



Louisiana Department of Transportation and Development (DOTD)

IDIQ Contract For Bridge Maintenance Preservation And Repair Statewide

Contract No. 4400036231



August 12, 2026

LJA Engineering, Inc.

DOTD FORM: 24-102

PROPOSAL TO PROVIDE CONSULTANT SERVICES

(Revised August 1, 2026)

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

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

1.	Contract Name as shown in the advertisement	IDIQ Contract For Bridge Maintenance Preservation And Repair Statewide
2.	Contract Number(s) as shown in the advertisement	4400036231
3.	State Project Number(s), if shown in the advertisement	N/A
4.	Prime consultant name (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)	LJA Engineering, 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.0005114
6.	Prime consultant mailing address	3711 S. MoPac Expy, Bldg. 2, Suite 400, Austin, TX 78746
7.	Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	3711 S. MoPac Expy, Bldg. 2, Suite 400, Austin, TX 78746
8.	Name, title, phone number, and email address of prime consultant's contract point of contact	Alanna Bettis, PE, Vice President, 512.767.7338 abettis@lja.com
9.	Name, title, phone number, and email address of the official with signing authority for this proposal	Alanna Bettis, PE, Vice President, 512.767.7338 abettis@lja.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response. Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association. In addition, proposer certifies it will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.	 Signature above shall be the same person listed in Section 9:	
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): N/A	Firm(s) %: N/A

12. Discipline Table:

Discipline(s)	% of Overall Contract	LJA Engineering, Inc. (Prime) Incl. Subsidiaries	Bridge Diagnostics, Inc.	Fugro USA Land, Inc.	Moffatt & Nichol, Inc.	Construction Technology Laboratories, Inc.	Each Discipline must total to 100%
Other (Asset Management)	35%	75%	10%	0%	10%	5%	100%
Bridge	35%	75%	10%	2%	10%	3%	100%
Data Collection	5%	10%	85%	0%	5%	0%	100%
Environmental	5%	5%	0%	0%	95%	0%	100%
Geotech	5%	0%	0%	100%	0%	0%	100%
Road	5%	75%	0%	0%	25%	0%	100%
Survey	5%	80%	0%	0%	20%	0%	100%
Traffic	5%	75%	0%	0%	25%	0%	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%	65%	11%	6%	15%	3%	100%

LJA Surveying, Inc. (LJAS) and Gonzalez-Strength & Associates, Inc. (GSA) are wholly owned subsidiaries of LJA Engineering, Inc. as referenced in the Organizational Chart on page 9.

13. Team Size:

Firm name	DOTD Job Classification	Number of personnel committed to this contract*	Total number of personnel available in this DOTD Job Classification (if needed)
LJA Engineering, Inc. (Prime) (Incl. Subsidiaries)	Administrative	3	12
	Computer Analyst	2	20
	Engineer	17	65
	Environmental Pro	1	12
	GIS Analyst	2	22
	Planner	1	65
	Supervisor - Eng	4	55
	Surveyor	2	50
Bridge Diagnostics, Inc.	Accountant	2	3
	Administrative	1	1
	Clerical	2	2
	Computer Analyst	3	3

13. Team Size:

Bridge Diagnostics, Inc.	Engineer Aide	3	3
	Engineer Intern	3	8
	Engineer	3	3
	Engineer Other	3	7
	Principal	1	2
	Professional	2	4
	Senior Technician	4	4
	Supervisor - Eng	2	2
	Supervisor - Other	4	12
	Technician	3	5
Fugro USA Land, Inc.	Principal	2	2
	Supervisor - Eng	2	4
	Supervisor - Other	3	4

13. Team Size:

Fugro USA Land, Inc.	Engineer	1	3
	Engineer - Other	2	4
	Geologist	2	2
	Driller	2	8
	Labor	4	16
	Senior Technician	4	8
	Administrative	1	1
Moffatt & Nichol, Inc.	Principal	1	10
	Administrative	1	5
	CADD Operator	3	10
	Senior Technician	0	5
	Engineer Intern	2	8

13. Team Size:

Moffatt & Nichol, Inc.	Engineer	3	12
	Supervisor - Eng	1	10
	Inspector - Bridge	2	10
	Inspector - Lead	2	15
	Supervisor - Other	1	5
Construction Technology Laboratories, Inc.	Administrative	1	3
	Principal	1	3

14. Organizational Chart:

Teaming

LJA

LJAS

GSA

BDI

CTL

FUGRO

MN

LJA Engineering, Inc.

LJA Surveying, Inc.¹

Gonzalez-Strength & Associates, Inc.²

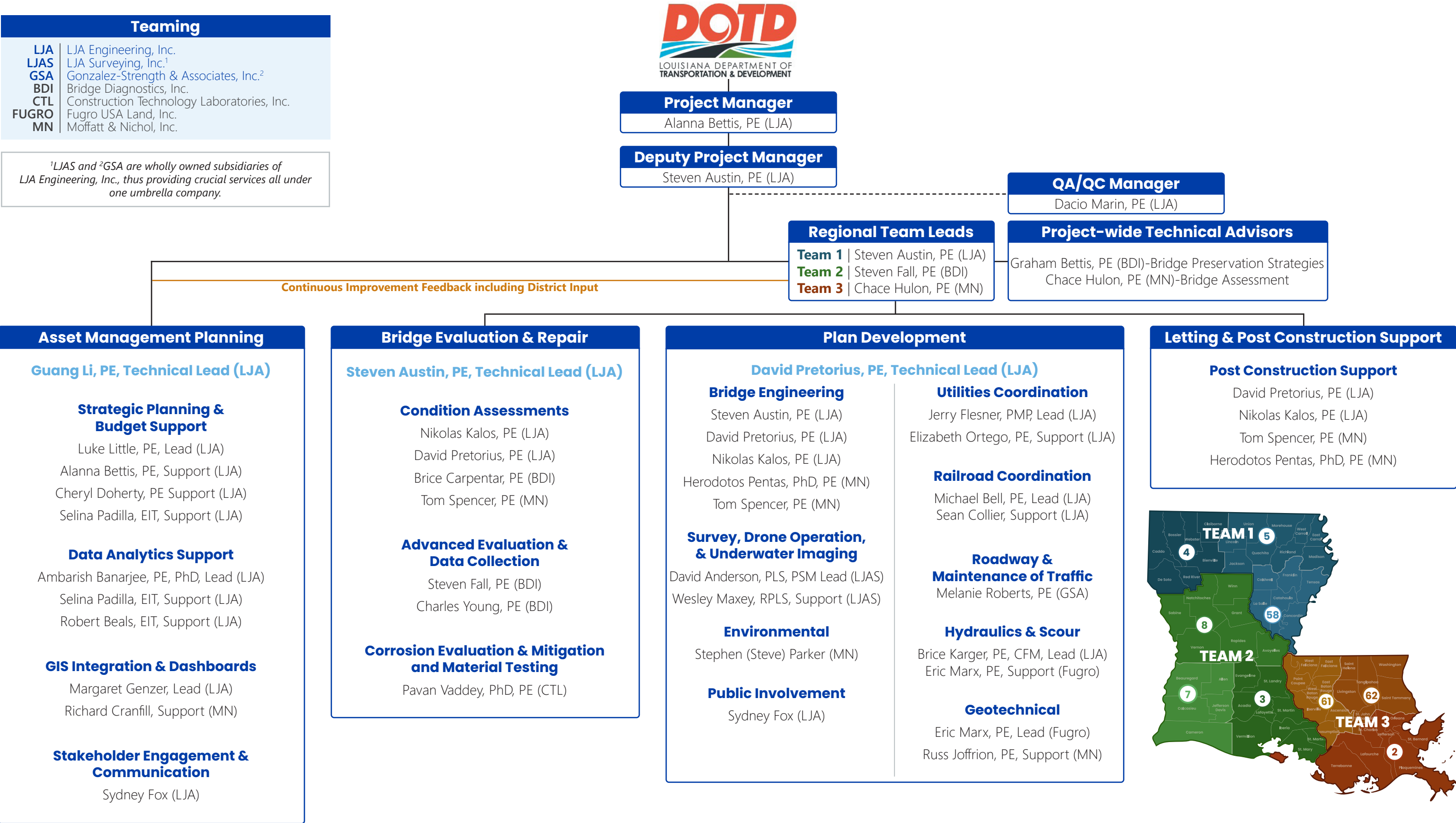
Bridge Diagnostics, Inc.

Construction Technology Laboratories, Inc.

Fugro USA Land, Inc.

Moffatt & Nichol, Inc.

¹LJAS and ²GSA are wholly owned subsidiaries of LJA Engineering, Inc., thus providing crucial services all under one umbrella company.



15. Minimum Personnel Requirements:

MPR No.	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE# - Civil)	State of license	License / certification expiration date
1	Alanna Bettis, PE Steven Austin, PE	LJA Engineering, Inc.	PE #0051030 - Civil PE #0050667 - Civil	LA	09/30/2026 03/31/2028
2	Alanna Bettis, PE Steven Austin, PE	LJA Engineering, Inc.	PE #0051030 - Civil PE #0050667 - Civil	LA	09/30/2026 03/31/2028
3	Alanna Bettis, PE Steven Austin, PE	LJA Engineering, Inc.	PE #0051030 - Civil PE #0050667 - Civil	LA	09/30/2026 03/31/2028
4	Alanna Bettis, PE Steven Austin, PE	LJA Engineering, Inc.	PE #0051030 - Civil PE #0050667 - Civil	LA	09/30/2026 03/31/2028

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Alanna Bettis, PE	Years of relevant experience with this employer	3
Title		Vice President	Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization			BS, 2002, Architectural Engineering	
Active registration number / state / expiration date			PE 0051030, LA, 09/30/2026 PE 99318, TX, 07/31/2027	
Year registered	2025 2007	Discipline	PE Civil PE Civil	
Contract role(s) / brief description of responsibilities			Project Manager/Scheduling, budget and resourcing concurrent tasks including asset management planning, bridge assessment, plan development, and post construction support. Meets qualifications for MPRs 1, 2, 3 & 4.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
10/23 - Ongoing		TxDOT Bridge Program, San Antonio District (SAT), TX, LJA Program Management, LLC. Project Manager in responsible charge of the refinement of the SAT's 4-year bridge asset management plan, streamlining inspection findings processes, and developing a bridge condition prioritization tool. To address the challenges of a metro-scale bridge inventory, Alanna improved project selection and lifecycle planning across multiple funding programs by leading development of a GIS-based prioritization tool and performance dashboards categorizing bridge work by type and condition. The tool provides structure-specific work needs using current and historical data to identify critical components, forecast outcomes and efficiencies for treatment options, and assign prioritization scores. She also led development of a maintenance work plan tool incorporating prioritization outputs, inspection findings, and NBI report comments to support field repair planning. Alanna continues to support SAT through implementation, incorporating feedback to refine and enhance the tools.		
07/25 - Ongoing		TxDOT Maintenance Division (MNT) Maintenance Program, Statewide, TX, LJA Program Management, LLC. Project Manager in responsible charge of MNT Division’s Routine Maintenance Program including a biennium budget submission via a Legislative Appropriations Request (LAR) to secure funding. The LAR outlines program budgets, performance measures, and key drivers shaping its resource requirements. As subject matter expert on bridge assets, Alanna evaluated the previous methodology through multiple approaches, including comparing statewide historical budget data, analyzing actual expenditures from the Maintenance Management System (MMS), and reviewing performance metrics to identify patterns in how funding impacts condition. Alanna transformed the calculation methodology from a strictly historical budget that was expanded proportionately to account for growth in inventory to a needs-based model. The new calculation is driven by historical spending to funding patterns, bridge inspection condition and element ratings, risk, and known cyclic maintenance needs while accounting for inflation impacts. Alanna and her team continued support to MNT Division as they presented their findings ensure alignment with Administration and Legislative requirements. She helped secure an 8.5 percent increase from the previous biennium budget.		

11/23 - 08/25	TxDOT Statewide Contract, Bridge Program Asset Management, Multiple Districts, TX, LJA Program Management, LLC. Project Manager in responsible charge for comprehensive bridge program support across the Abilene and Odessa Districts, including inspection findings resolution, scour evaluations, and 4-year bridge asset management plans with integrated decision-support and prioritization tools. Faced with 200+ unresolved inspection findings and limited staff capacity, Alanna assessed needs and deployed resources to develop actionable plans, resource-loaded schedules, and tracking tools to manage work types, timelines, costs, and labor recommendations. She led development of GIS databases and Power BI dashboards to visualize findings and support planning, budgeting, and risk reduction. Each structure was evaluated using current inspections and historical records to develop repair recommendations and planning-level cost estimates based on regional bid data and defined assumptions. Her team also addressed missing scour documentation for 350+ bridges, prioritizing structures by risk and performing hydraulic and hydrologic analyses to deliver TxDOT-compliant evaluations that strengthened safety, planning, and funding justification. Across all efforts, Alanna applied strong coordination and data-driven approaches to align asset strategies with funding and long-term performance, advancing proactive bridge maintenance programs and cost-effective preservation practices.
2017 - 2023	TxDOT Maintenance Division (MNT), Statewide, TX, Deputy Division Director led development of TxDOT's federally mandated Transportation Asset Management Plan (TAMP), coordinating across divisions, Administration, and FHWA. Engaged all 25 districts to assess challenges in managing bridge, pavement, and related assets under constrained budgets, providing support through training, guidance, standardization, innovation, and increased funding to improve statewide performance. Analyzed budget performance, asset conditions, and MMS data to help secure a 25% increase in the statewide Routine Maintenance budget. Served as responsible-in-charge for statewide maintenance programs, including maintenance and emergency operations, district peer reviews, maintenance contracts and letting, MMS, pavement and bridge programs, safety rest areas, and ROW and vegetation management. Led development and implementation of TxDOT's first regional crews and associated change management efforts, including balancing state force and contractor resources. Oversaw bridge maintenance project selection across all districts and managed the Bridge Preventative Maintenance (BPM) program, including revitalizing off-year inspections and securing additional funding. Partnered with the Austin District to deliver the first BPM-reimbursed on-call bridge joint cleaning and sealing contract, advancing preventative maintenance practices.
2002 - 2017	TxDOT Bridge Division (BRG), Statewide, TX, Project Manager and Bridge Designer responsible for the federally funded statewide bridge program, advancing lifecycle strategies and forecasting bridge needs based on predicted condition ratings. Developed multiple federally funded bridge programs to address safety gaps by establishing eligibility criteria, risk-based prioritization, and scoring methodologies to guide program planning. Managed bridge rehabilitation projects from funding and planning through preconstruction, including engineering analyses, planning-level scopes, cost estimates with life cycle cost considerations, specifications support, environmental coordination, and project packaging. Provided responsible oversight for bridge design, evaluation, and preservation decisions across statewide programs. Previously served seven years as a bridge designer, delivering rehabilitation and replacement designs across a range of structure types and complexity. Provided post-design support during construction, including RFI responses, submittal reviews, and design clarifications. Led design of the Pecos River High Bridge deck replacement, including gusset load rating and structural analysis, and collaborated with FHWA and industry experts to refine gusset design procedures following the I-35W collapse. Supported delivery by coordinating with TxDOT and stakeholders to preserve historic features and ensure construction-phase design support.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name	Steven Austin, PE	Years of relevant experience with this employer	1
Title	Vice President	Years of relevant experience with other employer(s)	21
Degree(s) / Years / Specialization	MS, 2007, Civil (Structural) Engineering BS, 2004, Civil Engineering		
Active registration number / state / expiration date	PE 0050667, LA, 03/31/2028 PE 100970, TX, 07/31/2027		
Year registered	2025 2008	Discipline	Civil Engineer
Contract role(s) / brief description of responsibilities	Deputy Project Manager supporting Alanna through project oversight over the plan production as well as technical lead for Bridge Assessment. Meets qualifications for MPRs 1, 2, 3 & 4.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/25 - Ongoing	Bridge Project Manager and Technical Advisor – Recent and relevant projects noted below: Waller County Bridge Maintenance Prioritization – Reviewed bridge inspection reports, coordinated with county engineers and maintenance staff, developed a prioritized repair list, and assigned implementation to county and contracted forces. Performed field condition assessments on select bridges to supplement inspection reports, determine damage extent, and inform repair strategies. Developed typical details for repairs. Prepared cost estimates for rehabilitation work including timber pile retrofits and channel armoring. Construction engineering for rehabilitation projects (Bexar County and Bell County, Texas) – Contractor’s engineer for design of bridge lifting plans for bearing replacement and repairs to address construction defects. Bridge Deck Assessment on LP1604 (San Antonio, Texas) – Performed in-depth deck evaluation and developed rehabilitation strategies for maintenance and preservation of bridge deck. Developed final report with quantities and cost estimates for recommended options. US 181 Retaining Wall at Moore Avenue Bridge (Portland, Texas) – Performed field assessment and developed recommendations for remediation of drilled shaft retaining wall. Developed schedule and proposed cost estimate for three remediation options. Liberty County CR 6494 Over Long John Creek Emergency Structural Evaluation – Performed in-depth bridge inspection and assessment of bridge following major foundation exposure. Performed an in-depth inspection and structural evaluation of the bridge following major foundation exposure. Developed repair recommendations based on findings. Technical advisor for bridge maintenance plans for local governments and TxDOT (Various)– Historic truss assessment and development of rehabilitation strategies and priorities. Performed technical reviews of bridge plans for overheight impact strikes, concrete repairs to decks and superstructures for conformance with specifications.		

09/14 - 03/25	TxDOT Bridge Division Field Operations Section Director – For nearly seven years, Steven was responsible for the statewide bridge inspection program and for supporting all 25 districts in the areas of bridge construction, maintenance, preservation, and geotechnical engineering. Steven played a key role in emergency response efforts and in-depth evaluations of critical bridges across Texas. He co-authored the first bridge preservation plans for signature bridges and was the primary author of TxDOT's first Bridge Preservation Guide. Steven was also responsible for regular updates to the TxDOT Concrete Repair Manual which serves as an extension of TxDOT specifications for repair of concrete spalls and bridge decks. Steven established policy for and managed the statewide Bridge Maintenance and Improvement Program, which is intended to extend the life of bridges and incorporate safety improvements like crashwalls at two column bents and rail upgrades. Steven was responsible for coordinating with FHWA on NBI compliance issues and implementing statewide bridge inspection program changes. Steven championed incorporating non-NBIS/ maintenance inspections into the statewide bridge inspection management system and developed a roadmap for tracking and monitoring follow-up action recommendations from bridge inspections. Other notable projects include: 1) the development of inspection procedures for Texas' Inventory of bridges with complex features which includes all bridges with cables or suspenders 2) District support for replacement of the Corpus Christi Harbor Bridge – both the assessment and preservation of the original bridge and technical support during construction of the new bridge. He represented TxDOT in national committees and held leadership roles, including chair of the AASHTO TSP-2 Bridge Preservation Partnership and the National Bridge Deck Preservation Working Group. Steven served as interim branch manager over each of the Geotechnical Branch, Construction and Maintenance Branch, and Inspection Branch, directly responsible for leading/managing work and final deliverables produced by branch staff. TxDOT Bridge Division Forensics Engineer – Over two years, Steven personally performed over 70 bridge assessments supporting statewide bridge preservation efforts. Steven performed load ratings, condition assessments, repair recommendations, cost estimates, and PS&E for bridge repairs and preservation. Steven managed over 100 bridge assessments performed through consultant teams and was responsible for technical review of field assessment, recommendations, and PS&E deliverables. Bridge types included trusses, steel girder superstructures, concrete and pre-stressed concrete bridges, post-tensioned segmental bridges, and cable stayed structures. Notable bridge maintenance responsibilities include: 1) Management of the statewide Texas Bridge Maintenance and Improvement Program, 2) Emergency bridge assessments and recommendations for repairs to critical infrastructure including Ferry Landings, and IH610 Over the Houston Ship Channel, 3) US 190 over Neches River in Jasper County - 1601 ft long structure constructed in 1943 consisting of steel approach spans and the two steel parker through trusses (240' and 125'), 4) IH10 WB Frontage Road Over Cibolo Creek in Bexar County – Performed field assessment, developed repair recommendations, and performed technical review of plans for rehabilitation. TxDOT Bridge Design Engineer and Group Leader – For nearly two years, Steven served as the engineer of record on new bridge projects and bridge widening projects. Steven's design work included a three-span steel plate girder bridge, a direct connector bridge superstructure and substructure, and concrete post-tensioned spliced girder unit. Steven also checked various designs by others.
02/09 – 08/14	Bridge Engineer - Associate Professional - Participated in numerous projects in various capacities including performing quality control reviews, designs, design checks, and project management. Assisted in overall staff planning and project scheduling/work planning on various projects to ensure projects were completed on time. Managed multiple fast-paced projects with staff ranging from as few as two people to projects with over 20 engineers at one time.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name	Dacio Marin, PE	Years of relevant experience with this employer	10
Title	Vice President - Structures Department Lead	Years of relevant experience with other employer(s)	31
Degree(s) / Years / Specialization	BS, 1984, Civil Engineering		
Active registration number / state / expiration date	PE 65549, TX, 12/31/2026 PE 31565, OK, 08/31/2026 PE 53676, GA, 12/30/2026 PE 34639, NV, 12/31/2027		
Year registered	1989	Discipline	Civil
Contract role(s) / brief description of responsibilities	Dacio will serve as a Technical Advisor and lead QA/QC efforts on this contract.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
11/24 - 04/26	TxDOT Fort Worth District Bridge Repair Project , Served as Project Manager for a comprehensive bridge assessment and improvement project involving multiple structures, including bridge-class culverts, a river crossing, and a railroad overpass. Led multidisciplinary efforts to evaluate existing conditions, develop repair strategies, and deliver coordinated, quality plan set for bridge maintenance and repairs. Established quality control plan and implemented QA/QC processes including detailed plan reviews by each discipling to ensure consistency across all deliverables.		
04/25 - 07/25	Camino Real International Bridge II – Bridge Repairs - Bridge maintenance project for bridge repairs, including deck repairs to an international bridge over the Rio Grande River in Eagle Pass. Dacio served as the Bridge Project Manager responsible for overall staffing, resource management, and quality of the final deliverables. Dacio coordination with all disciplines ensured that the final deliverables met the client’s needs.		
08/23 - 03/24	TxDOT Austin, Bridge Repair Project - Dacio served as the Project Manager responsible for overall staffing, resource management, and quality of the final deliverables. This project involved assessment and PS&E preparation for maintenance of 39 bridges. Repair work for this project included spall repairs, scour countermeasure installation, pile collar installation and replacement, bearing pad replacement, expansion joint clean and seal, expansion joint replacement, header joint repair, and concrete riprap repair. Four of the bridges were railroad crossings which required that Dacio coordinate with the owners, and discipline task leads for bridge access requirements and traffic control needs to accommodate phasing for the repair work. Dacio ensured that discipline task leads followed project-specific quality control processes ensuring that the final deliverables met the client’s expectations.		

01/20 - 06/24	TxDOT, LP1604 at I-10, San Antonio, Texas – Bridge Task Lead for Segments 1, 2, 3, 4, and 5 of the LP1604 corridor improvements from Bandera Rd to IH-35 along IH 10 from La Cantera to UTSA Blvd (a combined total of over 19.6 miles), the total replacement of the interchange at LP1604 and I-10 in Bexar County, and interchange improvements at US281. The project was designed in various segments and consisted of expanding the existing 4 lane expressway to 10 lanes including 2 HOV-Special Use Lanes and a total of 98 bridges. The project included widenings, rail upgrades, concrete repairs, steel painting, and other improvements to existing bridges to remain. Field assessment of the structures to remain was coordinated and performed to quantify the extents of repairs required and to develop cost estimates for remedial actions and improvements. Dacio reviewed recommendations for repairs and led efforts to incorporate innovative Accelerated Bridge Construction (ABC) techniques into the project where feasible. ABC included using full-depth precast straddle bent caps, hollow precast straddle bent caps, non-fracture critical steel straddle bent caps and precast aesthetic column capitals. Responsibilities included coordination with multiple disciplines including schematic, roadway, TCP, H&H, SUE, ENV, CEI (for constructability review) and OSB/COSS sign placement. In addition, Dacio coordinated the efforts of the LJA and subprovider structural design teams for efficient delivery of plans for all bridges and 20,000+LF of temporary and permanent soil nail and rock nail walls. Dacio was responsible for coordination of structural design teams, distribution of work assignments, and ensuring that the quality control plan for the project was executed. As improvements to this corridor were let in various segments, Dacio has effectively managed multi-million dollar design projects concurrently with construction phased services in previous segments.
07/19 - 07/22	Travis County - Gregg Lane at Wilbarger Creek Bridge Replacement - Dacio served as Bridge Lead overseeing the design of the bridge replacement. He coordinated with hydrologic/hydraulic team to establish bridge limits and roadway staff for geometrics. Dacio's evaluated structure types and considered phasing requirements and maintenance of traffic. Coordination with hydraulics staff led to key decisions including bridge length, hydraulic opening, and freeboard requirements, resulting in a 375-foot prestressed concrete girder bridge designed for long-term resilience and future roadway expansion. During construction, Dacio and his team assisted with construction phased services including shop drawing review, site inspections, and resolution of deficient work. As bridge lead on this project, Dacio was responsible for staffing, resource management, and quality of the final deliverables.
02/21 – 05/22	La Salle County Off-System Bridges, TxDOT Laredo District, TX – Dacio served as Project Manager for the development of full plans, specifications, and estimates for the replacement of 5 bridges in the Laredo District. The bridges were on four different roads in the county requiring coordination with multiple disciplines as design progressed for each location. LJA was the prime for this project. For one crossing, where a bypass road was not feasible because of restricted ROW, the road was closed, and the bridge was replaced full width. At the other four crossings, Dacio coordinated for the successful negotiation to obtain agreements with adjacent landowners for temporary detour easements. Dacio ensured that the design progressed

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Guang Li, PE	Years of relevant experience with this employer	2
Title		Project Director	Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization			MS, 2004, Transportation Planning and Management	
Active registration number / state / expiration date			PE 102206, TX, 09/30/2026	
Year registered	2008	Discipline	PE Civil	
Contract role(s) / brief description of responsibilities			Asset Management Planning Lead/ leads the group of asset management team experts on strategic planning and budget, data analytics, GIS integrations and dashboard development as well as stakeholder engagement.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
02/13 - Ongoing		TxDOT Alternative Delivery Division (ALD), Austin, TX. Jacobs, Atkins, and LJA Program Management, LLC. Supported TxDOT’s Alternative Delivery Division by providing asset management, maintenance, and operations advisory services for alternative delivery projects, with emphasis on maintenance cost evaluation, risk assessment, and long-term O&M planning. Conducted annual project reviews, supported risk register updates, and assisted with district coordination related to maintenance performance, cost controls, and change management during the O&M phase. Developed and applied an enhanced maintenance cost estimation framework using range-based, risk-informed estimates in lieu of single-point cost values. Created and maintained spreadsheet-based maintenance cost estimation templates incorporating probabilistic inputs and Monte Carlo simulation techniques to reflect uncertainty related to asset condition, maintenance frequency, unit costs, and future operational risks. This risk-based approach improved transparency and confidence in cost estimates by clearly defining upper- and lower-bound outcomes and associated likelihoods, allowing decision-makers to better understand potential cost exposure. Conducted numerous maintenance cost estimates using the standardized estimation templates and successfully supported districts during the early planning phase to assess project feasibility and long-term maintenance affordability. The range-estimating methodology was also applied to support refinancing evaluations, helping TxDOT understand the maintenance cost implications under revised financial assumptions. Additionally, supported contract termination decision-making by applying the cost models to assess contract value, remaining obligations, and potential cost risks under alternative scenarios. These efforts enabled TxDOT to make more informed, defensible decisions related to maintenance commitments, financial risk, and overall contract performance.		

02/24 - 09/25	TxDOT Odessa District Bridge Maintenance Program Support, TX. LJA Program Management, LLC. Task Lead. Supported bridge and structure maintenance and preservation activities for the TxDOT Odessa District, with emphasis on long-term program performance evaluation. Reviewed current bridge inspection ratings, condition trends, scour findings, and historical maintenance records to identify maintenance, preservation, rehabilitation, and required inspection finding actions. Supported development and application of an innovative bridge condition projection spreadsheet file that incorporated current and programmed funding levels, planned bridge maintenance and rehabilitation activities, and the latest inspection ratings to project future bridge condition ratings over multiple years. Used projected condition outcomes to help the district evaluate the effectiveness of the existing bridge program and assess potential funding gaps relative to district-wide bridge condition goals.
01/23 - 12/25	TxDOT San Antonio District Bridge Maintenance Program Support, TX. LJA Program Management, LLC. Task Lead. Supported development of a comprehensive bridge maintenance planning and prioritization effort for the TxDOT San Antonio District. Reviewed bridge inspection data and documented deficiencies to classify structures by maintenance need, including preventive maintenance, rehabilitation, replacement, and inspection finding actions. Supported development and refinement of ranking criteria and weighting methodologies used to prioritize bridge investments based on condition and observed deficiencies.
10/22 - 06/23	Annual Inspection Data Summary and Work Plan Development – Toll Facilities (CTTS, HCTRA, NTTA), TX. Atkins. Task Lead. Supported multiple toll agencies with annual inspection data analysis and work plan development. Reviewed and synthesized inspection data for roadway, bridge, and ancillary infrastructure assets to prepare annual inspection summaries and reports. Evaluated observed deficiencies, condition trends, and maintenance needs based on inspection findings. Supported development of recommended repair actions and associated planning-level cost estimates to inform agency work planning efforts.
05/20 - 07/20; 02/23 - 06/23	Central Texas Regional Mobility Authority (CTRMA), Austin, TX. Atkins. Task Lead. Provided advisory support for CTRMA's maintenance program. Reviewed and summarized annual inspection data for bridges, pavement, and associated roadway assets to support condition assessment and maintenance planning activities. Developed and enhanced an Excel-based inspection data and condition tracking tool using macros to compile inspection results and improve consistency in condition evaluation. The tool supported assessment of maintenance compliance and was used to calculate liquidated damage amounts based on inspection findings and condition thresholds defined in maintenance specifications. Supported invoice management by enhancing invoicing and tracking tools to align documented maintenance activities, inspection results, condition assessments, and liquidated damage calculations with CTRMA maintenance contract requirements.
09/23 - 02/24	TxDOT Austin District Pavement 4 Year Planning Support, TX, Task Lead. Atkins. Task Lead. Supported pavement 4 year planning activities for the TxDOT Austin District by updating and re implementing a previously developed macro based pavement prioritization tool to reflect the latest inspection data and planning assumptions. The effort required detailed review and reconciliation of updated pavement inspection datasets with the underlying logic and macros embedded in the tool. Worked meticulously through the existing code structure to update data inputs, revise calculations, and resolve compatibility issues introduced by changes in inspection data formats and rating criteria. Coordinated closely with Austin District pavement engineers throughout the process to confirm prioritization logic, validate updated outputs, and ensure the tool continued to reflect district pavement management practices and planning needs. The refined tool enabled the district to reliably assess pavement condition, prioritize candidate projects, and update the 4 year pavement program using current inspection information.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Luke Little, PE	Years of relevant experience with this employer	10
Title		Program Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS, 2016, Civil Engineering	
Active registration number / state / expiration date			PE 140741, TX, 07/31/2027	
Year registered	2021	Discipline	PE Civil	
Contract role(s) / brief description of responsibilities			Strategic Planning and Budget Support Lead/Develop bridge asset management strategies and budgetary needs to support the program	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/25 - Ongoing		TxDOT Maintenance (MNT) Comprehensive Engineering Contract (CEC) — Legislative Appropriations Request (LAR) Maintenance Budget Development, TX, LJA Engineering, Project Manager supporting development of an improved budget allocation methodology for TxDOT's LAR cycle with primary responsibility for the traffic asset category. Reviewed TxDOT's Maintenance Management System (MMS) function codes and historical expenditure data to identify data quality issues, missing codes, and inconsistencies between actual spending patterns and existing budget allocations. Developed updated budget projections by establishing function code inclusion thresholds and applying compound growth factors to account for inflation. Coordinated with TxDOT district and administration staff to align proposed traffic maintenance budget methodology with current service level policy and prepare materials for executive review. While this experience is TxDOT-specific, the MMS data analysis and condition-to-budget methodology are directly transferable to other agencies' maintenance programs.		
01/26 - Ongoing		TxDOT Enterprise Data Governance (EDG) — Striping Asset Data Governance Framework, TX, LJA Engineering, Project Manager supporting development of a statewide data governance framework for pavement marking assets, serving as a pilot for TxDOT's broader enterprise data governance initiative. Facilitated stakeholder interviews across TxDOT divisions including Traffic Safety, Maintenance, and district leadership to assess current data practices, establish data ownership structures, and define asset data fields and performance metrics for the statewide striping inventory. Reviewed existing TxDOT manuals, federal retroreflectivity requirements, and agency policy to evaluate alignment with proposed governance standards. Assessed stakeholder alignment across divisions to identify areas of consensus and outstanding policy decisions required prior to framework finalization. While Louisiana-specific, the LADOTD bridge maintenance program similarly depends on the same foundational principles driving this effort: asset inventory accuracy, condition-based performance metrics, and cross-divisional data governance that support preservation prioritization and funding justification		

01/25 – 02/26	TxDOT Corpus Christi District (CRP) Bridge Program, Corpus Christi, TX, LJA Engineering, Project Manager. Managed two concurrent bridge asset management workstreams for the CRP district: inspection finding cost estimating and scour analysis for scour-critical bridges. Developed and implemented a scalable two-track methodology to produce defensible planning-level estimates for nearly 900 inspection findings, combining 200 detailed reviews using AssetWise data, TxDOT bid codes, and Bluebeam measurements with a standardized, keyword-based approach for remaining findings. Established quantity and cost benchmarks using CRP data and historical data from other districts, categorizing structures by size and applying TxDOT bid averages and contingency. Delivered estimates totaling approximately \$14.46 million, supporting the district's improvement from rank 14 to rank 8 statewide in inspection completion. Conducted scour analyses across the district's bridge inventory, reviewing site conditions, historical inspections, and hydraulic characteristics to determine scour criticality, recommend plan-of-action designations, and assess countermeasure needs. Prepared, stamped, and sealed scour assessment documentation in accordance with FHWA and TxDOT Bridge Inspection Manual requirements.
05/25 – 09/25	TxDOT Pharr District (PHR) Bridge Inspection Findings Cost Estimating, Pharr, TX, LJA Engineering, Project Manager responsible for developing structure-specific inspection finding cost estimates across the PHR district's bridge inventory. Reviewed bridge inspection reports and finding records to identify deficiency repair types, performed quantity take-offs for each finding, and developed planning-level unit cost estimates to support district bridge maintenance budgeting. Coordinated with TxDOT district bridge staff and internal working group through regular progress meetings to address comments and refine estimates. Organized final inspection finding deliverables by structure and repair category for district review. Developed dashboard to track active inspection findings through PowerBI to assist with district maintenance planning.
06/19 – 11/20	IH-35 NEX / SE Connector, Bridge Quantity and Inventory Support, San Antonio, TX, LJA Engineering, Engineer supporting bridge inventory development and cost estimating for major TxDOT design-build procurements. Compiled NBI data and developed bridge inventories with KMZ mapping for all proposed structures. Performed quantity take-offs from schematic design files using MicroStation, including concrete, steel, and removal quantities broken out by bridge. Identified bridge clearance conflicts and prepared documentation to support project team review and resolution.
06/21 – 09/25	TxDOT Pharr District (PHR) PS&E, Utility Coordination and Relocation, FM 494 (CSJ 0864-01-068 & 069) and FM 1017 (CSJ 1227-04-023), Pharr, TX, LJA Engineering, Utility Engineer / Project Manager responsible for managing utility coordination and relocation efforts across multiple PHR PS&E projects over a multi-year period. Coordinated directly with utility owners including AEP, AT&T, Enterprise, Hilcorp, Merit, and municipal entities to advance relocation designs, review adjustment plans, and resolve conflicts identified through SUE data. Maintained and updated the Utility Conflict Matrix (UCM) and weekly status summary reports to track action items and communicate progress to TxDOT. Developed proposed utility layout sheets and conflict exhibits using MicroStation to support design resolution. Reviewed SUE data to evaluate interim versus ultimate conditions and determine adequacy for relocation planning. Coordinated with TxDOT district staff and ROW attorneys on UID supplements and utility-related design issues, and managed correspondence throughout the full PS&E phase, through advertisement.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name	Cheryl Doherty, PE	Years of relevant experience with this employer	<1
Title	Project Director	Years of relevant experience with other employer(s)	31
Degree(s) / Years / Specialization	BS, 1994, Civil Engineering		
Active registration number / state / expiration date	PE 104414, TX, 09/30/2026 PE 54617, FL, 02/28/2027		
Year registered	2009 1999	Discipline	PE Civil PE Civil
Contract role(s) / brief description of responsibilities	Strategic Planning and Budget Support / Asset management planning and budgetary support		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
10/11 - 12/18	TxDOT Project Finance and Toll Operations Division, Central Texas Turnpike System (CTTS), TX; Performed prior to joining LJA. Project Manager and Senior Engineer responsible for supporting TxDOT Toll Operations Division with bond indenture requirements, including oversight of the annual maintenance inspection and development of the annual inspection report for SH 130, SH 45N, Loop 1, and SH 45SE. In addition to the review of roadway and building inspection findings, Ms. Doherty also reviewed bridge inspection findings for the system’s 240+ bridges and documented the results in the annual report of conditions. She also supported CTTS in the development of the annual operations, maintenance, and capital budgets.		
08/13 - 03/25	Central Texas Regional Mobility Authority (CTRMA), General Engineering Consultant (GEC), TX; Performed prior to joining LJA. Senior Engineer supported the GEC oversight team on several CTRMA roadway and building projects, as well as provided maintenance support that included the development of maintenance procurement documents, management of maintenance inspections, and preparation of the annual report of conditions. As part of her responsibilities associated with the preparation of the annual report of conditions, Ms. Doherty reviewed bridge inspection findings for the system’s 78+ CTRMA-owned bridges, as well as the 16 shared bridges. Results of the findings were compiled and documented in the annual report of conditions.		
02/15 - 02/16	CTRMA, Systemwide Performance Based Maintenance Contract Development, TX; Performed prior to joining LJA. Senior Engineer responsible for the development of routine performance-based maintenance bid documents for the following corridors: 183A Toll Road, 290E, Loop 1 Toll, 71 Express, and 45SW. Ms. Doherty was responsible for overseeing the development of plan layout sheets, special specifications, general notes, and cost estimates for roadway and bridge assets on the system.		

12/23 - 04/26

TxDOT Austin District, Central Texas Construction Partnership Program (CPP), TX; Performed prior to joining LJA. Deputy Project Manager supporting TxDOT Austin District on their Central Texas Construction Partnership Program (CPP) technology initiative responsible for project controls and interagency coordination. Ms. Doherty helped oversee the development of a construction data platform. The platform was designed to gather, aggregate, and standardize traffic, roadway construction, and maintenance construction data from six agencies: TxDOT, the City of Austin, the Capital Area Metropolitan Planning Organization (CAMPO), the Central Texas Regional Mobility Authority (CTRMA), the Capital Metropolitan Transportation Authority (CapMetro), and the Austin Transit Partnership (ATP). This data was shared with the participating agencies, the traveling public, construction personnel, and other stakeholders



16. Staff Experience:

Firm employed by: LJA Engineering, Inc.

Name		Selina Padilla, EIT	Years of relevant experience with this employer	2
Title		Graduate Engineer	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS, 2024, Civil Engineering	
Active registration number / state / expiration date			EIT 84116, TX, 06/11/2033	
Year registered	2025	Discipline	EIT	
Contract role(s) / brief description of responsibilities			Strategic Planning and Budget Support & Data Analytics Support/Develop bridge asset management strategies and budgetary needs to support the program and provide data analytical review of bridge inspection, condition and cost data.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
06/24 - Ongoing		TxDOT San Antonio (SAT) District Bridge Program, San Antonio, TX., LJA Engineering. Graduate Engineer for the refinement of SAT's 4-year bridge asset management plan, streamlining inspection findings processes, and developing a bridge condition prioritization tool. LJA created a GIS-based prioritization tool to enable data-driven decisions and developed dashboards to categorize bridge work by type and performance. These tools enhanced SAT's ability to manage project selection, advanced planning, and ongoing maintenance. Selina supported the development of the prioritization tool which provided structure-specific work needs based on current and historical condition data identifying the most critical components of the structure, forecasted outcomes and efficiencies for various work options, and finally a prioritization score. Selina was responsible for an age-adjustment factor to account for the effect ADT has on bridge deterioration, tailored to each bridge component and superstructure type. This effort leveraged statewide data to estimate the average age at which components transition between condition states. Selina also supported a resolution to the lack of inventory data for prestressed concrete and girder bridges by incorporating statewide performance trends into the analysis. Selina conducted a comparative evaluation of deterministic (normal distribution) and probabilistic (Markovian) statistics, utilizing advanced visualization techniques to transform complex statistical outputs into intuitive, decision-support tools. In addition, Selina led the effort to create user guides for SAT to support adoption of these tools within their preservation program. She coordinated closely with key contributing members to ensure consistent, high-quality documentation across all deliverables. Throughout the project, Selina provided continuous support to both SAT and the LJA team by keeping them on track with ongoing tasks, coordination, and ensuring thorough documentation and recordkeeping.		

07/25 - Ongoing	TxDOT Maintenance Division (MNT) Maintenance Program, Statewide, TX., LJA Engineering. Graduate Engineer. Supported development of TxDOT's Routine Maintenance Program biennium budget submission through the Legislative Appropriations Request (LAR), evaluating prior methodologies using statewide budget data, MMS expenditures, and performance metrics to assess funding impacts on bridge conditions. Contributed to transitioning the program from a historical, inventory-based model to a needs-based approach incorporating condition ratings, risk, cyclic maintenance needs, and inflation. Compiled bridge maintenance quantities using inspection element data and normalization techniques, and analyzed historical MMS cost data to project unit cost growth. Assisted with QA/QC and final deliverables, streamlining the LAR for clarity and accessibility for Administration and legislative review.
06/24 - 08/25	TxDOT Odessa District (ODA) Bridge Program Asset Management, Odessa, TX., LJA Engineering. Graduate Engineer for comprehensive bridge program to support Odessa spanning inspection findings and scour evaluations including the development of decision-support and prioritization tools. ODA had over 200+ unresolved inspection findings and no available staff to develop a plan of action. Selina supported the assessment of each structure using the latest inspection data and historical records, developed repair recommendations, and prepared cost estimates based on region-specific historical bid data, incorporating assumptions and contingencies. Selina also provided support addressing missing scour documentation for over 35 bridges to meet federal requirements. She reviewed each bridge's inspection findings, original design plans, and historical records, performed scour risk assessments in accordance with TxDOT guidelines, and prepared required documentation, including recommended actions where warranted. In a tight timeline and budget, she prioritized structures by risk, performed in-depth hydraulic and hydrologic analysis on critical bridges, and delivered TxDOT-compliant evaluations that improved planning, funding justification, and long-term public safety. Across all efforts, Selina integrated clear communication, project organization and task tracking, and innovative approaches to help ODA align asset strategies with funding and long-term goals. Her work consistently strengthened bridge maintenance programs, advanced planning processes, and supported preventative maintenance as a cost-effective way to manage aging infrastructure.
2020 - 2024	Land and Site Development and Public Works, BGE Inc., Engineering Intern for development of single-family subdivisions and public improvement projects including drainage studies, utility design, submittal package documentation, and plan set development. Selina utilized various software including AutoCAD, Microstation, HEC-HMS, StormCAD and FlowMaster to assist in analysis and design. Contributions include plan set creation for multiple single-family subdivisions, design of storm sewer pipe network, gravity wastewater pipe network, water quality pond sizing calculations, project cost estimates for bid and quantity take offs, prepare TCEQ CZP forms for package submittal and prepare engineer's report package. Provided design resolutions to utility conflicts or other site restrictions. Supported modeling of public large-scale drainage vortex generated drop-manhole for major interstate highway expansion project. Provided analysis of hydrology models to support rehabilitation of several dams including contributing drainage ponds.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Ambarish Banerjee, PhD, PE	Years of relevant experience with this employer	1
Title		Senior Project Engineer	Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization			PhD, 2012, Transportation Engineering	
Active registration number / state / expiration date			PE 143220, TX, 09/30/2026	
Year registered	2021	Discipline	Transportation Engineering	
Contract role(s) / brief description of responsibilities			Data Analytics Support Lead/ lead the data analytics team through a systematic review of bridge inspection, work history, and cost data for asset management planning.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/25 - 04/26		TxDOT Bridge Program, San Antonio District (SAT), TX., LJA Engineering, Data Analytics Engineer developed a text mining program to analyze inspection findings, element level defects, and component inspection records to identify relevant repair categories for components. The method relies on assigning a score based on the pairwise similarity between the text of the inspector comment and keywords associated with each repair category. The repair category with the highest relevance/ score is identified as the most likely repair category for the issues highlighted in the inspector comments. The process is repeated for the inspection findings, element inspection, and component inspection data. Based on the alignment in the repair recommendations from the three independent datasets, a confidence score is developed that is subsequently used to rank the repair need for the said bridge component. Additionally, adopted the Markov transition probabilities published as part of TxDOT research project 0-6979 to quantify the drop risk for the deck, superstructure, and substructure. Investigated the historical transition duration for each bridge component and calibrated the Markov transition probabilities to the transition time for each of the quintiles in the survivorship distribution function for each condition state.		
09/20 - 08/21		Nevada DOT Enterprise Asset Management Implementation, Agile Assets, Software Developer worked on configuration and development of AgileAssets Structure Manager for Nevada DOT. Specific tasks included data integration with AASHTOware to synchronize NBI items, configuration of construction history, treatment types, decision trees for component and element level analyses, and development of condition summary reports for bridge, channel, and tunnel assets to meet federal reporting requirements.		

05/25 - Ongoing	Wishlist Project Selection Application, Odessa District (ODA), LJA Engineering, Project Engineer developed a project prioritization tool for rehabilitation projects for TxDOT's Odessa district. As part of the project planning, the maintenance office enters the centerline extents of the project. The program pulls in condition data, crash statistics, skid score, historical maintenance expenses, ride score, inventory attributes like AADT and AADTT, and the age of the pavement surface for each of the roadbeds that overlap with the centerline extents of the project. The granular data is weighted by the centerline overlapped length of the project to assign an aggregate composite score that incorporates each of the individual factors. The top 8 projects for each maintenance section are identified and ranked based on the scoring roster highlighted above and prioritized for further program planning.
07/25 - 01/26	TxDOT Maintenance Program, Pavement Asset Management, LJA Engineering, Senior Engineer proposed a new Legislative Appropriations Request (LAR) budget estimation procedure that is derived from pavement maintenance needs instead of historical allocation rules that only relate to inventory data. As part of the exercise, the quantity of critical distresses for each of TxDOT's 25 districts was calculated based on the latest distress survey data. In the following step, an appropriate treatment and the maintenance cycle for that distress was determined based on historical data available from the maintenance management system (MMS). The total cost and accomplishment for each of the targeted treatment were obtained from MMS for each of the last 5 years which was then used to calculate the unit cost of the treatment and the accompanying price inflation over the analysis period. This information was subsequently used to determine the expected unit cost for the treatment in the biennium FY28-29. The treatment cost was calculated as the sum of the product of targeted treatment mileage and the projected unit cost for the treatment for each of TxDOT's 25 districts. In the final step, the grand total of all the treatment types (base repair, mill and overlay, strip seal, crack seal, seal coat, fog seal, and concrete pavement repair) was calculated and proposed as the total pavement maintenance budget.
01/2026 - Ongoing	TxDOT Maintenance Division, Analysis of TSDD and 3DGPR, LJA Engineering, Senior Engineer analyzed TSD deflection, in conjunction with the layer thickness information obtained from 3DGPR, enables a more comprehensive evaluation of the pavement's structural capacity, which is not available through conventional visual distress surveys. Developing a program that considers deflection and layer thickness measurements to calculate the effective structural number and the Structural Condition Index (SCI). In the next step, the SCI is used together with the Condition Score to identify pavement sections requiring rehabilitation due to structural deficiencies. Conversely, the program also supports the screening of rehabilitation projects where observed distresses are superficial in nature, thereby assisting TxDOT in optimizing the allocation of maintenance funds.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Robert Beals, EIT	Years of relevant experience with this employer	2
Title		Graduate Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS, 2024, Mechanical Engineering	
Active registration number / state / expiration date			EIT, TX, 07/01/2033	
Year registered	2025	Discipline	EIT	
Contract role(s) / brief description of responsibilities			Asset Management Planning – Bridge Data Analytics Analysis of bridge inspection and cost data to support asset management planning	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
11/25 – 04/26		TxDOT San Antonio (SAT) District Bridge Maintenance Work Plan Development, San Antonio, TX. Graduate Engineer. Performed comprehensive condition analysis on hundreds of bridges within the San Antonio District (SAT). Assigned predicted component repair categories based on inspection finding worksheet descriptions, inspection finding repair categories based on reported issue descriptions, element repair categories derived from element-level defect data, and component inspection repair categories based on component and subcomponent inspection results. Developed and applied keyword tagging methodology to systematize categorization and support automated coding assignments across the full bridge inventory. Developed a dynamic bridge maintenance work plan tool using Microsoft Excel, including VBA macros and Power Query. The tool allows users to apply any combination of filters—such as bridge ID, maintenance section, and repair category—and automatically generates a prioritized list of bridges meeting the specified criteria. Bridges are assigned priority scores and displayed in descending order of priority to support maintenance planning and resource allocation decisions.		
10/25 – 04/26		TxDOT Maintenance Division (MNT) Bridge LAR Funding Support, Statewide, TX. Graduate Engineer. Supported Legislative Appropriations Request (LAR) funding analysis for the MNT by performing data cleaning and documentation of the Maintenance Management System (MMS) cost data to ensure accuracy and consistency for downstream analysis. Calculated bridge removal counts, deck square footage, and expenditure totals by district. Analyzed bridge inventory in good, fair, and poor condition categories, broken out by span bridge and culvert type, with dollar and square footage summaries by district. Developed two cost estimation approaches using pivot tables: Approach 1 identified maintenance work based on bridge condition, calculated average expenditures per square foot for bridges with documented maintenance activity, established work cycle assumptions, and applied per-SF cost rates to the full inventory of good and fair bridges. Approach 2 identified maintenance needs based on bridge element condition using BrM designations (Preventive Maintenance, Minor Repair, Major Repair), calculated average expenditures per unit of measure (\$/UOM) for worked elements, and applied rates to the full element inventory.		

04/25 – 09/25	TxDOT Odessa (ODA) District Bridge Program Support, Odessa, TX. Graduate Engineer. Analyzed bridge condition scores for the ODA inventory and calculated the percentage of bridges in poor, fair, and good condition. Applied the 10-Year Bridge Condition Score Prediction Tool to project future condition distributions across the district's bridge population. Reviewed Assetwise bridge inspection reports to identify and document inspection findings including scour concerns and maintenance needs requiring further evaluation.
08/24 – 09/25	TxDOT Statewide Bridge Inspection Finding Quantity and Cost Estimation—Pharr, Corpus and Odessa Districts, TX. Graduate Engineer. Reviewed bridge inspection reports in Assetwise for multiple TxDOT districts, including PHR, CRP, and ODA. Identified inspection findings and developed detailed quantity takeoffs for required repair work items. Quantities were used to produce cost estimates for the full scope of bridge repair work within each project, supporting district-level maintenance planning and funding documentation.
10/25 – 01/26	TxDOT Corpus Christi (CRP) District Scour Analysis—Scour Critical Bridges, Corpus Christi, TX. Graduate Engineer. Performed scour analysis on multiple scour-critical bridges within the CRP. Evaluated hydraulic and geotechnical conditions to determine the level and extent of scour at each bridge site. Assessed whether individual bridges met the threshold for scour-critical designation and documented findings in support of TxDOT's scour-critical bridge management program.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Margaret Genzer	Years of relevant experience with this employer	6
Title		GIS Regional Manager	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization			BS, 2016, GIS	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			GIS Integrations and Dashboards/ Use client's spatial data to depict asset management planning and tracking through GIS databases and dashboards.	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
4/26 - Ongoing		Harris County Flood Control District (HCFCD) Dashboard, LJA Engineering, Served as GIS Analyst in the development of a maintenance project Dashboard for HCFCD to display project limits, locations and attributes. Margaret's role included staging the project data within LJA's enterprise GIS Portal and designing the interactive map that is the primary display within a custom dashboard created with ArcGIS Experience Builder. Layers within the map include commissioner precincts, watershed boundaries, and channel centerlines. The user can leverage these layers to dynamically filter the maintenance projects within the map view and update charts and metrics within the dashboard.		
2/24 - 4/25		TxDOT San Antonio District (SAT) Bridge Prioritization Tool, LJA Engineering, GIS Analyst led the development of a GIS-based system designed to ingest output from a custom XLSX analysis tool that processes NBI bridge inspection data, and to visualize the results within an interactive web mapping application. The custom XLSX tool applies scripted risk-weighting methodologies to structural component condition data, generating an overall risk classification for each bridge within the TxDOT San Antonio District. The GIS system relates the resulting risk-classified dataset to bridge point features using unique bridge IDs and presents the data through a custom application built with ArcGIS Experience Builder. The application provides interactive geospatial visualization, filtering, querying, and export capabilities to support additional analysis workflows. The system was designed for annual updates as new bridge inspection data becomes available. The team also developed a comprehensive user guide outlining the process for running the XLSX analysis tool and updating GIS data within the enterprise geodatabase.		
07/25 - Ongoing		TxDOT Odessa District Pavement Project Prioritization, LJA Engineering, GIS Analyst led the development and implementation of a mobile GIS workflow within the ESRI environment that enabled users to create pavement improvement projects directly in the field. The workflow utilized an ArcGIS Field Maps application containing the TxDOT Roadway Inventory, Project Limits group layer, and additional reference layers stored in an enterprise geodatabase. The Project Limits layer included an editable Starting Point layer set up with a relationship class to an End Point layer, allowing users to define pavement project extents along roadway centerlines.		

07/25 - Ongoing	TxDOT Odessa District ITS Master Plan and Maintenance Work Planning Tool, LJA Engineering, GIS Analyst led the development effort for a GIS-based master planning tool for Traffic Operations assets (ITS) for the Odessa TxDOT District, as well as ongoing efforts to create an asset management system leveraging various ESRI products. The team first developed an XLSForm-based survey deployed through Survey123 to collect stakeholder feedback. Stakeholders accessed the survey through an ArcGIS Experience Builder application, which allowed them to view existing asset locations and provide input on proposed locations to gauge support. Survey results were used to help rank proposed assets based on stakeholder support and were incorporated into a final report. Margaret is currently leading the development of an additional GIS-based asset management system designed to improve efficiency within Traffic Operations maintenance activities. The system supports functions such as creating service requests, storing maintenance records, mapping and viewing assets with active requests, reporting, and document management. Using forms published through Survey123, Traffic Operations personnel can create service requests from either mobile devices or desktop computers. Service request records are stored in an enterprise geodatabase and directly related to individual assets. All data required to manage Traffic Operations assets is accessible through a custom ArcGIS Experience Builder application. The application enables users to view, manage, and maintain both asset inventory and associated service requests.
08/25 - 4/26	TxDOT Statewide Radio System, LJA Engineering, GIS Analyst developed a statewide radio tower inventory system within the GIS environment leveraging various ESRI products. The team utilized Survey123 to create a web-based smart form designed to collect radio tower attributes, installed equipment, and tower site conditions. The smart form also included the ability to take pictures during a tower assessment, which became crucial for post-processing. The team was able to monitor the progress of the statewide tower survey using an ArcGIS Dashboard, which played a major role in coordinating with the TxDOT Radio Division throughout the project. Using the GPS coordinates collected during the survey process, the team created a spatial dataset of the towers with the equipment attributes and attachments (photos). The team then developed a web application using ArcGIS Experience Builder for the Radio Division to understand the current condition of the radio system and identify where to focus improvement efforts.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Sydney Fox	Years of relevant experience with this employer	<1
Title		Engagement Specialist	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization			MPA, 2023, Public Policy Analysis BA, 2021, Communications	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Stakeholder Engagement & Communication – internal and external engagement specialist supporting programmatic communication	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/26 - Ongoing		Harris County Flood Control District, Maintenance Program, Houston, TX, LJA Engineering, Stakeholder Engagement Specialist for the Maintenance Program Management project. Contracted to support a review of the maintenance program and develop an implementable program management strategy. Responsibilities include planning and facilitating internal stakeholder workshops, and developing internal and external maintenance communications plans. This includes preparing presentations, briefing materials, and outreach content for meetings with Harris County Commissioners, precincts, the public, and other leadership. Additional responsibilities include coordinating and documenting stakeholder interviews, synthesizing feedback into themes, risks, and recommendations, supporting change-management and implementation planning activities, and tracking action items, decisions, and next steps across workstreams.		
03/26 - Ongoing		Fort Bend County Mobility Bond Projects GEC, Richmond, TX, LJA Engineering, Public Involvement Specialist supporting the South Mason Road/Grand Parkway (SH 99) Roadway Improvements Project and the Harlem Road Expansion Project. The South Mason Road/Grand Parkway (SH 99) project includes raised median installation, roadway widening, signal improvements, right-of-way acquisition, and utility relocation. Public engagement activities include coordinating with Fort Bend County staff and community stakeholders, identifying and engaging impacted businesses and residents, planning and preparing materials for a construction open house, responding to stakeholder questions, and continuing outreach and coordination throughout construction. The Harlem Road Expansion Project includes full roadway rehabilitation and widening, with outreach and stakeholder coordination required prior to and during construction to support project awareness, access, and construction impacts.		

2025-2026	TxDOT Bryan District, 4-Year Bridge Plan, District-Wide, TxDOT Stakeholder Engagement Specialist producing executive-ready presentation materials and data visualizations for the Bryan District's four-year bridge plan briefing. Work included developing clear graphics that summarized inspection cycles, bridge condition ratings, and planned preventive maintenance versus reactive repairs, along with associated costs across a four-year fiscal period, and supporting the bridge team with talking points and backup materials to prepare for the district presentation.
03/26 - Ongoing	TxDOT Enterprise Data Governance (EDG) — Striping Asset Data Governance Framework, TX, LJA Engineering, Stakeholder Engagement Specialist supporting development of a statewide governance framework for pavement marking assets. The project serves as a pilot for TxDOT's broader enterprise data governance initiative. Activities include developing a stakeholder engagement plan to guide communications, drafting and administering an internal and external stakeholder survey, scheduling and coordinating internal stakeholder workshops, preparing progress update presentations, and documenting engagement results in a Stakeholder Engagement Report.
01/24 - 01/26	TxDOT Bryan (BRY) District, SH 6 Central BCS Expansion, College Station, TX, TxDOT Public Involvement Specialist supporting stakeholder outreach during final design and early construction for a \$671 million expansion project, including full bridge replacements, bridge widenings, and bridge restriping. Public involvement activities included maintaining a stakeholder database and contact lists, preparing and disseminating weekly construction updates, coordinating with property owners and local agency partners, responding to public inquiries and documenting comments, coordinating with impacted property owners and businesses regarding access and construction phasing, preparing briefing materials for elected officials and community leaders, presenting to the local Metropolitan Planning Organization and City Councils, supporting media coordination and interviews, and planning and staffing outreach events such as the groundbreaking ceremony and sound wall workshop.
2/24 - 1/26	TxDOT Bryan District, SH 105 Widening, Grimes County, TX, TxDOT Public Involvement Specialist managing public involvement for a major widening project, including construction of direct connectors. Public involvement activities included obtaining right-of-entry agreements from adjacent property owners, coordinating and documenting meetings with impacted stakeholders, planning and preparing materials for a public meeting, maintaining the project website and updating public-facing information, and preparing media releases and project updates.
10/23 - 1/26	TxDOT Bryan District, US 290/SH 36 Interchange Design Build, Brenham, TX, TxDOT Public Involvement Specialist leading public involvement for an intersection improvement project that includes two full bridge reconstructions and construction of direct connectors. Activities included coordinating with affected property owners, managing outreach and stakeholder communications, preparing public hearing materials and plans in accordance with NEPA requirements, and drafting documentation to support the Environmental Assessment.
8/23 - 1/26	TxDOT Bryan District, I-45 Corridor Program, District-Wide, TxDOT Public Involvement Specialist leading early-stage public involvement for a 100-mile corridor improvement program. Activities included maintaining project websites and public-facing content, coordinating meetings and communications with impacted property owners, planning public meeting opportunities and outreach activities, drafting press releases and construction communications, preparing briefing materials and presentations for local elected officials, and supporting environmental field activities, including a culvert site visit to document potential habitat for Tri-Colored Bats.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name	David Pretorius, PE	Years of relevant experience with this employer	8
Title	Structural Team Lead	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	MS, 2012, Structural Engineering BS, 2011, Civil Engineering		
Active registration number / state / expiration date	PE 130358, TX, 07/31/2027 PE 53674, GA, 12/30/2026		
Year registered	2018	Discipline	Structural
Contract role(s) / brief description of responsibilities	Plan Development Lead and Bridge Design / Provide assessment, lead design, and post-construction support.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
11/24 - 01/26	TxDOT Fort Worth District, Bridge Repair Project - Served as the lead for bridge condition assessment, field coordination, and design of structural improvements for a multi-bridge rehabilitation project that included bridge-class culverts, a river crossing, and a railroad overpass. David planned field work and developed a method to ensure consistent field notes on all bridges during condition assessments. David developed recommendations for remedial actions and construction cost estimates for repair work and bridge improvements and prepared formal reports for each structure. David led plan development of bridge layouts, repair details, and bridge improvements for the project. David coordinated with the project manager, other disciplines, and TxDOT to ensure bridge details aligned with other disciplines and with the client's preferences.		
05/25 - 11/25	Craft Road Historic Steel Truss Repair and Relocation – The steel camelback pony truss carries vehicular traffic on Craft Road over a small creek, and will be removed, repaired, and relocated to a nearby creek crossing for the Katy Trail pedestrian path. Project involved an in-person site visit to inspect and investigate the truss, developing truss repair plans, developing truss lifting details for the relocation, developing the PS&E plans for the Katy Trail and implementation of the truss at the new bridge location, and providing a detailed cost estimate for the repair work and installation. David served as the structural design lead and oversaw the inspection and repair details for the truss. He coordinated with TxDOT to ensure the expectations of the repairs met their needs and coordinated with other project disciplines throughout the development of the details. This project involved assessment and rehabilitation of a historic steel truss bridge constructed in 1920 to be moved from its current location and repurposed for a pedestrian trail creek crossing.		

03/25 - 06/25	Camino Real International Bridge II – Bridge Repairs - Bridge maintenance project for repairs to an international bridge over the Rio Grande River in Eagle Pass. Project involved an in person site visit to inspect and investigate requested bridge repairs, which included deck spalling and pavement marking improvements on the USA side of the bridge. Repair plans and cost estimate, including TCP and structural details, were delivered as part of the project. David served as the structural design lead and oversaw the inspection and repair plans for the bridge. He served as quality control lead and coordinated with other disciplines for submittals and cost estimates.
06/23 - 06/24	TxDOT Austin, Bridge Repair Project - Maintenance project which included 39 bridges at an estimated construction cost of \$4.9M. Repair work for this project included spall repairs, scour countermeasure installation, pile collar installation and replacement, bearing pad replacement, expansion joint clean and seal, expansion joint replacement, header joint repair, and concrete riprap repair. Four of the bridges were railroad crossings which required development of exhibits for railroad coordination. David was the Structural Task lead for the project. He oversaw the design team throughout the site visits and inspections of each bridge, repair detail development, and plan production. Coordinated with TxDOT on bi-weekly calls, developed cost estimates, general notes, special specs, and provided technical lead for structural issues on bridges. David coordinated with other disciplines including traffic control to ensure maintenance of traffic throughout construction. David performed quality control reviews on all plan sheets.
03/20 - 10/25	TxDOT, LP1604/IH10 Interchange, San Antonio, TX - Bridge design engineer on highway improvement project to upgrade the existing 4 lane expressway to 10 lanes and the interchange at LP 1604 and IH 10. Provided technical direction on structural designs for complex features on direct connectors and performed quality control reviews of bridge details. Prepared design calculations and structural modeling of five accelerated bridge construction (ABC) prestressed, precast rectangular voided straddle bent caps. Prepared design calculations and modeling for soil nail walls, drilled shaft walls and oversaw design of bridge widenings. Coordinated with other disciplines and led the design of U-turn bridges at grade separated interchange and oversaw design of four prestressed girder bridges over UPRR Railroad.
04/18 - 08/21	Harris County Toll Road Authority, SH99/SH249 Interchange, Harris County, TX – Bridge engineer for the design of the curved, precast, post-tensioned, concrete U girder superstructure unit on Connector G. This is a 2-span continuous unit which is the first of its kind to be constructed in the state of Texas. Used 3-D time dependent modeling program RM Bridge to design girders. Also performed other various girder checks such as post-tensioning bursting design, closure pour design, diaphragm design, temporary stress checks for construction phases and transportation, and deck design. Considered construction sequencing to minimize disruption to traffic at interchange.
09/23 - 12/23	The John's Island Property Owner's Association owns and maintains 5 bridges and 1 major culvert around the island, but there were no as-built plans for any of the structures. LJA was tasked to inspect each of the structures and provide any recommendations on future maintenance and inspection needs. Role In Project: Over the course of a week, David and another engineer physically inspected each bridge, some of which required Jon boats and kayaks to access. David supervised the development of the inspection reports for each bridge. He also provided technical direction and quality control for the reports, recommendations, and repair cost estimates.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name	Nikolas Kalos, PE	Years of relevant experience with this employer	10
Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization	BS, 2011, Civil Engineering MS, 2013, Civil Engineering		
Active registration number / state / expiration date	PE 124916, TX, 09/30/2026 PE 53526, GA, 12/30/2026		
Year registered	2016	Discipline	Civil, Structural
Contract role(s) / brief description of responsibilities	Nikolas will lead a Bridge Group on this contract performing field assessment and design of repairs.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/17 - 04/18	Lynchburg Ferry Post Harvey Improvements Phase II, Harris County PC2, TX – PS&E for the upgrade and improvements of existing ferry infrastructure. Nikolas served as Deputy Project Manager for the design of new bulkheads, scour armoring and soil improvement, slope paving, illumination work, drainage, and traffic control. Responsibilities include development of special specifications, construction cost estimation, preparing client specific deliverables, construction schedule preparation, and direction of all design disciplines.		
08/19 - 12/21	Lynchburg Ferry Emergency Repair, Harris County, TX – PS&E for the repair of all ferry infrastructure damaged during Hurricane Harvey. Design engineer for four new fender landing wingwalls consisting of custom steel superstructure, UHMW plastic lumber facing grid, and thermal sprayed aluminum coatings. Detail design of two steel monopile dolphins with donut type floating fenders at ferry approach for vehicle loading/unloading. Development of special specifications for thermal sprayed aluminum coatings and steel monopiles.		
11/17 - 11/19	Seawolf Parkway Bridge Rehabilitation, TxDOT, Galveston, TX – PS&E for the rehabilitation of the existing Seawolf Parkway Bridge that connects Galveston Island to Pelican Island. Nikolas served as the design engineer responsible for steel and concrete tie beams used to reduce the unbraced length of existing trestle bents due to scour. The 160' steel truss span is approximately 35' wide by 18' deep and had sections of severe corrosion due to the saltwater environment. Nikolas was the design engineer for a truss gusset plate and lateral brace strengthening for one area of severe corrosion and section loss. Nikolas performed a load rating analysis of the existing hot rolled floor beams and open metal grid deck in the bascule span leading to the removal of load posting from the bridge due to a previously un-refined bridge load rating study. Nikolas designed four steel tie beams with concrete caps used to reduce the large unbraced length of existing trestle bents due to scour.		

08/20 - 05/21	Copper and Iron Road Bridge Inspection and Load Rating, BASF, Freeport, TX – Nikolas was the design engineer and engineer of record for the load rating of two single span pretensioned box beam bridges inside BASF's Freeport plant. Nikolas' scope was to perform a load rating of the existing bridges and to determine if these privately owned bridges were capable of carrying overweight trucks (108 kip trucks) in support of a change in operations at the plant. Nikolas performed a visual inspection of the bridges and directed an underwater inspection by divers. Based on the results, Nikolas assigned condition ratings to all superstructure and substructure components based on the inspection results and the guidance given in TxDOT's Bridge Inspection Manual. Nikolas performed an initial load rating for the superstructure using the Load Factor Rating method and TxDOT's PSTRI4 software to determine the inventory and operating ratings. Nikolas concluded the bridges could support the overweight vehicles based on the exact operating parameters expected inside a chemical plant versus those of typical highway bridges. However, Nikolas cautioned BASF that the anticipated frequency of this overweight traffic would likely result in a reduced useful lifetime of the bridges. Nikolas recommended minor repairs to the bridge approaches and assisted with the development of an inspection schedule for these bridges.
05/22 - 05/26	Port Aransas Ferry Mustang Island Infrastructure Improvements, TxDOT Corpus Christi District – Deputy PM for the PS&E \$58M infrastructure improvement project at the Mustang Island Ferry landing. The scope of project included: new monopile mooring/berthing dolphins with floating donut fenders, 760 LF of new tied back steel sheet pile bulkhead, six new steel vehicular transfer ramps, utility routing elevated truss, elevated generator platforms, new hydraulic lifting system, new above ground fuel system, and counter-weight tower retrofits. Nikolas oversaw and directed the multidisciplinary team to refine the project from the previous study phase to a complete construction package. Nikolas also was the EOR for the construction phasing, steel bulkheads, roadway geometrics, and site details. Nikolas oversaw the development of six special specifications for the unique infrastructure systems not covered by TxDOT's standard specifications. Nikolas coordinated with TxDOT's environmental group to produce exhibits required for clearance with multiple agencies such as USACE, U.S. Fish and Wildlife, & TCEQ.
04/25 - 12/25	CR 6494 over Long John Creek Emergency Structural Evaluation, Liberty Co. TX – Nikolas was one of the structural experts for the emergency structural evaluation of the CR 6494 over Long John Creek bridge. State bridge inspectors identified severe scour damage to this single span prestressed concrete beam bridge, which serves as the only roadway connection for over 40 homes. The damage observed included undermining of the concrete spillway lining, failed stone gabions, undermining of the approach roadway, and an exposed drilled shaft on the South abutment. Nikolas performed an in-depth visual inspection of the bridge and reviewed results of non-destructive testing which determined the remaining embedded length of the exposed shaft. Nikolas made recommendations for temporary remediation measures in close coordination with County maintenance staff, ensuring the solutions were within their capabilities so that construction was completed as quickly as possible. Nikolas personally observed the construction of the remediation measures and directed the work crew during all stages of construction.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Gerald (Jerry) Flesner, PMP	Years of relevant experience with this employer	3
Title		Senior Project Manager	Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization			Project Management Institute, PMP Project Management Professional, 2011	
Active registration number / state / expiration date			PMP Project Management Professional #1416540	
Year registered	2011	Discipline	PMP Project Management Professional	
Contract role(s) / brief description of responsibilities			Subsurface Utility Engineering (SUE) Utility Coordination	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/25 - Ongoing		TxDOT Fort Worth District Bridge Maintenance – SUE investigation and Utility Coordination 8 bridges were planned for maintenance due to scour, erosion, and degradation of riprap. Projects ranged from Interstate bridge over Brazos River to FM roads with bridges over creeks. Jerry was the project manager whose team was responsible for Subsurface Utility Engineering (SUE) and Utility Coordination. Existing utility locations were documented, confirmed, and coordinated with utility owners, and if necessary relocated by world class utility coordination services provided by LJA. SUE expenditures were optimized by focusing on the QL/A testholes only where necessary and elimination of QL/B where that was not needed. Analysis of the bridge maintenance scope of work versus existing utility facilities was provided. Exhibits were customized per TxDOT request and efficiently used to move these projects forward. A Utility Conflict Matrix (UCM) was created, maintained, and placed on file. Field verification of utility construction was performed. Deliverables included field inspection reports, survey files, SUE files, UCM, utility permit review, as-built utility records, and custom exhibits as required. Performed emergency underwater damage assessments while augmenting sonar technology and advising on corrective actions and repair alternatives. Performed more than 20 emergency response damage assessments, including the recent allision of the Grosse Tete Bridge (LA77) over the Port Allen Lock canal.		
10/23 - Ongoing		TxDOT Grand Parkway Segment B-1, Houston, TX – Jerry’s team managed the SUE effort and Utility Coordination support for this 15 mile toll road segment of the Grand Parkway. Early communication and coordination were performed with pipeline owners, electric transmission owners, League City, and the City of Alvin. The utility coordination by LJA Engineering brought together drainage design, roadway/bridge design, and adjacent private developers to facilitate the utility presence and growth in this rapidly developing corridor.		

2015 - 2023	TxDOT US181 Harbor Bridge in Corpus Christi - Jerry's team provided oversight for the utility project that cleared \$75M worth of utilities in conflict with the Harbor Bridge replacement project. SUE work and on-site support were implemented to deal directly with utility owners and design-build contractor to build and open up \$1B of cable-stay bridge, highway, direct connectors, and side streets with the bridge passing right over the top of the Port of Corpus Christi (POCCA) navigation channel. Coordination with major pipeline owners, POCCA, City of Corpus Christi, Nueces County, and TxDOT facilitated a project without utilities delay on the critical path schedule.
2020 - 2023	TxDOT IH30 Dallas and Rockwall Counties Segments 1-3 – The I-30 expansion project improved 17 miles of Interstate Highway 30 between Bass Pro Drive to west of FM 2642. The project involved 1 mile bridge over Lake Ray Hubbard and submarine fiber optic cable in conflict with approximately 7 utility owners. Jerry managed the consultant team implementing utility agreements from the PS&E phase through utility relocation and billing on the reimbursable utility agreements. Field inspection resolved issues and facilitated compliance and project close-out. SUE work was reviewed and fully utilized to to maintain the schedule and ensure compliance.
2021 - 2023	TxDOT IH30 from Linkcrest Drive (Spur 580) to I-820, Fort Worth, TX – Jerry led the utility coordination team to implement utility agreements, relocation, field inspection/verification, Buy America compliance, and utility billing for reimbursable adjustments. SUE information was reviewed and utilized for utility coordination. Duties included NOPC and NORA notification letters with plans to the utility owners, attending/hosting coordination meetings with TxDOT and owners, scheduling and reporting to TxDOT, Standard Utility Agreement (SUA) development with each utility owner, cost estimate and SUA Attachment support to utility owners, Buy America compliance starting with SUA and ending with the billing cycle.
2010 - 2023	IH35W and North Tarrant Expressway, Fort Worth, TX – This design-build project involved procurement and implementation on 32 miles of urban interstate and toll lanes through several project phases spanning 15 years on IH35W, US183, IH820 and SH121. Approximately 45 utility owners were relocated with challenges met through engagement, expertise, due diligence, and compliance. Duties included design review, schedule management, Utility Agreement coordination, field verification, and close out.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name	Elizabeth Ortego, PE	Years of relevant experience with this employer	2.5
Title	Utility Director	Years of relevant experience with other employer(s)	29
Degree(s) / Years / Specialization	MS, 2016, Business Admin BS, 1997, Civil Engineering		
Active registration number / state / expiration date	PE #91106, TX, 12/31/2026		
Year registered	2003	Discipline	Civil
Contract role(s) / brief description of responsibilities	Utilities Coordination Support		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
2024 – 2026	New Hope Drive – Cedar Park, TX Elizabeth is the utility coordinator for the reconstruction and widening of New Hope Drive from Blockhouse Dr. to CR 108 from 4 to 6 lanes. The project includes a telecom/electric ductbank design, water/wastewater design, and telecom design. Responsible for utility coordination and meetings, conflict assessment/resolutions, permit coordination with the CTRMA & the City, and coordination between utility companies and roadway contractor. Impacted utilities include PEC, AT&T, Spectrum, MCI, Grande, and Atmos.		
2020-2024	US 59 (Future IH 69) – TxDOT Lufkin District Elizabeth served as the TxDOT Project Manager for the development of PS&E to convert US 59 into IH 69 from Shepherd to Cleveland. The project scope included upgrading the existing US 59 to interstate standards by converting it to a controlled access highway with frontage roads and two mainlanes in each direction for 6.6 miles. Beth was also the Utility Lead responsible for utility coordination, utility conflict resolution, and utility agreements with Kinder Morgan pipeline, Energy Transfer/Sunoco pipeline, Southcoast Productions, Entergy Electric, Fiberlight, Consolidated Communications, AT&T, and Mercy Water Supply. The project also included relocating a cell tower with AT&T and Verizon attachments.		
2021-2023	RM 620 – TxDOT Austin District The project was a cojoined effort between the City of Round Rock and TxDOT and consisted of constructing a new 4-lane overpass at Chisholm Trail and Lake Creek Drive with a roundabout and intersection improvements at IH 35. Elizabeth was the TxDOT utility liaison and was responsible for reviewing utility conflicts, reviewing utility relocation plans in accordance to TxDOT policies, and processing standard utility agreements. She also attended meetings with the City’s utility consultant and provided guidance on TxDOT policies and procedures.		

2019-2022	IH 35/US 183 Direct Connectors – TxDOT Austin District This was a 2-mile urban freeway reconstruction project that widened IH 35 and US 183 for the installation of new direct connectors to connect these to freeways. Elizabeth was the Utility Engineering and Coordination Lead for TxDOT and responsible for managing the consultant utility team which included utility coordination, utility conflict resolution, and utility agreements with AT&T, Charter, City of Austin Water & Wastewater, Grande, Austin Energy, TGS, Level 3, GAATN, MCI/Verizon Wireless, Crown Castle, T-Mobile, Sprint, AT&T Wireless, and Alpheus Communications. The project also included relocating a cell tower and coordinating with multiple attached telecoms.
2019-2022	IH 35 at Parmer Lane – TxDOT Austin District This urban freeway project replaced the traditional intersection with a diverging diamond intersection, reconstructed the northbound bypass lane, added a southbound bypass lane, constructed additional turn lanes at the intersection of Parmer Lane and North Lamar Boulevard, and improved bike/ped paths throughout the corridor. Elizabeth and her team were responsible for the coordination, utility conflict resolution, and agreements with City of Austin Water Utility, AT&T, Texas Gas, Austin Entergy, Google Fiber, Fiberlight, CenturyLink, Level 3, GAATN, Windstream, Charter/Spectrum.
2017-2021	Mopac (Loop 1) at Slaughter Ln. – TxDOT Austin District The 3-mile urban freeway project consisted of extending the main lanes under new bridges at Slaughter Lane and La Crosse Ave., installing a diverging diamond intersection, adding frontage roads, and shared use paths. Elizabeth was responsible for leading the utility team which included utility coordination, conflict analysis/resolution, and utility relocations with AT&T, Texas Gas, City of Austin Water Utility, Austin Electric, Charter/Spectrum, and PEC Electric. A large diameter crude oil pipeline owned by Magellan was in conflict with the proposed retaining wall and detention pond. The cost estimate to lower the pipeline was estimated at \$8M and would take 4-5 years. Due to the environmentally sensitive project area, timeline, and the estimated cost, it was decided to allow the pipeline to remain in place by raising the elevation of the detention pond and modifying the retaining wall foundation.
2017-2020	IH 35 at Oltorf Rd – TxDOT Austin District The project included reconstruction of the Oltorf Street bridge, improved entrance/exit ramps and frontage roads, construction of extended entrance/exit lanes for mainlanes and ramps, and the addition of U-turns in both directions of I-35 at Oltorf Street. Elizabeth was the Utility Engineering and Coordination Lead for TxDOT and was responsible for managing the utility engineering consultant performing utility investigations, utility conflict analysis and resolutions, and utility coordination with the City of Austin Water Utility, AT&T, Texas Gas, Austin Entergy, Google Fiber, Fiberlight, CenturyLink, Level 3, GAATN, Windstream, and Charter/Spectrum. An existing overhead crossing with 7 telecoms was in conflict with the new bridge. Due to height restrictions for the electric poles, the lines could not be raised high enough to meet the required vertical clearance. A duct bank was designed and constructed within the bridge. The roadway contractor installed conduits for each of the 7 telecoms with spare ducts for future utility installations.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Michael Bell, PE	Years of relevant experience with this employer	9
Title		Vice President	Years of relevant experience with other employer(s)	41
Degree(s) / Years / Specialization			BS, 1985, Civil Engineering	
Active registration number / state / expiration date			PE 0025994, LA, 03/31/2027 PE 43217, FL, 02/28/2027 PE 46328, NC, 12/31/2026	
Year registered	1994 1992 2018	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Railroad Coordination Lead	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
2025 - 2026	Norfolk Southern Norris Yard Pull Back Tracks, AL - As senior project manager, Michael led the development of civil plans for increasing the number and lengthening the existing pull back tracks and reconfiguring the two forwarding yards by replacing the #10 turnouts with #15's. This project was complex. The project included modeling the pull back operation, to ensure the design would function.			
2017 - 2023	CSX Transportation Track Capacity Projects -Eight Track expansion projects in various locations in Georgia and Alabama. Project ranged from 3000’ to 7,000’ track extensions, as well as a connection track connecting two subdivision tracks, and many Transflo terminal expansions.			
2017 - 2018	Norfolk Southern BMW Support Yard Expansion, SC – As senior project manager, Michael lead the development of civil plans for nearly two miles of lead tracks as well as extending existing yard tracks. The project included coordinating with local authorities for lowering a road profile for the new tracks as well as modifications to an existing public water line. Mr. Bell and his team, coordinated closely with Norfolk Southern’s team and their sub-consultants for electrical and environmental. The project was successfully bid and is projected to be complete in early 2018.			
2017 - 2018	Norfolk Southern Linwood Lead Track – Developed a new 4,500’ lead track to a proposed industrial park. The project was complicated and included modifications to a major hump yard access road and electrical distribution system. Scope included track design, drainage, erosion/control design, and several retaining wall designs to support the track bed adjacent to a retention pond and large lake. Developed detailed construction plans and aided in the bidding documents.			
2017 - 2018	Norfolk Southern Track Capacity Projects – Developed a new 4,500’ lead track to a proposed industrial park. The project was complicated and included modifications to a major hump yard access road and electrical distribution system. Scope included track design.			

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Brice Karger, PE, CFM	Years of relevant experience with this employer	7
Title		Project Manager - Water Resources	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS, 2018, Civil Engineering	
Active registration number / state / expiration date			PE 147759, TX, 12/31/2026 CFM 4298-22N, TX, 9/12/2026	
Year registered	2023	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Brice will lead hydrologic and hydraulic (H&H) modeling, drainage impact analysis studies, bridge hydraulic analysis, scour evaluation and analysis, natural channel stable channel design, and the preparation of related plans, specifications, and estimates (PS&E).	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
06/25 - Ongoing		Project Manager - Relevant projects and experience noted below: Multiple bridge scour analyses new bridges and roadway culvert crossings within new developments around the Greater Houston Area. Scour analyses utilized HEC-RAS modeling and multiple scour analysis tools including HEC-18 and SRICOS. TxDOT Scour Evaluation Guide and TxDOT Scour Analysis Guide procedures were followed for all analyses. Developed scour analysis reports and documentation for the calculated and maximum allowable scour. IH-10 over the San Jacinto River from Magnolia St to Thompson Rd, TxDOT Houston District (Harris County, TX) – H&H analysis of the existing and proposed hydrologic and hydraulic analysis and design for the expansion and bridge reconstruction of IH-10 over the San Jacinto River. Updated HEC-RAS hydraulic modeling of the San Jacinto River bridge crossing and incorporated flow and stage data in the modeling to account for the coastal influence on the bridge crossing location. Bridge modeling and scour analysis for the mainlanes, frontage roads, and managed lane bridges that cross over 2 relief areas and the river crossing. Scour analysis utilized HEC-18 and SRICOS scour methods and the TxDOT Scour Analysis Guide. Assisted in the design development of pier protection structures and measures for scour and navigational means. Waller County Bridge Maintenance Prioritization – Reviewed bridge inspection reports, hydraulic modeling of critical bridge crossings, and conducted desktop review of hydraulic conditions to develop bridge scour repair measures. Utilized the hydraulic data including velocities and shear stress to size and inform the design of riprap scour protection for the critical bridges in Waller County.		

07/21 – 03/23	Project Engineer - Relevant projects and experience noted below: Multiple bridge scour analyses new bridges and roadway culvert crossings within new developments around the Greater Houston Area. Scour analyses utilized HEC-RAS modeling and multiple scour analysis tools including HEC-18 and SRICOS. TxDOT Scour Evaluation Guide and TxDOT Scour Analysis Guide procedures were followed for all analyses. Developed scour analysis reports and documentation for the calculated and maximum allowable scour. IH-10 from FM 359 to 500 ft East of Katy Fort Bend Road, TxDOT Houston District (Harris, Ft. Bend, and Waller Counties, TX) - Developed and analyzed the existing and proposed hydrologic and hydraulic analysis and design for the expansion of over 8 miles of IH-10. Evaluated the corridor to determine mitigation requirements, detention locations, storm sewer routing, 4 hydraulic bridge crossings, and scour analysis. Limited right of way restricted detention locations which required complex routing of the proposed storm sewer. Evaluated and modeled the four bridge crossing locations over FEMA effective modeled streams using HEC-RAS, including a 1D/2D MAAPNext model for one stream crossing. Analyzed and developed a scour analysis report for all hydraulic bridge crossings using HEC-18 and the TxDOT Scour Analysis Guide. Assisted in the development of the design and PS&E of the proposed drainage improvements. US 59 & US 290 Bridges at Brazos River: Study of Impacts to Bridge Structures due to Future River Scour and Migration, TxDOT Houston District (Fort Bend & Waller Counties, TX) – Studied the erosion and scour, and possible revetment solutions at the US 59 and US 290 Brazos River bridge locations in Fort Bend and Waller counties, respectively. Updated the Brazos River hydraulic model with bathymetric survey and Lidar, and calibrated flow data using USGS gauge data. Developed multiple 2D HEC-RAS models to determine velocities and shear stress values along the toe and side slopes upstream, through and downstream of the bridge crossings to identify critical areas of erosion potential. Developed recommendations for long-term and short-term erosion repair and protection as well as the critical distances of protection upstream and downstream of the bridge crossing to prevent undermining of bridge protection. Modeled the accepted alternative for each bridge in an Unsteady HEC-RAS 1D model to check the proposed design for impacts and to use the output from the model in the HEC-18 Scour Calculations.
01/19 - 07/21	Engineer in Training – Relevant projects and experience noted below: L500-09-00 Schiel Stormwater Detention Basin Preliminary Engineering Report and Final Design, Harris County Flood Control District (HCFCD) (Harris County, TX) – Modeled, analyzed, and designed regional detention facility including natural channel design for a 6,000 acre-foot facility. Modeled the proposed inline detention basins and natural channels in an Unsteady 1D HEC-RAS model to size outflow structures (including bridge & culvert crossings), analyze the natural channel design, and show no impacts to the surrounding areas. Designed the natural channel component of the project using regional curves developed for Harris County and used the accepted natural channel design methods of designing the stream's sinuosity, wavelength, slope, and profile. IH 45: From North of FM 519 to North of the Texas City Levee, TxDOT Houston District (Galveston County, TX) – Analyzed hydrologic and hydraulic impacts as well as design of drainage improvements and mitigation associated with the expansion and reconstruction of IH 45 through the City of La Marque in Galveston County. Modeled the five bridge class culvert crossings using updated Atlas 14 flows in a 1D/2D HEC-RAS model to compare changes to the inundation maps for the subwatersheds associated with pump station as well as size the crossings appropriately. Modeled all drainage system improvements in XPSWMM to ensure that both design conveyance and detention storage optimized in the design. Utilized the information from the modeling effort to develop exhibits, tables, output summaries for the impact analysis and scour analysis.

16. Staff Experience:



Firm employed by: LJA Engineering, Inc.

Name		Sean Collier, EIT	Years of relevant experience with this employer	1
Title		Rail Construction Manager	Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization			BS, 2011, Civil Engineering	
Active registration number / state / expiration date			EIT Certification EI-2011027313, MO, No Expiration Date	
Year registered	2011	Discipline	Transportation Engineering	
Contract role(s) / brief description of responsibilities			Railroad Coordination Support	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
08/20 - 05/22		UPRR/WisDOT, Zoo Interchange, Wauwatosa, WI – Oversaw construction of a temporary shoofly and two temporary grade-separated railroad structures to accommodate a State-led highway widening below active rail lines. Represented Union Pacific Railroad as the project coordination consultant, ensuring design and construction compliance, safety implementation, and phased construction execution. Led weekly construction conferences to resolve site-specific challenges, including temporary and permanent drainage issues, on-track safety protocols, and adherence to railroad curfews required for track shifts. Coordinated multidisciplinary stakeholders to maintain schedule integrity and minimize operational disruptions during complex construction sequencing.		
02/20 - 05/22		UPRR/WisDOT, CTH KR, Mount Pleasant, WI – Directed the railroad’s review and oversight for replacing an existing at-grade public crossing with a new grade-separated structure, ensuring full compliance with operational and safety standards. Performed regular on-site inspections during critical construction phases to protect railroad personnel, infrastructure, and adjacent property. Coordinated closely with State subcontractors to align construction activities with prioritized train operations, minimizing service disruptions and maintaining schedule adherence. Secured exception approval for a temporary at-grade construction crossing, enabling efficient movement of construction equipment and accelerating overall project delivery.		
02/21 - 02/22		UPRR/Kane County Forest Preserve District, South Elgin, IL – Served as Public Project Construction Coordinator for Union Pacific Railroad, facilitating collaboration with the City to deliver a below-grade trail connection beneath active freight and passenger rail lines. Oversaw construction of a standalone 12-foot bore parallel to an adjacent roadway structure, enabling uninterrupted trail continuity. Led design reviews, conducted field pre-construction meetings, and provided construction oversight to ensure safety, compliance, and schedule alignment. Coordinated temporary track stoppages of Chicago Metra operations during non-peak hours, limiting train delays to under 10 minutes during boring activities. Utilized FAA-certified commercial drone operations to perform aerial site observations and capture marketing imagery, enhancing project documentation and stakeholder engagement.		

16. Staff Experience:



Firm employed by: Gonzalez-Strength and Associates, Inc. (A wholly owned subsidiary of LJA Engineering, Inc.)

Name		Melanie Roberts, PE	Years of relevant experience with this employer	12
Title		Rail Construction Manager	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization			BS, 2009, Civil Engineering	
Active registration number / state / expiration date			PE 35645, AL, 2027	
Year registered	2015	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Roadway and MOT lead providing expertise on project plan development	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/20 - 01/23		Bridge Replacement on SR-14 over Blubber Creek, Pickens County AL. Project Manager and Designer for approximately 0.6 mile project to remove and replace a deteriorating bridge. Designed geometry, grading, drainage, striping, erosion control, typical sections, cross sections and earthwork for a temporary diversion road. GSA provided staff for design, plan production and coordination for ALDOT. Traffic control plans were important to the contractor and essential to keeping the public supportive of ongoing construction, in addition to keeping drivers safe as the bridge construction took place.		
01/19 – 01/25		Additional Lanes and Access Management on SR-38 (US-280) from SR-149 to I-459, Jefferson County. Project Manager and Designer for approximately 1.6-mile-long project to widen the existing US-280 from three lanes to four lanes in each direction to improve traffic flow. Designed geometry, grading, drainage, striping, barrier rail, erosion control, typical sections, cross sections and earthwork. GSA provided staff for design and plan production for ALDOT EC Region. The project is located in a highly congested urban area with limited clear zone and right-of-way constraints. Traffic control plans were important to the contractor and essential to keeping the public supportive of ongoing construction, in addition to keeping drivers safe along US-280 as the Pumphouse Rd bridge replacement and I-459 bridge resurfacing take place.		
01/22 - Ongoing		Additional Lanes and Bridge Replacement on SR-216 at Exit 100, Tuscaloosa County. Project Manager and Designer for approximately 0.7-mile-long project to improve the flow of traffic by utilizing a diverging diamond design. The project included widening the existing SR-216 from one lane to two lanes in each direction, adding turn lanes and access management, and replacing the existing bridge. Designed geometry, grading, drainage, striping, erosion control, typical sections, cross sections and earthwork. GSA provided staff for design, plan production and coordination for ALDOT WC Region. Traffic control plans were important to the contractor and essential to keeping the public supportive of ongoing construction, in addition to keeping drivers safe along I-20/59 as the bridge construction takes place.		



16. Staff Experience:

Firm employed by: LJA Surveying, Inc. (A wholly owned subsidiary of LJA Engineering, Inc.)

Name	David Anderson, PLS, PSM	Years of relevant experience with this employer	4
Title	Sr. Vice President	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization	MBA, 2019, Business Administration BS, 2009, Geomatics and Survey Sciences		
Active registration number / state / expiration date	PLS 5149, LA, 03/31/2028		
Year registered	2016	Discipline	Professional Land Surveyor
Contract role(s) / brief description of responsibilities	Survey, Drone Operation, & Underwater Imaging Lead		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/25 - Ongoing	Hickory Road widening and reconstruction from Betty Barrett Way to Red Bud Lane , including a new bridge over a tributary at Toonigh Creek. Also realignment and reconstruction of Hickory Springs Parkway from P. Rickman Drive to Hickory Springs Industrial, including bridge over a tributary of Toonigh Creek and an at-grade railroad crossing - Georgia Northeastern Railroad (GNRR).; \$16.9M total construction estimate.		
04/25 - Ongoing	Palm Street Bridge Replacement - An off-system bridge replacement over Toonigh Creek. Single-span bridge, roadway will be brought up to new design standards.		
03/25 - Ongoing	Holly Springs Parkway Widening, Phase IV – Widening and reconstruction of Holly Springs Parkway from Childers Road to Pinecrest Road of an existing 2-lane road to a divided 4-lane road with a 20' raised median. Including upgrading a signalized intersection to accommodate the 4-lane widening.; \$10M total construction estimate.		
03/25 - Ongoing	City of Holly Springs, Hickory Road Widening and Reconstruction, Holly Springs, GA – Project runs from Betty Barrett Way to Red Bud Lane, including a new bridge over a tributary at Toonigh Creek. Also realignment and reconstruction of Hickory Springs Parkway from P. Rickman Drive to Hickory Springs Industrial, including bridge over a tributary of Toonigh Creek and an at-grade railroad crossing - Georgia Northeastern Railroad (GNRR).; \$16.9M total construction estimate.		
02/25 - Ongoing	City of Holly Springs, Palm Street Bridge Replacement, Holly Springs, GA – An off-system bridge replacement over Toonigh Creek. Single-span bridge, roadway will be brought up to new design standards.		
01/15 -Ongoing	Quiktrip, 100+ Sites , AL, GA, TN, SC, FL, TX – Surveyed over 100 existing and proposed Quiktrip sites across Alabama, Georgia, Tennessee, South Carolina, Florida, and Texas. These projects included the base ALTA surveys required for design, along with construction staking, site, and utility as-builts, and final platting.		

01/14 - 01/15

ALDOT, Highway 280 Redesign and Optimization, Birmingham, AL – Helped perform the field work necessary to create the base map for the redesign and optimization of Highway 280 in Birmingham, AL through Shelby and Jefferson County. Was also responsible for drafting a significant portion of the project and helping make sure QC standards were exceeded in the field and office.

16. Staff Experience:



Firm employed by: LJA Surveying, Inc. (A wholly owned subsidiary of LJA Engineering, Inc.)

Name		Wesley Maxey, RPLS	Years of relevant experience with this employer	14
Title		Vice President	Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization			BS, 2010, Industrial Technology	
Active registration number / state / expiration date			RPLS #6536, TX, 12/31/2026	
Year registered	2014	Discipline	Registered Professional Land Surveyor	
Contract role(s) / brief description of responsibilities			Survey, Drone Operation, & Underwater Imaging Support	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/25 – 06/25		Energy Transfer, Flexport Terrestrial Laser Scan, TX – Performed project control survey and terrestrial laser utilizing a Leica RTC360 terrestrial laser scanner, scanning of approximately 4,000’ of existing pipe rack for design and routing of a new piping and pipe rack expansion.		
05/12 – 04/16		GT Logistics, Rail Infrastructure and Rail to Barge Crude Transfer Facility, Port Arthur, TX – Survey Lead. Provided boundary and topographic surveying for a facility designed to transfer 100,000 BPD of crude oil from rail to barges. Conducted surveys for nine miles of new railroad tracks, mechanical piping, two miles of twin 16-inch pipelines, and a 180-foot pipe bridge across the Port Arthur Hurricane Protection Levee.		
05/16 – 7/16		Port of Texas City, Dock 42/43 - New Liquids Terminal Dock and Feed Study, Texas City TX – Led the topographic and hydrographic survey to establish physical land features, boundaries, and channel depths for a proposed dual-slip liquids terminal dock. Wesley’s work supported the development of a dock layout accommodating Aframax vessels and contributed to dredging templates and design for the channel’s realignment and deepening.		
09/24 – 02/25		City of Corpus Christi Hydrographic Shoreline Survey, Corpus Christi, TX – Performed a multi-beam survey of the proposed pipeline removal location extending 500 inches upstream and downstream from the existing centerline. Survey extended from shoreline to shoreline to the extent possible determined by depth of water. An R2 Sonic High Resolution 2020 Multi-Beam Echosounder paired with an R2 Sonic I2NS Positioning System were used to collect the channel data and an AML Oceanographic Sound Velocity Profiler were used to measure the speed of sound to make any corrections for signal refraction within the water column. All hydrographic data was post-processed in HYPACK/HYSWEEP software and submitted to the client for use in removal method and permit drawing package for submittal.		

16. Staff Experience:



Firm employed by: Bridge Diagnostics, Inc. (BDI)

Name	Graham Bettis, PE		Years of relevant experience with this employer	1
Title	Vice President		Years of relevant experience with other employer(s)	26
Degree(s) / Years / Specialization			BS, 1999, Civil Engineering	
Active registration number / state / expiration date			PE.0051019, LA, 09/30/2026 PE.96670, TX, 09/30/2026 PE.0068242, CO, 10/31/2027 PE.0402071508, VA, 02/29/2028	
Year registered	2021	Discipline	Structural Engineer	
Contract role(s) / brief description of responsibilities			Technical Advisor - Bridge Preservation Strategies	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
09/25 - Ongoing	Bridge Diagnostics, Inc. (BDI) – Mr. Bettis joined the BDI team in 2025 with the goal of focusing on the National Bridge Inspection program and working with Infrastructure Owners on their Bridge Preservation and Asset Management strategies. Given Mr. Bettis’ experience and expertise in diagnosing structural issues and developing repair and preservation strategies, he is routinely called upon to review the results of nondestructive evaluations to add context to the findings and provide bridge owners with detailed conclusions and recommendations. Mr. Bettis has been, and remains, highly engaged with multiple national bridge preservation efforts that keep him on the cutting edge of structural preservation technology and materials. Over his 25+ years in the field of structural forensics he has been part of hundreds of structural preservation efforts, and repeatedly seen successes and failures, that allow him to guide effective and informed decisions for extending bridge service life in a safe and economically responsible manner. A recent example of Mr. Bettis’ input came on a standard multi-girder, nine-span bridge owned and maintained by the Town of Oro Valley, Arizona. Based on the findings from BDI’s field investigation, which included automated concrete sounding (SounDAR) and continuous-wave stepped-frequency ground-penetrating radar (CWSF-GPR), Mr. Bettis determined that (1) the premature failure of previous patches was due to incompatible repair material, (2) additional failures were likely imminent due to inconsistent reinforcement placement, and (3) the ineffective prior repairs were leading to a halo effect in the surrounding concrete, an often-discussed but rarely seen phenomenon related to electrochemical imbalances between fresh patch material and the surrounding concrete. Further, Mr. Bettis observed that the extensive defects were limited to four of the nine spans, pointing to construction deficiencies as the cause of the deck issues. Limiting widespread repairs to only those spans where construction defects are leading to problems will substantially reduce the cost to rehabilitate the deck.			

05/06 – 10/24	Texas Department of Transportation (TxDOT) – Mr. Bettis moved from the private to public sector in 2006, joining the Texas Department of Transportation. From 2006 to 2010, Mr. Bettis worked in TxDOT's Structures Lab where he was responsible for overseeing the statewide QC/QA program for largescale-structural bridge members, including precast concrete girders, structural steel, segmental units, bearings, pipes, and numerous other elements. A majority of his time was spent in prefabrication plants assessing damage or other nonconforming items and determining appropriate solutions. In 2011 Mr. Bettis moved to TxDOT's Bridge Division, where his primary technical focus was on structural forensics, assessment, load rating, and preservation. His specialty was in performing in-depth damage evaluations and condition assessments to determine options and best courses of action for repair, rehabilitation, or replacement. Mr. Bettis performed load ratings on dozens of bridges, which in most cases included in-depth field evaluations to ensure the analyses were representative of actual conditions. During this time, he authored the first edition of TxDOT's Concrete Repair Manual, and was responsible for writing or updating many other structural specifications and manuals. Mr. Bettis also routinely responded to emergency events (e.g. flooding, hurricanes, over-height bridge impacts, train derailments, etc.) to quickly assess damage and determine what steps must be taken to quickly but safely return damaged structures to service. In 2015 Mr. Bettis was named Field Operations Section Director, where his responsibilities included oversight of the federally-mandated bridge inspection program (Routine, Fracture Critical/ NSTM, and Underwater inspections). From 2018 to 2024 Mr. Bettis served as Texas' State Bridge Engineer. In that role he was responsible for overseeing all design, construction, inspection, and maintenance activities on an inventory of over 57,000 bridges. He personally developed and implemented a Four-Year Bridge Plan program for each of TxDOT's 25 Districts that focused on early-age preservation and maintenance activities for bridges. This asset management approach included the use of newly developed metrics and dashboards to measure progress and improve accountability. Those plans resulted in significant reallocation of priorities, including funding, towards bridge preservation and maintenance activities, and resulted in significant improvement to bridge conditions all over the state.
07/00 – 04/06	Engineering Diagnostics – As a Project Engineer, Mr. Bettis was responsible for performing structural and building envelope investigations of academic, medical, and commercial buildings, primarily high-rise structures. He conducted numerous AAMA and ASTM tests to determine suitability of various curtain wall, roofing, and coating systems. He also participated in the development of design drawings and specifications, bidding oversight, and quality control testing during implementation of the work. From September 2005 to April 2006, Mr. Bettis' primary job function was to perform post-hurricane structural and building envelope assessments in Southern Louisiana.

16. Staff Experience:



Firm employed by: Bridge Diagnostics, Inc. (BDI)

Name		Brice Carpenter, PE	Years of relevant experience with this employer	16
Title		Senior Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS, 2007, Civil Engineering MS, 2009, Civil Engineering	
Active registration number / state / expiration date			PE 0039341, LA, 03/31/2027	
Year registered	2014	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Bridge Assessment Support/ performing bridge condition assessments	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/09 – Ongoing		Mr. Carpenter joined BDI in 2009 and serves as a Senior Technical Engineer, Engineering Department Lead, and Subject Matter Expert in data-driven structural evaluation for bridge asset management. He has led the non-destructive testing and evaluation of hundreds of bridges, delivering reliable data to support lifecycle planning and preservation decision-making. His experience includes planning and executing field investigations; deploying instrumentation and data acquisition systems; analyzing structural response data; performing routine and complex structural evaluations, and developing actionable results and recommendations. He is proficient in advanced evaluation methods, including conventional and field-verified load rating analysis, as well as structure- and component-specific assessments in accordance with specifications relevant to this proposal: AASHTO (ASD, LFD, LRFD) and LADOTD BDEM standards. Throughout his career, Mr. Carpenter has focused on delivering accurate, defensible results that enable transportation agencies to optimize maintenance, extend service life, and maximize the value of bridge assets through effective, data-driven preservation strategies.		
10/24 - Ongoing		MULTI-PHASE FIELD-VERIFIED EVALUATION OF THE BAYOU RAMOS BRIDGES Louisiana Department of Transportation and Development / Morgan City Mr. Carpenter served as Project Engineer, leading the development and execution of a multi-phase structural evaluation and managing project delivery, staff coordination, and QA/QC. His responsibilities included oversight and review of load rating calculations and AASHTOWare BrR models, development and implementation of testing plans, evaluation of strut-and-tie (STM) methodologies for girder shear capacity, and preparation of technical reporting. Brice directed both analytical and field efforts, including diagnostic load testing to validate structural behavior and STM assumptions, as well as implementation of a monitoring program to assess deterioration activity. His work provided reliable, technically sound guidance to support refined load ratings and preservation decision-making for these prestressed concrete girder bridges.		

07/24-02/25	Refined Load Rating Of Falmouth Bridge For Emergency Repair Response Virginia Department of Transportation/ Fredericksburg District Mr. Carpenter served as Project Engineer, leading the development and execution of a refined load rating evaluation to support emergency response efforts based on recent inspection findings of severe section loss in primary steel members. He oversaw testing plan design and implementation, field-verified modeling and load rating, and coordination of the evaluation effort. His responsibilities included development of a field-verified finite element model using load testing data, structural analysis and load rating, and QA/QC of technical deliverables. Mr. Carpenter also led the interpretation of analysis results and preparation of reporting to support time-sensitive repair decision-making, including evaluation of proposed emergency retrofits.
01/25 – 02/25	BAYOU LA LOUTRE BRIDGE BALANCE TESTING CEC Mr. Carpenter served as Project Engineer, leading bridge balance testing in support of post-hurricane rehabilitation efforts. He was responsible for client coordination, development and execution of test plan, and overall project delivery. His work included field team oversight, data processing and evaluation of structural response, performance of balance calculations, and preparation of technical reports to support rehabilitation planning and decision-making.
01/24 - 03/24	LOAD TEST & FIELD-VERIFIED LOAD RATINGS FOR CFRP RETROFIT BRIDGE VDOT Fredericksburg District Mr. Carpenter served as Lead Analysis and Load Rating Engineer, supporting the evaluation of a carbon fiber retrofit of a historic reinforced concrete T-beam bridge. He was responsible for the design and implementation of instrumentation and testing plans, development of field-verified finite element models, execution of load rating calculations, and preparation of technical reporting. His work included analysis of diagnostic load testing data to validate structural performance following CFRP retrofit, along with independent evaluation of the retrofit's effect on its live-load carrying capacity. Evaluation results provided a reliable basis for the retrofit's resolution of load posting concerns.
10/21 - 05/22	LOAD TEST AND FIELD-VERIFIED LOAD RATINGS OF 10 STRUCTURES, LA Louisiana Department of Transportation and Development (LADOTD)/Forte & Tablada 2021-2022 Mr. Carpenter served as Lead Analysis Engineer, managing refined load rating evaluations for a group of ten bridge structures selected based on a discrepancy between load rating results and current structural condition. He led the development and execution of instrumentation plans, calibration and analysis of finite element models using diagnostic load testing data, and completion of load rating calculations and reporting. His work focused on validating in-service structural behavior to refine live-load capacity estimates for these load-restricted structures which included reinforced concrete slab bridges and culverts with minimal fill. Through data-driven evaluation, Brice supported decisions to reduce or eliminate posting requirements, helping agencies optimize asset utilization and prioritize maintenance efforts for a larger set of similar structures.

16. Staff Experience:



Firm employed by: Bridge Diagnostics, Inc. (BDI)

Name		Steven Fall, PE		Years of relevant experience with this employer		6	
Title		Senior Engineer		Years of relevant experience with other employer(s)		1	
Degree(s) / Years / Specialization				BS, 2019, Civil Engineering			
Active registration number / state / expiration date				PE 0048637, LA, 09/30/2026			
Year registered		2024	Discipline		Civil Engineering		
Contract role(s) / brief description of responsibilities				Advanced Evaluation & Data Collection and Bridge Engineering Expert. Performs NDE evaluations and analyses for bridge repair needs			
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).					
05/19 - Ongoing		General Experience – Beginning work for BDI in May of 2019, Mr. Fall has spent more than 6 years in the private sector in both non-destructive testing and evaluation and routine infrastructure inspection and monitoring and is the current office manager of the Louisiana office. Mr. Fall has been involved with non-destructive testing and evaluation of hundreds of structures including bridges, buildings, and hydro-structures such as lock gates and spill gates. His involvement in these projects included project management, planning, implementation, installation of instrumentation, testing, data processing, data review, and reporting. Previously, Mr. Fall worked with HNTB Inc. working in the transportation and civil department performing inspections of substructures and bridges on various jobs. He is a member of ASCE and ACI in the Louisiana chapter. Mr. Fall is a certified Professional Engineer, SPRAT L1 ropes access technician, ASNT Level I GPR inspector, and Team Lead under FHWA guidelines for routine inspections. He is also a certified traffic control supervisor, traffic control technician, and flagger in the state of Louisiana. He also has worked with various NDE methods for fracture critical techniques including but not limited to Magnetic Particle Testing, Ultrasonic Testing (UT), and Dye Penetrant Testing. He graduated from the University of New Orleans with a bachelor’s degree in civil engineering.					
05/23 – Ongoing		Retainer Contract for Non-Destructive Evaluation of Statewide Structures (DOTD Contract 4400025002) – Louisiana Department of Transportation awarded BDI with the retainer contract for Non-Destructive Evaluation of Statewide Structures. This IDIQ has 8 Task Orders awarded and will continue until 2025. These task orders include but are not limited steel inspection using Ultrasonic testing and Magnetic Particle Testing; deck evaluations via non-destructive testing methods including SoundAR, Ground Penetrating Radar, Infrared Thermography, and High Resolution Imaging; material sampling using coring; NHI routine and fracture critical inspections; and emergency response efforts. Mr. Fall serves as the project manager for this contract and is responsible for the testing plan development and application, team management, and QA/QC of various project tasks.					

11/23 – 12/23	Paris Road Emergency Bridge Inspection in Chalmette, LA – After noting a critical finding in a routine inspection on bridge recall 001621 by LADOTD on Paris Rd., BDI was called to perform an emergency in-depth inspection on the underside of the structure along with an NDE of the deck. The inspection results led to repairs on the bridge and the reopening of the structure. Mr. Fall was the inspection lead on this project for both the NBIS emergency inspection and the Non-destructive testing and evaluation of the structure. He was also responsible for the project management and reporting on the structure.
01/21 – 05/23	Task Orders for Retainer Contract for Non-Destructive Evaluation of Statewide Structures (DOTD Contract 4400017163) – Louisiana Department of Transportation awarded BDI with the retainer contract for Non-Destructive Evaluation of Statewide Structures. This IDIQ had 13 Task Orders awarded and lasted until 2023. These task orders include but are not limited steel inspection using Ultrasonic testing and Magnetic Particle Testing; deck evaluations via non-destructive testing methods including SounDAR, Ground Penetrating Radar, Infrared Thermography, and High Resolution Imaging; material sampling using coring; NHI routine and fracture critical inspections; and emergency response efforts. Mr. Fall served as a staff engineer for this project and was responsible for the testing plan development and application, team management, and field application of the various project tasks.
06/22 - 06/22 06/23 - 06/23	Counterweight Balance Testing of the Seabrook Bascule Bridge (Port of New Orleans) in New Orleans, LA –This bridge is a Strauss double heal-trunnion bascule bridge that carries St. Claude Avenue over the Industrial Canal. It is subject to hurricane winds and salt water and therefore has extreme corrosion and operational issues. During an inspection, the counterweight-to-span link bushings were found to be broken and falling out of the bearing hub. BDI was subcontracted by HNTB to measure force and moment in the truss link member and evaluate the span balance and operational friction. Operational test results showed high levels of friction and asymmetry in both the friction and lifting torque. Tests were initially performed to identify operational issues and again after bushings were replaced and drive torque imbalance conditions were addressed. BDI's instrumentation and data analysis was essential to identifying and solving the operational problems. The primary relevance of this project is identification and quantification of operational performance of bascule bridges.
07/19 – 01/20	Counterweight Balance and Friction Assessment of the St. Claude Bridge (LADOTD) in New Orleans, LA – BDI performed a counterweight Balance and friction assessment of the St. Claude Bridge to assist LADOTD to bring their bridge into lifting specifications and to determine the friction in each member during lifts. Mr. Fall installed all gages on the shafts and some gages on the steel members of the bridge, performed all testing, and helped report on these findings to help LADOTD balance the counterweight in the bridge and analyze the friction in each member. Mr. Fall was a team member responsible for field instrumentation and operational testing.
04/21 – 05/21	LA 324 over Bayou Teche – As part of Gresham Smith's advanced inspection team, BDI was contracted to perform short-term testing on the pivot pier of this swing bridge. During initial inspection, the pivot pier was observed to significantly rotate/translate during the opening operation. BDI's testing was performed as part of an emergency response to the inspection findings and consisted of taking laser displacement measurements of the pier during operational swings. Through this testing, BDI verified that up to 6" of movement was occurring at the end of the opening operation and provided short- and long-term recommendations. Mr. Fall was a team member responsible for team coordination, field instrumentation and testing, data processing and review, and reporting.

16. Staff Experience:



Firm employed by: Bridge Diagnostics, Inc. (BDI)

Name	Charles Young, PE	Years of relevant experience with this employer	7
Title	Senior Engineer	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	MS, 2017, Civil Engineering BS, 2012, Civil Engineering		
Active registration number / state / expiration date	PE 0042773, LA, 03/31/2027 PE 0066578, CO, 10/31/2025 PE 0402065368, VA, 06/30/2026		
Year registered	2018	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Advanced Evaluation & Data Collection Expert. Performs NDE evaluation and analyses for bridge repair needs.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
06/12 - Ongoing	Mr. Young has 13 years of experience in the fields of nondestructive evaluation and testing (NDE/NDT), structural monitoring, and inspection/evaluation of civil infrastructure. Mr. Young is responsible for program management, project management, analysis, and field services related to inspection and NDE/NDT of civil infrastructure. Mr. Young is certified ASNT Level II GPR and IR Inspector, SPRAT Level I certified, is a registered Part 107 UAV Pilot, and holds multiple certifications from NHI including FHWA-NHI-130055 Safety Inspection of In-Service Bridges (2014), FHWA-NHI-130053 Bridge Inspection Refresher Training (2021), and FHWA-NHI-420018 Instructor Development Course (2022). He is a registered Professional Engineer in multiple states including Louisiana.		
12/22 - Ongoing	IDIQ Contract for Nondestructive Evaluation of Structures Statewide (DOTD Contract No. 4400025002) Mr. Young is the Project Manager for statewide NDE of structures for DOTD under this contract. Scope items include testing of bridge decks, concrete substructures, steel elements such as welds and pin and hanger assemblies, unknown foundations, tunnels, culverts, and other highway transportation infrastructure. Mr. Young assists DOTD and the project team with successfully implementing NDE and inspection technologies for application and best methods for analysis and reporting of findings into DOTD’s AssetWise.		

05/23 - Ongoing	Twin Spans and Six Mile Bridge Inspection and NDE - The objective of this project is to perform a comprehensive inspection and NDE of the reinforced concrete bridge decks of the Twin Spans and Six Mile Bridges in Louisiana. Also included are supplemental inspection access techniques including unmanned aerial systems (UAS). Nondestructive evaluation includes a multi-technology bridge deck assessment including Deck Acoustic Response, Ground Penetrating Radar, Infrared Thermography, and High-Resolution Imagery. Mr. Young acted as the Project Manager. This work is being performed under LADOTD contract 4400025002.
01/19 - 12/22	IDIQ Contract for Nondestructive Evaluation of Structures Statewide (DOTD Contract No. 4400015262) Mr. Young is the Project Manager for statewide NDE of structures for DOTD under this contract. Scope items include testing of bridge decks, concrete substructures, steel elements such as welds and pin and hanger assemblies, unknown foundations, tunnels, culverts, and other highway transportation infrastructure. Mr. Young assists DOTD and the project team with successfully implementing NDE and inspection technologies for application and best methods for analysis and reporting of findings into DOTD's AssetWise.
07/21 - 10/22	I-10 Over Atchafalaya Basin Inspection and NDE - The objective of this project is to perform an NHI routine and fracture critical (NSTM) inspection of the bridge carrying I-10 over the Atchafalaya Basin between New Baton Rouge and Lafayette along with targeted NDE techniques at various critical portions of the structure. Also included are supplemental inspection access techniques including unmanned aerial systems (UAS). Nondestructive evaluation includes a multi-technology bridge deck assessment including Deck Acoustic Response, Ground Penetrating Radar, Infrared Thermography, and High-Resolution Imagery. Mr. Young acted as the Project Manager. This work was performed under LADOTD contract 4400015262.
10/20 - 09/22	Bonnet Carre Spillway Inspection and Nondestructive Evaluation, LA – This project involved an NHI routine and fracture critical (NSTM) inspection of the Bonnet Carre Spillway Bridge and targeted NDE techniques at various critical portions of the structure. Two cycles of Routine and NSTM inspections were conducted for this structure. This work was performed under an IDIQ Contract for Non-destructive Evaluation of Structures for DOTD. Also included were supplemental inspection access techniques including unmanned aerial systems (UAS). Nondestructive evaluation includes a multi-technology bridge deck assessment including Deck Acoustic Response, Ground Penetrating Radar, Infrared Thermography, and High-Resolution Imagery. Mr. Young acted as the Project Manager. This work was performed under LADOTD contract 4400015262.
08/19 - 07/20	NDE of City Park Lake Bridge LA – Mr. Young was the project manager for the NDE of the City Park Lake Bridge in Baton Rouge, LA. This project included a routine inspection of the structure, along with NDE technologies including ground penetrating radar (GPR), deck acoustic response (DAR), infrared thermography (IR), and high-resolution video (HRV). The remote inspection was performed on the substructure utilizing visual inspection and IR. This work was performed under LADOTD contract 4400015262.

16. Staff Experience:



Firm employed by: Fugro USA Land, Inc.

Name	Eric Marx, PE	Years of relevant experience with this employer	25
Title	General Manager, LA	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization	MS, 2001, Civil Engineering BS, 1999, Civil Engineering		
Active registration number / state / expiration date	PE 31479, LA, 03/31/2027		
Year registered	2004	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Geotechnical Lead. Performs geotech testing and analysis to support bridge repair needs.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/01 - Ongoing	Principal-in-Charge, Fugro Louisiana General Manager Eric Marx has provided geotechnical services on transportation, government, industrial, commercial and coastal infrastructure projects since joining Fugro in 2001. He has been both geotechnical engineer and geotechnical engineer-of-record (in responsible charge) on some of Louisiana’s high-profile transportation projects over the last 24 years, including the I-10 Twin Span Replacement Project, John J. Audubon Bridge, Ambassador Caffery Interchange, Kansas Lane-Garret Road Connector, Statewide Bridge Scour Program and numerous task orders as part of previous LADOTD geotechnical retainer contracts. In 2009, Mr. Marx led the initiative to achieve accreditation by AASHTO for the Baton Rouge laboratory. Since then, Eric has served in the role as Laboratory Technical Manager and Laboratory Quality Manager. Eric’s role has involved managing and executing geotechnical programs, developing and overseeing field programs, achieving and maintaining laboratory certifications and performing and reviewing geotechnical engineering analyses on transportation projects. Many of these projects require evaluation of existing foundation plans with recommendations for foundation remediation.		
1/10 - 03/17 08/20 - Ongoing	LADOTD Statewide Geotechnical Retainer Contract, Louisiana Principal-In-Charge. Eric served as Principal-in-Charge for this program which included performing over 20 task orders for bridge structures across Louisiana with a total program cost of over \$4M. The scope of work included soil borings (on land and in water), cone penetration test (CPT), laboratory testing, engineering analysis, and design recommendations. Fugro was also retained to install geotechnical instrumentation. Eric was Principal-in-Charge, negotiated and oversaw completion of task orders, and worked with DOTD to ensure client satisfaction.		

04/04 – 04/19	Bridge Scour Analysis, Statewide Louisiana Project Engineer, Project Manager and Principal-In-Charge. Fugro was selected by the Louisiana Department of Transportation and Development (LADOTD), with the assistance of selected Design Consultants, in evaluating the stability of critical bridge structures across the state regarding scour susceptibility. Since 2004, Eric has supervised evaluations on over 400 bridges across Louisiana including coordination of geotechnical field investigations, laboratory testing, and Electric Cone Penetrometer Test (ECPT) soundings. Geotechnical engineering analyses included deep foundation evaluations on driven piles, drilled shafts and caissons for varying scour events and development of soil parameters for input into the FB-Pier Software Program. For this program, Eric was responsible for collecting and reviewing existing foundation plans and existing subsurface information. Based on this information, Mr. Marx generated an updated soil model for foundation capacity determination. Subsequently, Mr. Marx performed axial and lateral capacity calculations for the existing foundation system modeling different potential scour events. Based on the results of the evaluations, a monitoring program could be developed to determine a critical scour elevation where remediation was required.
09/17 – Ongoing	Kansas Lane, Garrett Road Connector and I-20 Improvements; Ouachita Parish, Louisiana (H.004774.5 and H.007300.6). Principal-In-Charge. Eric provided contract oversight for the project. Work included conducting geotechnical field investigations and geotechnical analyses for the roadway project with significant interaction with the local airport and businesses. Eric reviewed the results of field and laboratory analyses and performed QA checks on deep foundation calculations, embankment settlement calculations of driven and drilled foundations and MSE Wall recommendations. MSEW Wall recommendations included evaluations using FHWA/AASHTO methods for earth retaining pressures, reinforcement lengths for both temporary and permanent walls along with global stability and settlement calculations.
04/13 – 12/24	LADOTD, I-49 South: Ambassador Caffery and U.S. 90 Interchange, Lafayette Parish, Louisiana Principal-In-Charge. Eric provided contract oversight for the project. Work included conducting geotechnical field investigations and geotechnical analyses for the roadway project. Eric reviewed results of field and laboratory analyses and performed QA checks on deep foundation calculations, embankment settlement calculations of driven and drilled foundations and MSE Wall recommendations, and construction support services including PDA and settlement monitoring. MSEW Wall recommendations included evaluations using FHWA/AASHTO methods for earth retaining pressures, reinforcement lengths for both temporary and permanent walls along with global stability and settlement calculations. During construction, settlement monitoring was performed along abutments and MSEW wall alignments to compare to design calculations. Mr. Marx provided recommendations for surcharge completion and recommendations for future wall settlement were provided during construction activities.

16. Staff Experience:



Firm employed by: Moffatt & Nichol, Inc.

Name		Chace Hulon, PE	Years of relevant experience with this employer	11
Title		Program Manager	Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization			BS, 2005, Civil Engineering	
Active registration number / state / expiration date			PE 39701, LA, 09/30/2026	
Year registered	2015	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Project-Wide Field Assessment Technical Advisor And Regional Team Lead	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
06/22 - 08/24		City of Los Angeles Citywide Bridge Strategic Plan (BSP) – Bridge Maintenance, Preservation, and Repair Program Development. Served as Subject Matter Expert supporting the development and delivery of a comprehensive Citywide Bridge Strategic Plan for the City of Los Angeles Bureau of Engineering, Bridge Improvement Division. The BSP created a long-term, self-sustaining framework for maintenance, preservation, and repair of the City's 500+ bridges (including 322 National Bridge Inventory structures and 94 culverts). Key contributions included: • Led the development of the City’s Bridge Preventive Maintenance Program (BPMP), establishing clear policies and procedures for cyclical and condition-based preservation activities on bridges in good and fair condition, directly aligned with FHWA Bridge Preservation Guide recommendations. • Identified and prioritized maintenance, preservation, and repair needs, including high-risk bridges requiring immediate attention and long-range capital improvement projects. • Defined eligible preservation treatments such as deck joint repair/replacement, bearing cleaning/restoration/replacement, localized deck repairs, spot/zone painting, deck sealing, concrete spall repair, approach slab repairs, bridge deck drainage improvements, superstructure and substructure protective coatings, and channel cleaning/scour countermeasures. • Developed recommendations for bridge inspection protocols, life-cycle cost planning, environmental process guidance, and task-order-style contract mechanisms for efficient delivery of routine and preventive maintenance services. Supported the alignment of prioritized needs with federal, state, and local funding guidelines, including preparation of Caltrans Highway Bridge Program submissions, grant applications, and leveraging of IJIA funding. The team successfully supported the City in securing \$3.5 million in additional fiscal-year budget specifically dedicated to bridge repair and preservation work. The team delivered a strategic, implementation-ready program that will improve program level bridge condition, extend service life, and optimize funding. We established an indefinite-delivery/task-order framework for prioritized bridge maintenance, preservation, and repair projects.		

03/18 - 01/25	LaDOTD Indefinite Delivery/Indefinite Quantity (IDIQ) for Complex Bridge Inspection, Statewide, LA. Project Manager and Chief Editor for major revisions of the 2020 bridge maintenance policies and procedures (BIM) to incorporate the 2022 NBIS Final Rule. The new policies and procedures included LaDOTD On-System BIM, LaDOTD Off-System BIM, and LaDOTD Coding & Field Guide. While the above documents have been completed, the LaDOTD Bridge Load Rating Manual development is currently in progress. M&N collaborated with the LaDOTD staff throughout the development to meet expectations and maintain their direction. In-person progress meetings occurred monthly, including facilitating various District Bridge Engineers throughout the state. The BIM policies and procedures were completed and published in December of 2024 to fully implement in January 2025 and be fully compliant for the FHWA audit in 2028. Compliance with the National Bridge Inspection Program (NBIP) and the associated Specifications for the National Bridge Inventory (SNBI) data tape is in alignment with the anticipated timeline published by FHWA. The tables of contents of the Off-System and On-System manuals were purposefully ordered primarily for the bridge inspector. The vital forms and checklists for the Bridge Inspection Program were narrowed down to eight and stored in the appendix section. The Coding and Field Guide is uniquely designed for a seamless user experience allowing efficient navigation through significant amounts of technical data. Performed in-depth bridge inspections on complex movable and long-span bridges. Performed structural, mechanical, and electrical inspections of six movable bridges utilizing detailed, nondestructive, and laboratory testing methods with hand sketches. Installed a wireless SHM (system health monitoring) system on the Greater New Orleans bridge to monitor significant deficiencies in Nonredundant Steel Tension Members (NSTM) members due to poor design details and advised of repair alternatives. Utilized nondestructive examination (NDE) methods (laser and acoustic) to analyze the rotational movement of an unstable pivot pier. Performed the inspections of two cable-stayed bridges with rope access techniques to inspect 208 cables between the two bridges, their Gensui Dampers, and anchorage systems. Performed two inspections of the I-10 Horace Wilkinson Bridge and two inspections of the Greater New Orleans Bridges, which are cantilever truss bridges utilizing rope access techniques and rolling lane closures to minimize traffic impacts. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans, utilizing rope access and Unmanned Aircraft Systems (UAS) access techniques. Performed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on NSTM and UAS access techniques on columns. Hands-on management and implementation of the QC review plan are vital to the continued success of this project.
02/22 – 04/22	Comprehensive Asset Management Program, City of Somerville, CA. Project Manager and Subject Matter Expert leading the development of a formal, enterprise-wide asset management program for the City of Somerville. Directed asset inventory analysis, Level of Service (LOS) definition workshops, and risk-based prioritization and assessment for five major infrastructure asset classes: Bridges, Roadways, Sidewalks, Building Systems, Electric Lights and Lines, and Parks and Playgrounds. A teaming partner managed the other two major asset classes: Collection and Conveyance System and the Water Distribution System. Conducted a comprehensive gap analysis of existing asset registries in accordance with ISO 55000 standards for accuracy, completeness, consistency, uniqueness, validity, and timeliness. Identified critical data gaps and delivered actionable recommendations for data collection, standardization, governance, and integration into enterprise systems (GIS and CMMS) to support condition assessment, life-cycle planning, and capital prioritization. Developed prioritization methodologies and risk assessments to inform maintenance, preservation, rehabilitation, and renewal strategies.

16. Staff Experience:



Firm employed by: Moffatt & Nichol, Inc.

Name		Russ Joffrion, PE	Years of relevant experience with this employer	1
Title		Program Manager	Years of relevant experience with other employer(s)	31
Degree(s) / Years / Specialization			BS, 1993, Civil Engineering	
Active registration number / state / expiration date			PE 27661, LA, 09/30/2026	
Year registered	1998	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Geotechnical Support / Perform Geotech Analysis And Design Support For Bridge Repair Needs	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
10/98 - 12/24	Russ managed the engineering and administrative staff in the LADOTD Pavement and Geotechnical Design section, providing direction and guidance pertaining to the design and construction of, deep foundations, Pile Driving Analyzer (PDA) Testing, mechanically stabilized earth walls (MSEW), roadway embankments and reinforced soil slopes (RSS) for major transportation structures on the LADOTD statewide highway system. Russ designed optimized geotechnical subsurface investigation plans for proposed roadway and bridge projects within Louisiana utilizing soil borings and Cone Penetrometer Tests (CPT) and conducted construction bridge foundation fieldwork utilizing the Pile Driving Analyzer (PDA) and the Wave Equation Analysis Program for driving test piles and permanent piles on bridges. He assisted in the professional development and training of the engineering staff through the use of the Federal Highway Administration/National Highway Institute training program, and project development. Served on the FHWA and AASHTO technical committees, HITEC, pertaining to approval of mechanically stabilized earth wall systems. Authored the LADOTD Geotechnical Engineering Design Guide No. 8 for MSEW and the LADOTD Drilled Shaft Inspection Manual.			
01/25 - 05/25	U.S. 84 Black River Bridge Replacement, Jonesville, LA. Engineer of Record and design engineer for the two major bridge pier foundations within the river, consisting of the cofferdam seals, the 24” steel pile compression and tension test pile program, and the final production pile lengths.			
10/24 - 05/25	Dauphin Island Causeway Shoreline Restoration Project, Mobile County, AL. Engineer who provided geotechnical slurry consolidation and dredging sensitivity analyses for the habitat restoration areas designed to protect transportation infrastructure, increase resiliency, and restore the shoreline along an approximate 3.3-mile section of Mobile Bay.			
12/24 - 05/25	Justin’s Bay Reconnection Investigation, Mobile, AL. Engineer who provided geotechnical foundation settlement analyses and support for the preliminary design of restoration alternatives.			
08/24 - 05/25	Boggy Point Living Shoreline, Orange Beach, AL. Engineer who provided geotechnical design services for the box culvert foundation settlement analyses, as well as provided senior technical reviews for permit drawings and pipeline infrastructure specifications for the design of two living shoreline sites to restore and stabilize the shoreline as part of the Boggy Point boat ramp improvement plan.			

16. Staff Experience:



Firm employed by: Moffatt & Nichol, Inc.

Name		Tom Spencer, PE	Years of relevant experience with this employer	18
Title		Inspection and Rehabilitation Practice Leader	Years of relevant experience with other employer(s)	27
Degree(s) / Years / Specialization			BS, 1981, Civil Engineering	
Active registration number / state / expiration date			PE 35742, LA, 03/31/2027	
Year registered	2010	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Bridge Engineer / Perform bridge assessments, design and construction support for bridge repair needs	
Experience dates (mm/yy–mm/yy)		Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
5/20 - Ongoing		PIANC Working Group 233, Nationwide, USA. Lead Author developing a new guideline for the Inspection, Maintenance, and Repair of Waterfront Facilities. The guideline will emphasize modern techniques in asset management, inspection, maintenance, rehabilitation, and monitoring. Key new topics and concepts include a detailed discussion of Intervention methods, guidance on contemporary digital inspection technologies, and the evaluation of the load-carrying capacity of existing structures.		
06/07 – 11/08		Special Facility Condition Assessment Program (S-FCAP), Development of Engineered Management System (EMS) for Waterfront Structures - Naval Facilities Engineering Command, Norfolk, VA. Principal-in-charge, Project Engineer, Subject Matter Expert. Developed the structural waterfront engineering program data to determine the condition indices of the various elements with various levels of degradation. The development included a listing of the material types, marine asset categories, asset defects, deduct value curves, Q curves, budgetary repair costs, and estimation of the service life of the assets. The assets included piles, pile caps, quays, relieving platforms, beams and girders, decks, utility vaults, utility trenches, mooring foundations, lighting foundations, utility mounds, fender piles, fender framing, fenders, camels, separators, dolphins, bollards, double bitts, and cleats. Provided input parameters for the marine structural elements of the Navy's asset inventory system.		
06/28 – 12/19		LaDOTD, Bridge Inspection Manual, Baton Rouge, LA. Health and safety officer who authored the safety section of the Bridge Inspection Manual (BIM) for LaDOTD. The BIM was designed to capture all previous policies, directives, memorandums, manuals, and forms into a single, centralized reference manual. The BIM aligns the Bridge Inspection Office Headquarters’ goals with all nine LaDOTD districts. The BIM will also allow for better communication and quality management among LaDOTD project managers, local bridge owners, and consultants.		

06/14 - Ongoing

LaDOTD, Various Bridge Inspections – Multiple Contracts, Statewide, LA. Principal-in-charge, Inspection and rehabilitation practice leader, team leader, engineer-diver, and QA/QC manager who has performed bridge inspection services in those various roles, supporting M&N's inspection efforts for LaDOTD under various contracts. Tom's experience includes the underwater inspection and assessment of nearly 1000 bridges with the findings, assessments, and recommendations presented in bridge specific reports. Bridge types include concrete, steel, and timber bridges. Acoustic imaging techniques were utilized to identify structural deficiencies and determine scour limits. Tom also responded to an emergency inspection requests related to high water and flood levels for various bridges.

16. Staff Experience:



Firm employed by: Moffatt & Nichol, Inc.

Name		Richard Cranfill	Years of relevant experience with this employer	14
Title		Business Analysis / Application Development	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization			BS, 2005, Mechanical Engineering	
Active registration number / state / expiration date			N/A	
Year registered	2010	Discipline	Engineer-in-Training	
Contract role(s) / brief description of responsibilities			GIS Integrations and Dashboard Support / Developing GIS database and data layers	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
12/11 – 12/14	LaDOTD RSIS Railroad Inventory Upgrade, Baton Rouge, LA. Rail specialist who provided project tracking, project management assistance, and coordination between software development team, engineers and management for a Web-based, crossing safety, inventory service for the LaDOTD. Generated a progress report and translated software code for client approval. Developed training material, including webinars and PowerPoint presentations.			
07/13 – 05/23	Nebraska Department of Roads (NDOR) Rail Inventory Management System (RIMS), Lincoln, NE. Assistant project manager and rail specialist who provided project tracking and scheduling to bring the NDOR online with RIMS. Conducted weekly status meetings following agile project management practices to coordinate tasks required of the NDOR IT and Rail sections with the feature planning and development of the RIMS team. Technical contributions included workflow validation, bug testing, reporting and QC. Conducted training in the use of the RIMS system via webinar and in person, including field training of rail inventory techniques.			
06/12 – 07/15	West Virginia Department of Highway Systems (WVDOH) Rail Inventory Management System (RIMS), Charlottesville, WV. Assistant project manager and rail specialist who provided project tracking and scheduling to bring the West Virginia Department of Highways online with RIMS. Coordinated with the WVDOH GIS project manager to schedule development milestones and integrate WV rail and mapping GIS data with RIMS. Provided technical assistance in accordance with other RIMS projects to improve the software and integrate the business needs of the WVDOH rail safety group.			
04/21 – 06/21	Nevada Department of Transportation’s (NDOT) Rail Inventory Management System (RIMS), Carson City, NV. Project manager and business analysis lead for the NDOT’s RIMS implementation. Notable experience for this project included the addition of multiple custom features and fields unique to NDOT requirements.			
10/20 – 05/22	Cuyahoga River Waterfront Structure Database, Cleveland, OH. Project manager for the implementation of a searchable database of waterfront parcels and structures. Conducted analysis of the client’s intended workflow and data requirements. Coordinated with developers, engineering staff, and sub consultants to ensure data compatibility, maintain delivery timelines and meet client expectations.			

16. Staff Experience:



Firm employed by: Moffatt & Nichol, Inc.

Name	Herodotos Pentas, PhD, PE	Years of relevant experience with this employer	3
Title	Business Analysis / Application Development	Years of relevant experience with other employer(s)	32
Degree(s) / Years / Specialization	PhD, 1990, Civil Engineering MS, 1985, Civil Engineering MS, 1984, Civil Engineering		
Active registration number / state / expiration date	PE 24660, LA, 09/30/2026		
Year registered	1992	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineering and Post Construction Support / Providing expertise on repair designs and construction needs.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/23 – 05/25	MISSISSIPPI DEPARTMENT OF TRANSPORTATION, IDIQ BRIDGE INSPECTION AND LOAD RATING, STATEWIDE MS. Project Manager/Lead Structural Engineer responsible for supervising load ratings of five bridges for the Mississippi Office of State Aid Road Construction involving modeling within AASHTOWare’s Bridge Rating (BrR) software for superstructures and LEAP for substructures in accordance with load resistance factor rating and load factor rating. As a subconsultant on this contract, supervised the team that identified bridge defects from inspection reports, developed a load rating report, and provided bridge posting recommendations.		
01/10 – 12/10	OFF-SYSTEM BRIDGE REPLACEMENT (S.P. NO. 700-26-0293) JEFFERSON PARISH, LA. Principal-in-Charge for design of preliminary plans for two concrete bridges for LADOTD. Responsible for hydraulic and structural calculations and plans		
01/10 – 12/10	I-10 / I-12 BATON ROUGE BYPASS MAJOR INVESTMENT STUDY (S.P. NO. 736-17-0360), LA. Project Manager for the major investment study for I-10/I-12 Baton Rouge Bypass project. Activities included alternative corridors, cost methodology, travel demand forecasting, environmental analysis, public involvement, economic feasibility, and financial feasibility.		
01/08 – 12/08	HELENBIRG ROAD, ST. TAMMANY PARISH, LA. Principal-in-Charge for widening and reconstructing a two-lane road in a residential area. The project included asphalt pavement design, intersection improvements, and horizontal and vertical alignments.		
01/07 – 12/08	LA HIGHWAY 1077, ST. TAMMANY PARISH, LA. Principal-in-Charge for widening and reconstructing a four-lane divided highway in a commercial/industrial area for LADOTD. Project included asphalt roadway section design, horizontal and vertical alignment, and subsurface drainage design.		
06/06 – 12/06	LA HIGHWAY 1091, ROBERT ROAD INTERSECTION IMPROVEMENTS, ST. TAMMANY PARISH, LA. Principal-in-Charge for converting a signalized intersection to a roundabout. Work included traffic analysis, asphaltic and Portland cement pavement design, drainage design, and environmental permitting.		

16. Staff Experience:



Firm employed by: Moffatt & Nichol, Inc.

Name	Stephen (Steve) Parker	Years of relevant experience with this employer	2
Title	Business Analysis / Application Development	Years of relevant experience with other employer(s)	31
Degree(s) / Years / Specialization	MS, 1987, Botany BS, 1984, Zoology/Wildlife Management		
Active registration number / state / expiration date	N/A		
Year registered	1992	Discipline	Civil
Contract role(s) / brief description of responsibilities	Environmental Lead / Providing environmental expertise for maintenance bridge repair project needs.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
10/22 – 11/23	Aberdeen Port Rail Spur Environmental Assessment, City of Aberdeen, Monroe County, MS. Project manager for the Draft/Final Environmental Assessment for the Aberdeen Port Rail spur EA. His responsibilities included agency and tribal coordination, leading a team in drafting of the Environmental Assessment, using US EPA Motor Vehicles Emission Simulator (MOVES4); to estimate construction air emissions impacts, and drafting the Finding of No Significant Impact (FONSI) for the project. The City of Aberdeen had received funding from the US Department of Transportation Maritime Administration under their Small Ports Project Infrastructure Development Program to construct 12,200 linear feet of rail spur between the Port of Aberdeen and the Kansas City Southern Rail. The purpose of the Project is to establish rail access to the Port of Aberdeen, which will in turn increase utilization of the port, allow for more efficient movement of products, and provide economic opportunities to the residents of Aberdeen and the surrounding area.		
11/23 – 04/26	Project Steel Wheel Columbus Dock Expansion Environmental Assessment, Columbus, Lowndes County, MS. Project manager for the Draft Environmental Assessment for the Project Steel Wheel Columbus Dock Expansion. His responsibilities included agency and tribal coordination, leading a team in drafting the EA, and will also include drafting the FONSI for the project. Lowndes County will receive funding from the US Department of Transportation Maritime Administration (MARAD) under their Small Ports Project Infrastructure Development Program (PIDP) to construct 9,757 linear feet of rail spur between the Columbus Port of and the Kansas City Southern Rail. The Project is part of a larger expansion by Steel Dynamics, Inc. (SDI), which plans to invest \$2.5 billion in Lowndes County and create 1,000 jobs with an average annual salary of \$93,000. The expansion includes a state-of-the-art low-carbon, aluminum flat rolled mill and a biocarbon production facility at the SDI Columbus facility, which is 13 miles from the Project via truck route. Phase 3 funds will be used for site acquisition and site preparation, infrastructure improvements, and workforce training. Adding the rail spur at the Port allows scrap metal and finished steel rolls to be transported between the Port and the Steel Dynamics facility via rail cars, taking an estimated 35,000 trucks off the road annually.		

02/22 – 11/23	Mississippi Trustee Implementation Group (MS TIG) Restoration Plan 4, Coastal Mississippi, Jackson, Harrison, and Hancock Counties, MS. Environmental scientist who provided contractual support services including project budgets, and the development of reasonable range of alternatives, TIG meetings, Environmental Consequences Chapter/Cumulative Impacts, and Monitoring and Adaptive Management Plans. Project funding by restoration types included wetlands, coastal, and nearshore habitats; nutrient reduction (nonpoint source) and enhance recreational opportunities. The Restoration Plan included an evaluation of the Reasonable Range of Alternatives under the Oil Pollution Act (OPA) and the National Environmental Policy Act (NEPA). Seven projects were approved for a total restoration costs of \$26.3 Million
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16. Staff Experience:



Firm employed by: Construction Technology Laboratories, Inc.(The CTL Group)

Name	Pavan Vaddey, PhD, PE	Years of relevant experience with this employer	6
Title	Senior Engineer	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	PhD, 2020, Civil Engineering Dual Degree (B.Tch & M.Tech), 2013, Civil Engineering		
Active registration number / state / expiration date	PE #0049626, LA, 03/31/2027		
Year registered	2024	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Corrosion Evaluation & Mitigation and Material Testing Lead		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/20 - 05/26	Missouri DOT: Served as a lead engineer on a research project led by CTLGroup that investigated the effect of various design parameters including fiber type and source, and fiber dosage on the performance of fiber-reinforced concrete (FRC) systems for potential use in bridge overlays. Scope of work included evaluation of various FRC properties including compressive strength (ASTM C39), resistivity (AASHTO T 358), unrestrained drying shrinkage (ASTM C157), restrained shrinkage (ASTM C1581), flexural toughness (ASTM C1609 and ASTM C1550), freeze-thaw resistance (ASTM C666), scaling resistance (ASTM C672), abrasion resistance (ASTM C779), and bond strength (ASTM C1583). Was responsible for developing performance-engineered FRC criteria that can be employed to determine the acceptability of FRC for overlay applications and developing specification/special provision that can be used as a guideline by various parties involved in the construction of FRC overlays in the state of Missouri.		
09/20 - 05/26	Wisconsin DOT: Assisted on a research study led by CTLGroup that investigated the performance of internally-cured concrete mixtures (containing lightweight aggregates and super-absorbent polymers) for bridge deck and paving applications. Scope of work included evaluation of various mortar/concrete mixtures through autogenous shrinkage (ASTM C1698), compressive strength (ASTM C39), flexural strength (ASTM C78), chloride penetration (ASTM C1202 and NT 492), resistivity (AASHTO T 358), unrestrained drying shrinkage (ASTM C157), restrained shrinkage (ASTM C1581), flexural toughness (ASTM C1609 and ASTM C1550), freeze-thaw resistance (ASTM C666), scaling resistance (ASTM C672), abrasion resistance (ASTM C779), and bond strength (ASTM C1583).		

09/20 - 05/26	Oregon DOT: Served as a lead staff researcher at OSU on a research project that involved developing and testing optimized mixture designs for improved performance of paving concrete mixtures. The optimization involved minimizing the overall cementitious content for mixtures developed with a variety of locally available aggregates. Served as a graduate student researcher for a research project that investigated the potential optimization of the reinforcement design parameters for interface shear applications by using high-strength steel. Scope of work included fabricating and testing of push-off test specimens, and statistical analyses of the test data for identifying the potential influencing parameters on steel-concrete shear interface strength. The outcomes of these research studies are being implemented to develop specifications for slip-form paving concrete for pavements and improve the existing specifications for structural applications in the state of Oregon.
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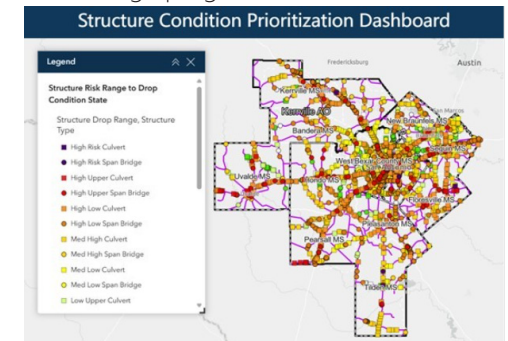
17. Firm Experience:

Firm Name	LJA Engineering, Inc.	Discipline(s)*	Planning, Other (Assessment Management)	
Project Name	San Antonio District - Bridge Prioritization and Maintenance Work Plan Development		Firm Responsibility (prime or sub?)	Prime
Project Number	14-3IDP5007 (13673)	Owner's Name	Texas Department of Transportation – San Antonio District	
Project Location	San Antonio, TX		Owner's Project Manager	Leon Flournoy
Owner's address, phone, email	4615 Northwest Loop 410 San Antonio, TX 78229 512.621.5459 leon.flournoy@txdot.gov			
Services commenced by this firm (mm/yy)	10/23	Total consultant contract cost (\$1,000's)	\$665	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$665 (Ongoing)	

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

LJA was awarded the Bridge Prioritization and Maintenance Work Plan contract through TxDOT San Antonio District to support their bridge program which includes over 2700+ on-system bridge assets. The following task orders are a summary of major work performed.

- **Task I Develop Bridge Prioritization Tool:** LJA developed a tool to optimize treatment types and timing for cyclic, preventative maintenance, and rehabilitation. The methodology used 32 years of statewide inspection data covering 45,000+ structures to evaluate condition trends and identify when components transition between condition states. Bridge elements, including culverts, decks, superstructures, and substructures, were analyzed across districts, climate regions, and bridge types. Statistical and Markov-based methods established deterioration risk ranges. Inspection, historical, and maintenance data were integrated to refine recommendations. Work types, efficiency ratings, and funding categories were assigned based on condition and risk to optimize lifecycle performance. A prioritization score incorporating condition, mobility, vulnerability, functionality, and size was validated through district input and field assessments.
- **Task II Develop GIS Tool:** LJA developed a GIS dashboard that leverages results from the prioritization tool to support project selection. The dashboard provides a spatial view of the bridge inventory, allowing users to visualize metrics such as condition state, drop risk, recommended work type, and funding needs. It can also be filtered by user group such as the district office, area office or maintenance section, or advanced planning office to tailor insights to specific decision-making needs.
- **Task III Develop Maintenance Work Plan:** LJA developed a maintenance work plan integrating multiple inspection data sources to support district-level prioritization. Inputs included inspection findings, element-level data, and component data, analyzed to identify repair categories and develop structure-specific recommendations based on condition, deterioration risk, and performance needs. Maintenance offices use this tool during site visits to verify work needs, with LJA supporting field coordination and validation of condition data.
- **Task IV Develop User Guides:** LJA provided user guides for all developed tools, including both condensed versions for quick data updates and detailed guides with background, assumptions, and weighting factors to tailor their specific needs.



These tools enable SAT to move from planning to delivery through data-driven prioritization, bundling, and structure-specific work definition. **Alanna Bettis** serves as project manager responsible for the prioritization tool, GIS application, and maintenance work plan development. **Ambarish Banerjee, Guang Li, Margaret Genzer, Selina Padilla and Robert Beals** serve as task and analysis support.

Benefit to Owner: LJA's approach enabled TxDOT to prioritizing projects efficiently, improving asset performance and maximizing the effectiveness of available funding.

17. Firm Experience:

Firm Name	LJA Engineering, Inc.	Discipline(s)*	Bridge, Planning, Other (Asset Management), Other (Assessment Rehabilitation)	
Project Name	Bridge Asset Management		Firm Responsibility (prime or sub?)	Prime
Project Number	14-3IDP5007 (33742)	Owner's Name	Texas Department of Transportation – Odessa District	
Project Location	Odessa District, TX		Owner's Project Manager	Jose A. Renteria
Owner's address, phone, email	Maintenance Office, 3901 W Hwy 80 E, Odessa, TX 79761 423.413.3879 jose.renteria@txdot.gov			
Services commenced by this firm (mm/yy)	11/23	Total consultant contract cost (\$1,000's)	\$384	
Services completed by this firm (mm/yy)	05/25	Cost of consultant services provided by this firm (\$1,000's)	\$384	

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

LJA was awarded the Bridge Asset Management project to support TxDOT Odessa District (ODA) in enhancing asset management across more than 1,100 on-system bridge assets amid rapidly growing program demands. LJA developed a 4-year bridge plan and prioritization tool to support project selection, inspection findings, cost estimation, and scour evaluation, ensuring delivery of the right projects at the right time to improve safety, mobility, and asset performance.

- **Task I Prioritization Tool:** LJA developed a tool to project bridge condition performance over a 10-year period to evaluate district goals against expected outcomes. The team assessed existing project selection processes, including preventative maintenance and rehabilitation strategies, and developed a predictive methodology based on funding levels, inspection ratings, and expected asset life. Recommended weighting and ranking criteria were established to support prioritization and optimize long-term condition, performance, and lifecycle cost efficiency.
- **Task II Inspection Finding and Cost Estimation:** LJA supported the ODA Bridge Design Office in resolving nearly 200 outstanding inspection findings requiring action for inclusion in the 4-year bridge management plan. Within a two-month timeframe, LJA rapidly assessed needs, data requirements, and system access to deliver results on schedule and within budget. A decision-support tool was developed to track findings and cost estimates, including time-to-completion, estimated costs, and recommended delivery methods (maintenance forces or contractors). Efficiency was improved by consolidating cost estimates for similar work types and standardizing bid items.
- **Task III Scour Evaluation and Mitigation Plans:** With 35 bridges lacking scour documentation, LJA optimized limited resources to complete required evaluations within budget and schedule constraints. The team compiled plans, inspection data, and field measurements, then prioritized structures based on risk, focusing on interstate routes, major crossings, and historically vulnerable bridges. A risk-based screening approach allowed completion of all required documentation despite funding limitations while establishing a consistent framework for future assessments. For higher-risk structures, LJA performed field verification and developed structure-specific mitigation recommendations and repair plans to improve long-term performance and safety.

This work strengthened ODA's bridge asset management program by enabling data-driven prioritization, cost-informed decisions, and scour documentation compliance, improving safety, regulatory alignment, and long-term performance. **Alanna Bettis** serves as a project manager responsible for project coordination, scheduling, and completion of all bridge tasks. **Guang Li** developed the prioritization tool. **Selina Padilla** and **Robert Beals** provided technical and analysis support for all three tasks.



Benefit to Owner: LJA's approach enabled ODA to prioritize critical repairs within limited funding, improving efficiency, safety, and overall asset performance.

17. Firm Experience:

Firm Name	LJA Engineering, Inc.	Discipline(s)*	Bridge, Planning, Other (Asset Management), Other (Assessment Rehabilitation)	
Project Name	Waller County Bridge Asset Management Planning		Firm Responsibility (prime or sub?)	Prime
Project Number	N/A	Owner's Name	Waller County	
Project Location	Waller County, TX		Owner's Project Manager	Ross McCall, PE
Owner's address, phone, email	County Road and Bridge, 775 Bus 290 East, Hempstead, TX 77445 979.826.7670 r.mccall@wallercounty.us			
Services commenced by this firm (mm/yy)	07/25	Total consultant contract cost (\$1,000's)	\$95	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$95 (Ongoing)	

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

Inventory by Condition Rating

Controlling Condition Rating	# Of Bridges	Bridge Deck Area (SF)
GOOD		
CR=9 Excellent	0	0 SF
CR=8 Very Good	3	6,086 SF
CR=7 Good	21	47,835 SF
FAIR		
CR=6 Satisfactory	25	31,531 SF
CR=5 Fair	5	8,287 SF
POOR		
CR=4 Poor	1	802 SF
CR=3 Serious	0	0 SF
CR=2 Critical	0	0 SF
CR=1 Imminent Failure	0	0 SF
TOTAL	55	94,540 SF

LJA performed countywide bridge asset management planning for Waller County. This project consists of a multi-year effort to evaluate, prioritize, and implement maintenance and rehabilitation improvements for the County's bridge inventory. LJA developed an understanding of the bridge inventory, the County's priorities, developed repair strategies, and prepared details to address defects and maintain the current condition of the bridge inventory with the ultimate goal of extending the useful life of bridges. Key components of the Waller County bridge prioritization and maintenance project included:

- Document review and inventory of bridges from

Recommendations For Repairs

Follow-Up Action Type	Count
In-House Debris Cleanup	26
In-House Stone/Armoring	22
In-House Other	13
Contracted	57
Total	118

statewide bridge inspection records.

- Interviews with County Engineer and County maintenance staff to become familiar with county capabilities, history of work performed, and known bridge issues.
- Identification, categorization, and grouping of deficiencies such as scour, guardrail damage, deck deterioration, joint failures, and structural damage.
- Field assessments of select bridges to quantify extents of defects and inform repair strategies.
- Development of prioritized list of bridges for replacement, repair and preservation strategies.
- Preparation of typical maintenance and rehabilitation details and cost estimates for two

concurrent initiatives, scour armoring and timber pile repairs.

- Support County staff to communicate bridge conditions and bridge repair needs to internal stakeholders.
- Support County with efforts to seek State and Federal funds for bridge replacement in support of overall lifecycle cost optimization.
- Develop method to monitor progress and support County staff in tracking the progress of work performed and resolution of defects.

Benefit to Owner: LJA's familiarity with bridge inspection, asset management, and bridge preservation enabled the County to implement a data-driven bridge management program that optimizes lifecycle costs, prioritizes funding, and supports efficient delivery of repair projects. Initial work led to the identification of work types later grouped for work order tasking and contracting. **Steven Austin, PE** is the Bridge Task Lead and is directly involved in all aspects of the project. **Alanna Bettis, PE** supported automation of defect collection from inspection reports and provided technical support for overall bridge asset management. The work is scalable and repeatable and has become a model for subsequent assignments.

17. Firm Experience:

Firm Name	LJA Engineering, Inc.	Discipline(s)*	Bridge
Project Name	Austin District – On-System Bridge Maintenance and Repair	Firm Responsibility (prime or sub?)	Prime
Project Number	N/A	Owner's Name	Texas Department of Transportation – Austin District
Project Location	Travis County, TX	Owner's Project Manager	Gisel Carrasco, PE
Owner's address, phone, email	6230 E Stassney Ln, Austin, TX, 78744 512.354.5768 gisel.carrasco@txdot.gov		
Services commenced by this firm (mm/yy)	10/23	Total consultant contract cost (\$1,000's)	\$900
Services completed by this firm (mm/yy)	05/24	Cost of consultant services provided by this firm (\$1,000's)	\$900

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



LJA performed preservation project development for district wide bridge maintenance work. Plans, Specifications, and Estimates (PS&E) for 39 bridges were produced with a variety of repair work, including concrete spall repairs, scour countermeasure installation, pile collar installation and replacement, bearing pad replacement, expansion joint clean and seal, expansion joint replacement, header joint repair, and concrete riprap repair. LJA performed site visits and inspections, taking measurements and

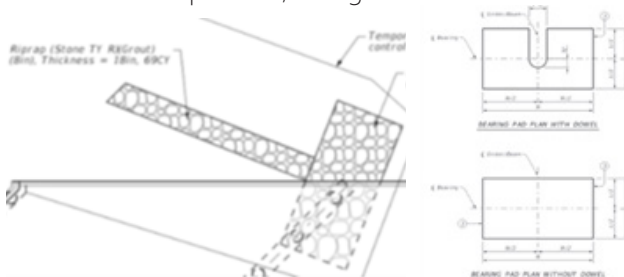
photos of defects, and to identify other action items to extend the service life on each bridge. Four of the bridges were railroad crossings which required coordination with the owners, and design and TCP efforts to minimize the impact to the Railroad ROW during repair work. Repair plans were separated into seven different packages over a short amount of time, requiring a high level of project management and coordination. The project was successfully delivered on time and within budget.

Key components of the project included:

- Multiple concurrent PS&E packages, similar to IDIQ Task Orders.
- Document review and development of repair strategies.

- Coordination with TxDOT Maintenance Staff to capture preferences.
- Preparation of typical maintenance and rehabilitation details and cost estimates for work.
- Construction phased services to support district after project letting.

As the project progressed, the client was highly satisfied with LJA's performance and chose to add additional bridges to the scope, all while maintaining the original deadlines and working within an already condensed schedule. The LJA team stayed organized to track progress and deliverables for various bid packages. Our team accelerated site visits and repair plans for bridges that were added to the scope later in the project schedule.

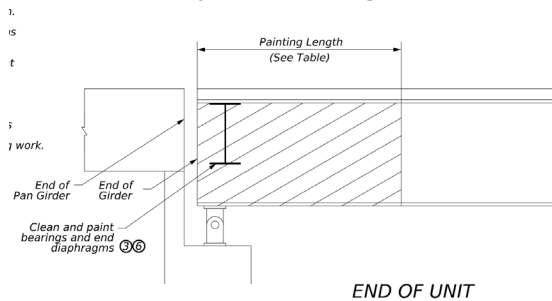


Benefit to Owner: By remaining adaptable, LJA maximized the number of bridges advanced to construction within a constrained schedule and budget through efficient packaging, standardized designs, and rapid delivery of concurrent PS&E packages. **Dacio Marin, PE** was the project manager and **David Pretorius, PE** served as the bridge assessment and repair lead.

17. Firm Experience:

Firm Name	LJA Engineering, Inc.	Discipline(s)*	Bridge
Project Name	US67/377 – Bridge Maintenance and Repair	Firm Responsibility (prime or sub?)	Prime
Project Number	N/A	Owner's Name	Texas Department of Transportation – Fort Worth District
Project Location	Erath County, TX	Owner's Project Manager	Ram Dhakal, PE
Owner's address, phone, email	2501 SW Loop 820, Fort Worth, TX 76133 817.370.6500 ram.dhakal@txdot.gov		
Services commenced by this firm (mm/yy)	12/24	Total consultant contract cost (\$1,000's)	\$700
Services completed by this firm (mm/yy)	04/26	Cost of consultant services provided by this firm (\$1,000's)	\$700

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

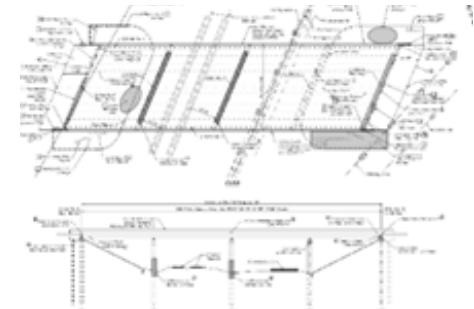


LJA prepared full plans, specifications, and estimates for bridge maintenance and repair work on five bridges. The bridges included bridge class culverts, a river crossing, and a railroad crossing. LJA performed a document review of defects and prepared recommendations for repairs. LJA coordinated and performed virtually all aspects of work including preparation of structural repair

and bridge maintenance details, survey, subsurface utility exploration, hydrology and hydraulics analysis, roadway design, and coordinated geotechnical subprovider work. Bridge maintenance details included channel protection, joint repairs, concrete repairs, crack sealing, cleaning tops of bent caps and abutments, maintenance of culverts to clear debris, and zone painting of steel bridges. Bridge improvement details included crashwalls at the railroad overpass. **Dacio Marin** was the project manager and **David Pretorius** served as the bridge assessment and repair lead. Dacio and David coordinated with all disciplines to ensure the project was successful.

Key components of the project included:

- Document review and field assessments to develop repair strategies.



- Cost estimates for bridge repair work.
- Use of working drawings, development of typical and project specific repair details.
- Turnkey project development required cross-discipline coordination with railroads, utilities, hydraulics, and maintenance of traffic for phased bridge repair work.



Benefit to Owner: The scale and complexity of the project required large multiple disciplinary reviews at the 60% and 90% submittals. With a strong understanding of all aspects of project development, LJA's team delivered coordinated, multi-discipline bridge repairs that minimized risk, streamlined reviews, and extended service life of bridges. **Performing the work with a relatively small group ensured project consistency and efficient project coordination.** **Dacio Marin** and **David Pretorius** stayed organized and worked closely with each discipline to ensure all comments were responded to and resolved prior to the next scheduled submittal. **Steven Austin** performed Quality Control Review on bridge repair details for the project. By following LJA's Quality Control Plan for the project, **Dacio** ensured all deliverables met the client's expectations and ultimately extended the useful life of bridges.

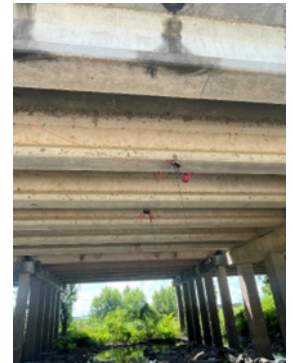
17. Firm Experience:

Firm Name	Bridge Diagnostics, Inc.	Discipline(s)*	Bridge
Project Name	Bridge Weigh in Motion (BWIM)	Firm Responsibility (prime or sub?)	Sub
Project Number	H.009730	Owner's Name	Louisiana Department of Transportation and Development (LADOTD)
Project Location	Norco, LA	Owner's Project Manager	Nick Fagerburg
Owner's address, phone, email	Office of Engineering PO Box 94245 Baton Rouge, LA 70804 225.379.1200 nick.fagerburg@la.gov		
Services commenced by this firm (mm/yy)	06/25	Total consultant contract cost (\$1,000's)	\$1000
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$920 (Ongoing)

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

BDI was awarded the Bridge Weigh in Motion (BWIM) project to assist LADOTD in determining overweight loads travelling across structures in Louisiana. BDI developed the BWIM system to use a structure as a load cell. This project serves as a proof of concept and was broken out into three phases in order to ensure LADOTD is receiving accurate data while maintaining long-term structure health by limiting overweight non-permitted loads. The US-61 Bonnet Carre westbound structure (Recall 002819) was chosen as the bridge where these phases would be tested before statewide implementation.

- **Phase 1 Live Load Testing (Completed):** BDI performed a live load test on recall 002819 to determine a baseline for the BWIM system. BDI installed strain gauges and tiltmeters on three spans of the superstructure to determine capacity and overall behavior of the AASHTO prestressed girders. BDI then drove a fully loaded dump truck over the structure to measure total strain in each girder. This data was used to develop the sensor plans for the BWIM gauge system along with typical responses that should be seen in the system if an overweight load was to drive over the structure.
- **Phase 2, BWIM System Plans and Install (Ongoing):** Once the baseline from the Live Load Test was determined, BDI developed a full structural plan set to install on the structure. These plans included "trigger gauges" that are always active and will trigger and turn the rest of the system on if an overweight load crosses the gauge threshold, strain gauges that once turned on, will measure total strain in the structure, and high-resolution cameras that will take photos of the vehicle passing over the span. BDI has installed all gauges and camera systems on the structure and is waiting for AC power lines to be brought to the system. Once power has been established, the system will be ready for data collection.
- **Phase 3, Data Collection:** Once the BWIM system has been installed, the initial data collection phase will begin. Over the next 6 months, BDI will constantly be monitoring and collecting data to ensure the BWIM system is operating properly and identifying overweight loads. Once an overweight load has been identified with the BWIM system, a police cruiser will weigh the vehicle with load cells and confirm the overweight, non-permitted load. Once enough data has been collected after the first 6 months and the BWIM system has been established as working properly, LADOTD will determine more structures where the BWIM system can be implemented and installed to help ensure the long term health of the bridge by limiting overweight loads.



Steven Fall serves as a project manager responsible for local crew coordination, scheduling, and completion of field work. **Michael Sullivan** supports project management responsibilities. **Jesse Sipple, Graham Bettis, Brice Carpenter** and **Charles Young** serve as subject matter experts.

 **Benefit to Owner:** This approach enables DOTD to detect and manage overweight loads in real time, reducing structural damage, improving safety, and supporting data-driven decisions to extend bridge service life and protect critical infrastructure.

17. Firm Experience:

Firm Name	Bridge Diagnostics, Inc.	Discipline(s)*	Bridge
Project Name	Statewide NDE IDIQ	Firm Responsibility (prime or sub?)	Prime
Project Number	Contract No. 4400025002	Owner's Name	Louisiana Department of Transportation and Development (LADOTD)
Project Location	Louisiana (various locations)	Owner's Project Manager	Bradley Mistich
Owner's address, phone, email	Office of Engineering PO Box 94245 Baton Rouge, LA 70804 225.379.1200 bradley.mistich@la.gov		
Services commenced by this firm (mm/yy)	02/23	Total consultant contract cost (\$1,000's)	\$7,500
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$5,200 (Ongoing)

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

BDI was awarded the Non-Destructive Evaluation contract through Louisiana Department of Transportation. The following task orders are a summary of major work performed.

- **Task Order II Twin Span and 6-mile Deck Evaluation:** BDI performed deck assessments involving various NDT-E methods including automated deck sounding (SounDAR), Ground Penetrating Radar (GPR), High Resolution Imaging (HRI), Infrared Thermography (IR), and concrete material sampling on bridge recall numbers 204140, 204150, 020467, and 020468 for the purpose of assessment of reinforcement concrete condition, cover, location, and diameter; detections of voids and delaminations in concrete, and concrete material sampling.
- **Task Orders III and VI Interstate 20 Deck Evaluation and Pin and Hanger Testing:** To assist with bridge preservation efforts, BDI is performing deck assessments for 273 structures on the Interstate 20 corridor in Louisiana involving various NDT-E methods including SounDAR, GPR, HRI, and IR for the purpose of assessment of reinforcement concrete condition, cover, location, and diameter and detection of voids and delaminations in concrete. BDI is also performing steel member condition assessment via ultrasonic testing (UT) on 39 structures statewide.
- **Task Order IV US-11 over Lake Pontchartrain Deck Evaluation and NBIS Inspection:** BDI performed deck assessments involving various NDT-E methods including SounDAR, GPR, HRI, and IR for the purpose of assessment of reinforcement concrete condition, cover, location, and diameter and detection of voids and delaminations in concrete on bridge recall numbers 001525, 001545, 001552, and 200830. BDI also performed the NBIS Routine inspections on these structures which included detailed in-depth field inspections.

Steven Fall serves as a project manager responsible for local crew coordination, scheduling, and completion of field work. **Michael Sullivan** supports project management responsibilities. **Jesse Sipple**, **Graham Bettis**, **Brice Carpenter** and **Charles Young** serve as subject matter experts.

Benefit to Owner: Rapid deployment of truck mounted deck evaluation methods brings valuable information without costly lane closures required for traditional deck evaluation techniques.



17. Firm Experience:

Firm Name	Bridge Diagnostics, Inc.	Discipline(s)*	Bridge	
Project Name	UT Anchor Bolt Inspection of Bayou Dularge Houma Navigation Bridge		Firm Responsibility (prime or sub?)	Prime
Project Number	Task Order 7, Task 4	Owner's Name	Louisiana Department of Transportation and Development (LADOTD)	
Project Location	Houma, LA		Owner's Project Manager	Bradley Mistich
Owner's address, phone, email	Office of Engineering PO Box 94245 Baton Rouge, LA 70804 225.379.1200 bradley.mistich@la.gov			
Services commenced by this firm (mm/yy)	08/25		Total consultant contract cost (\$1,000's)	\$501 (NTE)
Services completed by this firm (mm/yy)	09/25		Cost of consultant services provided by this firm (\$1,000's)	\$172 (Ongoing)

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

The Louisiana Department of Transportation and Development observed a ruptured anchor bolt on the Houma Navigation Bridge carrying Barrow St. over Bayou Dularge on August 12, 2025, and immediately requested BDI's services to determine the extent of damage on the bridge and perform NDE on the steel structure to assess condition.

BDI performed ultrasonic testing using the Olympus Epoch 650 UT system to assess the condition of the anchor bolts. Additionally, BDI performed hammer sounding on each bolt. Three (3) of the sixteen (16) anchor bolts failed hammer sounding, but did not exhibit defects when the UT data were analyzed. With the exception of the ruptured bolt, the remaining fifteen (15) bolts did not indicate flaws being present from ultrasonic evaluation.

The following testing activities were performed:

- BDI accessed all anchor bolts via internal structure stairways to minimize the need for fall protection or ropes access.
- BDI staff applied UT couplant to each bolt prior to testing to ensure full UT probe contact. Each bolt face was fully scanned and screenshots of each scan location were saved for reference.
- Following UT testing, each bolt was thoroughly cleaned and sprayed with cold-galvanizing compound to mitigate corrosion.
- Prior to application of cold-galvanizing spray, each bolt was hammer-sounded to determine if the bolts were fully intact or had faults.

BDI recommended that a monitoring system consisting of strain gauges on the northwestern tower, east leg anchor bolts to collect their responses as the bridge leaves were raised and lowered. Additionally, BDI recommended a similar monitoring system be installed on the northeastern tower to collect data that would be used as control data. By analyzing the data over time, the behavior and characteristics of the structure could be observed. Retrofits are currently being completed on the structure

Steven Fall serves as a project manager responsible for local crew coordination, scheduling, and completion of field work. **Michael Sullivan** supports project management responsibilities. **Jesse Sipple**, **Graham Bettis**, **Brice Carpenter** and **Charles Young** serve as subject matter experts.

Benefit to Owner: BDI's rapid response and targeted NDE assessment enabled DOTD to quickly evaluate anchor bolt integrity and confirm structural reliability, avoiding unnecessary repairs while focusing resources on the identified failure. The recommended monitoring approach provides ongoing performance data, supporting proactive maintenance decisions, improved safety, and reduced risk of unanticipated structural issues.



17. Firm Experience:

Firm Name	Fugro USA Land, Inc.	Discipline(s)*	Geotech
Project Name	Bridge Scour Analyses, Statewide Louisiana	Firm Responsibility (prime or sub?)	Sub
Project Number	H.005358.5-1	Owner's Name	Louisiana Department of Transportation and Development
Project Location	Louisiana, Statewide	Owner's Project Manager	Stephanie Cavalier
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 225.379.1329 stephanie.cavalier@la.gov		
Services commenced by this firm (mm/yy)	04/04	Total consultant contract cost (\$1,000's)	N/A
Services completed by this firm (mm/yy)	05/19	Cost of consultant services provided by this firm (\$1,000's)	\$1,000

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

Since 2005, Fugro has performed geotechnical evaluations on the potential impacts of scour on over 400 bridges across Louisiana. Fugro performed geotechnical field services including soil borings and cone penetration test (CPT) soundings at locations where there evaluations concluded site specific data were needed. Laboratory testing was performed on soil samples to characterize engineering properties. Fugro performed geotechnical engineering analyses including deep foundation evaluations including axial capacity, load-movement transfer curves and lateral evaluations for varying scour events. Soil parameters for use in the FB-Pier computed program were provided to bridge design consultants for further evaluation.

Eric Marx was the Project Manager and Principal In Charge during the duration of the program.

Eric coordinated with all multiple design consultants and LADOTD to ensure the project was successful.

Key components of the project included:

- Assessment of Existing Bridge Plans and Documentation to understand available information.
- Evaluations of bridges to determine susceptibility to scour
- Determination of a critical scour elevation that could be referenced during monitoring and inspection whereby mitigation measures could be implemented.

 **Benefit to Owner:** The scale and complexity of the project required various approaches to bridge structures across the State. Fugro mobilized various types of equipment to collect data in the different access environments. Developing a methodical approach, an efficient process for evaluating the bridges was implemented to make future studies cost effective.

Eric Marx worked closely with LADOTD and selected bridge design consultants to ensure all comments were responded to and resolved and ensured all deliverables met the client's expectations and ultimately extended the useful life of bridges.



17. Firm Experience:

Firm Name	Fugro USA Land, Inc.	Discipline(s)*	Geotech
Project Name	IDIQ Contract for Geotechnical Services, Statewide Louisiana	Firm Responsibility (prime or sub?)	Prime
Project Number	4400024650	Owner's Name	Louisiana Department of Transportation and Development
Project Location	Louisiana, Statewide	Owner's Project Manager	Kristy Smith
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 225.379.1387 kristy.smith2@la.gov		
Services commenced by this firm (mm/yy)	07/10	Total consultant contract cost (\$1,000's)	\$6,500
Services completed by this firm (mm/yy)	Current	Cost of consultant services provided by this firm (\$1,000's)	\$6,500

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

Since 2010, Fugro has been awarded multiple IDIQ contracts to perform geotechnical studies across Louisiana. Over 30 task orders have been performed covering a wide geographical area of Louisiana. Fugro performed geotechnical field services including field reconnaissance for equipment access, land clearing for equipment access, coordinated traffic control, deep and shallow soil borings and cone penetration test (CPT) soundings. Laboratory testing was performed on soil samples to characterize engineering properties.

Eric Marx was the Project Manager and Principal In Charge for the duration of the program.

Eric coordinated with LADOTD to develop the scope, negotiate project fees, oversee the programs and work with LADOTD to ensure project success.

Key components of the project included:

- Assessment of Existing Bridge Plans and Documentation to understand available information.
- Coordination of scope for field and laboratory programs in compliance with LADOTD Standards

 **Benefit to Owner:** The scale and complexity of the project required various approaches to bridge structures across the State. One of the largest task orders spanned between 2021 and 2022, included the I-10 Calcasieu River Bridge (H.003931), An accelerated project schedule was required to assist LADOTD in project procurement. Over 70 borings were performed using multiple rigs and a number of Fugro professionals to complete the project on budget and ahead of schedule, Fugro received high marks on the project evaluation recognizing the resources and timely response required.

Eric Marx worked closely with LADOTD to ensure all comments were responded to and resolved and ensured all deliverables met the client's expectations.



17. Firm Experience:

Firm Name	Moffatt & Nichol, Inc.	Discipline(s)*	Bridge	
Project Name	Caney Creek Spillway Inspection and Rehabilitation Study		Firm Responsibility (prime or sub?)	Prime
Project Number	H.012810.1, Task Orders 8 & 10	Owner's Name	Louisiana Department of Transportation and Development (LADOTD)	
Project Location	Statewide, LA		Owner's Project Manager	Haylye Brown
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 225.379.1989 haylye.brown@la.gov			
Services commenced by this firm (mm/yy)	11/16	Total consultant contract cost (\$1,000's)	\$245	
Services completed by this firm (mm/yy)	05/17	Cost of consultant services provided by this firm (\$1,000's)	\$245	

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

Moffatt & Nichol provided engineering inspection, condition assessment, and rehabilitation planning services for the Caney Creek Spillway structure located on Spillway Road off Highway 34 in Jackson Parish. The project included two task orders consisting of an underwater inspection and rehabilitation alternatives analysis to restore the spillway to safe operational condition and improve long-term maintainability of the structure. All work was performed in full accordance with LADOTD PS&E design standards and processes, specifically the LADOTD Bridge Design and Evaluation Manual (BDEM) Part I – Policies and Procedures (Chapters 6, 7, and 8), the LADOTD Bridge Design English Manual (4th English Edition, Version 1.4), and the Louisiana Standard Specifications for Roads and Bridges.

M&N performed a full condition assessment of the spillway to include diving operations to assess the submerged portion of the structure, the gate condition, and the sediment depth adjacent to the three sluice gate bays. The inspection identified significant corrosion and section loss in the dewatering bulkhead guides and hardware, heavy sediment accumulation upstream of the gates, and debris buildup impacting operability of the structure. M&N documented the condition findings, assessed operational risks, and developed recommendations for repairs and sediment removal to restore functionality of the spillway system.

Following completion of the inspection effort, LADOTD retained M&N to develop rehabilitation alternatives analysis to restore the spillway dewatering system and improve long-term O&M capabilities. The analysis was prepared in accordance with BDEM Part I, Chapter 6 – Design Policy for Bridge Rehabilitation/Repair Projects for conceptual/preliminary design phases, BDEM Part I, Chapter 7 – Project Delivery, and BDEM Part I, Chapter 8 – Plan Preparation, along with applicable provisions of the LADOTD LRFD Bridge Design Manual (2008.1) and the LADOTD Hydraulics Manual guidelines for hydraulic structures. This included preparation of three conceptual alternatives (new sluice gate assembly, FRP dewatering plate system, and redundant gate configuration), constructability evaluations, lifecycle maintenance assessments, operational redundancy evaluations, and Class IV construction cost estimates. M&N coordinated with specialty manufacturers (e.g., Rodney Hunt Inc.), marine contractors, and dredging subcontractors to develop realistic construction approaches and cost opinions for underwater construction, sediment removal, gate installation, and dewatering operations. Environmental and permitting considerations associated with sediment removal and in-water construction activities were evaluated in accordance with LADOTD requirements. The study explicitly outlined the path forward for detailed engineering analysis and full PS&E development (in accordance with BDEM Chapters 7 and 8 and the Louisiana Standard Specifications for Roads and Bridges) once a preferred alternative was selected.

Staff used: **Chace Hulon, PE**



17. Firm Experience:

Firm Name	Moffatt & Nichol, Inc.	Discipline(s)*	Bridge
Project Name	Citywide Bridge Strategic Plan	Firm Responsibility (prime or sub?)	Prime
Project Number	C-134522	Owner's Name	City of Los Angeles
Project Location	Los Angeles, CA	Owner's Project Manager	Scott Gibson
Owner's address, phone, email	1149 S. Broadway, Suite 700, Los Angeles, CA 90015 213.485.5101 scott.gibson@lacity.org		
Services commenced by this firm (mm/yy)	2022	Total consultant contract cost (\$1,000's)	\$1,686
Services completed by this firm (mm/yy)	2024	Cost of consultant services provided by this firm (\$1,000's)	\$1,680

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

City of Los Angeles (City) maintains one of the largest and most complex bridge inventories for any municipality in the nation. With over four million residents and two of the largest port facilities in the Western Hemisphere, the City's transportation infrastructure is critical for economic prosperity, community connectivity, and public safety. The Bridge Improvement Division (BID) is the lead division within the City maintaining an inventory of 516 bridges. Through our on-call contract, the BID tasked M&N to establish a comprehensive Citywide Bridge Strategic Plan (BSP). The main objective of the BSP is to create an expeditious program to advance repair, retrofit, or build new bridge projects and provide continuous maintenance for city bridges. The goal is for the BSP to create a self-sustaining program and effective funding vehicle for decades.

M&N is leading this effort, including prioritizing maintenance, inspection of potentially high-risk bridges that need immediate attention, as well as long- range capital project needs. Tasks include but are not limited to the following:

- Various grant applications, including traffic safety grants.
- Initial environmental process guidance for the BSP
- Caltrans - Highway Bridge Program (HBP) submissions

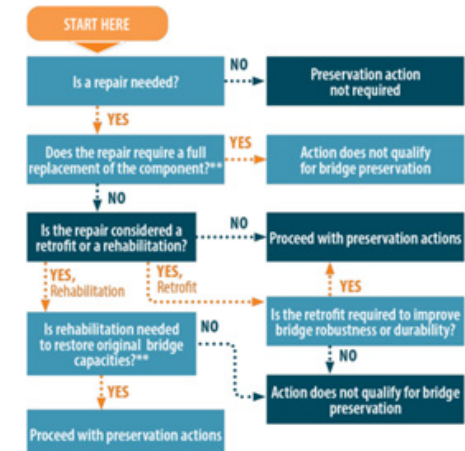
- Provide COLA with various contract mechanisms for routine maintenance
- Bridge PS&Es for routine maintenance for various bridges
- Structural Health Monitoring Pilot project evaluation

M&N worked with the City to create their Bridge Strategic Plan (BSP) to establish a comprehensive and prioritized framework for bridge maintenance, rehabilitation, and replacement, ensuring structural resilience and public safety for 51 bridges while maximizing funding opportunities of \$25 million at the federal, state, and local level. The plan includes these key objectives:

- Inventory Assessment and Prioritization of 51 bridges.
- Funding Strategy and Federal Compliance - sought \$15 million over five years.
- Initial environmental process guidance for the BSP
- Non-Routine Maintenance and Long-Term Planning - establishing an annual baseline for non-routine maintenance of \$1.5 million.
- Provide the City with various contract mechanisms for routine maintenance.
- Flexibility in Design and Technical Support - seeking annual budget of \$500,000 for urgent design and technical support services.
- Bridge PS&Es for routine maintenance for various bridges.

- Seismic Safety and Structural Resilience - identifying six (6) structurally vulnerable bridges needing urgent attention within five years.
- Establish and Maintain Asset Management System - leveraging existing platforms, including InspectX and Cartegraph, to establish and maintain a comprehensive bridge asset management system.
- Create Policies and Procedures for a Bridge Preservation Program with an effective asset management strategy.

Staff Used: **Chase Hulon, PE**



17. Firm Experience:

Firm Name	Construction Technology Laboratories, Inc (CTL Group)	Discipline(s)*	Other (Material Evaluation)	
Project Name	DOTD I-10 Overpass Over US 165		Firm Responsibility (prime or sub?)	Sub
Project Number	N/A	Owner's Name	Louisiana DOTD	
Project Location	Iowa, LA		Owner's Project Manager	Brian Buckel
Owner's address, phone, email	1201 Capital Access Rd/ Bldg & Struct Dsn 225.379.1503 brianbuckelk@dot.la.gov			
Services commenced by this firm (mm/yy)	06/24		Total consultant contract cost (\$1,000's)	\$132
Services completed by this firm (mm/yy)	02/26		Cost of consultant services provided by this firm (\$1,000's)	\$132

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

CTLGroup provided concrete core testing and materials consulting services for the 16 girders located in spans 1 through 4. Several precast prestressed concrete (PPC) girders fabricated for the I-10 / US 165 overpass were found to exhibit aggregate segregation, with visual inspection revealing limited or no coarse aggregate at the west ends of the girders. The differences in concrete quality between ends raised concerns about long-term structural performance and durability. CTLGroup's scope of work included on-site assistance to identify coring locations, oversight of the extraction of 121 concrete core specimens across all four spans, laboratory testing for mechanical performance and durability characteristics, and consulting support in response to a proposed Carbon-Fiber Reinforced Polymer (CFRP) repair strategy put forward by the contractor's engineer. Testing per ASTM C42, C469, C642, and C856 revealed statistically significant differences in compressive strength and permeable pore space between the east and west ends of the girders, confirming the structural consequence of aggregate segregation. Petrographic examination further showed that west-end cores did not comply with the specified mix design and exhibited shrinkage cracking associated with a paste-rich concrete matrix. CTLGroup also provided a technical memorandum documenting challenges with the proposed CFRP repair protocol, including concerns about long-term durability and the absence of a detailed maintenance plan.



Benefit to Owner: CTLGroup's testing and analysis provided definitive insight into material deficiencies, enabling DOTD to understand the structural implications of aggregate segregation and avoid ineffective repair approaches. By validating performance concerns and identifying risks with the proposed CFRP solution, DOTD was better positioned to select a reliable, long-term strategy that protects structural integrity, durability, and lifecycle performance.

18. Approach and Methodology:

Project Leadership

LJA will deliver a scalable program for structure asset management, preservation project development, and construction support using a risk-based, lifecycle-driven approach. Our approach is designed for DOTD's IDIQ environment producing repeatable, district-ready deliverables that reduce cycle time, minimize rework, and improve cost and safety outcomes through bundled, proactive preservation.

Work will be led by **Alanna Bettis, PE (PM)** and **Steven Austin, PE (Deputy PM)**, who oversee project execution, asset management implementation, and preservation strategy development across districts. Alanna and Steven provide an owner's perspective from managing large bridge inventories and leading statewide asset management initiatives, including program strategies, funding scenarios, policy development, and project selection..

Work will be executed through a structured, district-aligned workflow, progressing from data integration to condition assessment, repair strategy development, and plan preparation. Standardized details, data-driven prioritization, and field validation ensure deliverables are consistent, constructable, and aligned with DOTD priorities, supporting efficient delivery of multiple concurrent task orders. LJA's approach is designed for IDIQ delivery, enabling scalable execution across varying task complexity while maintaining consistent methodology, efficient resource utilization, and district responsiveness.

Benefit to DOTD: From this delivery model through (1) cost savings from bundling similar repair work into repeatable task order packages, (2) lower lifecycle costs by proactively addressing deterioration earlier (reducing reactive/emergency repairs), (3) improved work zone safety by reducing repeated mobilizations and traffic control deployments, and (4) compressed schedules by executing multiple concurrent task orders through a district-aligned regional lead structure.

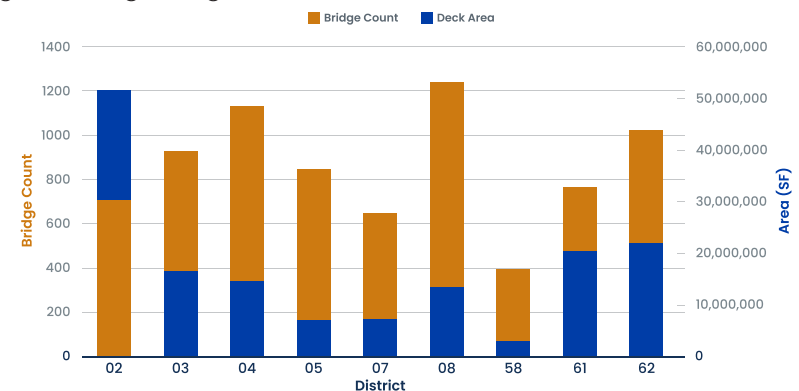
Alanna and Steven also bring national bridge preservation expertise through involvement in AASHTO committees, providing insight into proven practices across state DOTs. In collaboration with partners such as **BDI, Moffatt & Nichol, Fugro, and The CTL Group**, the team applies advanced evaluation and preservation strategies to deliver reliable, performance-driven solutions.

LJA will leverage the DOTD familiarity and experience of our subconsultants during scoping, internal QA/QC, and deliverable development to ensure alignment with DOTD standards, processes, and common practices. This familiarity improves constructability, increases accuracy of assumptions, and reduces review cycles and rework supporting more efficient, predictable delivery aligned with DOTD expectations.

Understanding of Louisiana Bridge Inventory and DOTD Needs

LJA understands that DOTD manages a large, diverse, and geographically dispersed bridge inventory across nine districts, each with unique challenges, capabilities, and priorities. LJA will implement a structured, data-driven approach that ensures statewide consistency while incorporating district-specific needs into asset management planning and delivery. Some inventory statistics that will drive asset management decisions include:

- Significant portion of structures built in the 1960s and 1970s
- 81% concrete/prestressed asset inventory
- Most timber assets were built before 1970s with concentration in Districts 03, 05, 08, 62
- Long overall length bridges/critical assets



LJA will evaluate funding needs through a comprehensive review of current and historic conditions, completed work, and associated costs, including data from DOTD's Maintenance Management System (MMS). This evaluation will support development of prioritized, condition-based strategies and funding scenarios, allowing DOTD to optimize investment across maintenance, rehabilitation, and replacement programs.

Our team brings expertise in developing repair strategies from working drawings and standards applicable to IDIQ delivery to bridge-specific designs for complex rehabilitation, across timber, steel, concrete, and prestressed concrete bridges.

Local partners strengthen DOTD alignment by bringing direct familiarity with DOTD standards, deliverable expectations, and maintenance objectives. For example, BDI brings over eight years of direct support to DOTD and provides data-driven evaluation inputs that strengthen preservation strategy selection and prioritization. Moffatt & Nichol bring over 20 years of DOTD project experience that supports DOTD-consistent plan development and reduces review iterations.

Technical Approach by Scope

1. Structure Asset Management Plan Development

Guang Li, PE will implement an asset management process integrating data analytics, document review, field validation, and lifecycle planning. This approach supports DOTD's IDIQ delivery by converting inventory needs into prioritized, IDIQ-ready work packages.

Discovery and Data Integration

To establish a DOTD-ready baseline for prioritization and task-order packaging, LJA's **Ambarish Banerjee, PE** will lead the analyses by:

- Consolidating asset inventory, inspection data, historical records, and MMS cost data into a centralized system (e.g., InspectX or GIS-based tools).
- Evaluating lifecycle trends to support initial categorization (preservation, rehabilitation, replacement) by bridge and defect type.
- Becoming familiar with district capabilities and practices through stakeholder coordination and interviews led by engagement expert **Sydney Fox**.
- Analyzing inspection results, work history, and costs to identify trends, performance, and recurring deficiencies.
- Develop an initial GIS-based prioritized district plan to guide field assessments created by **Margaret Genzer**.

Condition Assessment and Field Verification

Our team understands the distinction between NBIS inspections and condition assessments, which focus on identifying root causes and developing targeted repair strategies. While NBIS data supports network-level lifecycle analysis, condition assessments provide the detail needed to define effective repairs. Field assessments validate inspection data, evaluate past repairs, and support more informed, data-driven recommendations. To validate needs quickly and consistently across all districts, LJA will:

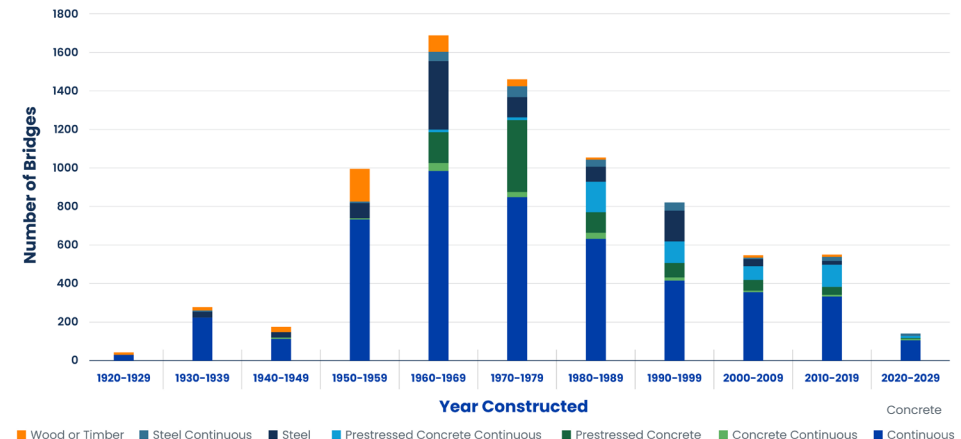
- Conduct field assessments using regional team leads (3 regions covering 3 districts each) to validate inspection data and refine repair needs.
- Utilize GIS-based tools for standardized data collection, real-time reporting, and feedback into asset management planning.
- **Develop condition assessment reports with planning-level cost estimates, including assumptions and applicable contingencies.**
- Integrate field results back into asset management plans to refine district-specific strategies.

Innovation Enhancement: LJA will integrate BDI's advanced NDT technologies (SounDAR, GPR, and imaging) with existing DOTD data to efficiently assess deterioration trends and identify defect extent and root causes across bridge inventories. This data-driven approach streamlines data collection, avoids duplication, and enhances repair prioritization and lifecycle planning, improving DOTD's confidence in decision-making and focusing resources on the highest-risk needs.

Risk-Based Prioritization and Lifecycle Strategy Development

Led by **Luke Little, PE**, the assessment findings will be used to further develop the assessment management strategies including:

- Identify and categorize deficiencies to support repeatable IDIQ work orders and efficient bundling by work type and location.
- Apply lifecycle cost analysis considering condition, criticality, and system impact (e.g., ADT, functional classification, scour, and safety).
- Incorporate asset-specific trends to support lifecycle strategic considerations such as:
 - Structures of similar asset type built in the 60's and 70's will have similar deterioration risk.



- Predominant concrete/prestressed inventory will guide baseline repair strategies.
- Districts with high timber inventories enable large-scale pile repair grouping.
- Long overall length/critical assets require higher weighting
- **Advance the lifecycle-based preservation, rehabilitation, or replacement strategies captured during Discovery and Data Integration.**
- **Produce a final prioritized GIS-based asset management plan with structure-specific recommendation and benefit-cost considerations to improve decision making and program visibility.**

Funding and Program Development

Using prioritized asset data, **LJA will develop funding scenarios tied to performance outcomes and recommend optimal funding levels for maintenance, rehabilitation, and replacement programs.** This approach reflects Alanna's experience leading similar efforts for TxDOT's Maintenance Division, where data-driven funding strategies supported the Legislative Appropriations Request and contributed to an 8.5% increase in the statewide routine maintenance budget.

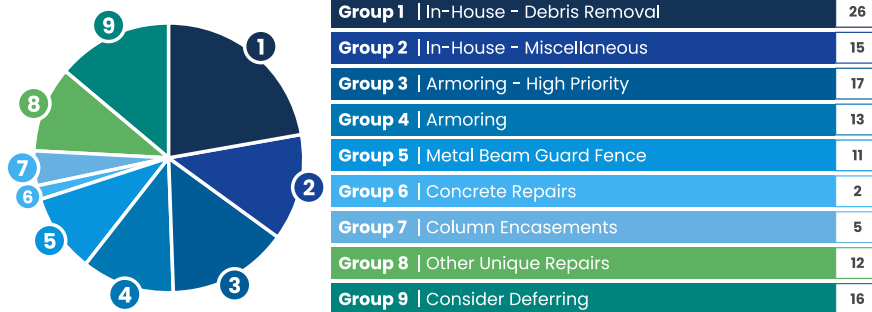
IDIQ Contracting Integration

Repair recommendations will be aligned with IDIQ-compatible work order scopes, enabling: rapid delivery of recurring maintenance activities, standardized repair categories, and efficient bundling by work type and corridor.

2. Structure Preservation Project Development

LJA will develop complete plans, specifications, and estimates and support DOTD throughout the bidding phase for maintenance and repair plans executing strategies developed in the previous task. Understanding that this work will be performed primarily under construction and maintenance IDIQ work orders, LJA will streamline plan preparation through development of typical details and project specific standards. Our team's familiarity with the use of working drawings will help to ensure we are efficient with our plan preparation. **David Pretorius, PE, Nikolas Kalos, PE, and Dacio Marin, PE,** have delivered biddable, district-wide repair plans using bundled repair strategies and repeatable plan conventions.

Benefit to DOTD: Typical details and repeatable repair libraries reduce design time, improve statewide consistency, and accelerate task order development allowing DOTD to deliver more repairs with fewer unique plan sets and fewer review iterations.



During scoping of each task, Alanna Bettis and Steven Austin will coordinate with discipline technical leads to develop a project schedule that accounts for SUE, utility coordination, environmental permitting, design, maintenance of traffic, cost estimates, and public and stakeholder outreach.

Clear recommendations from prior tasks on this contract will allow us to accelerate design often skipping the 30% submittal and advancing directly to 60% or 90%, depending on complexity. Plans will include drawings, specifications, and quantities suitable for bidding and construction.

Innovation Enhancement: LJA will produce district-wide bridge maintenance plans with overall location maps and typical repair details that could be employed at many locations.

Project Proofs: LJA has applied this same data-to-delivery workflow across multiple TxDOT Districts and counties, integrating inspection history, field validation, cost data, and GIS-based tools to support efficient, data-driven decision-making and prioritization. Our team has delivered biddable, district-wide repair plans using repeatable work categories (e.g., armoring, concrete repairs, column encasements), enabling efficient bundling and reduced mobilizations. This approach supports concurrent task order execution, shortens PS&E development, improves consistency, and enhances predictable, efficient delivery aligned with DOTD's IDIQ program needs.

Special consideration will be made to ensure constructability of repair procedures. Our bridge preservation engineers will work closely with our Traffic Control lead **Melanie Roberts, PE** to ensure phasing of work considers construction access and work space needs.

With many bridges over waterways, LJA understands that hydraulics and scour protection will be an important aspect of this assignment. Our Hydraulics and Erosion lead, **Brice Karger, PE** will be engaged to design scour countermeasures per HEC-23. Our Railroad Coordination lead, **Michael Bell, PE** will ensure that we complete relevant Exhibits, RR agreements, and receive timely responses from railroad owners. Our Environmental lead, **Stephen (Steve) Parker**, will provide direction to our team and ensure compliance with environmental requirements. Moffatt & Nichol will incorporate all known off-footprint activities into project environmental documentation and evaluate their consistency with Categorical Exclusion (CE) criteria. The team will engage early with state and federal regulatory agencies.

To ensure that all field notes are incorporated and completeness of plans, LJA will perform a field visit with 90% plans in-hand to ensure that all defects have been incorporated into the plans.

Our design schedule will allow sufficient time for LJA's Quality Control Reviews. LJA's Quality Control Review process consists of an independent reviewer, with expertise in each discipline, performing a detailed review of the plans followed by comment response and resolution before the plan submittal to DOTD.

Benefit to DOTD: This approach shortens PS&E development, increases consistency across task orders, and supports efficient packaging of recurring repairs for IDIQ delivery.

3. Post-Design Construction Support Services

LJA will provide comprehensive support throughout the letting and construction phase. This includes responding to contractor questions, reviewing submittals, performing site visits, and assisting with change orders, addressing unforeseen conditions, evaluating proposed changes, and project closeout.

Alanna will remain the primary point of contact throughout construction however a construction support task lead will be assigned for each project to support districts during construction. As a support task lead is assigned, LJA will maintain continuity from design through construction to ensure design intent is executed.

Our team brings strong experience in construction administration, inspection of repair work, and contract management available to support DOTD. Bridge rehabilitation projects can have unforeseen conditions or contractor performance issues. LJA is equipped to adapt quickly and enforce quality standards to prevent recurring deficiencies.

4. Contract Management Consultant Project Manager

Alanna Bettis will serve as Project Manager and primary point of contact, with Steven Austin supporting coordination, technical oversight, and integration of bridge evaluation, preservation, and plan development activities. This leadership structure ensures consistent execution across all task orders and alignment with DOTD priorities.

Task Order Delivery

Task Orders (TOs) will be executed through a **structured, repeatable framework** aligned with IDIQ delivery requirements.

- **Initiation and Scoping:** Each task begins with a kickoff meeting to define scope, priorities, and data needs in coordination with DOTD maintenance and district staff.
- **Staffing and Resource Allocation:** Staffing is coordinated with technical and regional leads to align with task complexity and district priorities. A resource-loaded approach enables efficient utilization and flexibility across concurrent task orders.
- **Execution (Assessment, Design, and Support):** Work is performed through a centralized asset management approach supported by regional leads, enabling direct coordination with DOTD to define scope, develop repair strategies, and prepare implementable plans.
- **Deliverable Development:** Deliverables are developed through a consistent workflow, including condition assessments, repair recommendations, prioritization, and cost estimates. Development incorporates district input and standardized details to ensure constructability and readiness for implementation.
- **Closeout and Documentation:** At completion, LJA finalizes deliverables, documents assumptions and methodologies, and captures key findings to support future task orders and program-level decision-making.

Concurrent Task Order Management

Multiple Task Orders will be managed concurrently through:

- **Regional Team Leads:** Ensuring consistent methodology while coordinating directly with DOTD staff to address district-specific needs
- **Flexible Staffing Assignments:** Coordination with Technical Leads to align resources to workload demands and scaling teams across districts as needed
- **Centralized Coordination and Reporting:** Utilizing Teams, SharePoint, and dashboard tools (e.g., Power BI, ArcGIS) to track progress, resources, and deliverables.



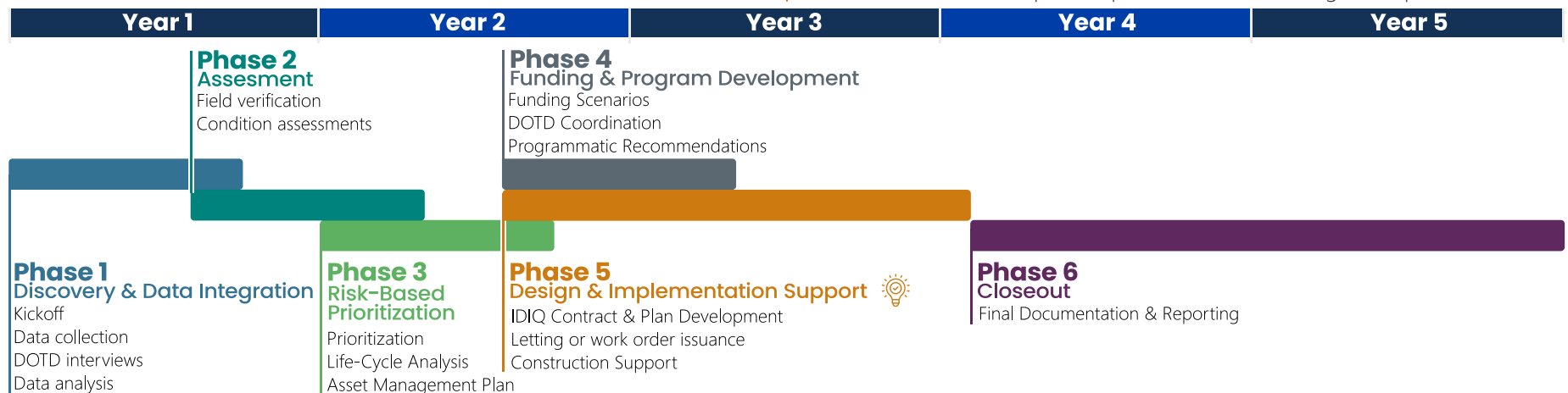
Innovation Enhancement: Regional leads and a repeatable task order workflow enable parallel execution across the nine districts, compressing schedules while improving consistency and maintaining quality and responsiveness. DOTD-experienced partners provide early "DOTD common practice" checks to reduce review iterations and rework, resulting in more efficient delivery and better alignment with district needs.

Reporting and Administration

- Monthly progress reports (schedule, budget, issues)
- Timely invoice submission
- Coordination across regional team and discipline technical leads
- Compliance with DOTD administrative requirements

Task Order Milestones:

LJA's asset management support is scalable and we will incorporate current DOTD maintenance office efforts to expedite work order plans. The following is a high-level schedule to develop a comprehensive asset management plan:



Our team understands the need to have actionable and implementable results. Design development for select work is expected to begin sooner for isolated issues or to address more immediate district needs.

19. Workload:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
LJA Engineering, Inc. (Incl. Subsidiaries)				N/A
Bridge Diagnostics, Inc.	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/ Evaluation of Structures Statewide TO5	\$294,799
Bridge Diagnostics, Inc.	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/ Evaluation of Structures Statewide TO7	\$5,034
Bridge Diagnostics, Inc.	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/ Evaluation of Structures Statewide TO9	\$115,918
Bridge Diagnostics, Inc.	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/ Evaluation of Structures Statewide TO10	\$408,471
Bridge Diagnostics, Inc.	Bridge	44-24187 H.004647.6	I-20 Miss. R. Bridge Geotechnical & Stru IDIQ Contract for Bridge Preservation Statewide TO 15	\$145,112
Bridge Diagnostics, Inc.	Bridge	4400023812	Mast Plan Development for the Weigh Station Assessment, Rehabilitation, and Plan Development Statewide TO3	\$27,081
Fugro USA Land, Inc.	Geotech	4400017033 H.005121.5	LA1/LA415 Connector	\$1,518,061
Moffatt & Nichol Inc.	Bridge	44-29207 H.009730.5	IDIQ Contract for Underwater Bridge Inspection – TO1, Statewide (240826/01)	\$1,371,557
Moffatt & Nichol Inc.	Bridge	44-29683 H.009730.5	IDIQ In-Depth Bridge Inspection Statewide (241360)	\$123,887
Construction Technology Laboratories, Inc.				N/A

20. Certifications/Licenses:

From: LTRC Registration Website <eml-regmgt-ltrc-prod@la.gov>
Sent: Tuesday, May 19, 2026 9:15 AM
To: Alanna Bettis <abettis@lja.com>
Subject: Registration Confirmation for Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)

[EXTERNAL EMAIL]

Louisiana Transportation Research Center

Thank you for submitting your student registration. This confirmation is for Pre-Booking only. you will receive a new confirmation once you are enrolled in an active course.

Course: Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)
First Name: Alanna
Last Name: Bettis
Company: LJA Engineering
Title: Vice President
Phone: 512-217-7424

If you need assistance with managing your submission, please contact Layne Brown at layne.brown@la.gov.

/outlook.office.com/mail/inbox/id/AAkALgAAAAAHYQDEapmEc2byACqAC%2FEWg0AZ8g3TnK9VEivPx5pbwr42AABcQ412gAA?nativeVersio...

Steven Austin

From: LTRC Registration Website <eml-regmgt-ltrc-prod@la.gov>
Sent: Wednesday, May 6, 2026 7:10 AM
To: Steven Austin
Subject: Registration Confirmation for Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)

[EXTERNAL EMAIL]

Louisiana Transportation Research Center

Thank you for submitting your student registration. This confirmation is for Pre-Booking only. you will receive a new confirmation once you are enrolled in an active course.

Course: Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)
First Name: Steven
Last Name: Austin
Company: LJA Engineering
Title: Vice President
Phone: 210-445-9659

If you need assistance with managing your submission, please contact Layne Brown at layne.brown@la.gov.

Visit Website | (225) 767-9183

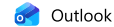
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20. Certifications/Licenses:

5/13/26, 3:08 PM

Inbox - Kenzie Kollmann - Outlook



Registration Confirmation for Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)

From: LTRC Registration Website <eml-regmgt-ltrc-prod@la.gov>
 Date: Wed 5/13/2026 2:14 PM
 To: Melanie Roberts <mroberts@gonzalez-strength.com>

[EXTERNAL EMAIL]

Louisiana Transportation
 Research Center

Thank you for submitting your student registration. This confirmation is for Pre-Booking only. you will receive a new confirmation once you are enrolled in an active course.

Course: Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)
First Name: Melanie
Last Name: Roberts
Company: LJA Engineering
Title: Project Manager
Phone: 205-942-2486

If you need assistance with managing your submission, please contact Layne Brown at layne.brown@la.gov.

Visit Website | (225) 767-9183

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20. Certifications/Licenses:



Steven Fall
has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 03-SEP-2025

CEU (If Applicable): 0.75

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

Student got a certificate from OnlineFlagger

Aug 08, 2024

Hi Steven, your student, Steven Fall has passed the course with a 96 percent.

You can access all information from your dashboard, by clicking this link [Dashboard](#).

We provided the student with the following information.

Congratulations Steven,

You have successfully passed the flagger training course for Louisiana.

We suggest that you print, or save a copy of your temporary certificate on your cell phone, click on the View Certificate button below to make copies.

This temporary certificate is valid until your permanent wallet card arrives in the mail. Wallet cards are mailed to the person that purchased the course unless special shipping arrangements were made.

Keep this email for future reference, and enter this unique verification code 190-57-114963 on the website [STARTFLAGGING.COM](#) to obtain additional copies of this certificate if needed.

We will mail your wallet card within a few days; please allow the USPS up to 30 days to get it there.

After you receive your wallet card, you must always carry it on your person when flagging traffic.

Reference Certificate Generated Email to Parent

20. Certifications/Licenses:



National Highway Institute

Certificate of Training

Chace Hulien

has participated in

FHWA-NHI-133113- Work Zone Traffic Control for Maintenance Operations

hosted by
ConnDOT

Hours of Instruction: 7

Date: April 27, 2015
Location: Newington, CT

David M. Hulien
Local Coordinator

Richard J. Barnaby
Richard J. Barnaby, Director
National Highway Institute

James D. Hulien
Instructor

Instructor

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
LJA ENGINEERING, INC.	Business Corporation (Non-Louisiana)	HOUSTON	Active
Previous Names			
Business:	LJA ENGINEERING, INC.		
Charter Number:	40864287F		
Registration Date:	6/18/2012		
Domicile Address			
3600 W SAM HOUSTON PARKWAY SOUTH SUITE 600 HOUSTON, TX 77042			
Mailing Address			
450 LAUREL STREET, 8TH FLOOR BATON ROUGE, LA 70801			
Principal Business Office			
3600 W SAM HOUSTON PKWY S STE 600 HOUSTON, TX 77042			
Registered Office in Louisiana			
450 LAUREL STREET, 8TH FLOOR BATON ROUGE, LA 70801			
Principal Business Establishment in Louisiana			
450 LAUREL STREET, 8TH FLOOR BATON ROUGE, LA 70801			
Status			
Status:	Active		
Annual Report Status:	In Good Standing		
Qualified:	6/18/2012		
Last Report Filed:	5/20/2025		
Type:	Business Corporation (Non-Louisiana)		
Registered Agent(s)			
Agent:	CORPORATION SERVICE COMPANY		
Address 1:	450 LAUREL STREET, 8TH FLOOR		
City, State, Zip:	BATON ROUGE, LA 70801		
Appointment Date:	9/8/2025		

20. Certifications/Licenses:

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
BRIDGE DIAGNOSTICS, INC.	Business Corporation (Non-Louisiana)	LOUISVILLE	Active
Previous Names			
Business:	BRIDGE DIAGNOSTICS, INC.		
Charter Number:	40760203F		
Registration Date:	2/27/2012		
Domicile Address			
740 S PIERCE AVE UNIT 15 LOUISVILLE, CO 80027			
Mailing Address			
4300 S I-10 SERVICE RD W SUITE 210 METAIRIE, LA 70001			
Principal Business Office			
740 S PIERCE AVE UNIT 15 LOUISVILLE, CO 80027			
Registered Office in Louisiana			
8550 UNITED PLAZA BUILDING II, STE. 305 BATON ROUGE, LA 70809			
Principal Business Establishment in Louisiana			
4300 S I-10 SERVICE RD W SUITE 210 METAIRIE, LA 70001			
Status			
Status:	Active		
Annual Report Status:	In Good Standing		
Qualified:	2/27/2012		
Last Report Filed:	2/16/2026		
Type:	Business Corporation (Non-Louisiana)		
Registered Agent(s)			
Agent:	CAPITOL CORPORATE SERVICES, INC.		

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
CONSTRUCTION TECHNOLOGY LABORATORIES, INC.	Business Corporation (Non-Louisiana)	SPRINGFIELD	Active
Previous Names			
Business:	CONSTRUCTION TECHNOLOGY LABORATORIES, INC.		
Charter Number:	35122047F		
Registration Date:	8/1/2001		
Domicile Address			
801 ADLAI STEVENSON DRIVE SPRINGFIELD, IL 62703			
Mailing Address			
1660 FEEHANVILLE DRIVE SUITE 300 MOUNT PROSPECT, IL 60056			
Principal Business Office			
1660 FEEHANVILLE DRIVE SUITE 300 MOUNT PROSPECT, IL 60056			
Registered Office in Louisiana			
450 LAUREL STREET, 8TH FLOOR BATON ROUGE, LA 70801			
Principal Business Establishment in Louisiana			
450 LAUREL STREET 8TH FLOOR BATON ROUGE, LA 70801			
Status			
Status:	Active		
Annual Report Status:	In Good Standing		
Qualified:	8/1/2001		
Last Report Filed:	7/3/2025		
Type:	Business Corporation (Non-Louisiana)		
Registered Agent(s)			
Agent:	CORPORATION SERVICE COMPANY		
Address 1:	450 LAUREL STREET, 8TH FLOOR		
City, State, Zip:	BATON ROUGE, LA 70801		

20. Certifications/Licenses:

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
FUGRO USA LAND, INC.	Business Corporation (Non-Louisiana)	HOUSTON	Active

Previous Names

FUGRO CONSULTANTS, INC. (Changed: 1/5/2017)
FUGRO CONSULTANTS LP (Changed: 3/16/2007)
FUGRO SOUTH LP (Changed: 4/2/2004)
FUGRO SOUTH, INC. (Changed: 8/5/2002)
FUGRO-MCCLELLAND (SOUTHWEST), INC. (Changed: 5/2/2000)
MCCLELLAND CONSULTANTS (SOUTHWEST), INC. (Changed: 5/2/2000)

Business: FUGRO USA LAND, INC.

Charter Number: 34355083F

Registration Date: 5/3/1990

Domicile Address

13501 KATY FWY
SUITE 1050
HOUSTON, TX 77079

Mailing Address

13501 KATY FWY
SUITE 1050
HOUSTON, TX 77079

Principal Business Office

13501 KATY FWY
SUITE 1050
HOUSTON, TX 77079

Registered Office in Louisiana

3867 PLAZA TOWER DR.
BATON ROUGE, LA 70816

Principal Business Establishment in Louisiana

4252 RHODA DR.
BATON ROUGE, LA 70816

Status

Status: Active
Annual Report Status: In Good Standing
Qualified: 5/3/1990

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
MOFFATT & NICHOL INC.	Business Corporation (Non-Louisiana)	LONG BEACH	Active

Previous Names

MOFFATT & NICHOL, ENGINEERS, INC. (Changed: 11/17/2003)

Business: MOFFATT & NICHOL INC.

Charter Number: 34527896F

Registration Date: 5/23/1996

Domicile Address

4225 E. CONANT STREET, SUITE 101
LONG BEACH, CA 90808

Mailing Address

4225 E. CONANT STREET, SUITE 101
LONG BEACH, CA 90808

Principal Business Office

4225 E. CONANT STREET, SUITE 101
LONG BEACH, CA 90808

Registered Office in Louisiana

3867 PLAZA TOWER DR.
BATON ROUGE, LA 70816

Principal Business Establishment in Louisiana

301 MAIN STREET
SUITE 800
BATON ROUGE, LA 70801

Status

Status: Active
Annual Report Status: In Good Standing
Qualified: 5/23/1996
Last Report Filed: 5/8/2026
Type: Business Corporation (Non-Louisiana)

Registered Agent(s)

Agent: C T CORPORATION SYSTEM
Address 1: 3867 PLAZA TOWER DR.
City, State, Zip: BATON ROUGE, LA 70816

21. QA/QC Plan:

22. Subconsultant Info:

Firm Name (Name must match <u>exactly</u> as registered with Louisiana's Secretary of State (SOS): <u>including punctuation, include screenshot(s) from SOS at the end of Section 20</u>)	Address	Point of Contact and Email Address	Phone Number
Bridge Diagnostics, Inc.	4300 S I-10 Service Rd W, Suite 210, Metairie, LA 70001	Steven Fall, PE stevenf@bditest.com	504.874.1042
Fugro USA Land, Inc.	4233 Rhoda Drive, Baton Rouge, LA 70816	Eric Marx emarx@fugro.com	225.800.5400
Moffatt & Nichol Inc.	301 Main Street, Suite 800 Baton Rouge, LA 70801	Chace Hulon, PE chulon@moffattnichol.com	225.336.2075
Construction Technology Laboratories, Inc.	1660 Feehanville Drive, Suite 300 Mount Prospect, IL 60056	Tim Tonyan, PhD ttonyan@ctlgroup.com	630.414.6510

23. Location: