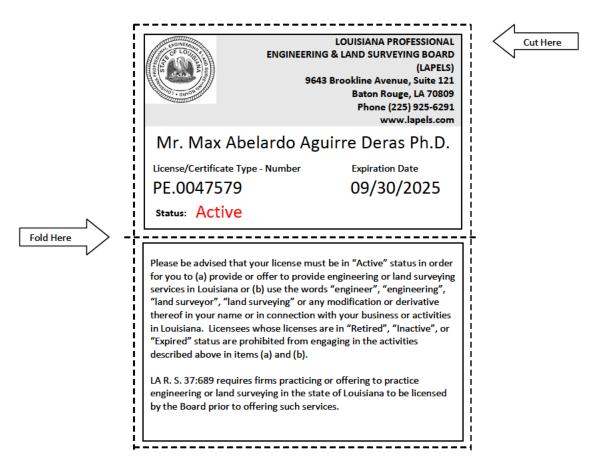
Howard McCulloch, P.E., NE ROUNDABOUTS

Howard Mchelloch



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/5/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:



Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer

All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

Transportation Professional Certification Board, Inc.

certifies that

Max Aguirre

has met all of the requirements established by the Certification Board to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Gertificate number 636 issued in Washington, DC, USA

8/8/2021

Lldeval ZSnyder Deborah Snyder Chair









Certificate of Completion

presented to

Max Aguirre

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date: January 29, 2020

Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5









Certificate of Completion

presented to

Max Aguirre

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: January 29, 2020

Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 3.5

Authorized Instructor



Authorized instructor



Certificate of Completion

presented to

Max Aguirre

for completing the

Traffic Engineering Analysis Process & Report Module 3

Date: January 30, 2020

Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor









LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)

> 9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291

www.lapels.com

Mr. Thomas Jude Montz Jr.

License/Certificate Type - Number

Expiration Date

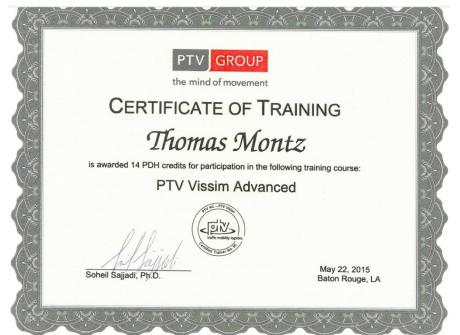
PE.0039128

09/30/2024

Status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.



Transportation Professional Certification Board, Inc.

certifies that

Thomas Jude Montz, Ir.

has met all of the requirements established by the Certification Board to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 4098 issued in Washington, DC, USA

7/18/2016







Transportation Professional Certification Board, Inc.

certifies that

Thomas Jude Montz, Jr.

has met all of the requirements established by the Certification Board to use the title of

Professional Transportation Planner

unless withdrawn by the Certification Board and subject to the provisions for renewal. Certificate number 599 issued in Washington, DC, USA

3/15/17









National Highway Institute

NATIONAL HIGHWAY INSTITUTE Training Solutions for Prereportation Evening

Certificate of Training Thomas Montz

has participated in

NHI Course No. 133078 – Access Management, Location and Design

hosted b

LA DOTD/LTRC

Date: February 5-7, 2013

Location: Baton Rouge, LA

Hours of Instruction: 18

nstructor

Land Somest

Richard Barnaby, Director National Highway Institute





Certificate of Completion

presented to

Thomas Montz

for completing the

Traffic Engineering Analysis Process & Report Module 1

July 16, 2018

Baton Rouge, Louisiana **Location**:

Professional Development Hours (PDHs) Awarded: 2





Certificate of Completion

presented to

Thomas Montz

for completing the

Traffic Engineering Analysis Process & Report Module 2

Location: Baton Rouge, Louisiana

July 23, 2018

Professional Development Hours (PDHs) Awarded: 3



Certificate of Completion

Thomas Montz

for completing the

Traffic Engineering Analysis Process & Report Module 3

December 3, 2018 Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3





National Highway Institute



Certificate of Training

Christine Dohy

has Successfully Completed

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

hosted by

Ohio Department of Transportation

Date: April 24-28, 2023

Hours of Instruction:

n:

Location: Akron Ohio

M. Patrick Kane

Thomas Harman

Instructor

Thomas Harman, Director National Highway Institute

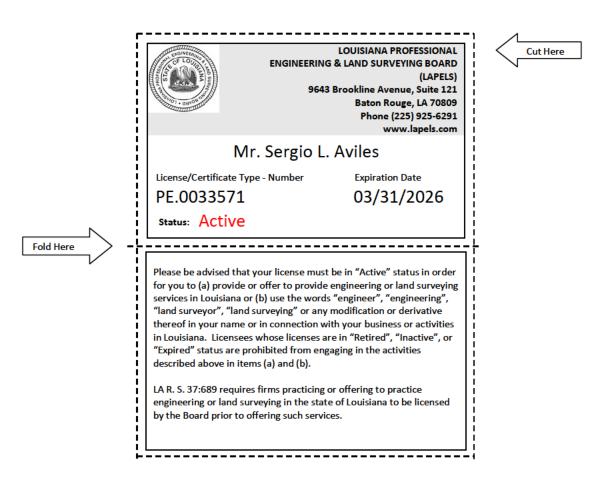
Tina M. Potte





LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/5/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:



Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

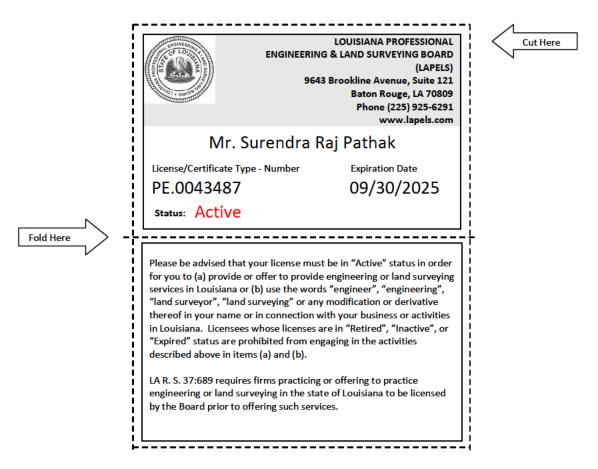
Disclaimer

All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/5/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:



Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer

All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.







LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program (DBE)

Small Business Element (SBE)

This is to certify that under Title 49, Part 26 of the Code of Federal Regulations & under the State of Louisiana United Certification Program (LAUCP)

APS Engineering and Testing, LLC

Is a Certified Disadvantaged Business Enterprise (DBE) & Small Business Element (SBE) in the following specialties:

NC221310, NC221320, NC541330, NC541370, NC541380, NC541620, NC541690

NOTE: There may be other approved NAICS Codes. The online DBE Directory includes a complete list of approved codes.

Certificate Eligibility: October 2023 to October 2024

This certificate is valid through the above date provided. This firm meets the on-going programmatic standard and fulfills the annual update requirement to remain in good standing as a DBE. This certification is subject to annual verification and suspension or revocation based upon reasonable cause to believe that the firm is ineligible.



Rhonda Wallace, DBE/SBE Programs Manager

Louisiana Department of Transportation & Development



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Sergio Aviles

has attended

Traffic Control Technician Virtual Training

Training Course

<u>1/24/2023</u> to <u>1/24/2027</u> Training Valid Through CEU: 0.75

Ramga8nth
Director of Training

Alace Tetachuer

Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

This certificate provides proof of training, not certification.



American Traffic Safety Services Association ATSSA.com



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Surendra Pathak

has attended

Traffic Control Supervisor Virtual Training

Training Course

12/28/2022 to 12/28/2026

Training Valid Through

Location

CEU: 1.50

Ramga8nth
Director of Training

Alax, Tetachum President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

This certificate provides proof of training, not certification.

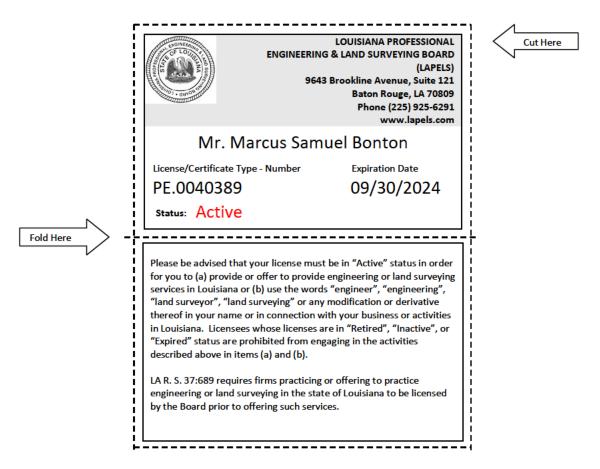


American Traffic Safety Services Association ATSSA.com



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/5/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:



Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

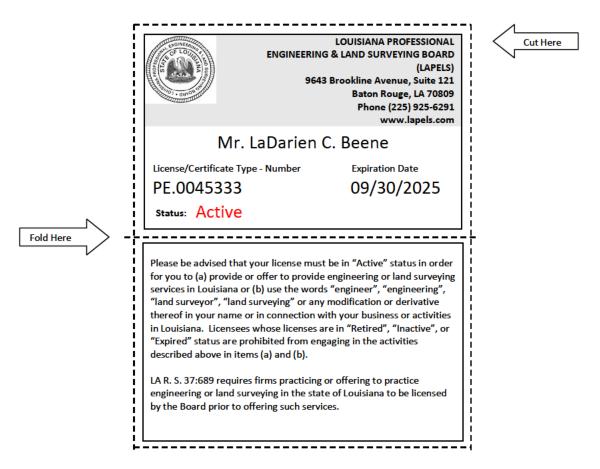
Disclaimer

All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/5/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:



Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer

All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.



Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
PH: 225-379-1200 | FX: 225-379-1851

John Bel Edwards, Governor Eric Kalivoda, Secretary

June 6, 2023

Bonton Associates, LLC ATTN: Darius Bonton 232 3rd Street, Suite 100 Baton Rouge, LA 70801

Dear Darius Bonton.

The Louisiana Department of Transportation and Development (LADOTD) Compliance Programs Section has received your firm's Disadvantaged Business Enterprise (DBE) and Small Business Element (SBE) annual affidavit. Based on the information, which you provided, it has been confirmed that your firm continues to meet the eligibility requirements of our program and remains certified for <u>only</u> the following <u>specific</u> work categories <u>that fall under the listed NAICS codes</u>:

NC541330-Engineering Services NC541620-Environmental Consulting Services C09-Civil Engineering C95-Stormwater Plans/Inspections

Please note that per the federal regulations, suppliers only receive 60% goal credit towards the materials they provide. Also, note that any contractor performing work in excess of \$50,000 with the exception of electrical, mechanical and plumbing requires A Louisiana Contractor's License, which are required to have a license if work is in excess of \$10,000. You may contact the State Licensing Board for Contractors at (225) 765-2301 for more information. All participants of the Louisiana Unified Certification Program will recognize your firm's certification. This includes all entities receiving federal transportation funding within the boundaries of our state.

You will be required to submit an annual affidavit with all supporting documents (Business taxes with all attachments, such as 1098, 1099, K-1's and/or W-2's) stating your firm continues to meet the eligibility requirements of the program. An email informing you to submit the necessary documentation will be forwarded to you approximately six (6) weeks prior to your anniversary date of June 30, 2024. However, should you not receive notification from this office for your annual affidavit; it is your responsibility to contact us. Additionally, you must notify our office immediately regarding any changes, which affect the social and economic disadvantage, size, ownership or control of your firm.

The LADOTD has contracted SJB Group, LLC to provide DBE Supportive Services to all certified DBEs, in the LAUCP, at no cost to you. This consultant can offer your firm assistance and guidance on areas such as marketing, estimating, bidding, financial preparations, etc. Contact Jackie des Bordes or Kenyatta Sparks with the SJB Group, LLC at (225) 769-3400 for any assistance needed to grow your organization.

Bonton Associates, LLC June 6, 2023 Page 2

The Louisiana UCP certifying entity reserves the right to withdraw this certification, if at any time, it is determined that **DBE** and **SBE** certifications was knowingly obtained by the submission of false, misleading or incorrect data. The Louisiana UCP certifying entity also reserves the right to request additional information and/or conduct an on-site visit at any time during your certification period.

We are pleased to have you as a participant in the LAUCP and wish you much success.

If you have any questions regarding the content of this letter, contact the LADOTD DBE Certification Unit at (225) 379-1382.

Respectfully,

Rhonda Wallace

Rhonda Wallace DBE/SBE Programs Manager

Enclosure (Certificate)







LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program (DBE)

Small Business Element (SBE)

This is to certify that under Title 49, Part 26 of the Code of Federal Regulations & under the State of Louisiana United Certification Program (LAUCP)

Bonton Associates, LLC

Is a Certified Disadvantaged Business Enterprise (DBE) & Small Business Element (SBE) in the following specialties:

NC541330, NC541620

NOTE: There may be other approved NAICS Codes. The online DBE Directory includes a complete list of approved codes.

Certificate Eligibility: June 2023 to June 2024

This certificate is valid through the above date provided. This firm meets the on-going programmatic standard and fulfills the annual update requirement to remain in good standing as a DBE. This certification is subject to annual verification and suspension or revocation based upon reasonable cause to believe that the firm is ineligible.



Rhonda Wallace, DBE/SBE Programs Manager

Louisiana Department of Transportation & Development



Certificate of Completion

presented to

Marcus Bonton

for completing the

Traffic Engineering Analysis Process & Report Module 1

July 30, 2018

Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5







Certificate of Completion

presented to

Marcus Bonton

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date:

August 6, 2018 Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3





Certificate of Completion

Marcus Bonton

for completing the

Traffic Engineering Analysis Process & Report Module 3

December 3, 2018 Location: Baton Rouge, Louisiana Professional Development Hours (PDHs) Awarded: 3



Certificate of Completion

LaDarien Beene

for completing the

Traffic Engineering Analysis Process & Report Module 1

April 19, 2018

Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2



Certificate of Completion

presented to

LaDarien Beene

for completing the

Traffic Engineering Analysis Process & Report Module 2

May 21, 2018

Location: Alexandria, Louisiana

Professional Development Hours (PDHs) Awarded: 2



Certificate of Completion

LaDarien Beene

for completing the

Traffic Engineering Analysis Process & Report Module 3

August 15, 2018 Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2







21. QA/QC Plan:

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



QUALITY CONTROL / QUALITY ASSURANCE

Bridge Design

LA 44: PELICAN POINT ROUNDABOUT AND WIDEN

Contract No. 4400028434

State Project No. H.015568.5

F.A.P. No. H015568

Route: LA 44

Ascension Parish, LA

QA / QC Work Plan LA 44: I-10 ROUNDABOUTS Ascension Parish, LA | Contract No. 4400028432



TABLE OF CONTENTS

1. Introduction	1
2. Design Criteria	
3. Design Criteria	2
Preliminary and Final Bridge Plans Development	2
5. QC Team	3
S. QC Review	3
7. QA Information Package	5
3. QA Process	5
9. QC/QA Certificate	5
10. Archiving Design Files	5
I1. Reference Material	6
12. Software	6
13. Deliverables	6



1. Introduction

Project Description

Provide engineering and related services for the design and development of construction plans for a multi-lane roundabout at the intersection of LA 44 and Pelican Point Parkway with widening to accommodate a four-lane highway section from the H.010909 project limits to the shopping center located south of Pelican Point.

Project Team Organization

Arcadis U.S., Inc. will be the prime consultant for the project. Arcadis will manage the contract and is responsible for Bridge Design, Roadway Design, Traffic, and overall QA/QC of the design documents.

The sub-consultants, Bonton and Associates will be supporting drainage design. APS will be responsible for geotechnical services.

As the prime, Arcadis will be fully responsible for overall QA/QC of the project. The key team members and roles are described below, but listed here for easy reference:

Title/Role	Name	Company
Project Manager	Jose L. Rodriguez, PE	Arcadis
Bridge Design Lead	Victor Sanchez, PE	Arcadis
Roadway Design Lead	Jose L. Rodriguez, PE	Arcadis
Quality Review	Anup Shah, PE, SE	Arcadis

Staff qualifications for QC/QA roles and qualification information for team support staff are described in the 24-102 form for this proposal.

Project Team Communications/Coordination. As Project Manager, Mr. Jose L. Rodriguez will be the team's administrative and technical point of contact for the LADOTD. All team communications to LADOTD will be through Mr. Rodriguez or his designee on a case-by-case basis or as requested by LADOTD.

The details of the QC/QA plan described below apply to the current project based on the scope of services requested. The overall QC/QA plan shall be amended in case additional services are added to the contract through amendments or extensions.

2. Design Criteria

The design criteria and the project objectives will be discussed in the Consultant Kick-Off Meeting. The design criteria will be created in accordance with the latest versions of the following documents:

- AASHTO LRFD Bridge Design Specifications
- AREMA Manual for Railway Engineering
- LADOTD Bridge Design Manuals
- LADOTD Bridge Design Technical Memoranda
- LADOTD Minimum Design Guidelines
- AASHTO Geometric Design of Highways and Streets



The design criteria shall include.

- Governing Design and Construction Specifications and Other References
- Design Assumptions and Design Exceptions
- General Information
- Design Factors
- Design Loads
- Limit States
- Bridge Barrier
- Guardrail
- > Approach Slab
- Deck and Deck Drainage
- Superstructure
- Substructure
- Piles/Drilled Shafts
- Walls
- Geotechnical Design
- Software

3. Design Team

As project manager, **Jose L. Rodriguez**, **PE** of Arcadis will be responsible for Quality Assurance, i.e., assuring that the QC Plan is implemented. He will also serve as the administrative and technical point of contact for the Arcadis team.

Mr. Victor Sanchez, PE of Arcadis will lead the structural design team bridge condition and replacement. Mr. Sanchez' qualifications are clearly summarized in the attached 24-102 forms. He will be in charge of the preliminary and final design and cost estimation of the superstructure and substructure for the new bridge structures.

Mr. Jose L. Rodriguez, **PE** will lead the roadway design efforts for the project. He and his team are responsible for carrying out the roadway and geometric design. His credentials are also well highlighted in the relevant section of the 24-102 form

Mr. Anup Shah, PE, SE from Arcadis will lead the overall QA/QC review team. Mr. Shah will perform detailed review of the contract documents including plan sets, specifications etc. Their credentials are also highlighted in the relevant section of the 24-102 form.

The design teams mentioned above are responsible for the development of the plan & profile plans, preliminary and final design calculations, special provisions, and cost estimate for their respective disciplines. The designers are also required to follow the design criteria that will be developed for the project.

4. Preliminary and Final Bridge Plans Development

Before design efforts are initiated, detailed design criteria for roadway and bridge structures shall be proposed and approved by the LADOTD. Approval will be memorialized in a meeting/email or call record. Any changes to the design criteria will be reflected in a revised version of the design criteria that conforms with expectations in LADOTD Policy Appendix A. Any changes will be distributed to team members via the Project Manager. Calculations used in the design process will be maintained by the designer and be consistent with the LADOTD calculation book checklist in Appendix B of the LADOTD QA/QC Policy. Key meeting decisions and communicated information will be memorialized in meeting records and shall be circulated via email to the design team.

QA / QC Work Plan
LA 44: I-10 ROUNDABOUTS
Ascension Parish, LA | Contract No. 4400028432



Both the designer and detailer are responsible for conducting an initial self-check of their own work product. They and other support staff preparing work product will be required to affix their name at "prepared by" to denote responsibility on the Arcadis QC/QA Acknowledgement Form. (See Section 6 for example of form)

5. QC Team

Quality Control (QC) activities are those related to checking the accuracy and consistency of materials developed for the contract. The team of Arcadis and its sub-consultants is wholly responsible for all QC activities of team deliverables. LADOTD is not responsible for the quality of any contract deliverables. The preliminary and final design plans for the bridge structure and traffic will be checked by Mr. Porta of Arcadis. Mr. Porta has a vast experience in LADOTD plans & specification preparation for a wide variety of projects nationwide. His qualifications are clearly summarized in the attached 24-102 form. He will also lead the QC effort to ensure compliance with the LADOTD design guidelines. As a design checker, he will perform a full technical review of the plan and profile drawings, and cost estimate. He will also ensure that the plans reflect the most current information shown in the design criteria.

6. QC Review

Based on Arcadis' practice and established workflow on previous LADOTD projects, it is recommended that the review be initiated and completed at the end of each phase. Individual pieces of the design, carried out throughout the project, shall be subjected to QC review before being transmitted or presented before LADOTD. A color-coding procedure will be used on plan, calculations, and report work products for the purpose of documenting responsibility and completion of work checking, back checking, comment incorporation, and change verification. The Arcadis Infrastructure Bridge Group color codes will be implemented for this entire project, which is explained below:



Color Code	Action	Responsibility
Yellow Highlight	Item is Correct	Checker/reviewer
Red Pencil	Delete, Error and Correction, Addition, Comment	Checker/reviewer
Green Pencil	Has been resolved, (use check); additional changes	Designer
Blue Pencil	Resolution of error or comment addressed and corrected on original document	Checker/reviewer
Orange Highlight	Revision has been made	CADD/other

LADOTD checklists will be used by both the design and QC teams in the preparation and review of project design criteria, final calculations, and the QA Packet. Arcadis utilizes the use of a Quality Matters QA/QC Acknowledgement Form to document milestone reviews, which is used in combination with QC stamps providing lines for checker, author/designer resolution, and comment incorporation verification. This form will be extensively used at each QC review of individual design components involved in the project.

Proper QC procedures should minimize superseding calculations. However, any such calculations will be carefully coordinated by the Designer to ensure proper disposition. All such changes will be documented as appropriate on the Project Activity Log Sheet.



	FRASTRUCTURE DIVISION (NOWLEDGEMENT FORM
Project Name:	
Project No.:	
Facility/Project Location:	
Discipline:	
Work Product:	
(briefly describe the work being reviewed)	
Milestone: (briefly describe the status of work	
product being reviewed)	
Detail Check If Independent Technical Review is	Independent Technical Review Minimum ITR Scope
required, attach a 2nd QA/QC form. Check with PM for appropriate level of review.	1. Has ARCADIS complied with the scope and contract (attached)?
	2. Has the standard of care for the industry been applied (e.g., have the appropriate standards and accepted
	practices been followed)? 3. Are the assumptions and conclusions reasonable?
Notes to Reviewer:	
	eck document, or comment summary for each iteration as
appropriate. Quality Review Signoff: Signoff signifies tha	eck document, or comment summary for each iteration as tall QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan.
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements	t all QA/QC functions have been conducted in accordance with
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review:
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer:	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer:	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review:
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review Completed:
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer:	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review Completed: Date Backcheck Completed:
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review Completed: Date Backcheck
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions Incorporated by:	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review Completed: Date Backcheck: Completed: Date Incorporation Completed:
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions Incorporated by: Verification:	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review: Completed: Date Backcheck: Completed: Date Incorporation: Completed:
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions Incorporated by: Verification: reparer - Staff responsible for work and self-checking eviewer - Detail Check: scan or hardcopy (yellow = co	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review Completed: Date Backcheck Completed: Date Incorporation Completed: Date of Verification: for errors and omissions throughout preparation. mect, red = revision); electronic files (show revisions in tracked changes
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions Incorporated by: Verification: reparer - Staff responsible for work and self-checking eviewer - Detail Check: scan or hardcopy (yellow = co or comment box). (IR: mark up document with comme	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review Completed: Date Backcheck Completed: Date Incorporation Completed: Date of Verification: for errors and omissions throughout preparation. meet, red = revision): electronic files (show revisions in tracked changes ents or attach separate page. At a minimum, respond to questions above
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions Incorporated by: Verification: reparer – Staff responsible for work and self-checking leviewer – Detail Check: scan or hardcopy (yellow = cor comment box). If it: mark up document with commend any others relevant to attached scope or technical in any others relevant to attached scope or technical.	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review Completed: Date Backcheck Completed: Date Incorporation Completed: Date of Verification: for errors and omissions throughout preparation. meet, red = revision): electronic files (show revisions in tracked changes ents or attach separate page. At a minimum, respond to questions above
appropriate. Quality Review Signoff: Signoff signifies tha ARCADIS policy and meet client requirements Preparer: Reviewer: Preparer Backcheck: Revisions Incorporated by: Verification: reparer – Staff responsible for work and self-checking leviewer – Detail Check: scan or hardcopy (yellow = cor comment box). If it: mark up document with commend any others relevant to attached scope or technical in any others relevant to attached scope or technical.	t all QA/QC functions have been conducted in accordance with and the project-specific Quality Control Plan. Date Submitted for Review: Date Review Completed: Date Backcheck Completed: Date Incorporation Completed: Date of Verification: for errors and omissions throughout preparation. rrect, red = revision); electronic files (show revisions in tracked changes into or attach separate page. At a minimum, respond to questions above criteria. ges); do not concur (X mark/comment bos). See PM or senior technical

QA / QC Work Plan
LA 44: I-10 ROUNDABOUTS
Ascension Parish, LA | Contract No. 4400028432



7. QA Information Package

Upon satisfactory completion of the design and detail checks, the designer is required to prepare the QA Information Package utilizing the LADOTD approved checklist (Appendix C). This package includes the following items:

- QA information package checklist
- Calculation book
- Plans
- Special provisions including Non-Standard items
- Cost estimate
- Relevant documents, such as checklists, review comments, etc. that were used by the designer, design checker, detailer and detail checker

The designer is responsible for providing this package to the Reviewer for his further use prior to submittal milestones. Should there be any revisions to the plans or calculations after this submittal, the designer shall revise the QA Information. Package and inform the Reviewer of the changes and provide him with the revised information.

8. QA Process

Quality Assurance (QA) activities are those related to reviewing work to ensure QC procedures are in place and effective. Arcadis is wholly responsible for all QA activities of team deliverables. Project Manager Jose Rodriguez, PE is ultimately responsible for ensuring that the QC Plan is implemented, and that the Reviewer has completed all steps of the review. LADOTD is not responsible for assuring that the QC Plan is implemented or for maintaining documentation of QC reviews and related information. The team of Arcadis and its sub-consultants is solely responsible for maintaining all administrative and technical files for project archives.

Mr. Rodriguez will coordinate with the Reviewer as required and maintain a record of QC forms including the LADOTD required checklists, QC/QA certification, Arcadis review forms, and other relevant information. Once the project manager confirms that the Reviewer has completed the QA process, design documents including design calculations, plans, special provisions and cost estimate shall be considered as final.

9. QC/QA Certificate

At the completion of the QA process by the Reviewer, the QC/QA certificate (Appendix D of the LADOTD Policy) shall be signed by the designer, design checker, detailer, detail checker, and reviewer. This form will be included in the project central files maintained by the Project Manager.

10. Archiving Design Files

Mr. Jose Rodriguez, PE shall be responsible for transmitting all deliverables to the LADOTD. He will maintain all final deliverables' digital files on a USB thumb drive and ProjectWise. Paper copies of these materials will also be maintained by the Project Manager in the repository of project files and moved to off-site archives in accordance with LADOTD document retention policy and Arcadis' retention policies, as appropriate. Retained files will include final, approved deliverables, calculation books, plans, special provisions, cost estimate, and other pertinent documents in accordance with the Bridge Design Section records retention policy, as well as contract documentation, QC/QA records, correspondence, and other materials per Arcadis' records retention policy.



11. Reference Material

Arcadis will use the following reference materials in our QC/QA process:

- AASHTO LRFD Bridge Design Specifications
- LADOTD Bridge Design & Evaluation Manual
- LADOTD Bridge Design Technical Memoranda
- AREMA Manual for Railway Engineering
- LADOTD Roadway Design Procedures and Details
- LADOTD Minimum Design Guidelines
- · AASHTO Geometric Design of Highways and Streets
- LADOTD Policy on Quality Control and Quality Assurance
- Arcadis Policy on Records Retention and Management
- Arcadis Infrastructure Division Quality Matters Program

12. Software

Computer based calculations will be completed only with use of the following list of pre-approved LADOTD Bridge Design Section software programs:

Software Name	Developer
Bridge Design	AASHTOware
Bridge Rating	AASHTOware
ConSpan	Bentley LEAP
CSI Bridge/SAP2000/CSI COL	Computers and Structures, Inc.
FB-Multiplier	BSI/Univ. of Florida
LEAP Bridge Enterprise	Bentley LEAP
L-Pile	Ensoft, Inc.
Mathcad	PTC, Inc.
RC-Pier	Bentley Leap
MicroStation	Bentley
CadConform	Altiva
Power Inroads	Bentley
Staad Pro	Bentley

Should other software be needed during the course of the contract, needs will be identified at the earliest opportunity, and a synopsis of the software including its purpose, industry use, limitations and other germane information will be submitted to the State Bridge Design Engineer Administrator for consideration and approval for use.

13. Deliverables

A deliverables schedule will be developed at the Consultant Project Kick-Off Meeting in accordance with other actions listed in the Consultant Project Kick-Off Meeting Agenda Checklist (Appendix H) of the

QA / QC Work Plan
LA 44: I-10 ROUNDABOUTS
Ascension Parish, LA | Contract No. 4400028432



LADOTD Policy. This schedule will be reviewed regularly by the Project Manager, Mr. Jose Rodriguez, PE for opportunities to reduce activity durations and expedite delivery.

Deliverables schedules, quality reviews, financials, and other topics are addressed on a monthly basis between Arcadis Project Managers and Operations Managers in a Monthly Project Progress Review Meeting near monthly financial close period. An internal consultant QC milestone schedule will also be developed in association with this deliverable schedule. It will be maintained by the Project Manager for use by the consultant team for review scheduling. Deliverables will be internally reviewed for correctness and completeness prior to LADOTD submittal and be accompanied by a Consultant Submittal (QC/QA) Certification form (Appendix I of the LADOTD Policy).

APPENDICES

LADOTD POLICY ON QUALITY CONTROL AND QUALITY ASSURANCE



Design Criteria Checklist

(Appendix A of LADOTD Policy on Quality Control and Quality Assurance)

Desig	n criteria for each project shall include, but not limited to, the following sections:
	_ Cover sheet
	The following information must be included on the cover sheet: LADOTD project number Project name Revision date The Supervisor or Team Leader's signature and date
	_ Governing Design and Construction Specifications and Other References
	A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.
	_ Design Assumptions and Design Exceptions
	All design assumptions and design exceptions received must be included in this section along with supporting documents.
	_ General Information
	 The general information as listed below should be included in this section: Bridge information (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.) Road information (roadway classifications, design speed, traffic data, etc.) Vertical datum Vertical and horizontal clearances Other relevant information
	Hydraulic Design Criteria
	All hydraulic design criteria (design year, design water elevations, scour depth and scour elevation, etc.) shall be included in this section and the information shall be provided by the Hydraulic Engineer.
	_ Design Factors
	The ductility factor ηD , redundancy factor ηR , and operational importance factor ηI shall be listed in this section.
	_ Design Loads
	All design loads (dead load, live load, wind load, thermal loads, vessel collision loads, seismic load, wave loads, etc.) used for the project shall be included in this section.
	_ Limit States
	All applicable limit states for this project shall be listed in this section.
	Bridge Barrier
	The design criteria, types, and test levels for bridge barriers shall be listed in this section.



 _ Guardrail
The design criteria, types, and test levels for guardrails shall be listed in this section. Standard plans and special details should be listed if they are utilized.
 _Approach Slab
Design criteria for approach slab shall be included in this section. Standard plans and special details should be listed if they are utilized.
 Deck and Deck Drainage
All design criteria for deck and deck drainage design shall be included in this section. Standard plans and special details should be listed if they are utilized.
Bearing
All bearing types and design criteria for each bearing type shall be included in this section. Standard plans and special details should be listed if they are utilized.
 _ Joint
All joint types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.
 Superstructure
All superstructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.
 Substructure
All substructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.
 Piles and Drilled Shafts
All pile types, sizes, and structural design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.
 _ Geotechnical Design
All geotechnical design criteria shall be included in this section and the information shall be provided by the Geotechnical Engineer. Standard plans and special details should be listed if the are utilized.
 _ Mechanical Design
All mechanical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.
_ Electrical/Lighting Design
All electrical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.
 As-Designed Bridge Rating Criteria
All as-designed bridge rating criteria shall be included in this section.
 _ Software
All software used for design and check shall be included in this section.



Final Calculation Book Checklist

(Appendix B of LADOTD Policy on Quality Control and Quality Assurance)

The final calculation book for each project shall include, but not limited to, the following sections: Cover Sheet The following information must be included on the cover sheet: • LADOTD project number • Project name • The title of "Final Calculation Book" • The EOR's seal with signature and date Final Calculation Book Check List QC/QA Certifications Peer Review Resolution Agreement (if peer review is performed) ____ Design Criteria ____ Final Hydraulic Analysis Report from Hydraulic Engineer ____ Final Geotechnical Analysis Report from Geotechnical Engineer Superstructure Design Calculations ____ Substructure Design Calculations ____ Quantity Calculations Special Provisions/NS-Items Construction Cost Estimate ____ As-Designed Rating Report ____ List of All Final Electronic Design Files and File Locations (ProjectWise directory name) Final calculation book shall be submitted to LADOTD on a CD or Flash Drive or placed to a designated ProjectWise folder including the following information: A PDF File of the Calculation Book ____ All Electronic Design Files A PDF File of the As-Designed Rating Report Only



QA Information Package Checklist

(Appendix C of LADOTD Policy on Quality Control and Quality Assurance)

Project No.:	H.015568.5
Project Name: ASCENSION PARISH	LA 44: PELICAN POINT ROUNDABOUT AND WIDEN, ROUTE: LA 44,
development of constr Point Parkway with wi	The Consultant shall provide engineering and related services for the design and ruction plans for a multi-lane roundabout at the intersection of LA 44 and Pelican dening to accommodate a four-lane highway section from the H.010909 project center located south of Pelican Point.
Calculation	Book
Plans	
Special Prov	visions
Cost Estima	te
Other Docur	ments:



QC/QA Certification

(Appendix D of LADOTD Policy on Quality Control and Quality Assurance)

Project No.: H.015568.5

Project Name: LA 44: PELICAN POINT ROUNDABOUT AND WIDEN, ROUTE: LA 44, ASCENSION

PARISH

Project Description: The Consultant shall provide engineering and related services for the design and development of construction plans for a multi-lane roundabout at the intersection of LA 44 and Pelican Point Parkway with widening to accommodate a four-lane highway section from the H.010909 project limits to the shopping center located south of Pelican Point.

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

Team Members	Name	PE Registration No.	Responsible Plan Sheets	Responsible Special Provisions	Construction Cost Estimate	Signature
Designer						
Designer						
Designer						
Designer						
Design Checker						
Design Checker						
Design Checker						
Detailer						
Detail Checker						
Reviewer						
Hydraulic Engineer						
EOR						



QC/QA EVALUATION

APPENDIX E of LADOTD Policy on Quality Control and Quality Assurance

Project No.: H.015568.5

Project Name: LA 44: PELICAN POINT ROUNDABOUT AND WIDEN, ROUTE: LA 44,

ASCENSION PARISH

Project Description: The Consultant shall provide engineering and related services for the design and development of construction plans for a multi-lane roundabout at the intersection of LA 44 and Pelican Point Parkway with widening to accommodate a four-lane highway section from the H.010909 project limits to the shopping center located south of Pelican Point.

We, the undersigned Peer Reviewer, Supervisor or Team Leader of the design team, and LADOTD Representative for this project, have reviewed and accepted the attached peer review resolutions. We certify that the peer review has been performed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

Team Members	Name	Signature
Peer Reviewer		
Supervisor or Team Leader		
LADOTD Representative		



Consultant Project Bridge Design Kick-Off Meeting Agenda Checklist

(Appendix H of LADOTD Policy on Quality Control and Quality Assurance)

A kick-off meeting with the Consultant's bridge design team shall be initiated by the LADOTD Bridge
Design Task Manager once the project is awarded. The meeting agenda shall include, but not limited to,
the following items:

_____Introduce LADOTD Bridge Task Manager and the Consultant's Key Team Members

 Introduce LADOTD Bridge Task Manager and the Consultant's Key Team Members
(The EOR and Key Designers/Design Checker/Reviewer).
 _Discuss Consultant's Staffing Plan and Implementation of QC/QA Plan Document
(The staffing plan should include names and responsibilities of the designers, detailers, checkers reviewers, and the EOR.)
 _ Determine Schedules for Project Submittals
(Design Criteria, TS&L, 30%, 60%, 90%, 100% of Preliminary Plans and Final Plans, Final Calculations, etc.)
 Share Expectations and Consultant Rating Criteria
(Consultant rating will be performed for all project submittals shown on the project submittal schedule.)
 _Discuss Design Criteria
 _ Discuss Budget, Supplemental Requests, Invoices, and Importance of Avoiding Claims
(Staff shown on invoices will be reviewed in accordance with the staffing plan.)



Consultant Submittal QC/QA Certification

(Appendix I of LADOTD Policy on Quality Control and Quality Assurance)

Project No.:

H.015568.5

Project Name: ASCENSION PARISH		ROUNDABOUT AND WIDEN, I	ROUTE: LA 44,
development of constr Point Parkway with wi	uction plans for a multi-lan	ide engineering and related se e roundabout at the intersectio four-lane highway section from ican Point.	n of LA 44 and Pelican
•	ce with the QC/QA plan doo	ify that the information included cuments and the information pr	
Submittal Description	1		
Engineer of Record (Bridge Design)	Signature	Date
Engineer of Record (Roadway Design)	 Signature	 Date



Project Activity Log Sheet

(Appendix J of LADOTD Policy on Quality Control and Quality Assurance)

Project No.: H.015568.5

Project Name: LA 44: PELICAN POINT ROUNDABOUT AND WIDEN, ROUTE: LA 44,

ASCENSION PARISH

Bridge Task Manager: Victor Sanchez, PE

Date	Project Activity	Comments



Consultant Submittal Review Checklist

Items	Design Criteria	TS&L	30% PP	60% PP	90% PP	100% PP	30% FP	60% FP	90% FP	100% FP	Final Calculation Book	Plan Revisions	Change Orders
Consultant Submittal QC/QA Certification													
Design Criteria	С												
TS&L		С											
Bridge Index			D	D	D	D	D	D	С	S			
General Notes			D	D	D	D	D	D	С	S			
Summary of Estimated Quantities			D	D	С	С	D	D	С	S			
General Plans			D	D	С	С	С	С	С	s			
Typical Sections			D	D	С	С							
Super elevation Diagram				D	D	С	С	С	С	S			
Construction Phasing Details				D	D	С	С	С	С	S			
Traffic Control Details				D	D	С	С	С	С	S			
Foundation/Pile Layout				D	D	С	С	С	С	S			
Pile Loads/Details					D	D	D	С	С	S			
Pile Data Table							D	D	С	S			
Bent Details							D	D	С	S			
Fender Details							D	D	С	S			
Girder Details							D	D	С	S			
Span Details							D	D	С	S			
Joint Details								D	С	S			
Bearing Details								D	С	S			
Approach Slab								D	С	S			



Items	Design Criteria	TS&L	30% PP	60% PP	90% PP	100% PP	30% FP	60% FP	90% FP	100% FP	Final Calculation Book	Plan Revisions	Change Orders
Guardrail Details								D	С	S			
Bridge Barrier/Railing Details								D	С	S			
Detour Bridge Details								D	С	S			
Revetment Details								D	С	S			
Signing/Lighting Details								D	С	S			
Year Plate								D	С	S			
Rebar Support								D	С	S			
Misc. Details								D	С	S			
Electrical Details								D	С	S			
As-built Plans								D	С	С			
Special Provisions							D	D	С	С			
NS-Items							D	D	С	С			
Cost Estimate					D	D	D	D	С	С			
Final Calculations											S		
Revised Plans/Calculations												S	S

LEGEND:

"R" = the item is required and shall be included in the submittal

"C" = the item shall be complete and shall be included in the submittal

``D'' = the item shall be in development and shall be included in the submittal

"S" = the item is stamped by the EOR and shall be included in the submittal



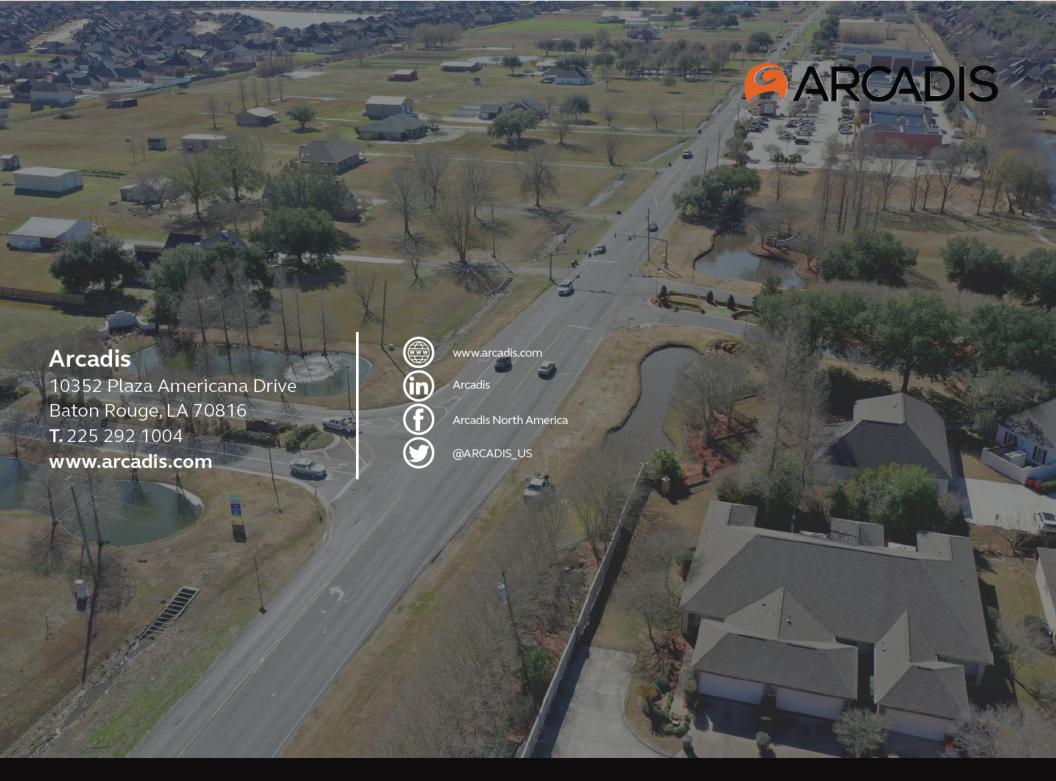
22. <u>Sub-consultant information:</u> If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
APS ENGINEERING AND TESTING, LLC	1645 Nicholson Drive, BR, LA 70802	Sergio Aviles sergio@aps- testing.com	225-456-5714
BONTON ASSOCIATES, L.L.C.	232 Third Street, Suite 100, Baton Rouge, LA 70801	Marcus Bonton, P.E. Marcus@bontonassociates.com	225-706-0975

(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. Any information included in this section will be redacted if not required by the advertisement.



Arcadis. Improving quality of life. arcadis.com