IDIQ CONTRACTS FOR BRIDGE PRESERVATION
Statewide, LA

Contract Nos. 4400023921, 4400023922, 4400023923, 4400024185, 4400024186, 4400024187, 4400024188, and 4400024189
May 10, 2022

Stantec

DOTD FORM: 24-102

(Revised March 1, 2022)

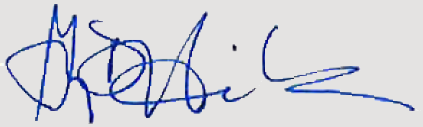
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

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

1.	Contract title as shown in the advertisement.	**IDIQ CONTRACTS FOR BRIDGE PRESERVATION**
2.	Contract number(s) as shown in the advertisement	Nos. 4400023921, 4400023922, 4400023923, 4400024185, 4400024186, 4400024187, 4400024188, and 4400024189
3.	State Project Number(s), if shown in the advertisement	N/A
4.	Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	Stantec Consulting Services 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.0003506
6.	Prime consultant mailing address	1200 Brickyard Lane Suite 400, Baton Rouge, LA 70802
7.	Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	1200 Brickyard Lane Suite 400, Baton Rouge, LA 70802
8.	Name, title, phone number, and email address of prime consultant's contract point of contact	**Gary Heitman, PE, Senior Principal** (225) 215-5105 | gary.heitman@stantec.com
9.	Name title, phone number, and email address of the official with signing authority for this proposal	**Gary Heitman, PE, Senior Principal** (225) 215-5105 | gary.heitman@stantec.com

10.	This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	**Signature (shall be the same person as #9):**  Date: May 10, 2022
11.	If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	**Firms(s)** — **Firm(s)'%:** **Civil Design & Construction** — **4%**

12. **Past Performance Evaluation Discipline Table:**

Sub-consultants are allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 19 of the DOTD Form 24-102*, the name of each firm that is part of the proposal, and the percentage of work in each past performance evaluation discipline to be performed by that firm. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract.
(Add rows as needed)

Evaluation Disciplines	% of Overall Contract	Stantec Consulting Services Inc. (Prime)	Wiss Jamney, Elstner Associates, Inc.	GeoEngineers	Civil Design & Construction	Forte and Tablada, Inc.	Meyer Engineers, Ltd.
Bridge	60%	67%	20%	0%	0%	10%	3%
Geotech	10%	0%	0%	100%	0%	0%	0%
Road	15%	90%	0%	0%	10%	0%	0%
Traffic	5%	100%	0%	0%	0%	0%	0%
Survey	5%	0%	0%	0%	50%	50%	0%
Environmental	5%	100%	0%	0%	0%	0%	0%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.							
Percent of Contract	100%	63.7%	12.0%	10.0%	4.0%	8.5%	1.8%

13. **Firm 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)
Stantec Consulting Services Inc.	Principal	1	4
Stantec Consulting Services Inc.	Supervisor - Eng	2	2
Stantec Consulting Services Inc.	Engineer	8	20
Stantec Consulting Services Inc.	Engineer Intern	4	8
Stantec Consulting Services Inc.	Senior Technician	3	3
Stantec Consulting Services Inc.	CADD Technician	1	5
Stantec Consulting Services Inc.	Planner	1	2
Stantec Consulting Services Inc.	Administrative	1	2
Wiss, Janney, Elstner Associates, Inc.	CADD Technician	1	4
Wiss, Janney, Elstner Associates, Inc.	Clerical	2	7
Wiss, Janney, Elstner Associates, Inc.	Engineer	0	3
Wiss, Janney, Elstner Associates, Inc.	Engineer Intern	2	28
Wiss, Janney, Elstner Associates, Inc.	Engineer - Other	2	28
Wiss, Janney, Elstner Associates, Inc.	Principal	4	45
Wiss, Janney, Elstner Associates, Inc.	Professional	4	19
Wiss, Janney, Elstner Associates, Inc.	Senior Technician	1	58
Wiss, Janney, Elstner Associates, Inc.	Supervisor - Eng	1	13
Wiss, Janney, Elstner Associates, Inc.	Technician	1	7
GeoEngineers, Inc.	Administrative	0	4
GeoEngineers, Inc.	CADD Technician	0	1
GeoEngineers, Inc.	Driller	2	3
GeoEngineers, Inc.	Engineer	2	9
GeoEngineers, Inc.	Engineer Intern	0	3
GeoEngineers, Inc.	Environmental Pro	0	2
GeoEngineers, Inc.	Principal	2	4
GeoEngineers, Inc.	Sr. Technician	1	1

GeoEngineers, Inc.	Technician	1	11
Forte and Tablada, Inc.	Administrative	0	3
Forte and Tablada, Inc.	CADD Technician	4	8
Forte and Tablada, Inc.	Clerical	0	4
Forte and Tablada, Inc.	Engineer	2	4
Forte and Tablada, Inc.	Inspector	0	3
Forte and Tablada, Inc.	Instrument Man	1	1
Forte and Tablada, Inc.	Party Chief	2	6
Forte and Tablada, Inc.	Engineer Intern	0	9
Forte and Tablada, Inc.	Principal	1	3
Forte and Tablada, Inc.	Rodman	1	11
Forte and Tablada, Inc.	Senior Technician	2	3
Forte and Tablada, Inc.	Supervisor - Eng	1	4
Forte and Tablada, Inc.	Supervisor - Other	0	2
Forte and Tablada, Inc.	Surveyor	2	5
Civil Design & Construction, Inc.	Surveyor	2	2
Civil Design & Construction, Inc.	Party Chief	2	4
Civil Design & Construction, Inc.	Instrument Man	2	2
Civil Design & Construction, Inc.	Rodman	2	3
Civil Design & Construction, Inc.	CADD Operator	1	1
Civil Design & Construction, Inc.	Senior Technician	3	5
Meyer Engineers, Ltd.	Administrative	1	1
Meyer Engineers, Ltd.	Engineer	1	9
Meyer Engineers, Ltd.	Engineer Intern	0	2
Meyer Engineers, Ltd.	Principal	1	1
Meyer Engineers, Ltd.	Architect – Licensed	2	6
Meyer Engineers, Ltd.	Interior Designer	1	1

14. Organizational Chart:

Legend

- Stantec
- Wiss Jamney, Elstner Associates, Inc.
- GeoEngineers
- Civil Design & Construction, Inc.
- Forte and Tablada
- Meyer Engineers, Ltd.

(PE) PE registered outside Louisiana
* TEPR Training
T Has work-zone training
✓ Meets NBIS Team Leader Criteria
I, II, III Society of Professional Rope Access Technicians (SPRAT) Certified (I, II, III)

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

PRINCIPAL-IN-CHARGE
Gary Heitman, PE T

PROJECT MANAGER
Brian Johnson, PE ✓

QA/QC
Tony Hunley, PhD, PE
Cindy Hall, PE *T

BRIDGE DESIGN

Engineering
- Amir Botros, PhD, PE *(Task Lead)*
- Robert Smith, PE
- Kunal Malpani, PE ✓
- Maggie Ye, PE
- Derrick Goudeau, PE *(Lighting)*
- Joffrey Easley, PE ✓
- Alfonso Romero *(Aesthetics)*

Movable Bridges
- Mickey Harrison, PE ✓ *(Structural)*
- John Williams, PE *(Mechanical)*
- Gareth Rees, PE *(Electrical)*

Sampling, Instrumentation, NDT
- Jonathan McGormley, PE T ✓
- Mohamed ElBatanouny, PhD, SE
- Steven Lauer, SE ✓
- Curtis Schroeder, PhD, (PE), SE ✓

BRIDGE INSPECTION
- Ryan Nataluk, (PE) ✓ III
- Dave Severns, (PE) ✓ *(Underwater)*
- Brian Stigner, (PE) ✓
- Michael Brodnax, EI ✓
- Donavon Cunningham II *(NACE Lv3)*
- Leonard Phelps *(SSPC)*

ROAD + TRAFFIC
- Joe Cains, III, PE T
- Mary Frances O'Rourke, PE T
- Nick Prudhomme, PE T
- Joey Lefante, PE, PTOE *T
- Karla Weston, PE

GEOTECHNICAL SERVICES
- James Aronstein, PE
- David Sauls, PE
- Larry Sant, PE T
- Cody Hatch, PE T
- Wendy Allen *(Lab Manager)*

SURVEY
- Russell Coco, PE
- Bradley Holleman, PLS T
- Ross Wilson, PLS T
- Brent Campbell *(Technician)* T
- Spencer Rimes *(Sr. Technician)*
- Ralph Burgess, PLS
- Chris Ballard, PLS
- Philip Dupree T
- Jason Stoehr T
- Trent Norris
- Scott Benton
- Jacob Stoehr T

ENVIRONMENTAL/PERMITTING
- Scott Hoffeld, CEP *T
- Lindsay Grissom
- Joe Cains, III, PE T *(USCG Permits)*

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 / certification & number	State of license	License / certification expiration date
1.	Brian Johnson, PE	Stantec	PE No. 31273	LA	9/30/2022
2.	Brian Johnson, PE	Stantec	PE No. 31273	LA	9/30/2022
3.	Brian Johnson, PE	Stantec	PE No. 31273	LA	9/30/2022
4.	Amir Botros, PE	Stantec	PE No. 43701	LA	3/31/2024
5.	John Williams, PE	WJE	PE No. 44300	LA	9/30/2022
6.	Gareth Rees, PE	WJE	PE No. 40754	LA	9/30/2022
7.	Mickey Harrison, PE	Stantec	PE No. 28313	LA	9/30/2023
8.	Cindy Hall, PE	Stantec	PE No. 27073	LA	9/30/2023
9.	James Aronstein Jr., PE	GeoEngineers	PE No. 11794	LA	3/31/2023
	David Sauls, PE	GeoEngineers	PE No. 23270	LA	3/31/2023
	Larry Sant, PE	GeoEngineers	PE No. 35625	LA	9/30/2022

16. **Staff Experience:**

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Gary Heitman, PE**	YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER	**22**	
TITLE	**Senior Principal**	YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(S)	**12**	
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 1986 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 24670 | LA | 9/30/2022**			
YEAR REGISTERED	**1992**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	With over 34 years of experience, Gary will serve as an **PRINCIPAL-IN-CHARGE** for this contract. He has led the study and design of various project types, including interstates and interchanges, arterials and collector highways, local roads, bridge replacement projects and other similar transportation systems, on both existing highway alignments and new locations. His experience also includes Design-Build and Construction Administration Services, allowing him to apply lessons learned in the construction arena to the design process and thereby providing a better set of alternatives and/or construction plans. Prior to joining Stantec, Gary served as a Plan Development Engineer and Design Engineer with the LADOTD.
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/01 - 03/04	**OUACHITA RIVER BRIDGE | LADOTD | Harrisonburg, LA** Project Manager. Gary was responsible for the study to replace the existing Louisiana 8 bridge in Harrisonburg, Louisiana on new alignment. The study identified potential alternative alignments and environmental impacts. Cost estimates, including roadway construction, right-of-way, and utility relocations costs were developed for the report. After successfully obtaining an EA document on the recommended alignment, the project proceeded into the design phase, where in addition to leading the Roadway team to develop the Preliminary and Final construction plans for the 1.4 mile relocation project, Gary coordinated with the Survey Division to develop the topographic survey and ROW maps. The project required close interaction with the LADOTD Bridge Design Section, who developed the bridge design and plans for the high-level river crossing.
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE DESIGN-BUILD | LADOTD | New Orleans, LA** Roadway Design QC. Gary is providing roadway design quality control for this multimillion-dollar project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans Airport. Project consists of a Diverging Diamond Interchange, in addition to flyover ramps leading to/ from the Airport on the east side of the interchange.
04/11 - 06/15	**I-210 COVE LANE INTERCHANGE PROJECT | LADOTD | Lake Charles, LA** Roadway Division Manager. Gary oversaw the roadway design efforts on this fast-paced project to improve access to the casino site located on I-210 between Cove Lane and Nelson Road Interchanges. Stantec led the initial study regarding appropriate access needs to and from the casino along I-210 as prior access to the site was not sufficient for the expected increase in traffic. Deliverables included a final report meeting all LADOTD requirements for a traffic impact study based on the proposed development and Stage 0 requirements for long-term improvements at the I-210/Cove Lane and I-210/Nelson Road interchanges, in each case reflecting all agency comments with no outstanding comments or further review required.
10/17 - Ongoing	**NELSON ROAD EXTENSION AND BRIDGE | LADOTD | Lake Charles, LA** Roadway Division Manager. Stantec oversaw the effort for this new high-level bridge and approaches over Contraband Bayou, a navigable waterway in the Lake Charles area. This project will provide a crucial link to downtown Lake Charles and the Port of Lake Charles by extending Nelson Road over Contraband Bayou to West Sallier Street.
10/09 - 06/11	**US 90 INTERCHANGE AT LA 85 DESIGN-BUILD | LADOTD | Iberia Parish, LA** Roadway Division Manager. Gary led the roadway design effort for this LADOTD project implemented to elevate the rural arterial to interstate standards. The effort began during the proposal phase, well before project award, during which he served on the team that developed several innovative solutions that helped win the project.

07/15 - Ongoing	**I-49 LAFAYETTE CONNECTOR | LADOTD Contract No. H.004273.5 | Lafayette, LA** Assistant Program Manager and Geometrics Task Manager. Gary is assisting with the Program Management task, including overseeing the implementation of an extensive QC/QA plan. He is managing the geometric design of the corridor, which includes segments of at-grade and elevated mainline, frontage roads, urban interchanges and slip ramps, as well as connections/modifications to the existing roadway network. Geometric team's task includes conceptual constructability and maintenance of traffic plans, conceptual drainage design, and estimates of probable construction costs throughout the project. Stantec performed a re-evaluation of the Final EIS through the corridor, began an extensive context sensitive solutions process, and analyzed the horizontal and vertical geometry concepts developed in the previous phases of the project. Through this process, additional concepts are being considered, and in addition to the CSS component, a formal SEIS process is being followed to document the changes identified for the project.
06/12 - 02/14	**NEW ORLEANS US 90Z HOSPITALITY ZONE | LADOTD | New Orleans, LA** Roadway Design Lead. Gary managed team of roadway engineers to provide deliverables for a study to review and evaluate existing traffic patterns. He provided QC for the design solutions for the new on-ramp and restriping. The on-ramp now has a third mainline lane to US 90 Business in the Interstate 10 westbound direction. Improvements converted the existing at-grade on-ramp to a ramp structure with an acceleration lane, which allows room for a third mainline lane east of the ramp construction.
05/15 - 06/18	**US 90 AT LA 318 INTERCHANGE DESIGN-BUILD | LADOTD | St. Mary Parish, LA** Roadway Independent QC. This project constructed a diamond interchange to replace the current at-grade signalized intersection of US90 and LA 318, as well as frontage roads and ramps through the project limits. Gary assisted with alternatives to the concept presented in the RFP. Performed independent QC and assurance reviews on the roadway design packages.
09/01 - 09/03	**US 61 - LIBERTY ROAD INTERCHANGE | MDOT | Natchez, MS** Project Engineer. The award-winning Liberty Road Bridge Project was designed to provide an aesthetically-pleasing gateway from the historic Natchez Trace Parkway into the City of Natchez. The improvement included the reconstruction of 1.7 miles of 5-lane urban roadway, a cloverleaf interchange, a 200-foot steel girder bridge on drilled shaft foundations, and MSE walls. The bridge's context-sensitive design included various unique architectural features, including towers at the abutments and intermediate pier, precast arched panels at the facias, concrete barriers with ornamental steel railing, and a multi-column arch soffit intermediate bent. Stantec fast-tracked the design and maintained minimal construction impact to adjacent properties. A major accomplishment of the design and construction team in conjunction with the MDOT traffic engineering division was our ability to minimize traffic impact, and maintain a high level of traffic on both the US Highway 61 arterial and the new Liberty Trace connection. Gary developed conceptual layouts of a tight diamond interchange, a partial clover leaf interchange, and a single point urban interchange during the original study. He later oversaw the roadway preliminary and final plans developed for the cloverleaf interchange selected, and performed QA/QC reviews prior to plan submittals.
02/06 - 08/07	**PLANK ROAD RELOCATION | City of Baton Rouge | Baton Rouge, LA** Project Manager. In order to obtain the current FAA safety criteria for the main runway approach at the Baton Rouge Metro Airport, the City of Baton Rouge was required to relocate a 1.6-mile stretch of Plank Road. Gary and our highway design team provided study alternatives for the corridor and developed construction plans and specifications for the four-lane divided roadway, including twin structures crossing Cypress Bayou. In addition to the development of construction documents, this project required both topographic and property surveys and the development of right-of-way maps, geotechnical and permitting services. The new roadway was designed to rural arterial standards with open ditch drainage. The Cypress Bayou bridge component of the project consisted of twin girder span bridges, each in excess of 192 feet long. Since Plank Road is a State Highway, Gary coordinated closely with the LADOTD during all phases of the project, obtaining approvals and permits as necessary, and ensuring that the State would accept the project post-construction. Gary and team also assisted the Airport/City during construction with contractor oversight, development of change order documents, attending meetings, performing weekly site progress inspections, and review and recommendations concerning approval of pay applications.
11/09 - 08/12	**I-12 WIDENING DESIGN-BUILD | LADOTD Contract No. 454-02-0071 | Livingston Parish, LA** Project Design Manager. Gary was responsible for coordination of design and plan development efforts to widen this four-mile stretch of Interstate, from the Amite River to the Juban Road interchange, as part of the selected Design-Build team. Project design elements included widening, removal, overlay, and replacement of various pavement sections, ramp deceleration lane improvements, interchange lighting, permanent signing, permanent concrete median barrier, median subsurface drainage, and widening of the Gray's Creek Bridges and the 4-H Club Road and Range Avenue overpasses. The project required erosion control plans addressing storm water runoff during construction, as well as extensive maintenance of traffic and traffic control plans for this heavily traveled stretch of interstate and connecting ramps. In addition to the design and plans developed for the construction elements, Gary was actively involved in construction progress meetings, and assisted the contractor during construction, after designs and plans were approved, working with the team to address construction questions and issues in the field. At the completion of construction, as-built plans and electronic files were created for the project, again with Gary serving as the Project Design Manager for all of the plan and design elements.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Brian Johnson, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**17**
TITLE	**Principal, Bridge Division Leader**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**5**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2000 | Civil Engineering; BS | 1999 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 31273 | LA | 9/30/2022**			
YEAR REGISTERED	**2004**	DISCIPLINE	**Civil Engineering; NBIS Certified Team Leader**	

Contract role(s) / brief description of responsibilities	Brian brings over 22 years of engineering experience specifically related to structural projects and serves as the Structural Section Manager in the Baton Rouge office. His primary expertise lies in analysis, design, rating, inspection, and rehabilitation of bridges. Brian has managed bridge projects with a variety of structure types such as prestressed concrete girders, steel truss vertical lift bridges, long span steel trusses, horizontally curved steel plate girders, concrete box culverts, and retaining walls. He has overseen several NSBI bridge inspection projects and been involved in several hydraulic studies for bridge replacement projects in both Mississippi and Louisiana. Brian will serve as **PROJECT MANAGER** for this contract. **Brian meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 1, 2, 3**
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
08/10 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Project Manager. Brian manages all field and office work for inspecting and load rating over 200 bridges annually throughout the state. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Brian is responsible for managing project activities, inspection scheduling, and performing QC/QA on field inspections, load ratings, and inspection reports. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches.
05/16 - 12/16	**US 82 OVER MISSISSIPPI RIVER IN-DEPTH BRIDGE INSPECTION | MDOT | Greenville, MS** Project Manager. Stantec performed an in-depth inspection of the US 82 Cable Stay Bridge over the Mississippi River. Brian served as the project manager and was responsible for coordination between six Stantec offices and three sub-consultants, performing the deck surface inspection, and reviewing the inspection report. The inspection included an element level inspection (abutment to abutment), in-depth inspection of the cables (including non-destructive testing), hydrographic survey of the river channel, and elevation survey of the cable stay spans deck surface.
05/17 - 08/17	**SR609 OVER OLD FORT BAYOU IN-DEPTH BRIDGE INSPECTION | MDOT | Ocean Springs, MS** Project Manager for the in-depth inspection of the 1760-ft long bridge that consists of a double leaf steel girder bascule span (176-ft) and 17 prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span. Brian's responsibilities included overseeing the project, scheduling and coordination of the field inspections, performing quality review checks of the draft and final inspection reports, and reviewing monthly invoices. Three different Stantec offices and one sub-consultant were involved in the inspections and report development. Due to the heavy traffic in these areas, inspections were limited to four business days which condensed field activities to a maximum of one week.
04/11 - 03/15	**I-210 COVE LANE INTERCHANGE| LADOTD H.010151 | Lake Charles, LA** Lead Structural Engineer. Brian managed the structural design of a single-span, 130-ft long, prestressed concrete girder bridge along I-210 over Cove Lane and twin concrete slab span bridges over Cline Canal. Bridge approaches consisted of an MSE wall system supported by a cast-in-place load transfer platform using over 8,000 timber and concrete piles. Brian provided construction support by reviewing shop drawings, addressing RFIs, and performing construction engineering. All design was performed in accordance with AASHTO LRFD Bridge Design Specifications.
08/15 - 03/20	**I-20 / TARBUTTON INTERCHANGE | City of Ruston | Ruston, LA** Project Manager. Brian managed the design of a two-span bridge over I-20 to replace an existing structurally and geometrically deficient bridge along Tarbutton Road. The bridge consisted of structural steel plate girders and drilled shaft foundations. Design efforts were performed in under four months to avoid losing project funding. In addition to design and plan development, Brian oversaw construction support which included reviewing shop drawings and addressing contractor RFIs.

01/19 – Ongoing	**LA 12 BRIDGE REPLACEMENTS VALUE ENGINEERING | LADOTD Contract No. H.000428 | Calcasieu Parish, LA** Project Manager. Brian manages the plan development for the replacement of six bridges consisting of 40-ft quad beam spans supported by prestressed concrete pile bents. Span arrangements include 3-span and 4-span units. Detour bridges were proposed in the original contract; however, the contractor preferred to construct additional bridge width which greatly reduced construction time and saved some costs. Phase construction is being used to ensure traffic flow is uninterrupted. Currently Brian oversees construction administration services.
09/17 – 06/20	**SR145 BRIDGE REPLACEMENTS | MDOT Contract No. BR-2839-00(019) / 100153-301000 | Prentiss County, MS** Project Manager. The Mississippi Department of Transportation (MDOT) replaced five structurally deficient bridges along SR 145 in Prentiss County. Construction was performed on the existing roadway alignment which created challenges both during design and construction. The five crossings include Twenty Mile Creek, Wolf Creek and its tributary, Osborne Creek, and Kings Creek. Brian served as Engineer-of-Record and project manager responsible for overseeing all design and production of contract documents. He was the single point of contact for MDOT's project divisions (roadway, bridge, geotechnical) and for managing the project budget.
07/18 - Ongoing	**SR 12 OVER SUNFLOWER RIVER | MDOT | Washington and Humphreys Counties, MS** Project Manager. Brian serves as the project manager for this bridge replacement project. The existing structurally deficient bridge is being replaced by a three-span structural steel plate girder bridge (910-ft) with a main span of 350-ft. Steel pipe pile and drilled shaft (7-ft diameter) are being used for the foundations. Segmental joints were designed for the bridge ends to accommodate large movements and to minimize future maintenance considerations.
08/19 – 06/21	**MADISON AVE OVER BRASHEAR CREEK | MDOT Contract No. ACNH-9204-00(006) / 100486-304000 | Madison, MS** Project Manager. Replacement of an existing structurally deficient bridge to accommodate additional travel lanes, sidewalks, and raised median. The bridge consists of a single 147.5-ft span using FIB-63 prestressed girders supported by steel pile, cast-in-place abutments. A cast-in-place retaining will be constructed in the northwest quadrant to prevent channel meandering. Brian served as the Engineer of Record and Project Manager for the design and plan production phase. This project is anticipated to be advertised within the next year.
12/15 - Ongoing	**NELSON ROAD EXTENSION AND BRIDGE | LADOTD Contract No. H.005967 | Lake Charles, LA** Structural Engineer. Brian managed the bridge and structural design efforts from preliminary to final plans. He performed quality review of bridge design, plans and specifications for this bridge extension to the surrounding roadway network. Project tasks included design of bridge superstructure, substructure including foundations, median barrier design and as-designed load rating. Other design elements include navigational lighting bridge attachments, steel bracket light supports with concrete anchors to the bridge structure. Structural Design was performed in compliance with AASHTO LRFD Specifications. In addition, he led the inspection of an existing sign truss to ensure it could be reused for the current project.
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Lead Structural Engineer. Brian leads the structural design efforts of two new flyover ramps (concrete slab spans, prestressed concrete girder spans, twin horizontally curved steel tub girder spans, and complex substructure units), one bridge widening (concrete slab spans), noise barriers, precast box culverts, roadway and pier protection barriers, and miscellaneous structural elements. During design Brian orchestrated a series of meetings with the contractor, fabricators, vendors, and suppliers to optimize and streamline the design. In addition, he oversees construction support which includes shop drawing reviews, addressing RFIs, and providing construction engineering services.
07/15 - 10/20	**I-10 ATCHAFALAYA FLOODWAY CLEAN, PAINT & MISC. REPAIRS | LADOTD Contract No. H.009461 | St. Martin & Iberville Parishes, LA** Project Manager. Brian was responsible for overseeing plan production, scheduling field activities, reviewing assessment reports, and construction support services. The project consisted of developing repair and rehabilitation plans for approximately 18.5 miles of structure. Structural steel plate girder and prestressed concrete girder spans founded on multi-column concrete bents were the primary structure types. Repair solutions included concrete deck and barrier rail repairs, concrete and steel girder repairs, bridge bearing replacements, and painting existing structural steel.
07/05 - Ongoing	**SR 601 / I-10 INTERIM INTERCHANGE | MDOT | HARRISON COUNTY, MS** Project Manager. The original project consisted of replacing a diamond interchange with a four-level, fully directional interchange between SR601 and I-10; however, due to a recent review by the client, the interchange was modified to eliminate two levels. Stantec has been tasked with updating bridge plans to incorporate these modifications and the new standard specifications. Project components include long span (up to 250-ft) horizontally curved steel plate girders; prestressed concrete girders (Types III, IV, BT-54, BT-63, and BT-72); hammerhead and multi-column concrete bents; cast-in-place concrete retaining walls; and complex pile footing designs. Brian manages the structural design efforts for the seven bridges assigned to Stantec. Design is in accordance with AASHTO Standard Specifications while utilizing a heavier vehicle live load (HS-25) to be more comparable to current LRFD specifications. Final plans are being developed.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Tony Hunley, PhD, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**25**
TITLE	**Principal, Bridge Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**1**
DEGREE(S) / YEARS / SPECIALIZATION	**PhD | 2008 | Civil Engineering; MS | 1997 | Civil Engineering; BS | 1996 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 38940 | LA | 9/30/2022**			
YEAR REGISTERED	**2014**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	Tony has worked with nearly every bridge type at every phase - planning, preliminary and final design, technical design reviews, owner's engineer for alternative delivery projects, bridge inspection, load rating, rehab design, and construction administration. In addition to traditional bridge types, he has worked on conceptual, detailed design and retrofit/rehab of complex and long span bridges - including seismic design and retrofits, historic bridges, post-tensioned concrete, steel plate and box girder, arch, truss, and cable-supported structures. Tony has specialized technical expertise in steel bridges where his experience includes construction falsework and erection engineering, complex rehabilitation design, fracture critical and redundancy research, highly skewed and curved bridges, long-span plate girders, trapezoidal box girders, tied arches and trusses. Tony will serve as **QA/QC** for 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.
09/16 - 08/18	**STATEWIDE BRIDGE LOAD RATING - PACKAGE 1 - ARCH LOAD RATINGS | Kentucky Transportation Cabinet | Various Locations, KY** Principal-in-Charge for the load rating of three arch bridges as part of this package. Structures include the 535-ft twin tied arches that carry I-24 over the Tennessee River in Marshall and Livingston Counties, the 186-ft open spandrel steel arch that carries Highland Ave. over I-471 in Campbell Co., and the 100-ft concrete infill arches that carry KY 90 over the Cumberland River in McCreary and Whitley Counties. The LRFR ratings incorporated all pertinent structural elements and included HL-93, four state posting vehicles, four specialized hauling vehicles, state superload vehicles, and FHWA FAST act’s emergency vehicles.
10/15 - 03/21	**WELLSBURG BRIDGE QUALITY ASSURANCE MANAGEMENT SERVICES | West Virginia Division of Highways | Wellsburg, WV** Design Quality Assurance Lead. Tony's responsibilities included the development of the RFQ and RFP, technical evaluation of Proposer ATCs, QA design review, review of construction non-conformance, and field design change submittals to provide QA Management Services. Tony’s role includes managing the overall design quality assurance team across all disciplines, including coordination with WVDOH, ODOT, and other stakeholders, as well as leading bridge design and construction plan reviews. Design and construction will consist of a new Ohio River bridge connecting Wellsburg, WV with Brilliant, OH as well as major improvements to West Virginia Route 2 and Ohio Route 7. Proposed network tied-arch bridge will span 830’ over the main navigation channel and have welded steel plate girders for the Ohio approach and West Virginia approach. As part of the project RFP documents, Stantec developed requirements for 100 year service life as well as redundancy considerations for the bridge.
06/09 - 08/15	**US 460 CONNECTOR DESIGN-BUILD | Virginia DOT | Buchanan County, VA** Principal-in-Charge. Tony was responsible for coordinating preliminary and final design for the award-winning 1,733' long Grassy Creek Twin Bridges. The six-span bridge features two PC I-beam approach spans and a four-span cast-in-place, post-tensioned segmental concrete box girder unit with main spans of 489' and box girder depths of 31' at the continuous piers. Substructures consist of unique H-column piers with heights up to 230'. Both stub abutments on rock and MSE Wall faced pile end bents are required to the side-hill landing of the bridge. Pier design is complicated by the presence of the Pine Mountain Thrust Fault directly beneath two piers. Spread footings, bearing pile foundations, and micropile foundations are being utilized on the piers. Stantec was responsible for substructure design and plans and a full independent superstructure design review and formal load rating analysis of the segmental concrete superstructure. Twin bridges were named the No. 1 bridge project in Roads & Bridges magazine's 2013 Top 10 Bridges program.
10/02 - 09/06	**US 60 BRIDGE OVER TENNESSEE RIVER | Kentucky Transportation Cabinet | Livingston and McCracken Counties, KY** Co-Engineer-of-Record. Tony was responsible for seismic analysis and design, structural design of steel stringer, deck and associated structural elements, and a full independent load rating of the final truss design. Superstructure is a 3-span (500 feet, 900 feet, 400 feet) parallel chord, Warren-type truss with no vertical members. The truss is 73.5 feet wide and carries two lanes of traffic and a combined shoulder/bicycle path in each direction. Additional features of the design include a moment-resisting frame lateral bracing system that eliminates sway bracing.

12/08 - 10/10	**KY 22 OVER KENTUCKY RIVER VALUE ENGINEERING INDEPENDENT DESIGN REVIEW | Kentucky Transportation Cabinet | Henry and Owen Counties, KY** Project Manager/Lead Structural Engineer. Tony was responsible for an independent design review on behalf of KYTC of a post-tensioned segmental concrete I-beam superstructure design performed by the Contractor's Engineer. The bridge has seven spans with a total length of 909 feet and a main span of 325 feet. The superstructure consists of four post-tensioned concrete I-beams with a variable depth of nine feet at midspan and 16 feet at the piers. An independent structural analysis was performed based on the VE plans to confirm the design met AASHTO design guidelines.
01/08 - 10/19	**OHIO RIVER BRIDGE INSPECTIONS | Campbell, Kenton, Boone, Union and Mason Counties, KY** Structures Principal-in-Charge. Tony was responsible for coordination and QA/QC for inspecting six Ohio River Bridges: Dan Beard (I-471) twin bridges, Clay Wade Bailey (US 25) bridge, Carroll Cropper (I-275) bridge, Shawneetown/Earle Clements (KY 56) bridge and the William Harsha (US 62) bridge. The bridges included steel tied arches, cantilever trusses and cable-stayed bridges. This inspection package focused on fracture critical members and gusset plates as part of a statewide effort to make sure Ohio River bridges in Kentucky are safe for travel. The inspections were element level and utilized AASHTO's PONTIS software. Stantec also completed a load rating of the deck truss gusset plates on the Earle Clements Bridge.
03/10 - 10/11	**OHIO RIVER BRIDGE INSPECTIONS (2010-2011) | Various Locations, KY** Department Manager. Tony was responsible for coordination and QA/QC of fracture critical bridge inspections of five Ohio River bridges: Brent Spence (I-75) Bridge, Combs Hehl (I-275) twin bridges, and 12th and 13th Street Bridges (US 23 twin bridges). A load rating analysis of the double-deck Brent Spence truss was also performed.
01/16 - 09/17	**US 41 NB/SB BRIDGES OVER OHIO RIVER | Kentucky Transportation Cabinet | Henderson County, KY** Bridge Co-Lead. Tony led the evaluation of the existing NB & SB Bridges over the Ohio River as part of the I-69 ORX Environmental & Preliminary Engineering project. The effort included development of conceptual, planning-level scope of work forecasts and life-cycle costs for each structure over a period from 2025 (assumed design year of new project) to 2060. Three scenarios were studied: No I-69 Build base condition, I-69 Build with no restrictions on traffic on the existing bridges and I-69 build with weight restrictions eliminating large truck traffic from using the existing bridges. The assessment included evaluation of routine maintenance costs, anticipated large rehabilitation efforts, painting cycles, addressing fatigue considerations, and strengthening from a load rating analysis.
08/10 - 05/11	**I-75 (BRENT SPENCE) BRIDGE OVER OHIO RIVER | Kentucky Transportation Cabinet | Covington, KY** Structural Engineer-of-Record. Tony was responsible for load rating calculations for the 1,736.5-foot long, four-span (453 feet, 830.5 feet, 453 feet) variable depth steel truss superstructure that carries four lanes of traffic in each direction on two roadway deck levels. The truss configuration is a cantilever truss with a 453-foot hinged suspended span in the main span. The load rating analysis of the main truss members accounted for the two roadway decks and incorporated member deterioration noted during Stantec's fracture critical inspection of the bridge. A separate load rating of the two roadway floor systems (floorbeams and stringers) was also performed.
01/13 - 09/13	**ENGINEERING STUDY OF OLD US 60 BRIDGE OVER FLOYDS FORK | Louisville/Jefferson County Metro Government | Louisville, KY** Project Manager. Tony was responsible for overseeing the inspection, material testing, load rating evaluation, and restoration plan development of the old US 60 (Shelbyville Road) Bridge over Floyds Fork in Louisville, Kentucky. Built in the 1920s, the bridge is an example of early twentieth century open-spandrel concrete arch style construction and was determined eligible for the National Register of Historic Places. The project will determine whether the bridge can be included as part of the proposed Louisville Loop, a planned 100-mile shared use path around the City of Louisville.
10/14 - 08/15	**FUNCTIONAL DESIGN STUDY OF CPR YARDS CROSSING | City of Winnipeg | Winnipeg, Canada** Technical Assistance. Tony provided technical assistance for the conceptual design and preliminary member sizing for the replacement of the Arlington St. Bridge, a 29 span steel truss structure crossing CPR Yards located in North West Winnipeg. Scope of work was to develop a plan to remove the existing aging 103 year old steel truss and girder bridge and determine if another crossing or replacement of the existing crossing is required. Tony led the bridge team, in collaboration with Stantec Winnipeg, with the bridge decommissioning plan for removal of the long Camelback truss and Pratt truss spans, minimizing rail operation interruptions. Several decommissioning options were evaluated, including gantry systems, drop in place, rollout via self-propelled modular transporters, etc.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Cindy Hall, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**30**
TITLE	**Principal, Transportation Infrastructure Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 1992 | Civil Engineering**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 27073 | LA | 09/30/2023**		
YEAR REGISTERED	**1997**	DISCIPLINE	**Civil Engineering | TEPR 3 Modules**	

Contract role(s) / brief description of responsibilities	Cindy's 30 years of experience have included the design and project management of various civil and transportation projects. As Roadway Division Manager, Cindy manages the productivity of the roadway staff and oversees the quality of the plans and specifications developed by the Roadway Division. She has also served as project manager on many transportation projects including interstate and interchange improvements, rural arterials, and urban roadways with subsurface drainage and traffic signalization. Cindy has been involved in numerous projects implementing innovative geometric solutions including continuous flow intersections and roundabouts. She has also recently been involved in three Design-Build projects for LADOTD. In addition to her transportation experience, Cindy has designed and managed many wastewater pipeline and pump station projects over the course of her career. Cindy will serve as **QA/QC** for this contract. **Cindy meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 8**
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
08/19 - Ongoing	**I-10 AT LOYOLA DESIGN-BUILD INTERCHANGE | LADOTD | Loyola, LA** Design Manager. Cindy manages this multimillion-dollar project that will improve access and traffic operations to and around the new Northfield Terminal. Cindy is overseeing the design and plan preparation efforts to add two directional ramps, I-10 Westbound to Loyola Southbound & Loyola Northbound to I-10 Eastbound. Cindy has worked with the contractor to develop phased construction plans and design unit plan sets to construct critical path items first. She has worked with the D-B team to implement cost/schedule savings through design modifications and alternative material selections.
08/05 - 12/13	**STARING LANE EXTENSION AND BRIDGE | City of Baton Rouge | Baton Rouge, LA** Project Manager. This GLP project required a design study and plan development for a new four-lane urban boulevard with a 30-foot median with subsurface drainage, sidewalks, and traffic signals. Cindy led construction plan development and design of preliminary and final plans including geometrics, intersections, earthwork modeling, striping, quantities, signal design, sanitary sewer force main design and quality control. She also attended public meeting and coordinated with City and sub-consultants.
02/10 - 8/11	**US 90 AT LOUISIANA 85 DESIGN-BUILD | LADOTD No. 424-04-0032 | Iberia Parish, LA** Design QC for this project to elevate the rural arterial to urban interstate standards. Stantec designed upgrades involving construction of a concrete girder span bridge over LA 85 along the US 90 corridor, an extensive rehabilitation of frontage roads and ramps, and the installation and upgrade of permanent drainage structures. Cindy was responsible for developing the Design QC Manual, managing the Design QC Reviews, responding to comments, holding design review meetings, distributing plan submittals, and documenting quality control records. During construction, she was responsible for adherence to the construction plans and the resolution of design non-conformance reports. Construction was completed, and the interchange opened to the public, in June 2011.
05/15 - 06/18	**US 90 AT LA 318 INTERCHANGE DESIGN-BUILD | LADOTD | St. Mary Parish, LA** Design Manager. Cindy managed the design for this design-build project which improved the intersection of US 90 at LA 318 to a grade separated interchange and brought US 90 up to interstate standards as a part of the Future I-49 Corridor. Project included dual overpass bridges, ramps, and frontage road relocations. Stantec proposed an alternative technical concept to the proposed alternative in the RFP. This ATC conserved right of way and lessened impacts to the community and the environment, and saved construction cost. Stantec was responsible for acquiring the right of way while construction was ongoing. Cindy also managed the relocation of utilities during construction and designed water and sewer relocations for St. Mary Parish. Stantec remained involved throughout construction and participated in resolving design and construction non-conformance issues and requests for information. Construction was complete in January of 2018.

03/14 - 05/15	**JIMMIE DAVIS BRIDGE REHABILITATION | LADOTD | Shreveport, LA** Lead Roadway Engineer. Cindy was responsible for the design and plan development of the roadway efforts for this fast-paced bridge rehabilitation project on LA 511 in Shreveport. The project included pavement rehabilitation and restriping on the approach roadways. Cindy was responsible for the accelerated approval of a Transportation Management Plan requiring complete shutdown of the Jimmie Davis Bridge during construction. The TMP required detour planning to nearby I-49/I-20 and a local detour plan using the parkways on either side of the Red River to route to the LA 3032 river crossing. Off-site improvements including turn lanes and traffic signals were required on the local detour route to mitigate for the additional traffic caused by the detour.
04/11 - 06/15	**I-210 COVE LANE INTERCHANGE | LADOTD | Lake Charles, LA** Roadway Engineer. Cindy was responsible for the sequence of construction and maintenance of traffic plans for this complex tight diamond interchange which required ramps elevated on MSE walls, two new bridges and surface street improvements including a new roundabout. Cindy was also responsible for the Level 2 Transportation Management Plan required for the project including safety and traffic analyses and traffic management strategies.
01/18 - 08/18	**DIJON DRIVE PHASE I & PHASE II | City of Baton Rouge | Baton Rouge, LA** Quality Control. Cindy was responsible for QC during the course of this project which was broken into 2 phases. She reviewed each phase of work two times and offered comments before major milestone submittals. Stantec designed this roadway on new alignment for the City of Baton Rouge as an access roadway to the new Our Lady of the Lake Children's Hospital. This fast-paced project included a four-lane divided roadway on new alignment, sanitary sewer force main, subsurface drainage, signalization and off-site intersection improvements.
11/12 - Ongoing	**PERKINS ROAD (SIEGEN TO PECUE) WIDENING TRAFFIC STUDY, ENVIRONMENTAL ASSESSMENT (EA), PRELIMINARY PLANS, FINAL PLANS AND RIGHT-OF-WAY MAPS | City of Baton Rouge Contract 12-CS-HC-0015 | Baton Rouge, LA** Project Manager. Initially included an EA and Preliminary Plans for improving 3.4 miles of Perkins Road from the existing 2-lane roadway to a 4-lane divided curb and gutter roadway with raised median, sidewalk, sewer and subsurface drainage. During the EA phase, Cindy was responsible for Line and grade alternatives study, stakeholder coordination, public outreach, led EA phase, preliminary plans and final ROW maps. Under the MOVEBR Program, Stantec is currently completing Final Plans for Perkins Road from Siegen Lane to Pecue Lane using MOVEBR design criteria. This 2-lane to 4-lane divided roadway widening project accommodates the increase in traffic and improves travel efficiency along this corridor by introducing access management principles which have been shown to increase capacity and safety. Stantec is responsible for all final design including roadway and traffic signal plans, subsurface drainage and culvert design, and wetlands permitting. Final plans for this project should be completed by the end of 2022.
11/09 - 08/12	**I-12 WIDENING DESIGN-BUILD | LADOTD Contract No. 454-02-0071 | Livingston Parish, LA** Lead Roadway Engineer. Cindy was responsible for Stantec's roadway design efforts to widen a four-mile stretch of Interstate, from the Amite River to the Juban Road interchange. Design included widening, removal, overlay and replacement of various pavement sections, ramp deceleration lane improvements, and widening of the Gray's Creek Bridge, and the 4-H Club Road and Range Avenue overpasses. The project required extensive maintenance of traffic and traffic control plans on this heavily traveled stretch of interstate. In addition to designing the construction plans, Cindy was actively involved in the construction phase, assisting the contractor by developing quality, cost-effective solutions that met or exceeded contract scope requirements.
05/12 - 12/17	**GOVERNMENT STREET ROAD DIET: STUDY THROUGH FINAL DESIGN | LADOTD | Baton Rouge, LA** Project Manager. Cindy managed the evaluation of alternatives during the EA phase for this 4 mile portion of Government Street. She attended public meetings, managed public preliminary and final plan development phases. Cindy coordinated with LADOTD, City of Baton Rouge, BREC, CATS and other project stakeholders. The project rehabilitates and restripes existing roadway from a 4-lane section to a 3-lane section (Road Diet). Restriping the roadway allows the reclaimed pavement to be used to provide multi-modal and streetscape improvements. Bike lane improvements and vegetative median islands were added to the corridor and sidewalks were brought up to ADA compliance. This project includes a single-lane roundabout with bypass lanes designed for the Lobdell Avenue intersection, complete street improvements, access management and community enhancements. Cindy provided construction support services during construction.
01/02 - 10/10	**SOUTH HARRELL'S FERRY ROAD SOUTH SHERWOOD FOREST BOULEVARD TO MILLERVILLE ROAD | LADOTD | Baton Rouge, LA** Cindy managed this project and was responsible for design and plan development for a new five-lane roadway/four-lane boulevard, approximately two miles in length. She oversaw the design of preliminary and final plans including geometrics, intersections, earthwork modeling, subsurface drainage, striping, and sequence of construction. Project included hydraulic and structural design of dual bridges to replace the existing bridge over Jones Creek. WSPRO analyses were performed and scour calculations based on HEC No. 18. A wetlands delineation and U.S. Army Corps of Engineer's wetlands permit were obtained. Cindy's activities also included permit drawings, public meetings and coordination with City officials and subconsultants.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Amir Botros, PhD, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**1**
TITLE	**Senior Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**15**
DEGREE(S) / YEARS / SPECIALIZATION	**PhD | 2015 | Civil Engineering; MS | 2009 | Civil Engineering; BS | 2005 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 43701 | LA | 3/31/2024**			
YEAR REGISTERED	**2019**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	With over 15 years of experience, Amir will serve as structural task lead for this contract. Amir has extensive experience in the analysis, design and rating of variety of bridge types including Prestressed Concrete Girders, Steel Plate Girders, Precast and Cast in Place Concrete Slabs, Column and Pile Bents, and RC box culverts. He is proficient in commercial design and rating software packages. He has been involved in bridge replacement projects across the state and has been a member of the Precast Prestressed Concrete Institute (PCI) for many years and has participated in PCI research projects. Further, he is the recipient of the 2017 Martin P. Korn and George Nasser PCI Journal Awards. He also received the 2018 ASCE T.Y. Lin award for his outstanding research on the dapped ends of prestressed concrete thin stemmed members. Amir will serve as **LEAD BRIDGE DESIGN ENGINEER** for this contract. **Amir meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 4**			

Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.
01/21 - Ongoing	**MDOT TRUSS INSPECTIONS AND LOAD RATINGS | MDOT | Statewide, MS** Load Rating Engineer. Stantec is tasked with inspecting and load rating superstructure elements on four steel through truss bridges with spans ranging from 120-ft to 180-ft. MDOT will use the findings to develop rehabilitation plans for future projects and establish procedures that will be used on other structures throughout the state. Amir is responsible for performing quality reviews of load ratings for four steel through truss bridges. AASHTOWare BrR is being used to model and analyze all truss members including main members, floor beams, stringers, and gusset plates. The load factor rating (LFR) method is being used at the request of MDOT and to have the ability to compare with the original designs.
03/21 - 06/21	**ALDOT LOAD RATING OF 42 BRIDGES | ALDOT | Statewide, AL** Lead Structural Engineer. Project consisted of rating of 42 bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised cast in place concrete T beam spans, Post-tensioned Channel beams and continuous steel plate-girders and steel I beam encased girders. Responsibilities included review of the as-built plans/ standard plans of the bridges, determining the appropriate load rating method, supervising engineers on the load rating analysis and review of load rating reports.
10/19 - 12/20	**RC CULVERTS TESTING AND RATING OF 100 CULVERTS | LADOTD H.009859.5 | Statewide, LA** Lead Structural Engineer. Project consisted of developing a load rating methodology for Reinforced concrete box culverts that accounts for the actual field conditions, performance history, and advanced modeling techniques. Study investigated the effect of utilizing advanced modeling techniques (finite element analysis) on the load rating of concrete box culverts. Results were verified through diagnostic testing of a sample of culverts (12 culverts) representing the existing Louisiana inventory. Responsibilities included building 3D FE analytical models of the parametric study, designing instrumentation and diagnostic load test procedure, supervising the crew on performing the diagnostic load tests, development of load rating guidelines that accurately account for all parameters believed to influence the culvert performance, development of a technical report that summarizes the proposed load rating guidelines and supervising engineers on load rating 100 representative culverts selected from the existing Louisiana inventory using the proposed guidelines.
10/19 - 12/20	**LOAD RATING OF 396 OFF SYSTEM BRIDGES | LADOTD H.012485.5 | Statewide, LA** Lead Structural Engineer. This project consisted of load rating of 396 bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate-girders, and RC box and arch culverts. The substructures comprised various components including reinforced concrete caps, timber caps, timber piles and steel H piles. Responsibilities included determining the appropriate load rating method, supervising engineers on the load rating analysis and review of load rating reports.

05/20 - 12/20	**I-10 OVER US 165 & MPRR | LADOTD | Jefferson Davis, LA** This project is a bridge replacement of a multi-span steel I-beam interstate overpass. The design was in accordance to the latest AASHTO LRFD Bridge Design Specifications and LADOTD Bridge Design and Evaluation Manual. The bridge has a total length of 765 ft EB and 776 ft WB and clear roadway widths of 72 ft. Both the EB and WB superstructures consist of eight (8) LG 63 beams over US 165 and ten (10) LG 54 beams over Union Pacific Railroad, acting in composite action with an 8.5-inch continuous concrete deck with new 36" MASH TL-4 bridge railing. The substructure consists of cast-in-place column bents supported drilled shafts. An important aspect of the design was to configure an appropriate construction phasing scheme that ensures that two lanes on each bound of I-10 remain in operation during the bridge replacement. In addition, the new bridge overpasses the Union Pacific Railroad entailing challenges with respect to bent locations and fulfilling the horizontal and vertical clearance requirements. Amir served as senior design engineer in this project and was involved in design calculations and plan preparation.
01/19 - 09/19	**27 COMPLEX OFF-SYSTEM BRIDGES RATING AND EVALUATION | LADOTD H.009859.5 | Statewide, LA** Lead Structural Engineer. This project consisted of rating of 27 complex bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised prestressed concrete girders, steel plate-girders, truss bridges, swing spans and steel trapezoidal girders. The superstructures were rated using Bridge Rating AASHTOWARE and/or and the substructures were rated using RC-Pier combined with MathCad Sheets. Some bridges involved complex irregular geometry for their on/off ramp spans and were not analyzed using AASHTO approximate methods and therefore those bridge/ramp junctions were analyzed using finite element models developed using Midas Civil software. Responsibilities included: reviewing the as-built drawings of the bridges; determining the appropriate load rating method for complex bridges; performing load rating on selected complex bridges and supervising the team on other bridges; developing the load rating reports. Additionally, multiple steps of QC were performed to assure accuracy and consistency of the rating analysis.
02/19 - 10/20	**LA 182 OVER ATCHAFALAYA RIVER (BERWICK BAY) BRIDGE REHABILITATION | LADOTD H.011487 | Lafayette, LA** Lead Structural Engineer. Amir's responsibilities included supervising engineers on performing the load rating analysis for the truss members and Gusset plates using Bridge Rating software. Design of the instrumentation and the diagnostic load testing procedure for the reinforced concrete T-beam spans. Supervising engineers on designing appropriate strengthening systems for the deficient truss members, gusset plates, bracing members and connections. Design of appropriate strengthening systems for the concrete pile bents, and the column bents using carbon fiber reinforced polymer sheets (CFRP) and preparation of the rehab plans of the bridge elements. The 100% final plans were submitted in October 2020.
04/16 - 03/17	**LA 10 BEAVER CREEK BRIDGE | LADOTD | St. Helena Parish, LA** This project is an emergency bridge replacement that consisted of an expedited design within two months of a precast prestressed concrete girder bridge consisting of two 60' LG-36 girder spans and one 80' LG-36 girder span. The design was performed according to the specifications provided in the LADOTD Bridge Design Manual. The responsibilities of this project included substructure design and evaluation using standard details and RC-Pier for analysis, bearing design according to LADOTD requirements and LG girder standard details, and calculations for the girder design data tables, such as prestressed strand configuration, shear reinforcement, camber, deflections, and haunch requirements. Amir was responsible for the structural analysis and design for all the bridge elements and preparation of the plans.
03/16 - 09/16	**US 80 RED RIVER TEXAS STREET BRIDGE: INSPECTION AND LOAD RATING | LADOTD H.011484 | Bossier, LA** Senior Structural Engineer. Amir's responsibilities performing load rating analysis for the truss members and Gusset plates using Bridge Rating software, preparation of load rating report for the bridge with proposed repair recommendations for the deficient elements and development of a three-dimensional (3D) finite element model using Midas Civil Software for verification of the load effects on the truss members
01/17 - 10/18	**US 80 RED RIVER BRIDGE TEXAS STREET REHABILITATION PLANS | LADOTD H.011484 | Bossier, LA** Senior Structural Engineer. Amir's responsibilities included design of appropriate strengthening systems for the deficient truss members and gusset plates for the deck truss spans and the main truss spans. Design of suitable strengthening schemes for the reinforced concrete T beams of the approach spans, the concrete pile bents, and the two column bents using carbon fiber reinforced polymer sheets (CFRP). Preparation of the rehab plans of the bridge followed the design phase and the 100% final plans were submitted in October 2018.
01/21 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Load Rating Engineer. Amir oversees QA/QC for the load rating analyses for over 200 bridges annually. Inspections performed by Stantec personnel are used to assist with developing load rating models and performing the analysis using AASHTOWare BrR, RC Pier, and STAAD. Load ratings are performed in accordance with AASHTO MBE and typically use the load factor rating (LFR) method to match the original design as requested by the client. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and prestressed concrete girders.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Robert Smith, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**9**
TITLE	**Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**29**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 1983 | Structural Engineering; BS | 1982 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 42575 | LA | 9/30/2022**			
YEAR REGISTERED	**2018**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Robert has over 38 years of experience in the design and management of structural systems. He has an excellent grasp of structural engineering principles, with an ability to develop solutions to non-typical situations and is skilled in finding problems and performing necessary change through project management or other methods. He maximizes resources to achieve client satisfaction and increased productivity, meeting deadlines and goals. He is also experienced in Microstation, ConSpan, RCPier, MathCAD, Excel, FDOT Structures programs, PennDOT Structures Programs, Merlin-Dash, Descus-II, Shoring Suite, and Larsa 4D. Robert will serve as **BRIDGE DESIGN** for 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.			
08/19 - Ongoing	**I-10 LOYOLA DESIGN-BUILD | LADOTD Contract No.011670 | New Orleans, LA** Bridge Design Quality Control. Robert serves as Bridge Design QC for this project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans International Airport. The design includes interstate lighting in all areas with ground mount light poles and foundations (including anchor bolts, base plate attachments, concrete elements, and drilled shafts) as well as also structure mount poles on bridge ramps and in median barriers (including concrete blisters and concrete anchors) in accordance with AASHTO standard specifications.			
02/12 - 11/14	**HOMESTEAD EXT., SOUTH OF KILLIAN DRIVE TO NORTH OF BIRD ROAD DESIGN-BUILD | Florida’s Turnpike Enterprise | FL** Engineer-of-Record. Robert was responsible for review and load rating of existing structures; preliminary design of widenings; BDR development for two replacement bridges; evaluation of retaining walls and sound barrier walls. Purpose of this project was to develop an RFP to allow the FTE to advertise for procurement of Design/Build services for final design and construction of this project. Project had over 170,000 SF of bridge area, including four dual (NB & SB) mainline bridges over local roads, one to be replaced the others to be widened; two single span bridges over canals which are to be widened; and a ramp bridge over a canal to be replaced. Project includes retaining walls, sound barrier walls, and miscellaneous structures for signs and electronic tolling equipment.			
02/04 - 10/08	**SR 826 AND SR 836 INTERCHANGE RECONSTRUCTION DESIGN-BUILD - SEGMENT 7 | FDOT VI | Miami-Dade County, FL** Structural Engineer for Segment 7 of the reconstruction of this $560 million, four-level interchange in the heart of Miami-Dade County. The job included the design of 23 new bridges that include 2 steel bridges, and 21 Florida I-beam bridges. Other improvements included retaining walls, sound walls, canal relocation, utilities JPA plans, new signing and pavement markings, new ITS, and special aesthetic features. Extensive stakeholder coordination was required with FDOT, MDX, MDC Water & Sewer, utility owners, the Miami International Airport, CSX Transportation, DERM, and SFWMD, etc.			
06/09 - 04/10	**I-595 CORRIDOR ROADWAY DESIGN-BUILD IMPROVEMENT PROJECT | FDOT | FL** Structural Engineer. Robert was responsible for light pole special foundation design and plans for four bridges. Design work included preparation of plans and specifications for custom concrete spread footing foundations for light pole structures (including anchor bolts, base plates, and concrete components) and barrier mounted structural components (including steel brackets and concrete anchors) for median supported sign structures.			

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Kunal Malpani, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**8**
TITLE	**Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2012 | Civil Engineering; BS | 2010 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 43016 | LA | 3/31/2023**			
YEAR REGISTERED	**2018**	DISCIPLINE	**Civil Engineering; NBIS Certified Team Leader**	

Contract role(s) / brief description of responsibilities	Kunal has 8 years of engineering experience with an emphasis on structural projects. His primary focus has been in the analysis, design, rating, and inspection of a variety of bridge types including prestressed concrete girders, structural steel plate girders, concrete slab spans, multi-column concrete bents, and pile bents. He is proficient in commercial software packages such as AASHTOWare BrDR, RC-Pier, CONSPAN, MDX, and STAAD. In addition to bridge design, Kunal has been involved in the design of highway sign structures and reviewing structural shop drawings. Kunal will serve as **BRIDGE DESIGN** for 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.
09/15 - 07/16	**I-20 AND TARBUTTON ROAD INTERCHANGE | LADOTD | Ruston, LA** Structural Engineer. Project consists of replacing an existing concrete overpass structure over I-20 near Ruston, LA with a two-span structural steel plate girder structure. Substructure units are supported by drilled shafts to minimize the bridge footprint. Design was performed in accordance with AASHTO LRFD. Kunal assisted with quality control of the superstructure and substructure design and performed the as-designed load rating.
05/13 - 02/16	**HOSPITALITY ZONE US 90Z IMPROVEMENTS | LADOTD Contract No. H.010189 (IDIQ 440000679) | New Orleans, LA** Structural Engineer responsible for developing a solution to minimize traffic impacts by extending existing bent caps to support new ramp meters. Worked with LADOTD to determine an exact location for each meter and, in turn, locating as-built drawings for that particular bent cap.
01/19 - Ongoing	**I-10 LOYOLA DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Structural Engineer who assisted signing engineer in design of flyover ramps, consisting of concrete slab spans, prestressed concrete girder spans, and twin horizontally curved steel tub girder spans. Design includes interstate lighting and structure mount poles on bridge ramps and in median barriers.
01/19 - Ongoing	**NELSON ROAD EXTENSION BRIDGE | LADOTD Contract No. H.005967 | Baton Rouge, LA** Structural Engineer. Kunal assisted the design engineer with preparation of plans and specifications for this bridge extension to the surrounding roadway network. Design included design of bridge components, including substructure, footing and foundation, load bearing calculations, girders and barrier design. Other design elements include navigational lighting bridge attachments, steel bracket light supports with concrete anchors to the bridge structure.
09/13 - 11/17	**BRIDGE PRESERVATION RETAINER PROJECTS | LADOTD | Statewide, LA** Load Rating Engineer. Kunal was responsible for developing LFR rating procedure using Bridge Rating Software (now BrR) and STAAD for superstructure as per AASHTO MBE. Highlights of the project include rating Long Span Steel Through Trusses, Short span Steel Pony Trusses, and Masonry Arch Bridges.
07/15 - 06/18	**US 90 INTERCHANGE AT LA 318 DESIGN-BUILD | LADOTD | St. Mary Parish, LA** Structural Engineer for the twin bridges. Each bridge consists of LG-54 prestressed concrete girder spans on multi-column concrete bents and concrete wall piers. His responsibilities included performing design, performing the as designed load rating, and reviewing shop drawings.
04/17 - 11/17	**LOAD RATING AND POSTING OF ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** Structural Engineer. Kunal's responsibilities included developing the LRFR rating procedure using the AASHTO Bridge Rating Software for superstructure and LEAP RC Pier for substructure as per AASHTO MBE and LADOTD rating guidelines. Project included load rating various bridge superstructure types including slab spans, prestressed concrete girders, rolled steel girders, and built-up steel plate girders as well as various substructure types.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Maggie Ye, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**1**
TITLE	**Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**4**
DEGREE(S) / YEARS / SPECIALIZATION		**MS | 2016 | Civil Engineering; BS | 2013 | Civil Engineering**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 44061 | LA | 3/31/2022**		
YEAR REGISTERED	**2019**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Maggie assists the project manager with bridge designs, compiling bridge plans, and QC/QA of load rating models and reports. She also helps EIs in developing load rating models. Maggie will serve as **BRIDGE DESIGN** for 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.
08/19 - 01/20	**LOAD RATING OF 18 COMPLEX BRIDGES | LADOTD | Statewide, LA** Structural Engineer. Maggie conducted the load rating of several complex bridges including a steel bascule span bridge and irregular geometry steel plate girder bridge. The load rating involved engineering judgment and hand-calculation of the counterweight of the bascule span bridge. She also rated a curved steel plate girder span and a straight steel girder with curved deck span.
03/20 - Ongoing	**MISSISSIPPI STATE AID COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Structural Engineer. Maggie's main task is to QC and QA the load rating models and reports that are developed by the EIs. She uses Bridge Rating and RC-Pier load rating software to review different types of bridges, including timber bridges, box culvert bridges, slab spans, prestressed beams etc. She also reviews the hand calculation of LLDF for culvert box, dead load input for substructure, and timber piles' load rating factors.
02/21 - Ongoing	**TRUSS BRIDGE INSPECTIONS AND LOAD RATING | MDOT, Contract No. NBIS(140)/108451- | Statewide, MS** Structural Engineer. Maggie used the existing plans and site measurements to load rate the complex truss bridge. The load rating consisted of rating truss members, gusset plates, stringers and floor beams. She will prepare the load rating reports including detailed truss rating results in accordance with client's requirement.
07/19 - 08/19	**LOAD TESTING OF BERWICK BAY BRIDGE AND LA-1 BRIDGE | LADOTD | Statewide, LA** Site Engineer. Maggie assisted the project engineer to installing sensors on the bottom of the bridge deck and connecting the sensors to computers. She guided the loaded truck on the bridge and analyzed the collected deflections from sensors. She gained on-site experience as well as knowledge that the load rating results were much more conservative than the load testing results.
08/19 - Ongoing	**I-10 LOYOLA DESIGN-BUILD INTERCHANGE | LADOTD Contract No. H.011670 | New Orleans, LA** Structural Design Engineer. Maggie serves as a Structural design engineer on this multimillion-dollar design-build project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans International Airport. The project consists of a DDI, in addition to flyover ramps leading to/from the Airport on the east side of the interchange. The flyover ramps consist of curved twin steel tub girders, prestressed concrete girders and slab spans being supported by a combination of hammerhead bents, wall bents and pile bents. The project is one of the first in the state to implement LU girders. Maggie's responsibilities include the design of the LU girders, substructure elements, reviewing shop drawings, and performing as-designed load ratings on structural components.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Derrick Goudeau, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**4**
TITLE	**Sr. Electrical Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**15**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2003 | Electrical Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 33288 | LA | 9/30/2023**			
YEAR REGISTERED	**2007**	DISCIPLINE	**Electrical Engineering**	

Contract role(s) / brief description of responsibilities	Derrick has over 18 years of experience in the design and development of Intelligent Transportation Systems(ITS) and electrical power, lighting, control, and related systems. He has been responsible for the preparation of plans and specifications (design and development) of ITS, lighting and electric power engineering projects, from design to final construction inspection. Other design experience includes Quality Control and Quality Assurance (QC/QA) review, calculations, data collection, and report preparation. During the construction phase, Derrick has provided Construction Engineering and Inspection (CE&I) services to support the owner and verify general conformance with the design including review of shop drawing and equipment submittals, respond to request for information, review/prepare as-built drawings, review payment applications, and perform periodic inspection and final system acceptance. He is also well-versed in industry codes and standards, including the 2020 NEC (NFPA 70) and 2018 NFPA 70E in which he has recently completed training courses. Derrick will serve as an **ELECTRICAL ENGINEER - BRIDGE DESIGN** for 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.
01/18 - 03/21	**STATE HIGHWAY 288 TOLL LANES P3 | TXDOT | Houston, TX** Engineer of Record. This P3 project will implement improved functionality over 10.3 miles along SH 288, from US 59 to the Harris/Brazoria County line at Clear Creek, by constructing new toll lanes, installing toll infrastructure, and establishing toll operations and maintenance. Derrick performed photometric analysis for the 10 mile corridor and prepared plans for upgrading all of the existing high pressure sodium lighting to LED luminaires. The lighting system consisted of conventional light standards as well as high mast towers up to 175 feet. The project also included two pedestrian bridges with decorative lighting to provide safe crossings for the residential communities on each side of this 400ft wide corridor. Derrick is currently providing technical support during construction
03/13 - 05/15	**I-210 COVE LANE INTERCHANGE | LADOTD H.010151 | Lake Charles, LA** Engineer of Record for the lighting/electrical portion of the project (incorporated via plan change) and provided CE&I services through construction. Project limits are from the East foot of the I-210 Lake Prien Bridge through the I-210/Cove Lane Interchange (approximately 1 mile of I-210). Project included coordinating roadway lighting design with the new interchange which was already in construction. This required frequent field inspection for changing site conditions, coordination with LADOTD Project Engineer and Contractor, and design adjustments for compatibility with Contractor’s sequence of construction.
03/13 - 02/18	**I-210 OVER CALCASIEU RIVER WEST OF I-10 INTERSTATE LIGHTING | LADOTD H.010440 | Lake Charles, LA** Engineer of Record for this project and provided CE&I services through construction. Project limits are from the I-10/I-210 Interchange to the I-210/Cove Lane Interchange (approximately 4.5 miles of I-210). Project makeup consists of the following types of roadway lighting standards: 44 ground mount low mast, 54 structure mount low mast (bridge), 7 barrier mount low mast, 10 ground mount high mast, and 4 underpass. In addition, lighting control and power distribution and system protection is included.
03/13 - 02/18	**US-61 ROADWAY LIGHTING, DAVID TO TRANSCONTINENTAL | Jefferson Parish, LA** Engineer of Record. Project limits are from the US-61 and David interchange through the US-61 and Transcontinental interchange. Project makeup consists of 81 ground mounted low mast roadway lights (LED). In addition, lighting control, power distribution, and system protection is included. Derrick was the Engineer of Record for this project.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Mickey Harrison, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**1**
TITLE	**Senior Structural Project Manager**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**40**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 1979 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 28313 | LA | 9/30/2023**			
YEAR REGISTERED	**1999**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	Mickey has more than 40 years of experience in managing, repairing and rehabilitating, designing and construction of bridges, complex bridges and movable highway and railway bridges. His extensive experience includes the design/rehabilitation of large complex highway and railroad bridges, including trusses, thru-plate girder, and long-span steel structures. Work experience includes developing plans, preparing specifications, developing reports, performing field inspections, condition reports, reviewing plans, reviewing as-builts and preparing as-builts. Construction experience includes resident engineering, installation assistance for structural, inspections, permits, and construction administration. Designs for critical structures are configured for redundancy and redundant methods of operation. He has worked with numerous public and private clients, Highway Departments, Class I Railroads, and short-line. For railroad clients, the performance of contractor safety reviews and compliance reviews, on-site resident services, constructability reviews, staging and coordination with groups and agencies, project safety plan and development, review of contractor marine operations and maritime work efforts along with review of shop drawing, request for information, change orders, dispute resolution, project monitoring and project close out. Mickey will serve as **LEAD MOVABLE BRIDGE ENGINEER** for this contract. **Mickey meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 7**
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.
03/20 - Ongoing	**COOS BAY RAIL BRIDGE ENGINEERING SUPPORT SERVICES | Oregon International Port of Coos Bay | Coos Bay, OR** Senior Movable Bridge Engineer for the rehabilitation of three different 100-year old swing span bridges (North Bend, Umpqua, and Siuslaw). This includes over 350 repair and/or replacement locations on the three bridges upgrading the load ratings as part of a BUILD Grant award. Reedsport (the Umpqua swing span) is a mechanical repair for damaged gear and shaft. The investigation of this bridge also determined that one of the motors is bad and is now being replaced. Other structural aspects include a mixture of trusses, thru-plate girders, and steel plate girders on Wildcat Creek and Vaughn Viaduct Bridges. The Wildcat Creek Bridge includes structural steel rehabilitation to make 240 necessary repairs to improve load rating. The Vaughn Viaduct Bridge, a 100- year old 80-foot steel tower span, is being rehabilitated and some portions completely replaced. Our team is rehabilitating the substructure (by strengthening the tower legs, replacing the bracing, and upgrading the load rating of the bridge) and replacing the superstructure (rail, ties, and girders).
03/20 - Ongoing	**SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY (SFRTA) RAILROAD BRIDGE ENGINEERING SUPPORT SERVICES FOR CONTRACTOR TRANSDEV RAIL | South Florida Regional Transportation Authority | Miami, FL** Senior Movable Bridge Engineer. South Florida Regional Transportation Authority (SFRTA) operates over 100 miles of commuter rail lines in South Florida. Acting as a subconsultant, Stantec provides bridge inspection and engineering assistance on all railroad bridges and conducts a review of overhead bridges along the rail lines. The rail line includes two bascule bridges (New River and Miami Canal). Mickey performs a Mechanical and Electrical inspection of these two bridges. Our team completes monthly walk-thru in and annual detailed inspections. Complete detailed bridge inspection reports are provided and maintained as required by FRA. The inspection reports also include recommendations for repairs and/or rehabilitation. Stantec has performing detailed inspections sufficient to load rate the bridges.
01/20 - 12/21	**CP BRIDGE MP 283.37 MECHANICAL UPGRADES | Canadian Pacific Railway | La Crescent, MN** Lead Engineer/Inspector for a moveable railroad swing bridge over the Mississippi River. He performed a mechanical and electrical inspection of the bridge. Findings included a need to replace mechanisms and structural supports on each end of the span; and upgrade the rail lift machinery to enhance the operation reliability of the swing span.

07/20 - 04/21	**R.J. CORMAN - CLARKSVILLE SWING SPAN BRIDGE ELECTRICAL UPGRADES | Koppers Railroad Structures | Clarksville, TN** Lead Design Engineer for a moveable railroad swing bridge over the Cumberland River. The project goal was to allow the railroad to remotely open/close the span. The equipment transition from an old gasoline engine, that needed to be operated on the bridge, to an electrical motor, that could be operated either on the bridge or from a remote control station. The four project components (to transition the bridge from manual to automated operation), included a new motor, a new reducer, a remote control station, and new motor controls. Design included retaining existing gasoline engine for use as a manual backup to operate the swing span. Phase 1 work included being able to operate the swing span from the east approach. Phase 2 design has been completed to permit operation of the entire span, construction has yet to be scheduled. Mickey facilitated the installation of new electrical Phase 1 equipment including added motors, reducer, coupling, and start-up of electrical controls.
05/16 - 12/18	**SAULT STE. MARIE MECHANICAL AND ELECTRICAL UPGRADES TO THREE MOVABLE BRIDGES | Canadian National Railway | Ontario, CA** Project Manager/Construction Manager. Rehabilitation of three side-by-side movable spans, two in Michigan, one in Canada. The bridges include a double-leaf heel trunnion bascule span, a swing span and a vertical lift span. Project is the complete renovation of the mechanical system, electrical system, deck replacement, structural repairs, and structural work related to the equipment being installed. Construction management and inspection will include site inspection, equipment installation tolerance review, project staging to get the work completed during the winter operational shutdowns in USACE's lock and dam system on the St. Mary's Canal. Swing span construction is underway and material procurement and testing is ongoing. Equipment installation is schedule for the winter shutdown and the project staging was developed during the design to allow the new equipment to be installed while the existing equipment was operational. New equipment will be tested, installed with the previous equipment in place to operate the span during the operational testing period. The span is critical for cargo transported between the US and Canada. Staging is set up to maintain rail operations throughout the construction period. Field monitoring and full-time project site staffing are a part of the engineering effort for CN.
01/15 - 09/18	**MOVABLE BRIDGE REVIEW SERVICES FOR THE NORWALK RIVER (WALK) BRIDGE REPLACEMENT | Connecticut DOT | Norwalk, CT** Structural Engineer for the independent peer review of structural plans, computations, and specifications representing the interests of the owner for this high-priority railroad movable bridge replacement project. This historic swing bridge is being replaced under the Department's first project using the CMGC delivery method. Review services include code compliance and cooperation with the owner to ensure that the design provided as part of the CMGC process meets the client's satisfaction. Directly responsible for management of project including structural, mechanical, electrical and architectural review services for the movable span superstructure.
04/01 - 12/10	**MOVABLE BRIDGE ON-CALL CONTRACT | Virginia DOT | Statewide, VA** Project Manager responsible for managing a team as part of a $2 million per year, 3-year statewide on-call contract to provide inspection services and prepare plans and specifications for 13 movable bridges for the Virginia Department of Transportation (VDOT). Among the projects was the Gilmerton Bridge, a vertical lift bridge in Chesapeake, VA, for which an independent quality control (QC) review of the entire project, including structural, foundations, mechanical, electrical, and the movable span. Oversaw all work on the vertical lift portion of the bridge and was directly responsible for the technical QC review of the mechanical and electrical aspects. For the overall on-call contract, the full team also responded to emergency calls, conducted field inspection, prepared reports, and coordinated with mechanical and electrical inspections. Under his leadership, the team created a Movable Bridge Information System (MBIS), which supports VDOT's movable bridge program's emergency response procedures. The contract also involved the coordination of permits with the U.S. Coast Guard.
02/15 - 10/16	**MOVABLE BRIDGE ASSESSMENTS: MOORE HAVEN SWING & PORT MAYACA VERTICAL LIFT BRIDGES | South Central Florida Express (SCFE) | Clewiston, FL** Inspection Manager for the assessment of two movable structures for the South Central Florida Express Railroad. Responsible for field inspection of the span operation, operating equipment evaluation and assist the railroad with minor repairs and operational improvements. Operational systems were fully tested and demonstrated during the assessment. This is part of the Railroad's preventative maintenance program. Railroad is responsible for hauling all sugar cane processed by US Sugar in Florida.
01/18 - 12/19	**CBRL - NORTH BEND BRIDGE | Oregon** Project Manager for emergency inspection & emergency repair to mechanical and electrical systems on a century old swing span. The swing span during operation suffered a failure of the columns over the pivot pier. The structural failure of the columns allowed the ends of the span to sag over a foot. The span was returned to the pivot pier and underwent extensive structural repairs. During the structural repairs, the machinery was examined. Machinery supports were damaged. Reinforcement to the machinery supports, electrical systems were extensively investigated, repaired to restored the span to service. Span balancing was required and eyebar shortening to achieve desired elevation of the span for operation. Task included field observation during construction and while returning the span to operational status.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Ryan Nataluk, PE***		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**15**
TITLE	**Bridge Inspection Discipline Leader**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**9**
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 1997 | Civil Engineering**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 37837 | CO* | 10/31/2023**		
YEAR REGISTERED	**2002**	DISCIPLINE	**Civil Engineering; NBIS Certified Team Leader; SPRAT Level III**	

Contract role(s) / brief description of responsibilities	Ryan has 24 years of experience in structural inspection and highway per the National Bridge Inspection Standards (NBIS) using the National Bridge Inventory (NBI) and AASHTO Element Level NBE coding systems, as well as per AREMA standards. He has worked for a variety of DOTD's and private clients performing inspections on all types of concrete, steel, and timber bridges with main spans reaching 800 feet. Ryan has performed and managed staff for more than 25,000 routine, fracture critical, in-depth, damage, and initial bridge and overhead sign inspections in 16 states and Canada. He's skilled in load rating of steel, concrete, and timber structures and is versed in the nondestructive testing of concrete, steel, and timber members using a variety of methods. Ryan will serve as **BRIDGE INSPECTION** for 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.
08/07 - Ongoing	**ON + OFF-SYSTEM BRIDGE INSPECTIONS | Colorado DOT | Statewide, CO** Project Manager. Ryan leads bridge inspection, load rating, and scour analysis services for approximately 4,900 off-system bridges in 64 counties and over 100 cities across Colorado per the National Bridge Inspection Standards (NBIS). He's responsible for routine, fracture critical, and special damage inspections on bridges and culverts greater than 20 feet in clear span. Performed field inspections in accordance with all CDOT, FWHA, NBIS, SPRAT and OSHA guidelines and requirements. Confined space entry protocol and Non-Destructive Testing methods are commonly used during these field inspections. In 2014, he collected CoRE Element data for structure components via Pontis with transition to new National Bridge Elements (NBE) via AASHTOWare Bridge Management (BrM). Collects inventory and inspects newly constructed bridges performed at the request of CDOT. Load ratings are performed using the AASHTOWare Bridge Rating program and per the CDOT Bridge Rating Manual. All scour analyses are performed per the FHWA's HEC 18: Evaluating Scour at Bridges. Final bridge reports are submitted. In-depth elemental reporting includes recommendations for maintenance, replacement and/or repair, sketches, photographs, and streambed measurements.
09/12 - Ongoing	**BRIDGE INSPECTION AND ANALYSIS SERVICES | Nevada DOT | Statewide, NV** Project Manager/Sr. Team Leader. Responsible for routine and fracture critical inspections per NBIS. Through two consecutive four-year contracts, Stantec inspected nearly 1,000 bridges per year, including routine, fracture critical, access required, damage, and tunnel inspections per NBIS and NTIS. Additional services included non-destructive testing using magnetic particle, dye penetrant, ground penetrating radar, infrared, impact echo, and sounding. 30 load ratings were completed on as-needed basis. Approx. 150 require specialized access and/or confined space entry either by UBIV or SPRAT certified rope access. Collected inspection data electronically.
05/16 - 12/16	**US 82 CABLE STAY IN-DEPTH NBI INSPECTION | MDOT | Washington County, MS** Assistant Project Manager and Field Team Leader. Ryan was the assistant PM and field team leader for the in-depth, fracture critical and element level inspection of the US Route 82 over the Mississippi river between Chicot County, AR and Washington County, MS. The scope included performing a routine element level inspection using the National Bridge Elements, a fracture critical inspection of the main river span floor systems including edge girders and floor beams, an in-depth hands-on SPRAT access inspection of all 112 stay cables.
02/09 - Ongoing	**SILVER MEMORIAL BRIDGE INSPECTION | West Virginia DOT | Point Pleasant, WV** Project Manager/Sr. Team Leader/SPRAT Climbing Supervisor for the 1,900 foot long fracture critical cantilever through truss: Silver Memorial Bridge under a six-year contract with the WVDOT. Maintenance of ropes and hand-held inspection equipment allowed inspectors to complete inspection without use of mechanical equipment, traffic control, or traffic disruptions. Bridge completed in 1969 as a replacement and monument for an earlier structure, the Silver Bridge. Original Bridge collapsed in a historic tragedy that led US Congress to establish the National Bridge Inventory (NBI) and the National Bridge Inspection Standards (NBIS) Standards between 1968 and 1971.

08/13 - 2020	**2ND LT. THEODORE R. WOO MEMORIAL BRIDGE | West Virginia DOT | Charleston to Dunbar, WV** Sr. Team Leader for first element-level inspection of the 2383' long bridge. Composed of 11 continuous steel multi-girder spans and three spans of continuous steel haunched girders with a floorbeam and stringer floor system. First annual in-depth periodic inspection was included an arm's length inspection of every member on structure. Bridge inspected utilizing rope access methods per the Society of Professional Rope Access Technicians (SPRAT) to avoid lane closures on a heavily traveled interstate. In addition to rope access methods, one innovative inspection technique included using parapet clamps to inspect the fascia girders of the bridge without the need for inspection access vehicles. Lead climbing techniques were also employed to inspect the deck girders and floor system.
03/14 - 05/15	**LA 511: JIMMIE DAVIS BRIDGE REHABILITATION | LADOTD H.010662 | Bossier, LA** Lead Inspector. Total structure length is 2,823 linear feet, including three main steel truss simple spans - 354 ft., 402.5 ft., and 354 ft. long respectively - crossing the Red River; 610 ft. approach spans at each side consisting of steel, two-girder systems with floor beams. Stantec provided design and plans for complete rehabilitation and repainting. Rehabilitation consisted on total deck replacement, over 200 structural repairs to truss span floor system, replacement of the link joint (hangers) of the approach spans, joint rehabilitation and barrier replacement.
04/17 - 08/17	**SR 605 OVER THE INDUSTRIAL WATERWAY IN-DEPTH BRIDGE INSPECTION | MDOT | Gulfport, MS** Field Team Leader. Ryan was a field team leader for the in-depth inspection of the 1390-ft long bridge that consists of a double leaf steel girder bascule span (211-ft) and prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span.
05/17 - 08/17	**SR 609 OVER OLD FORT BAYOU IN-DEPTH BRIDGE INSPECTION | MDOT | Ocean Springs, MS** Field Team Leader. Ryan was a field team leader for the in-depth inspection of the 1760-ft long bridge that consists of a double leaf steel girder bascule span (176-ft) and 17 prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span.
01/13 - Ongoing	**NDOT MIKE O'CALLAGHAN – PAT TILLMAN MEMORIAL BRIDGE | Nevada DOT | Boulder City, NV** Program Manager. As part of the NDOT statewide inspection contract, Ryan served as the Program Manager and Lead Inspection Engineer, registered in both Arizona and Nevada, for this in-depth inspection project for the newest United States landmark bridge, the Hoover Dam Bypass. Responsibilities included SPRAT Level III oversight of the rope access inspection team, project requirements, planning of materials, schedule, logistics, rescue protocols and client coordination in preparation for Stantec's Rope Access inspection of this 1,866 foot open spandrel arch bridge that spans the Colorado River just downstream of the Hoover Dam. Tasks included detailed planning, daily safety tailgate meetings, scheduling, review of previous inspection reports, coordination of client responsibilities, traffic control, and task-level breakdowns with associated climbing equipment and inspection objectives.
15/17 - 10/18	**COAST MERIDIAN OVERPASS - DETAILED CABLE STAY AND IN-DEPTH INSPECTION | City of Port Coquitlam | British Columbia** Senior Inspection Team Leader and SPRAT Level III Rope Access Supervisor. The City of Port Coquitlam in British Columbia, Canada retained Stantec to perform a detailed condition inspection and maintenance program for the Coast Meridian Overpass, a six span cable-stayed bridge over Canadian Pacific Railyard with a total length of approximately 580 m. The detailed cable inspection was completed by Stantec's in-house bridge inspection rope access team utilizing the Society of Professional Rope Access Technician (SPRAT) and WorkSafeBC requirements. Stantec inspected the steel pylons and cables to complete a hands-on inspection of every component, as per BC MoTI standards. The inspection of the cables included induced vibration measurements (harmonic frequency testing) to determine the in situ forces in each cable to compare against the as-built condition. Non-destructive testing consisting of Ultrasonic Testing (UT) was also completed on the steel pylons and steel box girders to developed a baseline measurement for inspections in the future. A snooper truck was also mobilized to inspect the deck soffit and the exterior of the steel plate box girders supporting the deck. Confined space entry procedures were used to inspect the entire length of the steel plate box girders. The project team also develop a 10-year maintenance/ repair works program in order to optimize a management strategy of the bridge, which will assist the City in planning future maintenance or rehabilitation work.
02/01 - 09/01	**FORT STEUBEN BRIDGE INSPECTION | Steubenville, OH** Team Leader. Ryan performed in-depth inspection of 1,584-foot-long span suspension bridge built in 1928 over the Ohio River. He utilized special access techniques to inspect suspension cables, towers, stiffening truss, approach girders, and floor system. Project included ultrasonic testing of 28 eyebar pins and underwater inspection of 5 river piers.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Dave Severns, PE***		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**6**
TITLE	**Principal, Bridge Inspection Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**28**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 1997 | Civil Engineering; BS | 1983 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 013969 | NV* | 6/30/2022**			
YEAR REGISTERED	**2010**	DISCIPLINE	**Civil Engineering; Commercial Diver- Air/Mixed Gas/Bell/Saturation #D-152-17; Surface-Supplied Air Diving Supervisor #Mixed-Gas Diving Supervisor #51670; FHWA-NHI-130055**	

Contract role(s) / brief description of responsibilities	Dave has over 34 years of experience in bridge inspection program development, management and administration, above water and underwater bridge inspection, structural and scour analysis, and quality control/quality assurance. Dave is experienced in all aspects of comprehensive bridge inspection programs, including policy development, asset management and programming, rehabilitation/replacement planning, development of inspection manuals and training programs, state and federal code adherence, over-dimensional permitting and load restriction posting, bridge scour analysis, and quality control/quality assurance. Dave's career includes more than 20 years with Nevada Department of Transportation, serving as the State Bridge Program Manager. He has written/developed numerous bridge inspection manuals and training programs for AASHTO, FHWA, and NHI. Dave is also a formally trained commercial diver, possessing Association of Diving Contractors International (ADCI) Mixed Gas Diving Supervisor Certification, and has extensive experience in offshore, coastal, and inland environments. His career includes serving as a member of the ADCI Board of Directors, and Chairman of the ADCI Engineering Diving Committee, and has twice been awarded the ADCI President's Award for his accomplishments in advancing engineering diving within the commercial diving industry. Dave will serve as **UNDERWATER INSPECTION TASK LEAD** for 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.
01/16 - Ongoing	**ON + OFF-SYSTEM BRIDGE INSPECTIONS | Colorado DOT | Statewide, CO** QA/QC Engineer on this statewide bridge inspection contract. Bridge inspection work includes both ground level and access required element level evaluations on concrete culverts, prestressed boxes and slab, and concrete & steel girder bridges.
01/16 - Ongoing	**STATEWIDE NBIS SAFETY INSPECTIONS | Kentucky Transportation Cabinet (KYTC) | multiple locations, KY** Bridge Inspection Team Leader. Dave conducted Condition Rating and Element Level inspections of approximately over 50 bridges throughout KYTC Districts 3 and 7, including Routine inspections as well as Special inspections of severely deteriorated bridges with reduced inspection frequencies. Inspections included both above and below water component inspection, as well as scour evaluation.
03/95 - 03/14	**NEVADA NBI BRIDGE INSPECTIONS | Nevada DOT | Statewide, NV** Project Manager and Inspection Team Lead. Dave conducted NBI Inventory, Biennial Routine, In-Depth, Damage and Special inspections of approximately 1,800 state and locally-owned bridges throughout Nevada. Work consisted of condition assessment, condition rating, element level inspection and rating, repair/rehabilitation strategy development, load rating calculations, and date entry and QA/QC, using the PONTIS Bridge Management System.
01/16 - Ongoing	**BRIDGE PRESERVATION, LOAD RATING & UNDERWATER INSPECTIONS | Kentucky Transportation Cabinet (KYTC) | Statewide, KY** QA/QC Manager; Engineer Diver, Dive Supervisor. Dave serves as supervisor for underwater bridge inspections for the Kentucky Transportation Cabinet. In 2017, the inspections included major bridges over the Ohio / Tennessee Rivers. These inspections included reinforced concrete bridge piers, bents, and abutments, steel bent columns, corrugated steel culverts, and reinforced concrete box culverts.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Brian Stigner, PE***	YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**11**	
TITLE	**Bridge Inspector, Structural Engineer**	YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**	
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2010 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 51122 | CO* | 10/31/2023**			
YEAR REGISTERED	**2016**	DISCIPLINE	**Civil Engineering; NBIS Certified Team Leader**	

Contract role(s) / brief description of responsibilities	Brian has 11 years of experience performing bridge inspections, tunnel inspections, minor structure inspections, load rating activities, bridge design, and contract administration throughout the United States. He has inspected hundreds of bridges across the western part of the United States and meets all the requirements of a team leader per the National Bridge Inspection Standards. Trainings: OSHA 10-hour Training; Safety Inspection of In-Service Bridges, NHI Course 130055; SPRAT Level 1, Society of Professional Rope Access Technicians; Fracture Critical Inspection Techniques for Steel Bridges, NHI Course 130078; Tunnel Safety Inspection, NHI Course 130110; Methods of Bridge Inspection. Brian will serve as **ROUTINE INSPECTION TASK LEAD** for 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.
06/11 - Ongoing	**ON + OFF-SYSTEM BRIDGE INSPECTIONS | Colorado DOT | Statewide, CO** Bridge Inspector. Brian’s responsible for routine, fracture critical, and special damage inspections on bridges and culverts greater than 20 feet in clear span. He performs inventory and inspection of newly constructed bridges. Field inspections are performed in accordance with all CDOT, FWHA, NBIS, SPRAT, and OSHA guidelines and requirements. Confined space entry protocol and non-destructive testing methods are commonly utilized during the field inspections. Load ratings are performed using the AASHTOWare Bridge Rating program and per the CDOT Bridge Rating Manual. All scour analyses are performed per the FHWA’s HEC 18: Evaluating Scour at Bridges. In-depth elemental reporting includes recommendations for maintenance, replacement and/or repair, sketches, photographs, and streambed measurements. Brian’s additional responsibilities include quality control, organizing submittals, and mapping/scheduling inspection events
03/12 - 10/19	**BRIDGE INSPECTION AND ANALYSIS SERVICES | Nevada DOT | Statewide, NV** Bridge Inspector and Team Leader for element level/NBI inspection throughout the state of Nevada. Inspections included routine, fracture critical, special, and damage per the NBIS. His responsibilities included inspections by specialized access by UBIT or confined space entry. Inspection data was collected electronically via tablet utilizing Bentley InspectTech software. He also assisted with state inspectors with routine inspections.
01/17 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Bridge Inspector. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches.
06/19 - Ongoing	**ARIZONA DOT BRIDGE INSPECTION | AZDOT | Southeast and Northeast Region, AZ** Deputy Project Manager/Team Leader on bridge and tunnel inspections in the northeast and southeast regions of Arizona. Bridge inspection reports are composed in BrM software. He schedules all inspections and coordinates with traffic control providers and equipment rental contractors, as well as all scheduling permitting with the State.
09/16 - Ongoing	**CDOT TUNNEL INSPECTION AND ASSET MANAGEMENT | CDOT | Statewide, CO** Team Leader for NTIS inspections in Colorado for initial routine element level inspections per the SNTI. He assisted in the development of a state tunnel inspection manual. The schedule was tracked through coordination with CDOT Staff bridge, tunnel operations & maintenance, sub-consultants, and subcontractors. Increases are approved as unforeseen scope items are identified, defined, estimated, and monitored with CDOT.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Michael Brodnax, EI**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**2**
TITLE	**Structural Engineer Intern**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2019 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**EI No. 34127 | LA | 3/31/2022**			
YEAR REGISTERED	**2019**	DISCIPLINE	**Civil Engineering; NBIS Certified Team Leader**	

Contract role(s) / brief description of responsibilities	Michael has been involved in structural designs ranging from deck, prestressed box girder and concrete substructure. Michael has performed numerous inspections and load ratings on Mississippi and Alabama Bridges. Michael is familiar with several design and analysis software programs including RC-Pier, CONSPAN, and AASHTOWare Bridge Rating. Michael will serve as **ROUTINE INSPECTION** for 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.
12/20 - Ongoing	**TRUSS BRIDGE INSPECTIONS AND LOAD RATING | MDOT, Contract No. NBIS(140)/108451- | Statewide, MS** Bridge Load Rater. Multiple steel trusses are inspected, and load rated by creating structural models of all primary members and connections. Michael develops structural models of steel trusses including fracture critical members and gusset plate connections using AASHTOware BrR.
07/19 - Ongoing	**COMPLEX BRIDGE INSPECTIONS AND LOAD RATINGS IDIQ | MDOT, Contract No. NBIS(114)/106281-10500 | Statewide, MS** Bridge Inspector and Load Rater. This project consists of inspections and load ratings on timber, complex, and non-complex structures in accordance with AASHTO and FHWA NBI specifications. Michael inspects and load rates various bridge types ranging from steel trusses, steel rail cars, box culverts, timber stringers, prestressed concrete girders, and steel plate girders. Michael uses AASHTOware BrR, Bentley Concrete, and STAAD models to complete ratings as well as in house rating tools.
07/19 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Bridge Inspector and Load Rating Engineer Intern. Stantec is responsible for inspecting and load rating over 100 bridges in 17 different Mississippi Counties. Michael serves as a bridge inspector and load rater for this project. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Michael is responsible for performing inspections, performing load ratings, and developing inspection reports using InspectTech. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches. Michael assists with data management and transmitting project status updates to the client.
07/19 - Ongoing	**I-10/CANAL ROAD INTERCHANGE | MDOT | Gulfport, MS** Bridge Inspector and Load Rating Engineer Intern. Michael designs prestressed concrete girders, concrete substructures such as hammerhead piers, pile bents, and column bents. I also load rate each bridge using AASHTOWare BrR software, CONSPAN, MDX steel design software, Microsoft office, bluebeam pdf editor.
08/19 - Ongoing	**I-10 LOYOLA DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Bridge Inspector and Load Rating Engineer. Michael designed concrete substructures such as hammerhead piers and pile cap footings. He designed prestressed concrete girders and concrete decks. I also designed and developed plans for concrete noise barriers and their concrete foundations using Microsoft office, STAADpro models, Bentley Microstation, CONSPAN, RC Pier, and bluebeam pdf editor. I also reviewed and approved production shop drawings for construction.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Donavon Cunningham**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**16**
TITLE	**Senior Construction Manager**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**2**
DEGREE(S) / YEARS / SPECIALIZATION	**Electronic Tech | 2004; CADD and Design | 1999**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**			
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	

Contract role(s) / brief description of responsibilities	Donavon is an experienced senior construction/coatings and corrosion manager with special experience in onsite and design project management. His highway and construction projects range from water and wastewater improvements to roadway and bridge construction, coatings inspection and corrosion assessments, and being a SPRAT-certified, in-service bridge inspector. He also has numerous material testing certifications that are valuable for ensuring quality inspection and management during construction. Donavon will serve as a **COATINGS/NDT INSPECTION** for 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.
06/17 - 10/17	**VICKSBURG OLD HIGHWAY 80 DETAILED BRIDGE INSPECTION AND LOAD CAPACITY RATING | Vicksburg Bridge Commission | Vicksburg, MS** Bridge Inspector assisted with the detailed bridge inspection. The bridge was built in 1930 and carries one mainline track used daily by Kansas City Southern Railroad and a highway deck closed public traffic. The bridge is 1.6 miles long and consists of 122 steel spans of multiple types, including through-truss, deck truss, and deck girders. The inspection was performed as part of a load rating analysis.
01/13 - 12/15	**CHESAPEAKE BAY BRIDGE, COATINGS CONDITION ASSESSMENT | Maryland Transit Authority | Annapolis, MD** Bridge Inspector. Donavon performed a coatings condition assessment of the East bound Chesapeake Bay Bridge. Assessments include a field inspection, testing and evaluation of the existing coating system. Report preparation and recommendations of each individual sub unit for repairs to arrest advanced corrosion and coating failure issues. $56.5M (est.) ($81M max.).
01/13 - 12/16	**MILLARD TYDINGS BRIDGE: CLEANING, PAINTING, AND MISCELLANEOUS REPAIRS | Maryland Transit Authority | Statewide, MD** Bridge Inspector. With the coating and corrosion department, Donavon developed and managed the cleaning and painting specifications and repairs for existing crevice corrosion and zone painting repairs of 4,838 feet of I-95 cantilever deck truss. Repairs consisted of the remediation of crevice corrosion with overcoating box members and localized zone painting in areas of advanced corrosion
03/19 - 12/19	**FLORIDA CR 280 OVER SR 8 (I-10) COATINGS REHABILITATION | Florida DOT | Statewide, FL** Bridge Manager. This project included the design and development of specifications and plans for overcoating rehabilitation of CR 280 overpass. Included were field inspection and testing to evaluate the condition of the existing coating system to determine if full remediation or overcoating was to be developed.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Joseph "Joe" Cains, III, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**18**
TITLE	**Senior Associate**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2003 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 33670 | LA | 03/31/2024**			
YEAR REGISTERED	**2008**	DISCIPLINE	**Civil Engineering | TEPR 3 Modules**	

Contract role(s) / brief description of responsibilities	Joe has experience in the design of arterials, local roads, roundabouts, bridge replacement projects and other similar transportation systems, along existing highway alignments and new locations. Joe is a Senior Engineer at Stantec in the Baton Rouge, Louisiana office, and has been involved in Project Management, as well as various aspects of planning, design, utility relocation coordination, and construction administration. His involvement in the planning and design of several innovative intersections, such as roundabouts, DDIs, CFIs, as well as small and major infrastructure projects has helped Stantec lead the charge in the transportation industry for the State of Louisiana. He loves the challenges that a project brings and meets them with thoughtful consideration of the safety of the traveling public. Joe will serve as **ROADWAY ENGINEER** for 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.
03/17 - Ongoing	**PERKINS ROAD (SIEGEN TO PECUE) WIDENING TRAFFIC STUDY, ENVIRONMENTAL ASSESSMENT (EA), PRELIMINARY PLANS, FINAL PLANS AND RIGHT-OF-WAY MAPS | City of Baton Rouge Contract 12-CS-HC-0015 | Baton Rouge, LA** QC Manager. Under the MOVEBR Program, Stantec is currently completing Final Plans for Perkins Road from Siegen Lane to Pecue Lane using MOVEBR design criteria. This 2-lane to 4-lane divided roadway widening project accommodates the increase in traffic and improves travel efficiency along this corridor by introducing access management principles which have been shown to increase capacity and safety. Partial median openings and u-turn movements with bulb outs are being provided along the corridor. Stantec is responsible for all final design including roadway and traffic signal plans, subsurface drainage and culvert design, and wetlands permitting. Final plans for this project should be completed by the end of 2022.
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE DESIGN-BUILD | LADOTD | New Orleans, LA** Lead Roadway Engineer. Joe serves as lead roadway engineer of this multimillion-dollar design-build project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans International Airport. Project consists of a Diverging Diamond Interchange and flyover ramps leading to/ from the Airport on the east side of the interchange.
07/15 - Ongoing	**I-49 LAFAYETTE CONNECTOR | LADOTD | Lafayette, LA** Roadway Engineer. Joe's responsibilities include assisting with the completion of Task 4 Geometrics, of a 15 task project that is being carried out with a team of 15 design firms. Task 4 involves the evaluation and recommendations for previously proposed geometry, (interchanges, intersections, horizontal & vertical alignments, design vehicles & criteria, etc.), investigation of the 5 design modifications recommended during the environmental process (ROD obtained in early 2000s), investigation of 20+ potential design modifications, public coordination, and final design report document development for future segmentation & design of independent utility segments.
02/10 - Ongoing	**NELSON ROAD EXTENSION & BRIDGE | LADOTD | Lake Charles, LA** Project Manager for the overall project, which has included the NEPA Environmental Assessment process, a line & grade study that included several alternatives, vessel surveys, and conceptual geometric design of an intersection configuration to access the Port of Lake Charles City Docks facilities. Stantec is leading the effort for this new high-level bridge (56-foot vertical navigation clearance) and approaches over Contraband Bayou, a navigable waterway in the Lake Charles area. This project will provide a crucial link to downtown Lake Charles and the Port of Lake Charles by extending Nelson Road over Contraband Bayou to West Sallier Street. Coordination with LADOTD, FHWA, Corps of Engineers, US Coast Guard, City of Lake Charles and the Port of Lake Charles are all required to gain approvals, permits, and an environmental decision for the project.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Mary Frances O'Rourke, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**12**
TITLE	**Roadway Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2012 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 41444 | LA | 09/30/2023**			
YEAR REGISTERED	**2017**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Mary's roadway engineering experience includes preparing roadway plans, quantity calculations, hydraulic analysis, striping and signing design, coordination of utility relocation for design-build projects and geometric design such as horizontal and vertical alignments for a variety of projects in Louisiana. Mary is knowledgeable in a number of software programs including Microstation, InRoads and SignCad. She has also assisted in the design of roundabouts, interchanges and realignments of urban roadways. Mary will serve as a **ROAD ENGINEER** for 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.
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Design-Build ROW/Utilities Manager for this project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans International Airport. Project consists of a Diverging Diamond Interchange, flyover ramps leading to/from the Airport on the east side of the interchange. Mary's responsibilities also included developing the signing and striping layout, assisting with the geometric layout, assisting with the drainage design which included using HYDRWIN to design to DOTD standards, developing joint layouts, quantity calculations, and coordination with the contractor to answer RFIs.
10/17 - 10/19	**NELSON ROAD AND BRIDGE EXTENSION | LADOTD | Lake Charles, LA** Lead Roadway Engineer. Mary's duties included geometric design, roadway modeling, drainage, signing and striping, joint layout, and sequence of construction. Mary also assisted with the NEPA Environmental Assessment process and coordination between all of the stakeholders. Stantec is led the effort for this new high-level bridge (56-foot clearance) and approaches over the navigational channel of Contraband Bayou. This project provides a crucial link to downtown Lake Charles and the Port of Lake Charles by extending Nelson Road over Contraband Bayou to West Sallier Street.
06/14 - 03/15	**I-210 COVE LANE INTERCHANGE| LADOTD H.010151 | Lake Charles, LA** Engineer Intern who assisted with the signing and striping layouts, assisting with plan development, and quantity calculations.
07/15 - 06/18	**US 90 AT LA 318 INTERCHANGE DESIGN-BUILD | LADOTD | St. Mary Parish, LA** Roadway Engineer who assisted with plan development, and directly coordinated with utility companies for all required utility relocations on the project, as well as LADOTD Headquarters, and the District office to ensure the utilities were relocated in a timely manner to mitigate utility conflicts roadway construction.
11/12 - Ongoing	**PERKINS ROAD WIDENING TRAFFIC STUDY, EA, PRELIMINARY PLANS, FINAL PLANS AND ROW MAPS | City of Baton Rouge | Baton Rouge, LA** Roadway Engineer. During the EA and Preliminary Phase, Mary assisted with line & grade studies, EA, plan development and design of subsurface drainage systems by using LADOTD Hydraulics Manual and LADOTD HYDRO Software. She calculated quantities for a construction cost estimates. Stantec is currently completing Final Plans for Perkins Road from Siegen Lane to Pecue Lane using MOVEBR design criteria. Stantec is responsible for all final design including roadway and traffic signal plans, subsurface drainage and culvert design, and wetlands permitting. Final plans for this project should be completed by the end of 2022.
07/15 - Ongoing	**I-49 LAFAYETTE CONNECTOR | LADOTD | Lafayette, LA** Roadway Engineer. Mary is responsible for developing permanent intersection and ramp terminal signage concepts and assisting with roadway designs, quantity and cost estimating, drainage designs and MOT concepts.
05/12 - 12/17	**GOVERNMENT STREET ROAD DIET: STUDY THROUGH FINAL DESIGN | LADOTD | Baton Rouge, LA** Roadway Engineer who designed bike lane facilities and signing/striping layout for this preliminary and final plan design project to upgrade a 4-mile portion of Government Street. Mary assisted with designs/plan development including typical sections, plan sheets, geometric details, signing and striping and sequence of construction. She calculated quantities and developed the cost estimate for construction and provided construction support.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**				
NAME	**Nick Prudhomme, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**16**	
TITLE	**Roadway Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**	
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 2006 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 35996 | LA | 3/31/2023**			
YEAR REGISTERED	**2011**	DISCIPLINE	**Civil Engineering**		
Contract role(s) / brief description of responsibilities	Nick has over 16 years of experience in feasibility/alternative studies and preliminary and final design of interstates, entrance and exit ramps, arterials, local roads, bridge replacement projects, and other similar transportation systems along both existing and proposed alignments. His experience also includes training courses for Traffic Control Supervisor, Traffic Control Design Specialist, and training in the Highway Safety Manual. Nick will serve as **ROADWAY ENGINEER** for 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.				
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Drainage Lead. Nick leads the drainage design consisting of subsurface drainage systems along Loyola Drive and the new airport access road, drainage systems/cross drains on I-10 and the extension of 2-8'x7' box culverts in Canal 13. This project will serve as a main entrance to the new airport terminal recently constructed for the Louis Armstrong New Orleans International Airport.				
08/08 - 09/11	**GOOSE BAYOU BRIDGE AND APPROACHES, LOUISIANA 45 | LADOTD CONTRACT NOS. 700-99-0430, 700-99-0485 | Lafitte, LA** The Goose Bayou bridge replacement project began as an alternative alignment study and is currently in finals plans. As the engineer in responsible charge of the roadway plans, Nick's responsibilities involve project management, client and sub-consultant coordination, and the design and supervision of all areas of plan development including horizontal and vertical design, sight distance calculations, drainage design, earthwork modeling, cross section development, striping layout, sequence of construction, quantity calculations, and cost estimation.				
11/12 - Ongoing	**PERKINS ROAD (SIEGEN TO PECUE) WIDENING TRAFFIC STUDY, ENVIRONMENTAL ASSESSMENT (EA), PRELIMINARY PLANS, FINAL PLANS AND RIGHT-OF-WAY MAPS | City of Baton Rouge Contract 12-CS-HC-0015 | Baton Rouge, LA** Roadway Lead. This project initially included an EA and Preliminary Plans for improving 3.4 miles of Perkins Road (LA 427) from the existing 2-lane roadway to a 4-lane divided curb and gutter roadway with raised median, sidewalk, sewer and subsurface drainage. During the EA phase, Nick assisted with the alternative analyses, conceptual drainage design, public meeting materials and presentations, and the development of the Environmental Assessment report and documentation. During preliminary plan development, he assisted in all areas of design and plan development including client interaction, drainage design, drainage report, roadway modeling and earthwork analyses using InRoads, quantity calculations, and construction cost estimate. Under the MOVEBR Program, Stantec is currently completing Final Plans for Perkins Road from Siegen Lane to Pecue Lane using MOVEBR design criteria. This 2-lane to 4-lane divided roadway widening project accommodates the increase in traffic and improves travel efficiency along this corridor by introducing access management principles which have been shown to increase capacity and safety. Partial median openings and u-turn movements with bulb outs are being provided along the corridor. Stantec is responsible for all final design including roadway and traffic signal plans, subsurface drainage and culvert design, and wetlands permitting. Final plans for this project should be completed by the end of 2022.				
05/15 - 06/18	**US 90 AT LA 318 INTERCHANGE DESIGN-BUILD | LADOTD | St. Mary Parish, LA** Roadway Engineer. Nick performed subsurface drainage analysis and design, earthwork modeling, cross section generation, and quantity calculations. The project included dual overpass bridges, ramps, and frontage road relocations. Stantec proposed an alternative technical concept to the proposed alternative in the RFP. This ATC conserved right of way and lessened impacts to the community and the environment, and saved construction cost. Stantec was also responsible for acquiring the right of way while construction was ongoing. Stantec remained involved throughout construction and participated in resolving design and construction non-conformance issues and requests for information.				

04/11 - 06/15	**I-210 COVE LANE INTERCHANGE	LADOTD H.010151	Lake Charles, LA** Roadway Engineer. Project began as a location and feasibility study for exit ramp modifications at a rural local road approximately half a mile in length. The project progressed to design and development for modifications to the existing interstate exit ramp and adjacent local roads, approximately 2500 feet total length, all to LADOTD standards. Nick assisted in the design and plan development for the proposed full tight diamond interchange at Cove Lane and I-210. He was responsible for all the earthwork calculations for the interchange improvements, as well as the extension of existing Cove Lane to the north. The project included retaining walls and a load transfer platform which were included in Nick's cross section design. Nick was also involved with geometric modeling and quantity calculations.
01/14 - 03/18	**LA 86 & LA 320 ROUNDABOUT	LADOTD	New Iberia, LA** Roadway Lead. Nicks responsibilities involved project management, client coordination, and the design and supervision of all areas of plan development including horizontal and vertical design, sight distance calculations, drainage design, earthwork modeling, cross section development, striping layout, sequence of construction, quantity calculations, and cost estimation.
01/06 - 09/10	**SOUTH HARRELL'S FERRY ROAD SOUTH SHERWOOD FOREST TO MILLERVILLE	City of Baton Rouge	Baton Rouge, LA** Roadway Engineer. Project began as a feasibility/alternative study for a proposed 5-lane urban collector roadway approximately 2 miles in length. Stantec was responsible for data collection and alternative cost estimates including construction, ROW and utility relocations. Under direct supervision of the projects engineers, Nick's responsibilities included horizontal and vertical design, drainage design, earthwork modeling, cross section development, joint layout, striping layout, sequence of construction, quantity calculations, and cost estimation.
02/05 - 03/08	**FLORIDA AVE BRIDGE OVER INNER HARBOR NAVIGATIONAL CANAL	LADOTD	Orleans Parish, LA** Roadway Engineer. Nick performed subsurface drainage analysis and design, earthwork modeling, cross section generation, and quantity calculations for 0.5 miles of reconstruction and 0.25 miles of pavement widening for a 3-level, fully-directional interchange which serves as the approaches to the main span bridge over the Inner Harbor Navigational Canal.
04/15 - 10/21	**LA 30: SOUTH BOULEVARD TO WEST CHIMES STREET	LADOTD	Baton Rouge, LA** Roadway Lead. Nick oversaw all aspects of the roadway design including horizontal and vertical geometry, roadway modeling, drainage, striping, sequence of construction, and quantities. LA 30, known in Baton Rouge as Nicholson Drive, is a commuter route that connects Louisiana State University (LSU) and downtown Baton Rouge. Additional scope included the realignment of the Interstate 10 off-ramp to Nicholson Dr. and Highland Rd. and the widening of Oklahoma street from a two-lane to four-lane section. The plan set currently consists of typical sections, plan and profile sheets, drainage details, pavement markings, signs, sequence of construction, traffic signal plans, right of way plans, and bridge plans. The plans have been completed with construction expected to begin this year.
01/06 - 12/13	**STARING LANE EXTENSION AND BRIDGE	City of Baton Rouge	Baton Rouge, LA** Engineer Intern. Nick worked with the roadway division assisting with drainage improvements for the project. The project involved the design and plan development for a new 4-lane urban boulevard with a 30ft median. The new design will include subsurface drainage, sidewalks and traffic signals. Stantec handled the design of two bridges as part of the overall development of the project. In addition, Stantec was in charge of construction plan development and design of preliminary and final plans including geometrics, intersections, earthwork modeling, striping, sequence of construction, quantities, signal design and quality control.
01/07 - Ongoing	**BATON ROUGE LOOP IMPLEMENTATION PLAN AND TIER 1 EIS	LADOTD	Baton Rouge, LA** Roadway Engineer. Nick assisted with the location and design of the preliminary horizontal alignments and a detailed cost analysis of different combinations of corridors. The purpose of this project is to determine possible corridors, impacts, and a financial package for the construction of a loop through five parishes, including two crossings of the Mississippi River. Stantec was responsible for the engineering components including corridor selection, design criteria, typical sections, cost estimates and potential right-of-way and environmental impacts. The project involves extensive coordination with affected agencies including the five parishes, LADOTD, the City of Baton Rouge, FHWA, the Coast Guard and the Corps of Engineers as well as public outreach and public meetings

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Joey Lefante, PE, PTOE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**13**
TITLE	**Senior Associate, Traffic Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 2008 | Civil Engineering**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 37244 | LA | 09/30/2022**		
YEAR REGISTERED	**2012**	DISCIPLINE	**Civil Engineering | PTOE #3560, 2013 | TEPR 3 Modules**	
Contract role(s) / brief description of responsibilities	With over 13 years of experience working on major traffic projects, preparing feasibility studies and interchange modification reports and leading improvements through plan design and signal construction. His experience using various analysis software packages, including TransCAD, Synchro, and VISSIM, allows him to determine innovative transportation solutions tailored to each individual situation. Joey will serve as a **TRAFFIC ENGINEER** for 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.
04/11 - 06/15	**I-210 COVE LANE INTERCHANGE AND ROUNDABOUT | LADOTD Contract No. H.010151 | Lake Charles, LA** Traffic Engineer. Joey developed an Interchange Justification Report (IJR) for I-210 between Cove Lane and Nelson Road interchanges. He developed peak hour traffic volumes for 28 possible design alternatives, which took into account and accommodated for all future developments in the area, including the Nelson Road Bridge over Contraband Bayou and the Ameristar Casino and Hotel development. Joey coordinated collection of traffic counts and performed field calibration of the traffic models. Roundabout was analyzed using SIDRA.
11/10 - Ongoing	**NELSON ROAD EXTENSION AND BRIDGE | LADOTD Contract No. H.005967 | Lake Charles, LA** Traffic Engineer. Joey ran traffic analyses for the different bridge tie-ins being studied. Also included in the traffic analysis was a consideration of the impact of the bridge on the surrounding roadway network. The Regional Travel Demand Model was modified in TransCAD to determine the effects of the bridge construction.
03/14 - 05/15	**LA 511 JIMMIE DAVIS BRIDGE REHABILITATION | LADOTD Contract No. H.010662 | Bossier Parish, LA** Traffic Engineer who performed traffic analysis for the designated detour route as part of the TMP and proposed locations for temporary signal installations during the bridge closure. Detour routes included city streets on both side of bridge. Based on analysis, Joey designed and detailed traffic signal plans for temporary signal installations. Each selected improvement was needed to handle rerouting of all bridge traffic to the detoured route with minimal permanent pavement changes.
08/14 - Ongoing	**I-49 LAFAYETTE CONNECTOR | LADOTD | Lafayette, LA** Traffic Task Manager responsible for coordination with LADOTD traffic staff and managing analysis of various geometric design alternatives. Project includes a comprehensive Vistro model and additional analyses using TransCAD, VISSIM, and Sidra software packages. It follows the Access Justification Request guidelines established by LADOTD and FHWA. Joey has been involved in the Context Sensitive Solutions (CSS) process, attending community meetings. CSS feedback has allowed Stantec to redesign several key elements to emphasize urban design principles, including pedestrian and bicycle accommodations.
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Traffic Engineer. Joey performed VISSIM analyses of an Alternative Technical Concept (ATC) consisting of two new flyover ramps leading to/from the Airport on the east side of the interchange and the first Diverging Diamond Interchange (DDI) in Louisiana. Joey completed an IMR to meet FHWA access policy standards to move the project forward on the accelerated design-build schedule. Joey is also leading the traffic signal design effort, including specialized DDI operations and complete street accommodations such as sidewalks and a two-way cycle track.
08/09 - Ongoing	**I -49 INNER CITY CONNECTOR STAGE 0-1, STUDY & IJR | LADOTD | Shreveport, LA** Traffic Engineer performing NEPA investigations, developing IMR and IJR and providing quality assurance for this 3.5-mile final nationwide link of I-49 by connecting the existing I-49/I-20 interchange to the proposed I-49/I-220 interchange. NLCOG's Travel Demand Forecasting Model was modified and used to project future traffic for 3 alternatives representing different interchange combinations. HCS will be used to determine which roadway improvements would be necessary for each alternative.
11/08 - 12/13	**STARING LANE EXTENSION AND BRIDGE | City of Baton Rouge | Baton Rouge, LA** Project Engineer. Joey detailed traffic signal plans for both a signal replacement at Staring Lane and Hyacinth Avenue as well as a signal modification at Staring Lane and Highland Road. He also developed interconnect plans for Staring Lane between Highland Road and Hyacinth Avenue.

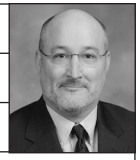
FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Scott Hoffeld, CEP**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**2**
TITLE	**Senior Project Manager, Environmental**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**26**
DEGREE(S) / YEARS / SPECIALIZATION		**MS | 1994 | Resource Management and Administration; BA | 1989 | Economics**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**CEP No. 02040408 | LA | 3/31/2022**		
YEAR REGISTERED	**2002**	DISCIPLINE	**Certified Environmental Practitioner**	

Contract role(s) / brief description of responsibilities	Scott is a Senior Project Manager with over 27 years of planning and NEPA compliance/analysis, public/agency outreach and participation, and economic impact analysis experience for transportation and other public works projects. Scott is well-versed in environmental and socioeconomic impact and planning methods, including environmental justice evaluations, industrial siting studies, cumulative impact analyses, solid waste management, needs and alternatives analyses, public outreach and involvement programs, public relations, permitting, and transportation benefits and benefit to cost evaluation. Scott will serve as **ENVIRONMENTAL** for 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.
02/16 - 12/17	**FLORIDA AVENUE IMPROVEMENTS | LADOTD | Orleans and St. Bernard Parishes, LA** Scott was responsible for team coordination and public/stakeholder outreach oversight and agency coordination. The project alternatives include a new bridge over the Inner Harbor Navigation Canal, as well as optional roadway improvements, and neighborhood traffic calming for neighborhoods in the vicinity of the project alternatives, including 9th Ward of New Orleans. Key issues include truck traffic, property values, and environmental justice concerns.
12/12 – 12/17	**LA 143 – US 165 CONNECTOR AND OUACHITA RIVER BRIDGE , LINE AND GRADE AND TOLL STUDY | LADOTD SP No. H.004782.2 | Ouachita Parish, LA** Project Manager for new connector roadway and bridge over the Ouachita River, which has been discussed for over 40 years. New location alignments traverse sensitive, high-functioning wetlands, which required a detailed new alignment screening process. Accepted by the US EPA and USACE, the alternatives development methodology was augmented to include in-town alternatives to complete a full consideration of potentially reasonable and feasible alternatives. Tolls were determined to be worthy of further consideration based on traffic analysis. Key issues include wetland and wildlife corridor impacts cost minimization, and traffic impact minimization at junctions.
12/14 – 12/17	**US 11 NORFOLK SOUTHERN RAILROAD OVERPASS REPLACEMENT | LADOTD SP No. H.000688 | Orleans Parish, LA** Project Manager for replacement and widening of the US 11 roadway overpass of the Norfolk Southern Railroad in Slidell. Project included evaluation of partial and full-access intersection options and bridge alignment and type alternatives for the heavily skewed and long steel span bridge in this urban area of Slidell. Key issues included the historic status of the bridge, commercial parking impacts, use of the Norfolk southern right of way, and travel pattern changes following the construction.
04/10 - 10/14	**CHEF MENTEUR BRIDGE AND APPROACHES REPLACEMENT | LADOTD | Orleans Parish, LA** Project Manager for high-priority bridge replacement EA and Line and Grade Study, responsible for coordination and technical assessment of key issues. Both movable and fixed-span designs are under consideration along three alignments in an area of notable environmental and design challenges. The existing US 90 swing-span bridge over Chef Menteur Pass has two 10-foot lanes, no shoulders and a bridge sufficiency rating of 37. Environmental constraints include the abutting Venetian Isles subdivision, Fort Macomb structure and state parkland, terrestrial and submerged archaeological sites, and the Bayou Sauvage National Wildlife Refuge. Intensive public and agency outreach and involvement was initiated along with computerized renderings of post-construction views to be used in the effort.
12/06- 06/07	**ST. CLAUDE AVENUE AND CLAIBORNE AVENUE BRIDGE REPLACEMENT | USACE | New Orleans, LA** Project Coordinator and Environmental Planner for the reconnaissance evaluation of providing tunnels in lieu of bridge crossings over the Inner Harbor Navigation Canal in New Orleans. Tunnel concepts were investigated at a reconnaissance-level study to determine if the concept warranted additional investigation. Alignment, construction techniques, maintenance of traffic, effects to the socioeconomic an natural environments, and costs were evaluated for both crossings (i.e., tunnel sites). Several alternatives were determined to be feasible; however, all were more expensive than associated bridge improvement alternatives. Limitations of tunnel schemes include maintenance of traffic, pedestrian and cyclists’ access, displacements, local traffic circulation, and adverse effects or displacement to structures listed or potentially eligible for listing on the National Register of Historic Sites.

12/00 - 06/01	**GRAMERCY-WALLACE BRIDGE NEEDS AND ALTERNATIVES ANALYSIS, AND WETLAND PERMITTING ASSISTANCE | LADOTD | St. John the Baptist and James Parishes, LA** Project Transportation and Environmental Planner responsible for developing needs statement, alternate constraints map, and alternate alignments, as well as the preparation of the supplemental information report and graphics. The project proposes to complete a section of a bridge approach, delayed by funding issues. The extension/completion of the West Bank Approach was documented as a very important link for hurricane evacuation, as well as providing local and commercial transportation benefits through reduced travel times and lower average operational costs per mile. Eight alternate alignments were developed. Detailed preliminary conceptual cost estimates were prepared, and all alignments were compared in a matrix. The proposed alignment is currently under permitting with the USACE.
10/15 - 03/17	**EA AND REEVALUATION FOR DIJON EXTENSION IMPROVEMENTS | City of Baton Rouge H.012233/H.012232 | Baton Rouge, LA** Project Manager responsible for EA and public outreach for short connector roadway between LA 3064 (Essen Lane) and LA 1248 (Bluebonnet Boulevard) in Baton Rouge. The project involved coordination with the Our Lady of the Lake and The General hospitals regarding future development plans, as well as consideration of future bikeway plans for the City of Baton Rouge.
02/04 - 09/05	**I-210 AT COVE LANE INTERCHANGE IMPROVEMENTS AND EA | LADOTD | Lake Charles, LA** NEPA Project Manager. Scott worked with Stantec, formerly ABMB during this project. NEPA Project Manager for this aggressive seven-month NTP to FONSI, high-profile interstate interchange improvement project in Lake Charles, Louisiana. Project need is related to a new casino special traffic generator. Expedited work included completion of outreach, field work, and analysis of six build alternatives within six weeks of the NTP. Special NEPA documentation and review protocols were proposed by ARCADIS and approved by LADOTD and FHWA, enabling environmental streamlining and reduction of schedule by over 55 percent.
12/99 – 01/01	**FEASIBILITY STUDY FOR LA-3235 EXTENSION | LADOTD | Louisiana** Project Transportation Economist and Environmental Planning Coordinator to evaluate alternatives to connect LA-3235 to Relocated US-90. This study, investigated the economic, environmental, and engineering feasibility of connecting LA-3235 to alternatives identified in the Hurricane Evacuation Corridor Study. Feasibility considered freight movement, connectivity, daily travel, and other purposes for the project in addition to hurricane evacuation effectiveness. Alternatives were evaluated with the use of the MicroBENCOST computer model, which is a computer application of the AASHTO's "Red Book" user benefit methodology (User Manual on Bus Transit and Highway Improvements (AASHTO, 1977). Costs, depreciated values, avoided accidents, and cross traffic benefits were evaluated with the model. Due to the existence of mechanical waterway bridges along existing routes, the MicroBENCOST rail crossing delays were adjusted to account for average draw-bridge delays.
06/96 - 12/97	**SUNSET BEACH BRIDGE REPLACEMENT, ENVIRONMENTAL IMPACT STATEMENT AND SECTION 4(F) STATEMENT | NCDOT | Brunswick County, NC** Scott served as Project Coordinator and Environmental Planner for this project involving the replacement of the Sunset Beach Bridge over the Atlantic Intracoastal Waterway. Social and economic issues are extremely apparent, especially regarding secondary and cumulative impacts. Impacts to natural resources, including wetlands and endangered species, also present concern.
12/93 - 01/95	**FORT BUHLOW BRIDGE REPLACEMENT | LADOTD | Pineville, LA** Project Planner responsible for data collection and impact projections to socioeconomic environment from the replacement of the Fort Buhlow Bridge. The project would replace the existing bridge with a high-span bridge. Several federally funded areas may be impacted from the construction, as well as the Central Louisiana State Hospital.
01/10 - 12/15	**EA/IMR AND ROUNDABOUTS ANALYSIS FOR KANSAS LANE - GARRETT ROAD CONNECTOR AND I-120 INTERCHANGE | LADOTD | Monroe, LA** Project Manager for an I-20 interchange improvement abutting the Pecanland Mall in Monroe. Coordination was required with the Kansas City Southern railroad in the evaluation of alternative crossing locations and bridge/tunnel options. Railroad crossing safety improvements were evaluated and costed. Local mall-patron travel patterns were evaluated in detail along with potential roundabout options, which included combining frontage roads with I-20 ramps.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Lindsay Grissom**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**7**
TITLE	**Principal, Senior Environmental Scientist**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**11**
DEGREE(S) / YEARS / SPECIALIZATION	**MS |2002 |Cell & Molecular Biology; BS|2000|Zoology & Physiology**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**NA**			
YEAR REGISTERED	**NA**	DISCIPLINE	**NA**	

Contract role(s) / brief description of responsibilities	Lindsay is a Principal Scientist with over 17 years of experience in the environmental services industry. Lindsay specializes in federal and state agency permitting and plan preparations for linear pipeline and facility construction projects. She serves as Stantec's U.S. Technical Lead for Assessment and Permitting. Lindsay routinely provides technical oversight for NEPA documents, with a focus on water resources, socioeconomics, land use, and safety and reliability. Lindsay has a diverse regulatory background in oil and gas, which includes U.S. Army Corps of Engineers Section 408 and 404/10 permitting, threatened & endangered species coordination, state coastal zone permitting, development of environmental training, and occupational health and safety. She has completed projects in more than 25 states, focusing on the gulf coast, mid-west, and Marcellus shale regions. Lindsay will serve as **ENVIRONMENTAL** for 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.
2016 – 2018	**DEPUTY PROJECT MANAGER |Confidential Pipeline Project | Louisiana** The proposed project involved construction of approximately 40 miles of pipeline in St. Charles, Jefferson, Orleans, and St. Bernard Parishes, including a crossing of Lake Pontchartrain. Responsible for routing and siting support; alternatives analysis; securing federal, state, and local environmental permits; and supporting agency coordination and public outreach.
2016 – Ongoing	**VALERO ENERGY ST. CHARLES DOCK EXPANSIONS – MULTIPLE PROJECTS | LOUISIANA** Responsible for overseeing environmental surveys, agency coordination, and securing environmental permits for construction and modification of multiple oil and gas dock facilities in Louisiana. Permits and clearances obtained include U.S. Army Corps of Engineers (USACE) Section 404/10 and Section 408 permits, Louisiana Department of Natural Resources (LDNR) Coastal Use Permits, levee district Letters of No Objection (LONOs), and threatened and endangered species clearances.
2019 – Ongoing	**ENBRIDGE TEXAS EASTERN PIPELINE O&M PROGRAM MANAGEMENT | Louisiana, Texas, Mississippi, Arkansas, Missouri** Responsible for environmental review, overall project coordination, and development and oversight of federal, state, and local environmental permit applications for more than 60 operations & maintenance projects along the Texas Eastern pipeline.
2015 – 2016	**UTICA MARCELLUS TEXAS PIPELINE PROJECT | Ohio, Kentucky, Tennessee, Arkansas, Mississippi, Louisiana, and Texas** Protected species lead responsible for all aspects of threatened and endangered species compliance for the Project, which involves conversion of 990 miles of pipeline and 375 miles of new build pipeline. Tasks included coordination with state and federal agencies, report preparation oversight, and technical review of related deliverables. Also served as a Quality Assurance/Quality Control lead for the Project.
2008 - 2015	**MULTIPLE LINEAR PIPELINE PROJECTS – THIRD-PARTY CONTRACTOR TO FERC** Responsible for review of environmental reports, survey reports, and other studies as well as preparation of the corresponding section of the NEPA Environmental Impact Statement. Specific resource areas included water resources, land use, recreation and visual aesthetics, socioeconomics, health and safety, and geological resources.

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**Jonathan McGormley, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**28**
TITLE	**Principal**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**1**
DEGREE(S) / YEARS / SPECIALIZATION		**MS | 1994 | Civil Engineering; BS | 1992 | Civil Engineering**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 43912 | LA | 03/31/2024**		
YEAR REGISTERED	**2019**	DISCIPLINE	**Civil Engineering | NBIS Certified Team Leader and Program Manager**	
Contract role(s) / brief description of responsibilities	Jonathan has 29 years of structural engineering experience specifically in instrumentation and testing, bridge inspections and repair design. He is NBIS Certified Team Leader and Program Manager He is also certified in NHI 130078, NHI 130055. Jonathan will serve as **BRIDGE DESIGN - SAMPLING, INSTRUMENTATION, NDT** for 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.			
07/19 - Ongoing	**DANZIGER LIFT SPAN BRIDGE, US 90, OVER THE INDUSTRIAL CANAL | New Orleans, LA** Project Manager responsible for overseeing the inspection of portions of the lift span contributing to reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the bridge's long-term functionality and reliability. Oversaw the development of a unique monitoring and sensor installation plan, the installation of instrumentation and monitoring equipment, and the creation of a web-accessible reporting platform to evaluate the bridge's operations over an extended period. Assisted with development of plans and specifications to address emergency repairs including the installation of polyester polymer concrete lift span orthotropic deck overlay repairs, replacement of failed pinion bearings, elimination of lift span-to-approach span contact issues, and the improvement of the lift span seating by counterweight movements and air buffer repairs. Bridge monitoring is ongoing.			
05/19 - 08/19 08/20 - Ongoing	**I-255 JEFFERSON BARRACKS BRIDGE OVER THE MISSISSIPPI RIVER, EMERGENCY REPAIRS | Mehlville, MO** Project Manager responsible for emergency repairs and subsequent rehabilitation repair design. Following the discovery of a six-foot-long crack in the steel tie girder during a fracture critical inspection, performed an in-depth inspection of similar details, obtained material samples for laboratory testing, coordinated emergency repairs, oversaw repair installation, and prepared investigation report. Completed bridge rehabilitation plans for the twin, tied-arch structures with construction ongoing.			
03/21 - Ongoing	**LULING BRIDGE DECK OVERLAY REPAIR CONSULTATION | St. Charles Parish, LA** Project Manager responsible for revising the project specifications and providing quality control assistance for the repair of an orthotropic deck overlay system comprising and epoxy underlayment with a SFRC overlay on the cable-stayed spans. Installed a long-term monitoring system to evaluate the performance of the overlay repairs.			
02/19 - Ongoing	**US 90 OVER BAYOU RAMOS | St. Mary Parish, LA** Project Manager leading the investigation of delayed end cracking of precast, prestressed concrete (PPC) girders. The project includes the evaluation of previously collected monitoring data, development of a detailed finite element model to examine crack initiation and repair options, inspection of existing retrofits, laboratory testing of CFRP repairs, and development of a trial retrofit program.			
09/21 – ongoing	**I-10/310 BONNET CARRÉ FIRE DAMAGE REPAIR | St. Charles Parish, LA** Project Manager overseeing the emergency inspection and load rating of the PPC girders, substructures, and bridge deck damaged by fire. Developed repair scope of work and estimated probable construction costs. Preparation of repair drawings and specifications ongoing.			
12/21 - ongoing	**JEFFERSON ST. BASCULE BRIDGE REHABILITATION | Joliet, IL** Project Manager overseeing the rehabilitation of structural, mechanical, and electrical components of this rolling Scherzer lift bridge. Inspection and design work ongoing.			
02/19 - 07/19	**LAKE SHORE DRIVE BRIDGE OVER THE CHICAGO RIVER, GIRDER FRACTURE INVESTIGATION | Chicago, IL** Project Manager leading the investigation, stabilization, and repair installation after the bridge experienced two girder fractures related to corrosion.			

10/18 - 01/19	**SUNSHINE BRIDGE OVER THE MISSISSIPPI RIVER | St. James Parish, LA** Project Manager responsible for the development and implementation of a monitoring plan to provide information regarding redistribution of loads during the installation of repairs to the truss bottom compression chord damaged by impact. Responsible for the design of the jacking system, review of member repair design, site observations, preparation of shop and jacking procedure drawings, field technical assistance, and chord jacking operations oversight.
03/15 – 06/17	**IH-345 INSPECTION, ANALYSIS, AND RETROFIT DESIGN | Dallas, TX** Project Manager for a fracture critical inspection of the 1.6-mile-long steel two-girder structure connecting I-35, I-45, and US 75 with local city streets, visual examination of substructure elements, and a visual and exploratory study of the PT deck. Oversaw instrumentation and field load testing for finite element method model calibration and trial retrofit installations. Developed fatigue retrofit contract documents and provided on-site construction observation and technical support throughout construction.
03/14 – 12/14	**S. HALSTED STREET OVER THE LITTLE CALUMET RIVER | Chicago, IL** Project advisor performing QA/QC for load ratings and gusset plate rehabilitation design to address live load rating concerns for this steel truss bridge.
09/13 – 09/13	**GRAND AVENUE BASCULE BRIDGE | Chicago, IL** Project Engineer for gusset plate condition assessment, load ratings, and preliminary retrofit development for members of this double leaf bascule bridge with inadequate live load capacity.
04/10 – 04/11	**HYLEBOS BRIDGE | Tacoma, WA** Project Engineer conducting the visual inspection of the double-leaf bascule bridge in preparation for its rehabilitation
02/10 – 08/10	**SCHERZER ROLLING LIFT BRIDGES | Joliet, IL** Project Manager for fracture critical inspections, gusset plate load rating, and repair recommendations of three lift bridges over the Illinois River.
03/08 – 06/09	**I-5 COLUMBIA RIVER BRIDGE | Portland, OR** Project Engineer for span balance and counterweight adjustments of lift span bridge. Documented number and location of concrete blocks, cored counterweights to determine voids, oversaw instrumentation of operating rope turnbuckles and pinion shafts, inspected bearings and guide rollers.

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**John Williams, PE**	YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**	
TITLE	**Supervisor**	YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**23**	
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 1996 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 44300 | LA | 09/30/2022**			
YEAR REGISTERED	**2020**	DISCIPLINE	**Mechanical Engineering**	
Contract role(s) / brief description of responsibilities	John is a mechanical Engineer licensed in Louisiana as well as 13 other states and 5 Canadian Provinces. John will serve as **LEAD MECHANICAL ENGINEER** responsible for task orders involving movable bridges for this contract. **John meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 5**			MEETS MINIMUM LADOTD PERSONNEL REQ.
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.			
07/19 - Ongoing	**DANZIGER LIFT SPAN BRIDGE, US 90, OVER THE INDUSTRIAL CANAL | New Orleans, LA** Senior Mechanical Engineer for the inspection of portions of the lift span contributing to reported operational issues, an in-depth inspection of the lift bridge machinery systems, and development of repairs to restore the bridge's long-term functionality and reliability. Assisted with the development of a unique monitoring and sensor installation plan, the installation of instrumentation and monitoring equipment, and the creation of a web-accessible reporting platform to evaluate the bridge's operations over an extended period. Lead the development of plans and specifications to address emergency failed pinion bearing repairs. Performed strain gage testing to measure span balance, implemented weight changes and air buffer repairs to improve seating of the span, and determined through testing that the span drive differentials on both towers were not functioning properly, requiring work with the manufacturer to properly adjust the associated clutchesn-to-approach span contact issues, and the improvement of the lift span seating by counterweight movements and air buffer repairs. Bridge monitoring is ongoing.			
08/15 – Ongoing	**3RD STREET BASCULE BRIDGE OVER ISLAIS CREEK | San Francisco, CA** Project Manager and Lead Mechanical Engineer for the design of a replacement bridge that included new span operating machinery, new span support machinery for the new leaf to be supported by the existing substructure and development of complex construction staging to address constraints for the number and duration of outages for MUNI light rail services. The project started with a detailed scoping inspection including a rating assessment of the structure, mechanical, and electrical systems that identified critical deficiencies leading to the decision to replace the bascule span superstructure in its entirety.			
07/20 – 1/20	**ST. CLAUDE AVENUE BRIDGE CONSTRUCTION ENGINEERING SERVICES | New Orleans, LA** Project Manager and Senior Mechanical Engineer for construction engineering services on an expedited basis to assist with the replacement of the second link pins which connect the counterweight truss to the balance link. Services included balance testing, design of the counterweight support system, development of a sequence of work for supporting the structure, unloading and removing the pins, completing the repairs and restoring the bridge to service within a marine navigation closure that was controlled by repairs to the adjacent lock. Mechanical engineering services were provided on an expedited basis due to the short time-period between the award of the project and the start of the marine navigation closure.			
10/14 – 07/19	**ST. PETERS CANAL SWING BRIDGE REPLACEMENT | Cape Breton, NS, Canada** Project Manager and Engineer of Record overseeing the mechanical and hydraulic machinery design for this new hydraulically operated center bearing swing bridge. Responsibilities included design and backchecking of design calculations, plans preparation and detailing, and preparation of contract specifications and construction cost estimates during design. Responsibilities during construction included coordination of a team of mechanical and electrical engineers and inspectors to review and approve construction submittals and provide complete shop and field inspection of all mechanical/electrical aspects of the rehabilitation project.			

08/08 – 08/18	**COLUMBUS ROAD LIFT BRIDGE | Cleveland, OH** Senior Mechanical Engineer for the rehabilitation project with the objective to maintain the historic character of the structure while significantly reducing maintenance requirements and improving overall system efficiency. A scoping inspection of the mechanical machinery determined suitability for continued long-term service and compliance with current AASHTO code requirements. The new mechanical design provides for complete replacement of all span support machinery, span drive machinery, and span locks.
07/14 – 02/18	**BURLNGTON CANAL LIFT BRIDGE | Hamilton, ON, Canada** Movable Bridge Construction Specialist and Heavy Machinery Specialist for the contractor as part of a major electrical and minor mechanical rehabilitation of this critical vertical lift bridge. The electrical scope of work included complete replacement of the electrical power and control systems for the bridge including an aerial cable installation and skew control of the lift span. The mechanical scope of work included replacement of the high-speed end of the span drive machinery (brakes, speed reducer, shaft, and couplings). The scope of work required the contractor's engineer to sign and seal all submittals including shop drawings
03/10 – 11/17	**SIR AMBROSE SHEA LIFT BRIDGE REPLACEMENT | Placentia, NL, Canada** Project Manager and Mechanical Engineer of Record responsible for the design of span drive machinery, span lock machinery and span support machinery for a new tower drive lift bridge. Duties included preparation and review of all relevant calculations (sized motor, gear tooth strength calculations, sized brakes, shaft calculations for moment and torsion, sized couplings, designed machinery base plates, sized span lock bars, sized span lock and lockbar actuator, performed fatigue analysis of trunnion shaft, and sized trunnion bearings), and preparation of design drawings, specifications, and cost estimates as part of design. During construction, responsibilities included review of contractor's shop drawings and procedures for conformance to contract requirements, disposition of non-conformance reports, and responding to requests for information or changes.
02/04 – 11/13	**MYSTIC BRIDGE REHABILITATION | CONNECTICUT DOT | Groton, CT** Project Manager and Senior Mechanical Engineer for the rehabilitation of the historic single leaf, mechanically operated Brown bascule bridge. The mechanical design included upgrades to the capacity of the span drive machinery and design of a custom vehicular safety barrier gate to rise out of the roadway to protect errant vehicles from entering the waterway with the bridge raised yet remain visually unobtrusive with the bridge seated and open to vehicular traffic. Responsibilities included design and backchecking of design calculations, plans preparation and detailing, and preparation of contract specifications and construction cost estimates.

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**Gareth Rees, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**
TITLE	**Principal**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**51**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 1968 | Electrical Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 40754 | LA | 09/30/2022**			
YEAR REGISTERED	**2016**	DISCIPLINE	**Electrical and Computer Engineering**	
Contract role(s) / brief description of responsibilities	Gareth is an Electrical and Computer Engineer licensed in Louisiana as well as 17 other states, the UK and 6 Canadian Provinces. Gareth will serve as **LEAD ELECTRICAL ENGINEER** responsible for task orders involving movable bridges for this contract. **Gareth meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 6**			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.			
07/19 - Ongoing	**DANZIGER LIFT SPAN BRIDGE, US 90, OVER THE INDUSTRIAL CANAL | New Orleans, LA** Lead Electrical Engineer for the inspection of relevant portions of the main lift span contributing to reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the long-term functionality and reliability of the bridge. Prepared a new lift span skew control system design after the existing Selsyn components were removed from the bridge, developed electrical controls for the clutches with the span drive differentials, and provided recommendations for rehabilitation of the bridge.			
08/15 – Ongoing	**3RD STREET BASCULE BRIDGE OVER ISLAIS CREEK | San Francisco, CA** Senior Electrical Engineer for the design of a replacement bridge that included the design of new electrical power and control systems to be integrated with the MUNI light rail traction power and signal system.			
03/20 – 12/20	**SKEW DETECTION SYSTEM REPLACEMENT ON VERTICAL LIFT BRIDGES | LA** Principal Investigator to review alternatives for skew control, monitoring, and indication for tower drive vertical lift bridges based on effective management of skew and minimizing advanced electronic equipment. The study included a literature review, interviews with current owners and maintainers of vertical lift bridges, and interviews with industry control specialists experienced in skew control systems. As a result of the study, a preferred system of skew control that combines the use of direct skew measurement with an inclinometer for skew monitoring and trip indication, and indirect measurement of skew using encoders for controlling skew during operation was recommended. To minimize maintenance, mean-time-to-repair, and to limit dependency on PLC systems, it was recommended that control integration be achieved using SMART relays (that contain self-diagnostics) that may easily be replaced in the event of an issue.			
03/18 – 02/20	**CHARLES BERRY (ERIE AVE) - LORAIN 6 BASCULE BRIDGE REHABILITATION | Lorain, OH** Movable Bridge Project Coordinator for the rehabilitation of the operating and support systems for this historic double leaf deck truss bascule bridge including complete replacement of the drive machinery and electrical power and controls control systems. Services included review, coordination and integration of the mechanical, electrical, and structural systems, review of all shop drawings for fit-up and constructability; shop inspection of critical components; field oversight during construction for critical assemblies; verification of final alignment of machinery; shop and field acceptance testing of the electrical system installation, commissioning of the installed operating systems, strain gage operational testing and power recordings to confirm satisfactory performance of the newly installed systems, and development of the Operations and Maintenance Manual.			
04/13 – 10/19	**FORT MADISON TOLL BRIDGE | Fort Madison, IA** Engineer of Record and Project Manager for the rehabilitation of this double decker swing span bridge. The first phase was the design of a new aerial and submarine power cable installation, the new installation to be configured as redundant power sources. The design of the submarine cable installation included surveying of the existing submarine cable, routing of the new cable, and designing and specifying the cable. The work also included excavation requirements and developing an approved trenching system. The design and contract documents were developed based on staged construction to satisfy marine, railroad, and highway operations as well as Coast Guard and emergency services with respect to bridge operating outages. Construction services were also performed.			

MEETS MINIMUM LADOTD PERSONNEL REQ.

03/10 – 11/17	**SIR AMBROSE SHEA LIFT BRIDGE | Placentia, NL, Canada** Engineer of Record for the design of a replacement tower drive vertical lift bridge with two duty motors and brakes in each tower and two sets of span locks. The bridge operator's control house is located at roadway level and remote from the bridge with CCTV surveillance and fiber optic communications to the towers. The PCL-based control system was designed with Hot standby redundant PLC's, a human machine interface (HMI), and control console and a redundant fiber optic communications transmission backbone. The electric services are distributed to state-of-the-art intelligent MCC's in each of the bridge towers and have internal communications capabilities and interface directly with the bridge control system PLC for bridge operation, drive monitoring, and data acquisition.
06/14 – 06/16	**EAST ROUNDBUNCH ROAD OVER COW BAYOU | Orange County, TX** Lead Electrical Engineer responsible for designing new drives, controls, and field devices for the span drive machinery and the end wedge machinery as part of a rehabilitation of this historic structure to provide long-term reliable service. Span drive machinery was comprised of components with a proven history of utilization on movable bridges and was powered by an electric motor. Design and integration of new traffic control features, bridge and maintenance lighting, and a CCTV system were also included.
01/14 – 12/14	**HAYSTACK BASCULE BRIDGE OVER PETALUMA RIVER | Petaluma, Canada** Engineer of Record and Lead Electrical Engineer for the relocation, rehabilitation, and reassembly of a single leaf rolling lift bascule railroad bridge. The designed bridge electrical systems consist of modern PLC logic control and flux vector variable frequency drives. The electric service and standby generator for bridge back-up power are located on one side of the navigable channel with the bridge operating system on the other. An under-channel installation was developed to connect the electric service equipment and associated communications to the bridge operating system. The system design included communications, fire life safety system design as well as the integration of the bridge operating system with the railroad train control.
10/10 – 02/12	**PORT SEVERN SWING BRIDGE 60 REHABILITATION | Port Severn, ON, Canada** Lead Electrical Engineer for a bridge inspection, condition survey, engineering analysis and preparation of plans, specifications, and cost estimate.

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**Steven Lauer, PE*, SE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**11**
TITLE	**Supervisor**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2010 | Civil Engineering; BS | 2009 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 062-068057 | IL* | 11/30/2023; SE No. 081-007838 | IL* | 11/30/2022**			
YEAR REGISTERED	**2016**	DISCIPLINE	**Civil Engineering | NBIS Team Leader and Program Manager | SPRAT Level I**	
Contract role(s) / brief description of responsibilities	Steven is a Level I Society of Professional Rope Technicians (SPRAT). He is NBIS Certified Team Leader and Program Manager He is also certified in NHI 130078, NHI 130055. Steven will serve as **LEAD INSTRUMENTATION ENGINEER** for this contract. He will also participate in load ratings, NDE and bridge inspections.			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.			
07/19 - Ongoing	**DANZIGER LIFT SPAN BRIDGE, US 90, OVER THE INDUSTRIAL CANAL | New Orleans, LA** Project Engineer assisting in the development of a unique monitoring and sensor installation plan, the installation of instrumentation and monitoring equipment, and the creation of a web-accessible reporting platform to evaluate the bridge’s operations over time. Monitoring was designed to assess bridge span lift operations and included laser distance devices, linear potentiometers, strain gages, temperature measurements, ultrasonic distance measurements, and Wi-Fi cameras.			
02/22 - Ongoing	**LULING BRIDGE DECK OVERLAY REPAIR CONSULTATION | St. Charles Parish, LA** Project Engineer assisting with the development of a long-term monitoring system to evaluate the performance of the repairs the orthotropic deck overlay system comprising and epoxy underlayment with a SFRC overlay on the cable-stayed spans.			
01/21 - Ongoing	**WASHINGTON AVE BRIDGE OVER THE MISSISSIPPI RIVER | Minneapolis, MN** Project Engineer responsible for finite element modeling of the bridge structure, load rating, and the design and installation of the instrumentation system capable of recording strain, displacement, rotation, and temperature. Various scan rates record structure behavior during daily and long-term thermal cycles and live load events. The double-deck bridge has a pedestrian level, and the vehicular level was retrofitted to include light rail transit by adding trusses between the original girders and now has bearing seat distress.			
08/21 - Ongoing	**BLACKHAWK BRIDGE CARRYING IOWA 9 OVER THE MISSISSIPPI RIVER | Lansing, IA** Project Manager responsible for the wireless pier monitoring instrumentation system. Data is remotely accessed and presented on a website for the owner. This work followed our routine, in-depth, element-level, fracture critical, inspections that included ultrasonic testing (UT) of pins for the three truss spans and approach spans. An inspection report and repair recommendations were developed.			
06/21 - 04/22	**SR 62 OVER PIGEON CREEK | Evansville, IN** Project Engineer responsible for bearing pad inspection and corresponding instrumentation system designed to aid in determining the cause of walking elastomeric bearings.			
10/19 – 11/21	**SHERMAN MINTON BRIDGE - I-64 OVER THE OHIO RIVER | New Albany, IN** Project Engineer for instrumentation and monitoring, crack arrest hole retrofit installation, and Team Leader of fracture critical and routine inspections of truss members using rope-access and structure climbing techniques of the double-deck bridge having tied arch trusses as the main spans and an approach span combination of deck/through trusses.			
05/21 – 10/21	**I-40 HERNANDO DESOTO BRIDGE, EMERGENCY REPAIRS | Memphis, TN** Project Engineer assisting the contractor in the tie girder fracture repairs for the I-40 Bridge, which was closed due to a partial section fracture. Installed emergency instrumentation utilizing rope-access techniques, mobilizing personnel and equipment to have a working web-accessible system with over 25 sensors functional in a week. Participated in the development of measurement and reporting procedures to be used during tensioning and de-tensioning of the temporary jacking system used for the tie girder repairs.			

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**Curtis Schroeder, PhD, PE*, SE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**
TITLE	**Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**8**
DEGREE(S) / YEARS / SPECIALIZATION	**PhD | 2018 | Civil Engineering; MS | 2011 | Civil Engineering; BS | 2009 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 44013 | WI* | 07/2022; SE No. 081.008638 | IL* | 11/30/2022**			
YEAR REGISTERED	**2015**	DISCIPLINE	**Civil Engineering | Level II NDT Ultrasonic Technician | Level II NDT Magnetic Particle Testing**	
Contract role(s) / brief description of responsibilities	Curtis is and AWS Certified Welding Inspector. He is also certified in NHI 130078, NHI 130055. Curtis will serve as **LEAD NONDESTRUCTIVE TESTING OF STEEL ELEMENTS** focusing on phased array UT (PAUT) and MT for this contract. He will also participate in sampling, bridge inspection, load rating, and development of welding procedures.			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.			
11/21 – ongoing **06/19 – 07/20**	**PURDUE-FORT WAYNE PEDESTRIAN BRIDGE | Fort Wayne, IN** Project Engineer assisting with UT and PAUT inspection of CJP welds, review of repair design calculations, load rating, and visual, MT, and UT inspection of repairs for this cable stay bridge.			
01/21 – ongoing	**CHICAGO SKYWAY BRIDGE | Chicago, IL** Project Engineer assisting with visual inspection and load rating of primary members and gusset plates on steel deck truss bridge and steel piers.			
11/21 – 02/22	**SUSQUEHANNA RIVER RAILROAD BRIDGE | Havre de Grace, MD** Project Engineer assisting with UT and PAUT inspection of 45 pinned connections of deck truss railroad bridge with known defect indications.			
05/21 – 01/22	**SR 66 OVER I-64 | Carefree, IN** Team leader for special inspection of bridge containing 18 pinned hinge connections, including visual inspection, ultrasonic testing (UT), and magnetic particle testing (MT). Assisted with development and implementation of repairs for cracked pin plate fillet welds.			
09/21 – 12/21	**WATER STREET BRIDGE | Pittston, PA** Project Engineer for the the UT of ten transfer pins in steel through-truss bridge.			
08/21 – 10/21	**BLACK HAWK BRIDGE | Lansing, IA** Project Engineer responsible for UT and PAUT of 21 pinned connections in a steel through truss and suspended spans. Assisted with fracture critical inspection of steel through-truss spans.			
07/21 – 08/21	**I-40 HERNANDO DESOTO BRIDGE, EMERGENCY REPAIRS | Memphis, TN** Project Engineer for the fracture investigation of a tie girder fabricated using T-1 steel in one of two tied arches. Performed UT, PAUT, and wet fluorescent MT of removed fracture specimen and steel cores. Performed QA verification of PAUT inspection procedure.			
03/21 – 08/21 **05/19 – 09/19**	**JEFFERSON BARRACKS BRIDGE | St. Louis, MO** Project Engineer for the fracture critical inspection of the twin tied-arch bridges over the Mississippi River. Performed PAUT and MT inspection of tie girder welds during emergency repair work to estimate extent and size of cracking. Performed inspection of welded repairs as a certified welding inspector (CWI), assisted with follow-up MT inspection of tie girder welds, and reviewed weld repair design for rehabilitation project.			
05/21 – 08/21 **09/19 – 11/19**	**BURLINGTON-BRISTOL BRIDGE SHEAVE INSPECTIONS | Burlington, NJ** Project Engineer performing PAUT of surface indications on thrust face of vertical lift bridge cast sheave and wet fluorescent MT inspection of cast sheaves. Assisted with development of repair recommendations.			

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**Mohamed ElBatanouny, PhD, PE***		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**7**
TITLE	**Supervisor**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**5**
DEGREE(S) / YEARS / SPECIALIZATION	**PhD | 2012 | Civil Engineering; MS | 2010 | Civil Engineering; BS | 2008 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. P24910 | IA* | 12/2023; SE No. 081.008166 | IL* | 11/30/2022**			
YEAR REGISTERED	**2018**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Mohamed serve as **LEAD NONDESTRUCTIVE TESTING OF CONCRETE ELEMENTS** for this contract. He will also serve as an instrumentation engineer for structural monitoring and load testing task orders.			

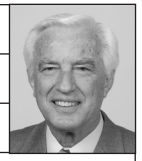
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
04/19 - Ongoing	**PERFORMANCE EVALUATION OF POLYESTER POLYMER CONCRETE OVERLAYS | Iowa DOT | Statewide, IA** Project Manager responsible for inspection and condition documentation of two bridge decks using visual inspection, GPR, half-cell potential, impact echo, sounding, and material testing. The project included construction observation, assistance, and acceptance testing (rebound hammer and pull-off testing) during installation of the first polyester polymer overlays on Iowa DOT bridges. Follow-up inspections, every 2 years, and service life analysis are also being completed.
01/21 - Ongoing	**CONDITION ASSESSMENT OF APPROACH SLABS | South Dakota DOT, Statewide, SD** Project Manager responsible for inspection and condition documentation of 15 bridge approach slabs using visual inspection, GPR, and elevation surveys. Also included is an assessment of differential settlement at the approach slabs.
07/19 - Ongoing	**DANZIGER LIFT SPAN BRIDGE, US 90, OVER THE INDUSTRIAL CANAL | New Orleans, LA** Project Engineer assisting in the development of a unique monitoring and sensor installation plan, the installation of instrumentation and monitoring equipment, and the creation of a web-accessible reporting platform to evaluate the bridge's operations over time. The monitoring was designed to assess bridge span lift operations and included laser distance devices, linear potentiometers, strain gages, temperature measurements, ultrasonic distance measurements, and WiFi cameras. Assisted with the development of specifications for the installation of polyester polymer concrete lift span orthotropic deck overlay repairs.
02/22 - Ongoing	**LULING BRIDGE DECK OVERLAY REPAIR CONSULTATION | St. Charles Parish, LA** Project Engineer responsible for providing quality control assistance for the repair of an orthotropic deck overlay system comprising and epoxy underlayment with a SFRC overlay on the cable-stayed spans. Developed and installed a long-term monitoring system to evaluate the performance of the overlay repairs.
06/21 – 08/21	**NONDESTRUCTIVE EVALUATION OF INDUSTRIAL EQUIPMENT FOUNDATION | IN** Project Manager responsible for inspection and condition documentation of industrial equipment foundations to detect voiding condition using NDT methods including ultrasonic pulse velocity (UPV) and ultrasonic shear-wave tomography.
09/16 –12/21	**JAMES K. POLK BUILDING | Nashville, TN** Project Manager responsible for the long-term acoustic emission and vibration monitoring of post-tension wire breaks.
05/18 – 10/20	**SHIP CHANNEL BRIDGE | Houston, TX** Project Engineer to monitor girder movement in existing bridge.
12/18 – 02/19	**CHICAGO PUBLIC SCHOOL DISTRICT | Chicago, IL** Project Engineer participating in the structural condition assessment; instrumentation and load testing of reinforced concrete roofs.
10/18 – 01/19	**SUNSHINE BRIDGE | St. James Parish, LA** Project Engineer for the development and implementation of a monitoring plan to provide information regarding redistribution of loads during the installation of repairs to the truss bottom compression chord damaged by impact. Assisted with field technical assistance and chord jacking operations oversight.

FIRM EMPLOYED BY	**Wiss, Janney, Elstner Associates, Inc.**			
NAME	**Leonard Phelps**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**37**
TITLE	**Supervisor**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**8**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 1991 | Chemistry; BS | 1979 | Chemistry; BS | 1979 | Biology**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**			
YEAR REGISTERED	**2021**	DISCIPLINE	**SSPC (AMPP) Certified Protective Coatings Specialist No. 2021-014-012 | 12/31/2025**	
Contract role(s) / brief description of responsibilities	Leonard will serve as the **PRIMARY COATING INSPECTOR** for 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.
04/21 – 11/21	**PACIFIC HIGHWAY LAND PORT OF ENTRY ENVELOPE RENOVATION | Blaine, WA** Lead Chemist, as part of the building envelope upgrade, provided project advice regarding the coating specification, minimum adhesion rating for tests on canopy coating, coating tape adhesion test results, and coating submittals.
08/21 - Ongoing	**I-255 JEFFERSON BARRACKS BRIDGE OVER THE MISSISSIPPI RIVER, EMERGENCY REPAIRS | Mehlville, MO** The twin structures consist of a main span 910-ft long tied-arch structure with a steel box arch and a 12-foot-deep steel I-shaped tie girder. WJE completed bridge rehabilitation plans for both structures with construction ongoing. As Lead Chemist, assisted with bridge cable specification development and guidance regarding metalizing of the hanger cables that have experienced corrosion in the splash zone. The specification included trial testing to determine the proper blast media to prepare the surface without substantially removing the existing galvanized coating.
04/15 – 09/16	**I-20/I-55 BRIDGE OVER THE PEARL RIVER, FATIGUE RETROFITS | Jackson, MS** The twin I-20/I-55 structures consist of precast prestressed concrete girder approach spans and a 3-span continuous welded plate girder river crossing with a maximum span length of 130 ft. MDOT retained WJE to develop and install fatigue retrofits to address distortion-induced cracking and to correct observed section loss in the girders at the abutments. As Lead Chemist, provided guidance for the surface preparation which included coatings containing lead and painting of the bridge repairs. Also advised on bridge coating repair issues including the removal of a holding primer prior to the application of a permanent coating system.
10/11 – 03/14	**AIRPORT COOLING TOWER | Confidential Client** Blistering and delamination of the polyurethane-based liner from interior concrete surfaces of upper and lower precast concrete cells of a cooling tower prompted a field investigation of the liner system, which included observations of the liner, sealant, and panel-to-panel conditions, as well as measurement of in-wall concrete relative humidity, determination of liner adhesion and coating thickness measurements. Samples of the liner and concrete substrate were also obtained and reserved for laboratory studies by Mr. Phelps. Laboratory studies of selected samples included visual, microscopic, and petrographic examinations; analyses by SEM/EDS; and analyses by infrared spectroscopy, and x-ray diffraction. Studies for acid-soluble chloride contents and conformational coating thickness were also conducted. The primary contributing cause to these delaminations was exposure of water to the backside of the liner at open, breached, weathered, and split sealant joints. Water at the backside interface can move past the backer rod to the sealant and create breaches in the sealant joints by freezing/ice jacking. Irregularities associated with installation techniques and methods may also contribute to the formation of mid-field blisters. Drawings and specifications were prepared to remediate the failed coating.
06/11 - 04/14	**REEDS ISLAND BRIDGE | Hilo, HI** Primary Coating Inspector and Lead Chemist to prepare specifications for preparation and shop painting of new galvanized steel, and for the painting and repair of site elements in a damp, wet environment due to average rainfall of about 130 inches of rain per year and waterway below. Led efforts to perform site inspections of shop and field surface preparation and coating application. The field coating application was in a wet environment due to frequent Hilo rainfall, and waterway below.

FIRM EMPLOYED BY	**GeoEngineers, Inc.**			
NAME	**David Sauls, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**26**
TITLE	**Senior Principal Geotechnical Engineer | QA/QC**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**10**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 1984 | Civil Engineering; BS | 1982 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 23270 | LA | 03/31/2023**			
YEAR REGISTERED	**1989**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	David will serve as a **GEOTECHNICAL ENGINEER** for this contract. David has more than 30 years of experience providing services on transportation-related projects and extensive experience working with the LA DOTD including the U.S. 165, Pollock to Tullos project and various timed projects for numerous private consultants. He has been the engineer of record in the production of many LA DOTD profile and laboratory data programs. David's role in these projects required project supervision and quality control in the generation of the field data as well as laboratory testing assignments and techniques. David is aware of the budget and schedule requirements for LA DOTD-related activities and has met such conditions in the past. David currently serves as frequent guest speaker to the Louisiana State University civil engineering department and previously was an adjunct professor for the instruction of Civil Engineering 4300 Foundation Design. He is an active member with numerous technical and professional societies, both locally and statewide. He is an author and co-author of seven technical papers regarding the soil behavior and deformation characteristics of numerous geotechnical foundation studies. **David meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 9**
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
07/19 - ongoing	**I-10/LOYOLA INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Kenner, LA** QA. David is performing the geotechnical quality assurance during this design-build project that will increase traffic capacity and alleviate congestion on Loyola Drive at the I-10 interchange in the New Orleans area.
06/18 – 07/19	**PLANK ROAD RELOCATION | City-Parish of East Baton Rouge | Baton Rouge, LA** Performed geotechnical exploration and laboratory testing for the City of Baton Rouge. New runways at the Baton Rouge Metropolitan Airport necessitated the relocation of Plank Road. David provided bridge and piling design as well as pavement design recommendations based on geotechnical investigation results.
08/17 – 11/20	**I-10 WIDENING (HIGHLAND TO LA-73) DESIGN BUILD, OV/QA | LADOTD S.P. H.009250 | Baton Rouge, LA** David was the Managing Principal for GeoEngineers' OV/QA role in this highly-anticipated I-10 project that involves widening a 6.5-mile segment of I-10 from four lanes to six lanes between Highland Road and LA-73.
04/15 – 11/17	**US-90/LA-318 INTERCHANGE DESIGN-BUILD | LADOTD S.P. H.004932 | Baton Rouge, LA** David completed the QA during this project in support of the proposed Interchange on US90 at LA318. His team completed the geotechnical design including drilling, log review, test assignments, pile design, settlement analysis, embankment monitoring, and embankment design. Conducted extensive settlement modeling to demonstrate that the aggressive schedule for this project can be met along with modeling driving in the wave equation analyses (WEAP). Conducted PDA/CAPWAP testing to keep the schedule progressing during construction.
09/12 – 04/15	**I-210 AT COVE LANE INTERCHANGE | LADOTD S.P. H.010151 | Lake Charles, LA** David completed the QA during this fast-track design and construction project in support of the proposed Interchange on I-210 at Cove Lane. He completed engineering analyses and provided recommendations for design and construction of about 8,000 driven pile foundations, MSE walls, and wick-drain/surcharge design to reduce post-construction embankment settlement, in accordance with AASHTO LRFD specifications for highway bridges. He monitored MSE wall construction, provided PDA evaluation of the piles during installation, and installed liquid settlement sensors to monitor embankment settlement.
01/10 – 12/12	**I-12 WIDENING (AMITE RIVER TO JUBAN ROAD) DESIGN BUILD | LADOTD S.P. 454-02-0071 | Denham Springs, LA** Managing Principal for this design build project. GeoEngineers completed engineering analyses and provided recommendations for design and construction of driven pile foundations for four bridge structures in accordance with AASHTO LRFD specifications for highway bridges, which included PDA/CAPWAP monitoring.

FIRM EMPLOYED BY	**GeoEngineers, Inc.**			
NAME	**James M. Aronstein, Jr., PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**52**
TITLE	**Principal Geotechnical Engineer | Principal**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**5**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 1965 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 11794 | LA | 03/31/2023; PLS No. 458 | LA | 03/31/2023**			
YEAR REGISTERED	**1969**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	James "Jim" will serve as a **GEOTECHNICAL ENGINEER** for this contract. He has provided geotechnical services on private, industrial, and public facilities since 1969, with extensive, significant expertise in the transportation industry. He has been the EOR for the majority of GeoEngineers' Louisiana road and bridge projects over the past 30 years, including LADOTD statewide retainer contracts for geotechnical investigations and project-specific programs. His projects include the I-210 at Cove Lane Interchange; I-49/US90 Widening over LA182 and BNSF Railroad Design-Build; 37-mile extension of I-49 North through Louisiana, I-220 to the Arkansas state line; Rigolets Pass Bridge project on US 90; numerous off-system bridge sites for LADOTD through local consultants; and work on the East Baton Rouge Parish Green Light roads and streets improvements plan. Jim's role has involved managing and executing engineering analyses and reports, field exploration, site access, drilling technology evaluation, exploration conduct, laboratory test assignments, and quality control of the generated work product. **Jim meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 9** 
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
01/19 - ongoing	**I-10/LOYOLA INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Kenner, LA** GeoEngineers is completing the geotechnical exploration, testing and engineering for this high-profile project in Kenner that will ultimately improve the Loyola Drive interchange to increase operational efficiency and traffic capacity. Jim is serving as Principal-in-Charge.
05/18 - ongoing	**I-20/I-220 (BARKSDALE AFB) DESIGN BUILD, OV/QA | LADOTD S.P. H.003370 | Bossier Parish, LA** Principal-in-Charge for GeoEngineers' OV/QA role in this design-build project which involves interchange improvements that will increase access to the Barksdale Air Force Base in Bossier Parish.
08/17 – 11/20	**I-10 WIDENING (HIGHLAND TO LA-73) DESIGN BUILD, OV/QA | LADOTD S.P. H.009250 | Baton Rouge, LA** Principal-in-Charge for GeoEngineers' OV/QA role in this highly-anticipated I-10 project that involves widening a 6.5-mile segment of I-10 from four lanes to six lanes between Highland Road and LA-73.
04/15 – 11/17	**US-90/LA-318 INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Baton Rouge, LA** Principal-in-charge during this project in support of the proposed Interchange on US90 at LA318. Performed the geotechnical design including drilling, log review, test assignments, pile design, settlement analysis, embankment monitoring, and embankment design. Conducted extensive settlement modeling to demonstrate that the aggressive schedule for this project can be met along with modeling driving in the wave equation analyses (WEAP). Conducted PDA/CAPWAP testing to keep the schedule progressing during construction.
02/13 – 04/13	**I-49/US90 WIDENING OVER LA182 AND BNSF RAILROAD | S.P. H.010620 | Lafayette, LA** Principal-in-charge in conducting bridge and roadway borings, and laboratory tests in support of design of this bridge and roadway widening project located just south of Lafayette. GeoEngineers completed 119 borings for the project on a fast-track schedule utilizing multiple drill rigs to meet the deadline.
08/12 – 04/15	**I-210 AT COVE LANE INTERCHANGE | LADOTD S.P. H.010151 | Lake Charles, LA** Principal-in- charge during this fast-track design and construction project in support of the proposed Interchange on I-210 at Cove Lane. Completed engineering analyses and provided recommendations for design and construction of about 8,000 driven pile foundations, MSE walls, and wick-drain/surcharge design to reduce post-construction embankment settlement, in accordance with AASHTO LRFD specifications for highway bridges. Monitored MSE wall construction, provided PDA evaluation of the piles during installation, and installed liquid settlement sensors to monitor embankment settlement.

FIRM EMPLOYED BY	**GeoEngineers, Inc.**			
NAME	**Larry Sant, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**20**
TITLE	**Associate Geotechnical Engineer | Project Manager**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**2**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2001 | Civil Engineering; BS | 2001 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 35625 | LA | 09/30/2022**			
YEAR REGISTERED	**2010**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Larry will serve as a **GEOTECHNICAL ENGINEER** for this contract. He is a senior geotechnical engineer with over two decades of experience managing geotechnical engineering projects. His experience includes project planning and technical direction during exploration, laboratory testing, engineering design analyses, report preparation and construction monitoring. Larry has been involved in hundreds of projects including roadways ranging from highways to private access drives, airports, bridges, dams, university and K-12 schools, wastewater treatment plants, drainage facilities, utility projects, and other structures ranging from private residences to large public and private facilities. **Larry meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 9**			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.			
01/19 - ongoing	**I-10/LOYOLA INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Kenner, LA** Project Manager for the geotechnical exploration, testing and engineering for this high-profile project in Kenner that will ultimately improve the Loyola Drive interchange to increase operational efficiency and traffic capacity.			
05/18 - ongoing	**I-20/I-220 (BARKSDALE AFB) DESIGN BUILD, OV/QA | LADOTD S.P. H.003370 | Bossier Parish, LA** Project Manager for GeoEngineers’ OV/QA role in this design-build project which involves interchange improvements that will increase access to the Barksdale Air Force Base in Bossier Parish.			
08/17 – 11/20	**I-10 WIDENING (HIGHLAND TO LA-73) DESIGN BUILD, OV/QA | LADOTD S.P. H.009250 | Baton Rouge, LA** Project Manager for GeoEngineers’ OV/QA role in this highly-anticipated I-10 project that involves widening a 6.5-mile segment of I-10 from four lanes to six lanes between Highland Road and LA-73.			
04/15 – 11/17	**US-90/LA-318 INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Baton Rouge, LA** Project Manager during this design-build project in support of the proposed Interchange on US90 at LA318. He lead the geotechnical design including drilling, log review, test assignments, pile design, settlement analysis, embankment monitoring, and embankment design. We also conducted extensive settlement modeling to demonstrate that the aggressive schedule for this project can be met along with modeling driving in the wave equation analyses (WEAP). During construction we conducted PDA/CAPWAP testing to keep the schedule progressing.			
02/13 – 04/13	**I-49/US90 WIDENING OVER LA182 AND BNSF RAILROAD | LADOTD S.P. H.010620 | LAFAYETTE, LA** Project Manager conducting bridge and roadway borings, and laboratory tests in support of design of this design build widening project located just south of Lafayette. GeoEngineers completed 119 borings for the project on a fast-track schedule utilizing multiple drill rigs to meet the deadline.			
08/12 – 04/15	**I-210 AT COVE LANE INTERCHANGE | LADOTD S.P. H.010151 | Lake Charles, LA** Project Manager during this fast-track design and construction project. Completed engineering analyses and provided recommendations for design and construction of about 8,000 driven pile foundations including modeling driving in the wave equation analyses (WEAP), MSE walls, and wick-drain/surcharge design to reduce post-construction embankment settlement, in accordance with AASHTO LRFD specifications for highway bridges. Monitored MSE wall construction, provided PDA/CAPWAP evaluation of the piles during installation, and installed liquid settlement sensors to monitor embankment settlement.			
01/10 – 12/12	**I-12 WIDENING (AMITE RIVER TO JUBAN ROAD) DESIGN BUILD | LADOTD S.P. 454-02-0071 | Denham Springs, LA** Project Manager during this design build project. Completed engineering analyses and provided recommendations for design and construction of driven pile foundations for four bridge structures in accordance with AASHTO LRFD specifications for highway bridges, which included PDA/CAPWAP monitoring.			

FIRM EMPLOYED BY	**GeoEngineers, Inc.**			
NAME	**Cody Hatch, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**6**
TITLE	**Geotechnical Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2014 | Civil Engineering; BS | 2013 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 42346 | LA | 09/30/2022**			
YEAR REGISTERED	**2018**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	Cody will serve as a **GEOTECHNICAL ENGINEER** for this contract. He is a geotechnical engineer with experience in many types of transportation projects from small road improvements to mega design-builds. He also has experience working on industrial facilities, pipelines, and coastal marsh and marine infrastructure. Cody's capabilities include site investigations and scoping; field exploration, and boring log creation; laboratory test assignments and laboratory data interpretation; pavement design; pile and deep foundation design; dynamic pile testing and interpretation; and preparing and presenting reports.
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
01/19 - ongoing	**I-10/LOYOLA INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Kenner, LA** GeoEngineers is completing the geotechnical exploration, testing and engineering for this high-profile project in Kenner that will ultimately improve the Loyola Drive interchange to increase operational efficiency and traffic capacity. Cody is part of the team as a geotechnical engineer.
05/18 - ongoing	**I-20/I-220 (BARKSDALE AFB) DESIGN BUILD, OV/QA | LADOTD S.P. H.003370 | Bossier Parish, LA** GeoEngineers' OV/QA role in this design-build project involves interchange improvements that will increase access to the Barksdale Air Force Base in Bossier Parish. Cody is part of the team as a geotechnical engineer.
08/17 – 11/20	**I-10 WIDENING (HIGHLAND TO LA-73) DESIGN BUILD, OV/QA | LADOTD S.P. H.009250 | Baton Rouge, LA** GeoEngineers' OV/QA role in this highly-anticipated I-10 project involves widening a 6.5-mile segment of I-10 from four lanes to six lanes between Highland Road and LA-73. Cody is part of the team as a geotechnical engineer.
04/15 – 11/17	**US-90/LA-318 INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Baton Rouge, LA** Cody was part of the geotechnical engineering team during this design-build project in support of the proposed Interchange on US90 at LA318. Cody contributed to geotechnical design including drilling, pile design, settlement analysis, embankment monitoring, and embankment design.
08/12 – 07/15	**I-210 AT COVE LANE INTERCHANGE | LADOTD S.P. H.010151 | Lake Charles, LA** Cody was part of the geotechnical engineering team during this fast-track design and construction project in support of the proposed Interchange on I-210 at Cove Lane. GeoEngineers' completed engineering analyses and provided recommendations for design and construction of about 8,000 driven pile foundations including modeling driving in the wave equation analyses (WEAP), MSE walls, and wick-drain/surcharge design to reduce post- construction embankment settlement, in accordance with AASHTO LRFD specifications for highway bridges. In addition, the GeoEngineers' team monitored MSE wall construction, provided PDA/CAPWAP evaluation of the piles during installation, and installed liquid settlement sensors to monitor embankment settlement.

FIRM EMPLOYED BY	**GeoEngineers, Inc.**			
NAME	**Wendy Allen**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**4**
TITLE	**Laboratory Manager**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**28**
DEGREE(S) / YEARS / SPECIALIZATION	**N/A**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**			
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	
Contract role(s) / brief description of responsibilities	Wendy will serve as a **GEOTECHNICAL LABORATORY MANAGER** for 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.
02/20 - Ongoing	**P3 BELLE CHASSE BRIDGE AND TUNNEL REPLACEMENT; PLAQUEMINES PARISH, LA** GeoEngineers is providing geotechnical services along with subsurface exploration borings and laboratory testing for the P3 Bridge and Tunnel Replacement project in Plaquemines Parish, Louisiana. Wendy is involved with the laboratory testing and all reporting.
08/19 - Ongoing	**I-10 WIDENING (LOUISE STREET TO I-110) | LADOTD | Baton Rouge, LA** GeoEngineers is providing geotechnical explorations and laboratory testing for the widening of westbound Interstate 10 (I-10) from the Louise Street exit to just south of the I-10/I-110 split in Baton Rouge, Louisiana. Wendy is overseeing all laboratory testing and reporting on this project.
01/19 - ongoing	**I-10/LOYOLA INTERCHANGE DESIGN BUILD | LADOTD S.P. H.004932 | Kenner, LA** GeoEngineers is completing the geotechnical exploration, testing and engineering for this high-profile project in Kenner that will ultimately improve the Loyola Drive interchange to increase operational efficiency and traffic capacity. Wendy is conducting the laboratory and testing for this project.
04/19 – 02/20	**CADDO LAKE BRIDGE GT EVALUATION | LADOTD | Caddo Parish, LA** GeoEngineers provided geotechnical explorations and laboratory testing for approximately 2,500 lineal feet of new bridge with 23 bents including the two abutments located on LA 1 in Caddo Parish, Louisiana. Wendy oversaw all laboratory testing and reporting for this project.
01/11 - 10/14	**GULF INTRACOASTAL WATERWAY (GIWW – WORLD’S LARGEST PUMP STATION) | Belle Chasse, LA** Prior to GeoEngineers, Wendy supported Fugro Consultants with the laboratory testing and reporting for the geotechnical services for the Gulf Intracoastal WaterWay Pump Station in Belle Chasse, Louisiana. Wendy assisted with testing and conducted all technician reports as well as all USACE forms.
01/11 - 10/14	**ENTERGY NINEMILE POINT | Westwego, LA** Prior to GeoEngineers, Wendy supported Fugro Consultants with the laboratory testing and reporting for the geotechnical services for the NineMile Point in Westwego, Louisiana. Wendy assisted with testing and conducted all technician reports as well as all USACE forms.

FIRM EMPLOYED BY	**Meyer Engineers, Ltd.**				
NAME	**Alfonso Romero, NCARB**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**1**	
TITLE	**Architect**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**34**	
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 1985 | Architecture**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**NCARB No. 9367 | LA | 12/31/2022**			
YEAR REGISTERED	**2020**	DISCIPLINE	**Architecture**		
Contract role(s) / brief description of responsibilities	Alfonso will serve as a **BRIDGE DESIGN ARCHITECT** for 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.				
01/22 - Ongoing	**CAUSEWAY BRIDGE BASCULE BRIDGE TENDER'S HOUSE | Jefferson Parish, LA** Project Manager for the rehabilitation of the upper two levels of the Bridge Tender's House. The work consists of removing and replacing all existing windows at the operator's level with new impact resistant glazing, reconfiguring one of the windows into an impact resistant, operable door to allow direct access to the catwalk outside, painting all interior surfaces, removing and replacing existing flooring, removing and replacing all furniture/millwork with new construction, providing better lighting, upgrading the air conditioning, recovering the existing roof surface, repairing the access ladder to the roof and installing new safety railings, and patching and repairing any structural damage. Construction Cost: $226K.				
02/21 – Ongoing	**SKELLY RUPP STADIUM REPAIRS | Orleans Parish, LA** Project Manager responsible for review of the conditions of the facility and investigated the required scope of work to make the entire stadium and sports facility to be operational, compliant with building codes, and LSHAA standards due to damage from Hurricane Katrina. The work included parking lot resurfacing, striping, stormwater drainage, signage, repair and prevent soil subsidence, compliance with ADA, lighting, and perimeter fencing with entry gates. The stadium improvements consist of repair and replacement of the aluminum bleacher/stand, press box, handicap ramps, bleacher entry steps, roof, structural repairs, improved lighting and sound system, electrical controls to the sports facility and restoring connections and operations of the score board, air conditioning in the press box. Also renovate and refurbish all restrooms, concession stand, ticket booth, offices, including repairs to roof and roofing, masonry repairs and cleaning, interior refinishing, replacing code compliant drinking water fountains, exterior grounds and facilities. The project is FEMA funded. Construction Cost: $1.7M.				
02/21 – Ongoing	**FREDERICK SIGUR CIVIC CENTER ROOF REPLACEMENT – BALLROOM | Orleans Parish, LA** Project Manager for completion of the Roof Site Observation Report on the current conditions of the existing roof on the building that was caused by Hurricane Zeta in October 2020. The project consists of removing the 22,900 SF existing modified bitumen roofing assembly over the ballroom at the Frederick Sigur Civic Center. The work includes the installation of modified bitumen roof assembly over lightweight insulating concrete metal deck. In addition to addressing the roof leaks, the project includes various work that is or may be required to correct damage to the existing structure due to the long-term effects of the roof leaks. The project is FEMA funded. Construction Cost: $403K.				
07/21 – Ongoing	**JACKSON BARRACKS 141ST ROOF REPLACEMENT | Jefferson Parish, LA** Project Manager responsible for preparing a site assessment of the facility to propose what direction is required for the existing roof. The project consists of 3,500 SF of retrofit roof to repair water leakage into the building. Construction Cost: $276K.				

FIRM EMPLOYED BY	**Forte and Tablada, Inc.**			
NAME	**Joffrey Easley, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**14**
TITLE	**Project Manager**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**3**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2003 | Civil Engineering; BS | 2000 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 31542 | LA | 03/31/2023**			
YEAR REGISTERED	**2004**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Joffrey will serve as **BRIDGE DESIGN ENGINEER** for 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.
03/18 - Ongoing	**LADOTD RETAINER CONTRACT FOR OFF-SYSTEM BRIDGE LOAD RATING | LADOTD | Statewide, LA** Project Manager/Load Rating Engineer/Team Leader for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 – Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
01/21 - 09/21	**LADOTD RETAINER FOR BRIDGE PRESERVATION - US 90Z: WESTBANK EXPRESSWAY REHAB | LADOTD | Jefferson Parish, LA** Project Manager who developed plans for the rehabilitation of the nearly 6-mile long Westbank Expressway in Jefferson Parish, LA.
10/15 - 04/19	**LADOTD RETAINER CONTRACT FOR BRIDGE PRESERVATION – ATCHAFALAYA FLOODWAY | LADOTD | LA** Project Manager who provided engineering services for the rehabilitation of multiple bridges along I-10 between Baton Rouge and Lafayette. Bridge types included PPC and steel girder spans, steel grid deck, and slab spans. Scope of work included performing a detailed inspection, documenting deficiencies, and preparing rehabilitation plans for all bridge
04/19 - 08/19	**LADOTD LOAD RATING OF ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** Load Rating Engineer for over 200 slab span and girder bridges across Louisiana. Joffrey utilized Virtis load rating software.
05/16 - 10/19	**LADOTD RETAINER CONTRACT FOR COMPLEX BRIDGE RATING | LADOTD | Statewide, LA** Project Manager who provided engineering services for the rehabilitation of multiple bridges along I-10 between Baton Rouge and Lafayette. Bridge types included PPC and steel girder spans, steel grid deck, and slab spans. Scope of work included performing a detailed inspection, documenting deficiencies, and preparing rehabilitation plans for all bridge
06/16 - 04/20	**ST. TAMMANY PARISH OFF-SYSTEM BRIDGE LOAD RATINGS | St. Tammany Parish, LA** Project Manager who collected all available bridge files from all available resources, including LADOTD and Parish records, for numerous slab span, girder, and railcar bridges in St. Tammany Parish and perform inspections and load ratings for the bridges
11/16 - 10/20	**LIVINGSTON PARISH OFF-SYSTEM BRIDGE LOAD RATINGS | Livingston Parish, LA** Project Engineer. Joffrey performed inspection and load rating of numerous existing slab span bridges and culverts so that Livingston Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated.
04/18 - 09/18	**TANGIPAHOA PARISH OFF-SYSTEM BRIDGE LOAD RATINGS | Tangipahoa Parish, LA** Project Engineer. Joffrey performed inspection and load rating of 2 railroad flatcar bridges and a slab span bridge to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.

FIRM EMPLOYED BY	**Forte & Tablada, Inc.**			
NAME	**Russell "Joey" Coco, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**14**
TITLE	**President/CEO**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**6**
DEGREE(S) / YEARS / SPECIALIZATION	**Coastal Engineering Certificate | 2008; MBA | 2006; BS | 2000 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 31337 | LA | 09/30/2022**			
YEAR REGISTERED	**2004**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Joey will serve as **SURVEYOR** for 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.
03/18 - Ongoing	**RETAINER CONTRACT FOR OFF-SYSTEM BRIDGE LOAD RATING | LADOTD | Statewide, LA** QA/QC review engineer for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 –Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 –Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
03/14 - 03/17	**LOAD RATING OF ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** QC/QA review engineer for over 200 slab span and girder bridges across Louisiana. Utilized Virtis load rating software.
06/16 - 04/20	**OFF-SYSTEM BRIDGE LOAD RATINGS | LADOTD | St. Tammany Parish, LA** QC/QA review engineer for the data collection, inspection, and load rating of numerous slab span, girder, and railcar bridges in St. Tammany Parish.
11/16 - 10/20	**OFF-SYSTEM BRIDGE LOAD RATINGS | LADOTD | Livingston Parish, LA** QC/QA review engineer for the inspection and load rating of numerous existing slab span bridges and culverts in Livingston Parish In accordance with FHWA Metric 13, which requires a current load rating of all Off-System bridges.
04/11 - 10/16	**IBERVILLE PARISH BRIDGE RATINGS AND PRIORITIZATION | LADOTD | Iberville Parish, LA** Project Engineer for continued off-system bridge ratings, repairs, and repair/replacement prioritization recommendations for Iberville Parish.
05/19 - 09/19	**DANZIGER BRIDGE REHABILITATION | LADOTD H.000303.6 | Orleans Parish, LA** Principal overseeing survey investigation of Danziger Bridge. Included laser scanning and comparison of actual conditions to original plans.
10/18 - 12/18	**SUNSHINE BRIDGE REPAIR | LADOTD 4400010587 | St. James Parish, LA** Principal overseeing topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord.
05/17 - 10/18	**BELLE CHASSE BRIDGE AND TUNNEL REPLACEMENT HYDROGRAPHIC SURVEY | LADOTD | Plaquemines Parish, LA** Principal-in-Charge for comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
11/19 - 11/20	**CALCASIEU RIVER BRIDGE INVESTIGATION | LADOTD S.P. NO. H.012083.5 | Calcasieu Parish, LA** Principal overseeing laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA.
08/19 - Ongoing	**I-10/LOYOLA INTERCHANGE IMPROVEMENTS | LADOTD H.011670 | Kenner, LA** Principal-in-Charge overseeing Topographic Survey, Right-of- Way Survey, and Drainage Survey. The project stretches from the levee in Kenner to the Williams Blvd. off ramp, as well as Loyola Avenue and portions of Veterans Blvd.

FIRM EMPLOYED BY	**Forte and Tablada, Inc.**			
NAME	**Bradley Holleman, PLS**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**1**
TITLE	**Senior Vice President, Survey/Advanced Measurements & Modeling**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**14**
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 2009 | Civil Engineering**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PLS No. 5082 | LA | 09/30/2022**		
YEAR REGISTERED	**2012**	DISCIPLINE	**Land Survey**	
Contract role(s) / brief description of responsibilities	Bradley will serve as **SURVEYOR** for 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.
05/12 - 09/12	**H.009456 – TCHEFUNCTE RIVER BRIDGE** Surveyor-in-Charge for the topographic survey and existing drainage map. This project was for a bridge replacement over the Tchefuncte River in Tangipahoa Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
01/13 – 09/13	**H.009489 JEFFERSON HIGHWAY OVERPASS** Surveyor-in-Charge for the bridge monitor survey, topographic survey and existing drainage map. This project was monitoring and the overpass replacement of Jefferson Highway over Airline Highway in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
07/13 – 10/13	**I-12 TO BUSH ROUTE LA 3241 SURVEY CONTROL** Surveyor-in-Charge for setting the primary static control and digital levels for future phases of the project. This project was for the construction of a new connecting route from Interstate 12 to Bush Louisiana. The work consisted of setting deep rod monuments along the proposed route and conducting over 40 miles of digital levels between the deep rod monuments.
09/13 – 03/14	**H.002375 AMITE RIVER BRIDGE NEAR FRENCH SETTLEMENT** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for constructing a new bridge over Amite River in French Settlement Louisiana to the replace the existing swing bridge. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
09/14 - 02/15	**H.011158 LA 3139** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for constructing a replacement span because of a damaged girder on the LA 3139 overpass over I-10. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
12/14 – 03/16	**H.011137 & H.011152 I-12 (LA 21 TO LA 59) | St. Tammany Parish, LA** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for widening of Interstate 12 from LA 21 to La 59 in St. Tammany Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
09/15 - 11/15	**H.011923 HOOPER ROAD ROUNDABOUT AT SULLIVAN ROAD** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for construction of a roundabout at Hooper Road and Sullivan Road in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.

06/16 - 02/17	**H.000263 CHEF MENTEUR PASS BRIDGE** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for the design of new bridge to replace the existing swing bridge on US 90 over Chef Menteur Pass. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits
03/17 - 03/18	**H004987 US 190 COLLINS BLVD | St. Tammany Parish, LA** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for the design of capacity improvements on US 190 in Covington. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
05/18 - 11/18	**I-10: LOYOLA INTERCHANGE IMPROVEMENTS, KENNER, LA** Surveyor-in-Charge for the control survey, utility survey and 3D mobile laser scanning. This project was for the design of new exit for the New Orleans Airport. The work consisted of completing a utility and control survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths that fell within the survey limits.
06/20-12/20	**4400017597 DOTD RURAL BRIDGE REPLACEMENT** Surveyor-in-Charge for the topographic survey. This project was for design of multiple bridge replacements throughout south Louisiana. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
02/20 - 06/20	**H.000284 US 90 PEARL RIVER BRIDGES** Surveyor-in-Charge for the 3D Mobile laser scanning. This project was for the design of improvements to US 90 over Pearl River tributaries. The work consisted of completing mobile lidar scan and delivering a point cloud for DOTD use and extraction.
01/19 - 04/19	**H.012735 LA 182 BARROW STREET BRIDGE** Surveyor-in-Charge for the topographic survey, 3D Mobile laser scanning and existing drainage map. This project was for the design of a new bridge on La 182 in Houma. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
06/19 - 08/19	**H.004791 LA 232 BELLE CHASSE BRIDGE** Surveyor-in-Charge for the topographic survey and laser scanning. This project was additional work for the design of a bridge near the Belle Chasse Tunnel. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.

FIRM EMPLOYED BY	**Forte & Tablada, Inc.**			
NAME	**Ross Wilson, PLS**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**10**
TITLE	**Surveyor**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**2**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2010 | Geomatics**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PLS No. 5148 | LA | 03/31/2022**			
YEAR REGISTERED	**2015**	DISCIPLINE	**Land Survey**	
Contract role(s) / brief description of responsibilities	Ross will serve as **SURVEYOR** for 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.
04/21 - 06/21	**LA 397: TURN LANES AT RICE MILL | LADOTD H.014628 | Calcasieu Parish, LA** Surveyor responsible for topographic surveying at the intersection of LA 397and Joe Spears Rd. in Calcasieu Parish.
8/19 - Ongoing	**I-10/LOYOLA INTERCHANGE IMPROVEMENTS | LADOTD H.011670 | Kenner, LA** Project Manager providing Topographic Survey, Right- of-Way Survey, and Drainage Survey. The project stretches from the levee in Kenner to the Williams Blvd. off ramp, as well as Loyola Avenue and portions of Veterans Blvd.
6/20 - Ongoing	**RURAL BRIDGE REPLACEMENT INITIATIVE; 7 STATE PROJECTS NUMBERS (22 STRUCTURES) | LADOTD H.013979, H.013995, H.013992, H.013994, H.013985, H.013954, H.013990 | Districts 04, 05, 08 and 58, LA** Surveyor for topographic surveying of 22 bridges in Louisiana.
1/20 - 10/20	**I-10: ATCH BASIN BR-W. BATON ROUGE P/L, I-10: IBERVILLE P/L-W END MISS BR, I-10: W END OF BR 290-W END OF LA 415 | LADOTD H.012588, H.012169, H.012587 | West Baton Rouge & Iberville Parish, LA** Project Manager for complete topographic survey, approximately 18.3 miles, from the East end of the Atchafalaya Bridge to the West end of the I-10/LA 415 Interchange.
11/19 – 12/20	**CALCASIEU RIVER BRIDGE INVESTIGATION | LADOTD H.012083 | Calcasieu Parish, LA** Surveyor to provide laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA. Terrestrial scans were done underneath the bridge for 10 spans on the East and West side, on top the deck to capture the superstructure, as well as from the water below to capture the sub structure. In addition to the terrestrial scans, mobile Lidar was done for future planning.
12/19 – 9/20	**BAYOU TERREBONNE BRIDGES | LADOTD H.011970 | LA** Surveyor for the Bayou Terrebonne bridge along with the entire intersection and adjacent roads.
11/18 - 04/19	**LA 327 SPUR: STARING LANE EXT. ROUTE LA 327-S | East Baton Rouge Parish, LA** Project Manager for a topographic survey for this project which is located in East Baton Rouge Parish, in between the intersections of La 42 (Burbank Dr.) and Staring Ln. and La 327 (Gardere Ln.) and La 30. A complete Topographic survey including all utilities with depths and all drainage was required, along with finish floor elevations of all buildings that fall within the survey limits.
05/17 - 10/18	**BELLE CHASSE BRIDGE AND TUNNEL REPLACEMENT HYDROGRAPHIC SURVEY | LADOTD H.004791.5 | Plaquemines Parish, LA** Surveyor for comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
01/18 - 06/19	**I-10 (LA 415 TO ESSEN LANE ON I-10 AND I-12) | LADOTD H.004100 | East and West Baton Rouge Parishes, LA** Project Manager for topographic survey of the work between LSU lakes and Essen Lane.

FIRM EMPLOYED BY	**Forte & Tablada, Inc.**			
NAME	**Brent Campbell**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**8**
TITLE	**Advanced Measurements and Modeling Technician**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 2013 | Construction Management**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**N/A**		
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	
Contract role(s) / brief description of responsibilities	Brent will serve as an **ADVANCED MEASUREMENTS AND MODELING TECHNICIAN** for 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.
9/21	**WESTBANK CLOSURE COMPLEX MULTI-BEAM HYDROGRAPHIC SURVEY | Belle Chasse, LA** Utilizing a shallow draft vessel equipped with advanced multi-beam sonar equipment, Forte and Tablada performed a comprehensive survey extending bank-to-bank of the station and beyond the protection fenders for a global depiction of scour. Scour results were presented in a color ramped elevation map, as well as imagery showing the presence of debris on an intake screen. Brent served as Advanced Measurements technician for the project.
1/20 - 10/20	**I-10: ATCH BASIN BR-W. BATON ROUGE P/L, I-10: IBERVILLE P/L-W END MISS BR, I-10: W END OF BR 290-W END OF LA 415 | LADOTD H.012588, H.012169, H.012587 | West Baton Rouge & Iberville Parish, LA** AMM Technician for complete topographic survey, approximately 18.3 miles, from the East end of the Atchafalaya Bridge to the West end of the I-10/LA 415 Interchange.
10/19 - 10/20	**INSPECTION OF METAL CULVERTS | LADOTD H.012485.1 | Statewide, LA** Laser scanning technician to provide inspections and data acquisition for approximately 230 culvert locations statewide. Culvert measurements were acquired with a mixture of 3-D laser scanning, sonar, and LIDAR.
12/19 – 9/20	**BAYOU TERREBONNE BRIDGES | LADOTD H.011970 | LA** Surveyor. Responsible for laser scanning the Bayou Terrebonne bridge along with the entire intersection and adjacent roads.
05/19 - 09/19	**DANZIGER BRIDGE REHABILITATION | LADOTD H.000303.6 | Orleans Parish, LA** Laser scanning and project technician for survey investigation of Danziger Bridge. Included laser scanning and comparison of actual conditions to original plans.
05/17 - 10/18	**BELLE CHASSE BRIDGE AND TUNNEL REPLACEMENT HYDROGRAPHIC SURVEY | LADOTD H.004791.5 | Plaquemines Parish, LA** Surveyor. Responsible for laser scanning for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
11/19 - 12/20	**CALCASIEU RIVER BRIDGE INVESTIGATION | LADOTD H.012083 | Calcasieu Parish, LA** Surveyor. Responsible for laser scanning and project technician to provide laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA. Terrestrial scans were done underneath the bridge for 10 spans on the East and West side, on top the deck to capture the superstructure, as well as from the water below to capture the sub structure. In addition to the terrestrial scans, mobile Lidar was done for future planning.
01/22 - Ongoing	**HAT CREEK PERMIT SURVEY | Bossier Parish, LA** Advanced Measurements Technician for Responsible for UAV based aerial LiDAR and hydrographic surveys to provide plan and profile plans for permitting purposes. The project included flying approximately 200 acres on the Red River to provide a bare earth model to our engineers. This method allowed us to rapidly capture survey grade data versus traditional survey methods. A hydrographic survey of the Red River was performed using a sonarmite mounted on a shallow water vessel due to the low levels of the river. This hydrographic survey data was also provided to our engineers where it was integrated with the aerial LiDAR to provide the client with plan and profile plans for permit applications.

FIRM EMPLOYED BY	**Forte & Tablada, Inc.**				
NAME	**Spencer Rimes**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**>1**	
TITLE	**Senior Advanced Measurements Technician**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**12**	
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2009 | Landscape Architecture, GIS; BS | 2005 | Horticulture**				
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**				
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**		
Contract role(s) / brief description of responsibilities	Spencer will serve as a **SENIOR ADVANCED MEASUREMENTS TECHNICIAN** for 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.				
6/13 - 4/14	**USACE LEVEE INSPECTIONS | USACE | LA, TX, IL** GIS Specialist for levee system inspections. The work consists of manual inspection using a GPS-enabled tablet, recording all deficiencies and creating advanced reports, photo logs and detailed maps with their associated quality ratings.				
5/14 - 8/15	**STRATEGIC SITES INVENTORY PROGRAM | Statewide, LA** Site planning and design consultant for Louisiana Economic Development. The program consists of identifying development-ready sites and accelerating the availability of those sites for industrial and commercial development.				
11/15 - 3/16	**LA 327 - GARDERE LANE TOPOGRAPHIC SURVEY | Baton Rouge, LA** GIS Analyst for topographic survey of drainage features and development of the existing drainage map using a combination of field-collected data and LiDAR imagery.				
1/18 - 6/19	**LA 415 TO ESSEN LANE TOPOGRAPHIC SURVEY | Baton Rouge, LA** GIS Analyst for topographic and drainage survey. The work consists of field data collection of features and attributes utilizing an imaging laser scanner and creating the overall drainage network using a combination of as-built drawings and field-collected data.				
9/20 - 5/21	**HYDROGRAPHIC BRIDGE SURVEYS | LADOTD | Statewide, LA** Technical lead for multibeam surveys related to bridge scour analysis. The work consists of hardware calibration, data collection, and post-processing of survey data.				
9/21	**WESTBANK CLOSURE COMPLEX MULTI-BEAM HYDROGRAPHIC SURVEY | Belle Chasse, LA** Technical Lead for the comprehensive multibeam hydrographic scour survey. Forte and Tablada performed a comprehensive survey extending bank-to-bank of the station and beyond the protection fenders for a global depiction of scour. Scour results were presented in a color ramped elevation map, as well as imagery showing the presence of debris on an intake screen.				

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**				
NAME	**Karla Weston, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**17**	
TITLE	**President**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**6**	
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 1999 | Civil Engineer**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PE No. 31010 | LA | 3/31/2023**			
YEAR REGISTERED	**2004**	DISCIPLINE	**Civil Engineering**		
Contract role(s) / brief description of responsibilities	Karla has over 23 years of civil engineering experience. She started CD&C, a small woman-owned business in 2005. Karla has worked with over 10 Corps of Engineering Districts throughout the U.S. She has also worked with various state and local agencies providing civil engineering, surveying, and SUE services. Karla will oversee the firms' role as a sub-consultant and make sure the work is completed to LADOTD standards. Karla will perform **ROAD DESIGN** for 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.
02/16 - 09/19	**PECUE LANE/I-10 INTERCHANGE | H.003047 | Baton Rouge, LA** Principal in Charge. Karla oversaw CD&C's role as a subconsultant for the engineering design services of the West Bound on Ramp to I-10, the West Bound Off Ramp from I-10, the extension to Rieger Road and Pecue Lane Extension. She worked to oversee the firm's design, coordinate with the prime consultant and government agencies.
12/13 – 10/19	**GRAMERCY BRIDGE | H.02960 | St. James Parish, LA** Principal in Charge. Karla oversaw CD&C's role as a subconsultant for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical Grades for the project.
02/14 - 02/15	**I-49 DESIGN BUILD | H.010620 | Lafayette, LA** QA/QC. Karla provided QA/QC review for the Roadway Design Plans on this Design-Build Project.
05/13 – 05/14	**LA 1 RAILROAD BRIDGE AT DOW | H.009288.5 | West Baton Rouge Parish, LA** Principal in Charge. Karla oversaw CD&C's role as a subconsultant for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical Grades for the project. She worked to oversee the firm's design, coordinate with the prime consultant and government agencies.
06/12 – 10/12	**LA 1 RAILROAD BRIDGE AT DOW | H.009288.5 | West Baton Rouge Parish, LA** Principal in Charge. Karla oversaw CD&C's role as a subconsultant for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical Grades for the project. She worked to oversee the firm's design, coordinate with the prime consultant and government agencies.
01/06 – 12/12	**EBR CITY/PARISH PROJECT NO. 06-CS-HC-0018, FAIRCHILD-BADLEY ROADWAY | East Baton Rouge Parish, LA** Principal in Charge. This project was approx. 1.25 miles in length along Fairchild-Badley Road and also included approximately 600 linear feet of Elm Grove Garden Dr. CD&C designed the upgrade to the existing narrow roadway to a typical section of 2-11' lands with a 2' barrier curb and gutter, and a 6' adjacent sidewalk. This included the design of a new sub-surface drainage system throughout the length of the project as well.
06/18 – 05/19	**COMITE RIVER DIVERSION – US 61 & KCS BRIDGES | East Baton Rouge Parish, LA** Lead Cost Engineer. These bridge projects which are part of the Comite River Diversion project. The project included roadway, bridges, and associated channel improvements. Karla helped provide a complete contractor style estimate including all material costs and quotes, hauling and disposal quotes; labor and equipment prices; and all tasks and assemblies for these items.
12/19 -12/20	**COMITE RIVER DIVERSION – BAYOU BATON ROUGE DROP STRUCTURE | East Baton Rouge Parish, LA** Lead Cost Engineer. This project included bridge and roadway improvements as part of the Comite River Diversion project. Karla helped provide a complete contractor style estimate including all material costs and quotes, hauling and disposal quotes; labor and equipment prices; and all tasks and assemblies for these items.

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**			
NAME	**Ralph Burgess, PLS**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**11**
TITLE	**Principal Land Surveyor**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**12**
DEGREE(S) / YEARS / SPECIALIZATION		**BS | 2004 | Industrial Design & Supervision**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PLS No. 5040 | LA | 9/30/2022**		
YEAR REGISTERED	**2010**	DISCIPLINE	**Land Surveyor**	
Contract role(s) / brief description of responsibilities	Ralph will serve as a **SURVEYOR** for this contract. He will work to oversee the project progress stays on schedule, aide in both crew coordination and office production, and provide final QC on the firms' deliverable to the Prime Consultant. Ralph has an extensive background in providing topographic surveys for LADOTD in accordance with Location and Survey policies and procedures. He has overseen projects utilizing traditional means and methods of collecting data as well as those that include the use of 3D Terrestrial Scanning.			

Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
07/20 – 04/21	**COMITE RIVER DIVERSION BRIDGE AT LA 67, LA 19 AND LA 19 RAILROAD BRIDGE | LADOTD H.001352.5 & H.002273.5 | East Baton Rouge Parish, LA** Survey Manager for this project. CD&C as a sub-consultant on this project was responsible for topographic surveying the LA 67 and LA 19 sites of the Comite River Diversion project. This included merging of data from a previous survey on one portion of the site and field verifications of that data. The topographic data for this project was collected traditionally.
01/18 - 01/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** Surveying Manager for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415 including work on Tributaries of the Intercoastal Canal. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.
07/17 - 12/18	**LA 30 ROUNDABOUT AT TANGER I-10 | LADOTD H.010960.5-2 | Ascension Parish, LA** Survey Manager for the project. Duties included meeting with LADOTD & Cardno, Inc for utility locations, coordination of crews and 3D terrestrial scanning crew along with office personnel, coordination. Special duties were merging of two state projects with project survey for final submittal to combine all projects together
01/16 - 08/16	**US 190 SUPERSTREET | LADOTD H. 005733.5 | St. Tammany Parish, LA** Survey Manager for the project. Duties included complete topographic survey and drainage map for this project including all utility coordination. The survey began at the intersection of US 190 and Holiday Square Frontage Road. From this point, the survey proceeded in a northerly direction along US 190 for approximately 2.9 miles to a point that is 700 feet South of Intersection of US 190 and E. Boston St. in Covington, LA. This project also included work in the Abita River and utilized 3D Terrestrial Scanning for the main route
10/15 - 12/18	**I-10 TEXAS STATE LINE –EAST OF COONE GULLY | LADOTD H.003184.5 | Calcasieu Parish, LA** Survey Manager for the project. Duties included meeting with LADOTD, coordination of traditional crews and 3D terrestrial scanning crew, coordination of utility companies on the project, review and verification of drainage crossing I10, merging of existing topographic survey of bridges from LADOTD and final review of all survey data for submittals.
08/16 - 12/17	**I-49 SOUTH AT VEROT SCHOOL ROAD | LADOTD H.011235 | Lafayette, LA** Survey Manager for the project. Duties included meeting with LADOTD, and all consultants on the team, coordination of both traditional crews and 3D terrestrial scanning crew, coordination of survey crews with Cardno, Inc, utility locations on the project, met and review right of entry with landowners for project, review of drainage map, merging of existing topographic survey of the I-49 Connector project from LADOTD with current survey of project, review of apparent right of way mapping for prime consultant, and final review of all survey data.

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**			
NAME	**Chris Ballard, PLS**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**6**
TITLE	**Survey Project Manager**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**19**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2004 | Biological Science**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PLS No. 5033 | LA | 9/30/2022**			
YEAR REGISTERED	**2010**	DISCIPLINE	**Land Surveyor**	
Contract role(s) / brief description of responsibilities	Chris will serve as a **SURVEYOR** for this contract. Chris has an extensive background in providing topographic surveys for LADOTD in accordance with Location and Survey policies and procedures. He has overseen projects utilizing traditional means and methods of collecting data as well as those that include the use of 3D Terrestrial Scanning.			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.			
01/18 - 01/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** Surveying Project Manager for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415 including work on Tributaries of the Intercoastal Canal. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.			
04/17 - 07/17	**LA 58 PETIT CAILLOU BRIDGE REHABILITATION (SARAH BRIDGE) | LADOTD H.010006.5-3 | Terrebonne Parish, LA** Survey Project Manager on this project which included a complete topographic survey, utility coordination, channel cross sections, and the scanning of the existing vertical lift bridge for the design of its repairs/replacement. Project included data collection of the topography via traditional means and methods along with 3D terrestrial scanning and hydrographic surveying.			
02/19 - 09/19	**BRIDGE REPLACEMENTS IN EAST FELICIANA PARISH | Rural East Feliciana Parish, LA** Survey Project Manager for this project for East Feliciana Parish Police Jury. It includes the replacement of 2 bridges which were damaged from flooding and the repairs to many rural roadways throughout the parish. These projects are being funded thru FEMA and all documentation has to be in accordance with FEMA's policies and procedures.			
01/17 - 12/17	**EAST BATON ROUGE PARISH BRIDGES | East Baton Rouge Parish, LA** In 2017, CD&C has performed topographic surveys for at least 4 Bridge Replacement Projects throughout East Baton Rouge Parish. Chris served as Survey Project Manager on each of these projects which included cross-sectioning and tracing the channel at each location. These included bridges over Dawson Creek, Claycut Bayou, Copper Mill Bayou, and Cypress Bayou.			
10/16 - 11/16	**LA 443: TANGI RIVER BRIDGE REPLACEMENT | LADOTD H.012728.5 | Tangipahoa Parish, LA** Project Manager for this Project. Among the duties performed for the project were review of the crew work conditions, review & processing of the survey data, verification and review of final submittal. CD&C completed a topographic survey which included all utilities with depths, all drainage, all building information including finish floor elevations, and all super/substructure of the bridge over the Tangipahoa River. Additional information regarding the river was located by traditional means upstream and downstream for the engineer's design of the new bridge. To utilize data collection of the failed bridge, 3D Terrestrial Scanning was incorporated in conjunction with traditional means to complete the topographic survey. Due to the nature of the project being an Emergency Bridge replacement all staff worked on this project non-stop until field work was completed in less than 3 weeks.			
09/17 - 12/17	**1 DISTRICT62 BRIDGES | LADOTD H.012650.5 | Livingston and Tangipahoa Parishes, LA** Survey Project Manager for this project which included 5 bridge sites in District 62. In addition to all of the existing data for the bridge and roadway at each site, each channel was cross-sectioned both upstream and downstream of the bridge. These included bridges over the US 190 Bridge over Gray's creek, 2 bridges on LA 442 both crossing East Hog Branch, LA 1063 over the Natalbany River, and US 51 over Ponchatoula Creek. Several of these bridges including the US190 one was surveyed utilizing 3D Terrestrial Scanning.			

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**			
NAME	**Philip Dupree**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**10**
TITLE	**Survey Party Chief**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**30**
DEGREE(S) / YEARS / SPECIALIZATION		**NSPS Certified Technician | Level III, Boundary Cert No. 0799-1106 | Nationwide**		
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**PLS No. 5040 | LA | 9/30/2022**		
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	
Contract role(s) / brief description of responsibilities	Philip will serve as a **SR. SURVEY PARTY CHIEF** for this contract. He will work to oversee a crew as well as aide in coordinating all crews with Survey PM to ensure field work is being completed timely and accurately.			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.			
07/20 – 04/21	**COMITE RIVER DIVERSION BRIDGE AT LA 67, LA 19 AND LA 19 RAILROAD BRIDGE | LADOTD H.001352.5 & H.002273.5 | East Baton Rouge Parish, LA** Senior Party Chief & Field Coordinator for this project. CD&C as a sub-consultant on this project was responsible for topographic surveying the LA 67 and LA 19 sites of the Comite River Diversion project. The topographic data for this project was collected traditionally.			
01/18 - 02/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** Survey Party Chief for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415.			
07/17 - 12/18	**LA 30 ROUNDABOUT AT TANGER I-10 | LADOTD H.010960.5-2 | Ascension Parish, LA** Field coordinator on this project by working specifically to set the control on the job and overseeing field crews as they work to complete the topography.			
10/15 - 12/18	**I-49 SOUTH AT VEROT SCHOOL ROAD | LADOTD H.011235 | Lafayette, LA** Field coordinator on this project. He resurrected the original control set on the project and oversaw the checking of it. Mr. Dupree was the field coordinator with the R/R and also the SUE contractor on the project. He oversaw all field crews and ensured that the project was completed accurately and timely.			
01/16 - 08/16	**US 190 SUPERSTREET | LADOTD H.005733.5 | St. Tammany Parish, LA** Field coordinator on this urban roadway topography project that included 3D scanning in addition to traditional topography. He oversaw the daily progress of both traditional field crews and scan crews and completed the project accurately and on schedule.			
10/16 - 11/16	**LA 443: TANGI RIVER BRIDGE REPLACEMENT | LADOTD H.012728.5 | Tangipahoa Parish, LA** Field coordinator on this project. CD&C completed a topographic survey which included all utilities with depths, all drainage, all building information including finish floor elevations, and all super/substructure of the bridge over the Tangipahoa River. Additional information regarding the river was located by traditional means upstream and downstream for the engineer's design of the new bridge. To utilize data collection of the failed bridge, 3D Terrestrial Scanning was incorporated in conjunction with traditional means to complete the topographic survey.			

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**			
NAME	**Jason Stoehr**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**5**
TITLE	**Survey Party Chief**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**N/A**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**			
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	
Contract role(s) / brief description of responsibilities	Jason will serve as a **SURVEY PARTY CHIEF** for this contract. He will manage a crew to collect topographic data in the field in accordance with LADOTD Location and Survey means and methods.			

Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.
07/20 – 04/21	**COMITE RIVER DIVERSION BRIDGE AT LA 67, LA 19 AND LA 19 RAILROAD BRIDGE | LADOTD H.001352.5 & H.002273.5 | East Baton Rouge Parish, LA** Party Chief on this project. CD&C as a sub-consultant on this project was responsible for topographic surveying the LA 67 and LA 19 sites of the Comite River Diversion project. The topographic data for this project was collected traditionally.
01/18 - 01/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** Survey Party Chief for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415.
07/17 - 12/18	**LA 30 ROUNDABOUTS AT TANGER I-10 | LADOTD H.010960.5-2 | Ascension Parish, LA** Survey Party Chief on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.
08/16 - 01/18	**I-49 SOUTH AT VEROT SCHOOL ROAD | LADOTD H.011235 | Lafayette, LA** Survey Party Chiefs on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.
02/19 - 09/19	**BRIDGE REPLACEMENTS IN EAST FELICIANA PARISH | Rural East Feliciana Parish, LA** Jr. Party Chief on this project for East Feliciana Parish Police Jury. It includes the replacement of 2 bridges which were damaged from flooding and the repairs to many rural roadways throughout the parish. These projects are being funded thru FEMA and all documentation has to be in accordance with FEMA’s policies and procedures.
7/17 – 12/18	**I-10 TEXAS STATE LINE –EAST OF COONE GULLY | LADOTD H.003184.5 | Calcasieu Parish, LA** Instrument Man on this project by aiding the crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**				
NAME	**Trent Norris**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**8**	
TITLE	**Senior Technician**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**	
DEGREE(S) / YEARS / SPECIALIZATION	**NSPS Certified Survey Technician | Level I Boundary Certificate No.: 0418-5963**				
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**				
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**		
Contract role(s) / brief description of responsibilities	Trent will serve as a **SR. TECHNICIAN** for this contract. He serves as the firm's 3D Scanning Technician who will aide in field data collection as well as process all 3D scan data in the office and assist in any other processing to complete the submittal.				

Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "Designed drainage", "designed girders", "designed intersection", etc.
01/18 - 01/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** 3D Scanning Technician for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415.
07/17 - 12/18	**LA 30 ROUNDABOUTS AT TANGER I-10 | LADOTD H.010960.5-2 | Ascension Parish, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from them thru TopoDot to put into InRoads.
04/17 – 07/17	**LA 58 PETIT CAILLOU BRIDGE REHABILITATION (SARAH BRIDGE) | LADOTD H.010006.5-3 | Terrebonne Parish, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from them thru TopoDot to put into InRoads.
08/16 – 01/18	**I-49 SOUTH AT VEROT SCHOOL ROAD | LADOTD H.011235 | Lafayette, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from them thru TopoDot to put into InRoads.
10/16 – 10/16	**LA 443 EMERGENCY BRIDGE REPLACEMENT | LADOTD H.012728.5 | Tangipahoa Parish, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from them thru TopoDot to put into InRoads.
10/15 - 12/18	**I-10 TEXAS STATE LINE –EAST OF COONE GULLY | LADOTD H.003184.5 | Calcasieu Parish, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from them thru TopoDot to put into InRoads.
01/16 - 07/16	**US 190 SUPERSTREET | LADOTD H. 005733.5 | St. Tammany Parish, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from them thru TopoDot to put into InRoads.

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**				
NAME	**Scott Benton**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**5**	
TITLE	**Senior Technician**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**5**	
DEGREE(S) / YEARS / SPECIALIZATION		**N/A**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE		**N/A**			
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**		
Contract role(s) / brief description of responsibilities	Scott will serve as a **SENIOR TECHNICIAN** for this contract. He is specialized in 3D Terrestrial Scanning, processing, and extraction.				

Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.
12/19 – 01/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** 3D Scanning Technician for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415.
03/14 – 06/14	**CLEO ROAD ROUNDABOUT | LADOTD H.008369 | St. Tammany Parish, LA** Senior Technician on this project processing survey field data. CD&C was responsible for the topographic survey that began approximately 2400 ft. NW of intersection of I-59 and US Hwy 1090 and ended approximately 1000 ft. NW of intersection of I-59 and US Hwy 1090. The survey also included 500 ft. of Cleo Road and 175 ft. of Avenue D.
05/13 – 07/13	**LA 1 RAILROAD BRIDGE AT DOW | LADOTD H.009288 | West Baton Rouge, LA** Survey Crew Instrument Man and later as a technician on this project processing survey field data. The intent is to create a grade separation at the intersection of LA 1 and the R/R spur for DOW. CD&C is performing all of the topographic survey for this project including utility coordination and R/R coordination and permits so that CD&C can survey the spur and parallel line.
02/13 – 06/13	**LA 447 | LADOTD H.005693 | Walker, LA** Survey Crew Instrument Man and later as a technician on this project processing survey field data. CD&C’s responsibilities included all field work, utility coordination, review of existing survey data provided by LADOTD and all office work to produce the final product; this includes merging of supplied survey from LADOTD and survey by CD&C. CD&C also performed the tie-in of the new survey to the existing survey provided by LADOTD to produce an overall deliverable to be utilized in this design.
10/14 – 12/14	**WEST PRIEN LAKE | LADOTD H.011088.5 | Lake Charles, LA** Survey technician on this project processing survey field data. This project was to provide topographic survey for a new route to be constructed. Topographic survey and DTM was required along the proposed alignment including all utilities and all drainage with the survey limits.
07/14 – 10/15	**I-110 NORTH ST. TO PLANK ROAD | LADOTD H.010319.5 | Baton Rouge, LA** 3D Scanning Tech on this project by working with the scan crew in the field, post processing the scans, and extracting necessary topographic data from them thru TopoDot to put into InRoads.

FIRM EMPLOYED BY	**Civil Design & Construction, Inc. (CD&C)**			
NAME	**Jacob Stoehr**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**7**
TITLE	**Survey Party Chief**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**1.5**
DEGREE(S) / YEARS / SPECIALIZATION	**N/A**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**			
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	
Contract role(s) / brief description of responsibilities	Jacob will serve as a **SURVEY PARTY CHIEF** for this contract. He manages a crew to collect topographic data in the field in accordance with LADOTD Location and Survey means and methods.			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.			
01/18 - 01/20	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12 | LADOTD H.004100 | West and East Baton Rouge, LA** Survey Party Chief for this project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415.			
07/17 - 12/18	**LA 30 ROUNDABOUT AT TANGER I-10 | LADOTD H.010960.5-2 | Ascension Parish, LA** Survey Party Chiefs on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.			
08/16 - 01/18	**I-49 SOUTH AT VEROT SCHOOL ROAD | LADOTD H.011235 | LAFAYETTE, LA** Survey Party Chiefs on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.			
05/17 - 07/17	**ROUNDABOUT US 171 AT BOONE STREET | LADOTD H.011909.5-2 | Vernon Parish, LA** Survey Party Chief on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.			
01/16 - 08/16	**US 190 SUPERSTREET | LADOTD H. 005733.5 | St. Tammany Parish, LA** Survey Party Chiefs on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.			
10/15 - 12/18	**I-10 TEXAS STATE LINE –EAST OF COONE GULLY | LADOTD H.003184.5 | Calcasieu Parish, LA** Survey Party Chiefs on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.			
10/16 – 11/16	**LA 443 EMERGENCY BRIDGE REPLACEMENT | LADOTD H.012728.5 | Tangipahoa Parish, LA** Survey Party Chiefs on this project by managing a crew in the collecting of topographic data in the field utilizing LADOTD Field Codes.			

17. **Staff Experience:**

FIRM NAME	**Stantec Consulting Services Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**RETAINER CONTRACT FOR BRIDGE PRESERVATION**	FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**4400002536**	OWNER'S NAME	**Louisiana Department of Transportation**
PROJECT LOCATION	**Statewide, Louisiana**	OWNER'S PROJECT MANAGER	**Mark Bucci**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1076 | mark.bucci@la.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**09/12**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$6,056**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**09/17**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$4,323**

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

Stantec performed a wide variety of services on multiple contracts for LADOTD.

PROJECT RELEVANCE:

- ☑ Retainer Contract Management
- ☑ Subconsultant Coordination
- ☑ Bridge and Roadway Design
- ☑ Bridge Inspections, Repairs, Rehabilitation
- ☑ Traffic Engineering / TMP Development
- ☑ Construction Support Services

Services included bridge inspections, bridge rehabilitation, new roadway alignment construction, lighting and utility design services, new bridge construction, construction support services, and bridge load rating analyses. Stantec was responsible for managing all services throughout the contract period. Below are a few of the task orders:

US 90: Ramp Improvements | New Orleans, LA (New/Widening - Concrete): New bridge construction to improve the on-ramp and add an additional travel lane to US 90 Business. Stantec developed preliminary plans, final plans, and a traffic management plan (level 4) and was responsible for providing construction support. The bridge consists of prestressed concrete quad beams and concrete slab spans founded on pile bents.

LA 3064: Essen Lane Bridge Widening | Baton Rouge, LA (Rehab/Widening - Concrete): Developed preliminary and final bridge plans to widen the existing bridge over Ward Creek to add travel lanes. The bridge consists of concrete slab spans and pile bents. During construction, Stantec was responsible for providing support services and managing utility relocations along the corridor.

LA 511: Jimmie Davis Bridge Rehabilitation | Bossier Parish, LA (Rehab/Repair - Truss): A "fast-track" design schedule of 5 months was agreed on to complete final plans for the rehabilitation of an existing 16-span structure that is approximately 2,800-ft long. The structure consists of three main steel truss spans and approach spans composed of multiple three-span continuous steel deck girder spans and 70-ft simple spans. Rehabilitation efforts include replacing the bridge deck, repairing joints and structural members, modifying truss expansion bearings, and cleaning and painting the steel components.

I-10: Calcasieu River Bridge & Approaches | Calcasieu Parish, LA (Navigational Study): Stantec was responsible for evaluating a proposed bridge crossing over the Calcasieu River by identifying current and future navigational needs to assess the sufficiency of proposed horizontal and vertical clearances.

I-210: Cove Lane Extension & Interchange | Lake Charles, LA (New Construction - Concrete): Stantec was responsible for providing construction support including attending regular progress meetings, reviewing shop drawings, and answering contractor requests for information for the new crossing of Cove Lane with the first LG bridge span in the state at that time.

I-10: Bridge Preventive Maintenance | Iberville & St. Martin Parishes, LA (Rehab/Repair - Concrete & Steel): Stantec was responsible for developing bridge repair and rehabilitation plans, including maintenance of traffic plans, for 19 bridges along the I-10 corridor over the Atchafalaya Floodway Basin between Henderson, LA and Grosse Tete, LA. The bridge structure types consist of prestressed concrete and structural steel girder spans. An assessment was performed prior to plan development in order to identify major deficiencies that needed to be addressed in construction.

TEAM MEMBERS INVOLVED: **B. JOHNSON, G. HEITMAN, C. HALL, K. MALPANI, R. NATALUK, J. CAINS, J. EASLEY (FORTE & TABLADA), J. COCO (FORTE & TABLADA)**

FIRM NAME	**Stantec Consulting Services Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Road, Bridge, Traffic, ITS, Other (lighting)**
PROJECT NAME	**NELSON ROAD EXTENSION AND BRIDGE**	FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**H.005967 (700-10-0153)**	OWNER'S NAME	**Louisiana Department of Transportation and Development**
PROJECT LOCATION	**Lake Charles, Louisiana**	OWNER'S PROJECT MANAGER	**Christina Brignac**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-2516 | christina.brignac@la.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**11/10**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$1,582.8**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$825.5**

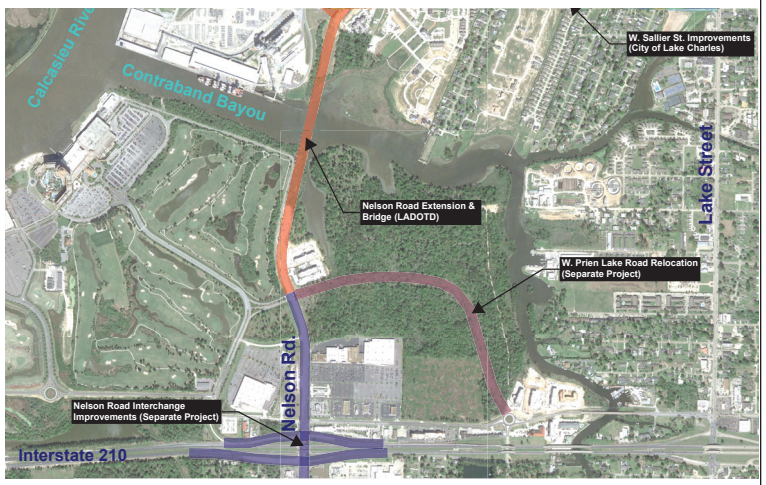
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Safety is a top concern for the traffic entering and leaving the Port of Lake Charles. The City, LADOTD, and the Port are relying on Stantec to help complete this project, desired for several decades, that involves building a bridge over Contraband Bayou to connect southwestern Lake Charles with downtown and the Port.

PROJECT RELEVANCE:

- ☑ Bridge Design
- ☑ New Roadway Alignment
- ☑ Stage "0" Study
- ☑ Hydraulic Analysis
- ☑ Vessel Study

Having completed the Stage 0 effort, Stantec is now leading Stage 1 design services. Our first task involved extending Nelson Road north over Contraband Bayou and connecting it with Sallier Street. We developed several alternatives to resolve the safety issues with trucks negotiating the bridge to enter the Port, and the hazards of having a railway nearby. Our preferred alternative incorporates a sweeping curve from Nelson into Sallier, providing seamless access to downtown; an additional connecting roadway provides safe access to and from the Port. Our team also took the opportunity to further enhance safety, by relocating the railway of concern at the Port. We swapped its footprint with Sallier Street, reducing the number of at-grade rail crossings along the new rail alignment.



For the Stage 1 effort, we secured a Finding of No Significant Impacts, Section 404 and Section 10 permits, and perform wetlands investigations, public involvement, and noise studies, as well as Phase I Environmental Site Assessments, other NEPA considerations, traffic studies, cost estimates, and line and grade studies. We worked closely with City leaders and the Port to determine the ultimate roadway cross section and relocate the railway.

Stantec also provided Stage 3 design services for the preliminary design phase of the project. This included a fixed-high level bridge with 51-foot vertical clearance along with connecting roadways at-grade. The bridge typical section will include four travel lanes with shoulders and a separated pedestrian and bicycle lane. The project includes bridge mounted navigation lighting for the channel which are supplied by utility power. A pier protection system includes additional solar powered lighting and will prevent a drifting vessel from impacting the bridge. A scour protection systems will prevent the deep-water section of Contraband Bayou near the Port from moving upstream near the bridge.

TEAM MEMBERS INVOLVED: **G. HEITMAN, B. JOHNSON, A. BOTROS, J. LEFANTE, J. CAINS, K. MALPANI, N. PRUDHOMME, M. O'ROURKE**

FIRM NAME	**Stantec Consulting Services Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Road, Bridge, Traffic**
PROJECT NAME	**I-10 LOYOLA DESIGN-BUILD PROJECT**	FIRM RESPONSIBILITY (prime or sub?)	**Sub-consultant**
PROJECT NUMBER	**H.0011670**	OWNER'S NAME	**Louisiana Department of Transportation and Development**
PROJECT LOCATION	**New Orleans, Louisiana**	OWNER'S PROJECT MANAGER	**Timothy Nickel**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1071 | timothy.nickel@la.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**08/19**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$125,591**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$8,508**

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

Multimillion dollar design that connects you to new destinations.

PROJECT RELEVANCE:

- ☑ Traffic Engineering
- ☑ Environmental Reevaluation
- ☑ Public Outreach
- ☑ Traffic & Safety Studies
- ☑ Project Management
- ☑ Construction Support
- ☑ Roadway & Bridge Design

Stantec is serving as the Lead Design Engineer for this **Design-Build project** which provides improvements to Loyola Drive north of Interstate 10 (I-10) and continues south of I-10 connecting to the new terminal access road for the new LANOIA north terminal. As part of the GCC/Stantec proposal, ATC No.2 is being constructed which includes a Diverging Diamond Interchange (DDI) at Loyola and I-10. ATC No.2 provides one-way elevated flyovers from I-10 Westbound to Loyola Drive Southbound; Loyola Drive Northbound to I-10 Eastbound; and, eliminates the need for a third bridge structure in the Preferred Alternative configuration which traversed nearly 1,200 feet along the median of Loyola north of I-10. Through Stantec **traffic analysis**, the DDI was shown to perform better than the Preferred Alternative for the overall project.

Innovation provided by the GCC/Stantec Team allowed a total price of $125.6M, which was at the LADOTD's budget and 27% below the next lowest bid. The improvements include aesthetically pleasing bridge structures, including steel box girders and enhanced substructure in the high-level areas; and concrete trapezoidal box girders (LU shapes); enhanced substructure at the combined bridge section of the northbound and southbound Loyola approaches to the Airport Access Road.

The project includes sidewalks, a two-way cycle track, and a landscaped park area. The **commitment to enhanced pedestrian and bicycle circulation** in the area meets needs identified in recent pedestrian and bicycle crash studies identifying the Loyola interchange as one of the highest crash locations in Jefferson Parish. The increased pedestrian and bicycle accommodations were coded into the traffic model to evaluate their impacts on the proposed signal timing.

The GCC/Stantec Team also worked hard to avoid as many utility relocations as possible by continually improving geometrics and providing longer spans for the bridges at strategic locations – especially near Veterans Boulevard. **Our design achieved minimal impacts to existing right-of-way** by avoiding business and residences – especially along the east side of Loyola near the new terminal access road.

Stantec assisted LADOTD with the reevaluation and has participated in public and stakeholder meetings. Stantec completed the IMR, which required traffic and safety studies of the Design-Builder's Alternative.

TEAM MEMBERS INVOLVED: **C. HALL, G. HEITMAN, B. JOHNSON, J. LEFANTE, M. O'ROURKE, S. MENSAH, J. CAINS, R. SMITH, M. YE, M. BRODNAX, D. GOUDEAU, A. BOTROS, J. ARONSTEIN (GEOENGINEERS), C. HATCH (GEOENGINEERS), L. SANT (GEOENGINEERS), D. SAULS (GEOENGINEERS), J. COCO (FORTE & TABLADA), B. HOLLEMAN (FORTE & TABLADA), R. WILSON (FORTE & TABLADA)**

FIRM NAME	**Stantec Consulting Services Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**MDOT BRIDGE SERVICES IDIQ MASTER CONTRACT 2017**	FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**N/A**	OWNER'S NAME	**Mississippi Department of Transportation**
PROJECT LOCATION	**Statewide, Mississippi**	OWNER'S PROJECT MANAGER	**Scott Westerfield**
OWNER'S ADDRESS, PHONE, EMAIL	**401 North West Street, Jackson, MS 39201 | 601-359-7200 | swesterfield@mdot.ms.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**08/17**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$2,463**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$2,085**

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

Stantec has provided a wide variety of services on multiple assignments involving bridge services for MDOT.

PROJECT RELEVANCE:

- ☑ Bridge Design (New, Rehab, Repair)
- ☑ Bridge Inspections
- ☑ Bridge Load Rating
- ☑ Construction Support Services

Services included bridge inspections, bridge rehabilitation, new bridge construction, construction support services, and bridge load rating analyses. Below are the work assignments under this contract:

SR 145 Bridge Replacements | Prentiss County, MS (Replacement - Concrete): Construction support services for the replacement of five structurally deficient bridges on existing roadway alignment. Structure types included AASHTO and BT prestressed concrete girders with spans up to 135-ft.

Load Rating Bridges in AASHTOWare | Statewide, MS (Rating - Concrete & Steel): Stantec was responsible for load rating 120 bridges (116 unique models) using AASHTOWare BrR. Structure types included concrete slab spans, concrete tee-beams, prestressed concrete girders, structural steel girders, and concrete box girders.

SR 12 over Sunflower River | Washington & Humphreys Counties, MS (New - Steel): Realignment of an existing roadway to improve the crossing over Sunflower River. The bridge consists of three spans (280-ft, 350-ft, 280-ft) using four structural steel plate girders and X-bracing, spaced at approximately 25-ft, and parallel to the 15-degrees skew. Three 7-ft diameter drilled shafts will support concrete intermediate bents.

US80 over Pearl River | Hinds & Rankin Counties, MS (Repair/Rehab - Concrete): Stantec performed an inspection of concrete tee-beam approach spans, developed an assessment report, and prepared final rehabilitation plans. Repairs included resealing deck joints, concrete patching, beam hanger assembly installation, and replacing concrete pedestals. Stantec provided construction support services.

Madison Avenue over Brashear Creek | Madison, MS (Replacement - Concrete): Bridge replacement using phase construction to maintain traffic on the existing alignment. The bridge consists of one 145-ft long, Florida I-Beam, span with a skew of 30-degrees at each abutment. At 113.92-ft wide, the roadway section consists of four travel lanes, sidewalks on each end, and a raised median. A pile supported retaining wall was designed for the northwest quadrant to armor the creek bank.

I-20 South Frontage Road | Vicksburg, MS (New/Repair - Concrete): Construction support services for new bridge construction and repairs on five existing bridges along the I-20 corridor. The new bridge will extend the frontage road to US80 over old SR 27 and a KCS railroad line.

Trusses Inspection and Load Rating | Statewide, MS (Inspection/Rating - Trusses): Detailed inspections and load rating analyses were performed on four steel through trusses. MDOT is using this project to establish processes and procedures to assist with future needs on other trusses. Reports included in field measurement verifications with shop drawings, fracture critical member identifications, and recommended posting requirements.

US 84 over Mississippi River | Natchez, MS (Inspection - Trusses): Stantec was responsible for performing a detailed inspection of twin steel through trusses. Inspection techniques consisted of climbers, manlifts, from deck, and from ground. Pin testing and a bathymetric survey were included.

SR 27 over Little White Oak Creek | Hinds County, MS (New - Concrete): Design of a three span FIB girder bridge. Spans are 60-ft, 100-ft, 60-ft.

SR 601 / I-10 Interim Interchange | Harrison County, MS (New - Concrete & Steel): Stantec is responsible for updating an existing plan set to meet current construction specifications for 7 new bridges including AASHTO, BT, and FIB sections and one horizontally curved structural steel plate girder bridge with hammerhead piers. Load rating analyses are being performed on the as-designed bridges using AASHTOWare BrR.

TEAM MEMBERS INVOLVED: **B. JOHNSON, K. MALPANI, R. NATALUK, A. BOTROS, M. BRODNAX, M. YE**

FIRM NAME	**Stantec Consulting Services Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Road, Bridge, Traffic**
PROJECT NAME	**I-210/COVE LANE EXTENSION AND INTERCHANGE**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**H.010151**	OWNER'S NAME	**Mississippi Office of State Aid Road Construction**		
PROJECT LOCATION	**Lake Charles, Louisiana**			OWNER'S PROJECT MANAGER	**Timothy Nickel, PE** *Project Management Administrator*
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1110 | timothy.nickel@la.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**04/11**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$6,000 (estimated)**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**03/15**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$4,400**

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

"I also want to thank the consultant, Stantec... I want to recognize you all for your forward thinking and your help in partnering and bringing everyone together to make this project successful."
-LADOTD Secretary, Sherri Lebas

PROJECT RELEVANCE:
- ☑ Bridge Design
- ☑ New Roadway Alignment
- ☑ Hydraulic Analysis
- ☑ Retaining Wall Design
- ☑ Geotechnical Services

Increasing development pressure combined with construction of a new $500M casino/resort facility created the immediate need for better interstate access and local street connectivity. The new casino development was obligated to be open in November of 2014. Because of our ongoing work with the casino operator and our extensive knowledge of LADOTD requirements, we were able to facilitate a partnership between the developer, LADOTD and FHWA to help identify the type of access needed and move quickly to a shovel-ready project. Beginning in April 2011, a fast-track schedule was developed to gain federal interstate access approval (IJR) and environmental clearance (EA/FONSI) in conjunction with the design so that construction of the interchange could start in the summer of 2013 and be open to traffic in time for the casino's opening. As a result, a typical eight-year process of planning through construction letting was reduced to just over two years. Available funding was tight, so a funding plan was devised that included a $20M share by the private developer along with funds from LADOTD, state bonds, and local sources. Later in 2016, ENR awarded the project Regional Best Project Award of Merit: Highway / Bridge.

While serving as Prime Consultant, Stantec used Value Engineering to save overall costs, reduce the project schedule, and as a catalyst to make key design decisions. Due to poor soil conditions, a load transfer platform (LTP), supported by approximately 8,000 timber and concrete piles, was chosen to stabilize existing soils so that the increased fill could be supported, instead of using a longer overpass structure (more expensive) or surcharged fill (more time). Mechanically stabilized earth (MSE) wall systems serve triple duty to extend Cove Lane, create the grade separation of I-210 and ramps, and support the abutments of the overpass and canal structures. A single overpass span using the newly approved LG-54 girders helped to reduce cost. All structural design was performed in accordance with AASHTO LRFD. Stantec also coordinated with the lighting design consultant for highmast, underpass and median barrier mounted low-mast lighting infrastructure (conduit, junction boxes, anchor bolts) to be incorporated into this project for a lighting system to be installed in a subsequent project.

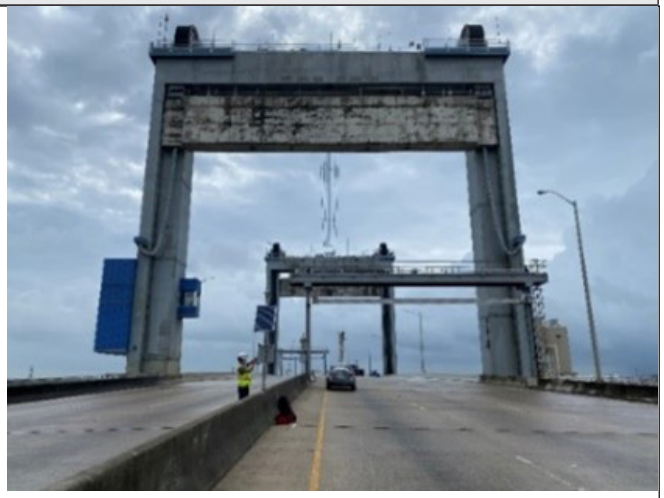
The project was let for construction in June 2013. Our Baton Rouge staff also provided construction support services to assist the LADOTD District in proactively addressing project issues, responding to requests for information, attending weekly contractor progress meetings, making field visits, reviewing shop drawings, etc. For our project management efforts on the project, we were awarded a 4.9 out of 5.0 rating score by LADOTD.

TEAM MEMBERS INVOLVED: **G. HEITMAN, C. HALL, J. LEFANTE, B. JOHNSON, J. CAINS, N. PRUDHOMME, W. ALLEN (GEOENGINEERS), J. ARONSTEIN (GEOENGINEERS), C. HATCH (GEOENGINEERS), L. SANT (GEOENGINEERS), D. SAULS (GEOENGINEERS)**

FIRM NAME	**Wiss, Janney, Elstner Associates, Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**DANZIGER LIFT BRIDGE REPAIR**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**4400009424, H.000303**	OWNER'S NAME	**Louisiana Department of Transportation and Development**		
PROJECT LOCATION	**New Orleans, LA**			OWNER'S PROJECT MANAGER	**Mark Bucci**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1076 | mark.bucci@la.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**07/19**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$1,386**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$1,347 (to date)**

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

The Danziger Lift Bridge is an electro-mechanical, tower drive vertical lift bridge that opened to vehicular traffic in 1984.



The bridge was reportedly experiencing operational issues, which included the movable span no longer fitting into the available space between the towers as well as one corner of the bridge not seating properly. WJE was tasked with performing an inspection of relevant portions of the main span contributing to the reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the long-term functionality and reliability of the bridge. WJE installed instrumentation and monitoring equipment during the field investigation to evaluate the bridge's operations over an extended period. Based on the findings from our investigation, WJE prepared emergency repair plans and specifications to address some of the operational issues with the bridge. Significant findings and the associated remedies included the following.

- Improving the lift span riding surface on the steel orthotropic deck with the installation of polyester polymer concrete repairs.
- Identification of pinion shaft bearing damage and the subsequent restoration of the pinion shafts and bearings.
- Addressing the contact of the lift span during warm temperatures with the approach spans by monitoring the joint movements and identifying that daily thermal movements of the approach spans were causing the issue, and that by cleaning the expansion joints, the issue was alleviated.
- Design of a new lift span skew control system after existing components were removed from the bridge and could not be relocated or replaced in kind.
- Design of electrical controls for the clutches associated with the span drive differentials.
- Strain gage testing to measure span balance and implementation of counterweight changes to improve seating of the span.
- Strain gage testing also showed that the span drive differentials on both towers were not functioning properly requiring coordination with the manufacturer to properly adjust the clutches in the differentials.
- Inspection of trunnion bearings and the installation of an automated acoustic monitoring system to assess bearing performance until scheduled replacements are required.

TEAM MEMBERS INVOLVED: **J. MCGORMLEY, S. LAUER, M. ELBATANOUNY, J. WILLIAMS, G. REES**

FIRM NAME	**Wiss, Janney, Elstner Associates, Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**SUNSHINE BRIDGE OVER THE MISSISSIPPI RIVER, IMPACT REPAIR**	FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**4400009424; H.012343.6-1**	OWNER'S NAME	**Louisiana Department of Transportation and Development**
PROJECT LOCATION	**St. James Parish, Louisiana**	OWNER'S PROJECT MANAGER	**Chris Guidry**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1328 | Chris.Guidry@la.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**10/18**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$516**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**01/19**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$499**

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

The Sunshine Bridge is a cantilevered through truss with a main span of 825 feet that crosses the Mississippi River.

Constructed in 1964, the bridge provides 170 feet of vertical clearance over the river channel. In the early morning hours of October 12, 2018, a crane barge tow made contact with the bottom chord of the truss. The resulting impact severely distorted the chord including the fracture of a castellated bottom plate. The damaged chord is in a region of compression four truss panels from a support. The bridge was closed to traffic by the LADOTD.

WJE was responsible for the development and implementation of a monitoring plan to provide information about the redistribution of loads during the installation of repairs to the damaged truss bottom chord. WJE engineers performed a review of the original design and construction documents with an evaluation of distortion measurements and damage survey findings to inform the design of a jacking system. WJE engineers developed a novel approach to jack apart the affected truss chord panel points to restore the original truss geometry to within 3/16-inch and to permit installation of a replacement bottom truss chord section. Multiple hydraulic jacks achieved a jacking load of 2.2 million pounds. Heat straightening was also used to restore portions of the chord. WJE instrumented selected truss members to monitor changes in forces during repairs. The jacking system members were also monitored. Working with the project surveyor, WJE engineers used their laser scanning data to assist in restoring the structure's geometry. Other project responsibilities assumed by WJE included development of jacking frame shop drawings, review of the replacement chord design, technical assistance during jack system installation, oversight of chord jacking operations, and instrumentation and monitoring of the truss.

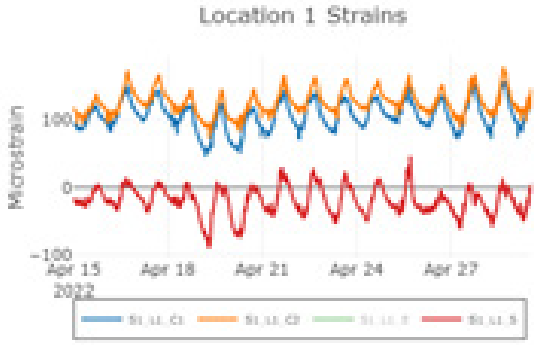
Replacement of the damaged truss chord was completed by December 1, 2018, enabling the structure to be reopened to limited traffic while the repair project was completed.

TEAM MEMBERS INVOLVED: **J. MCGORMLEY, S. LAUER, M. ELBATANOUNY**

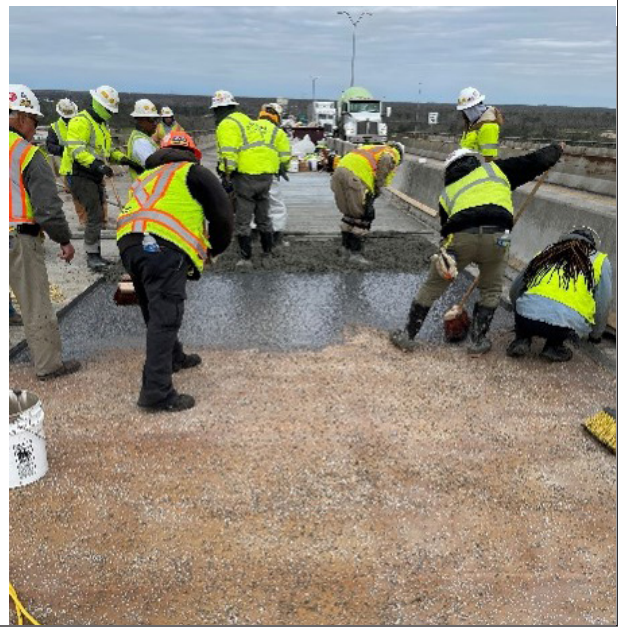
FIRM NAME	**Wiss, Janney, Elstner Associates, Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**HALE BOGGS MEMORIAL (LULING) BRIDGE DECK OVERLAY REPAIR CONSULTATION AND INSTRUMENTATION SERVICES**	FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**H.012617.6**	OWNER'S NAME	**Louisiana Department of Transportation and Development**
PROJECT LOCATION	**Luling, St. Charles Parish, LA**	OWNER'S PROJECT MANAGER	**Chris Guidry**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1328 | Chris.Guidry@la.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**03/21**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$499**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$322**

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

WJE is providing technical guidance and quality assurance assistance to the LADOTD and the contractor repairing the concrete overlay on the steel orthotropic bridge deck spans of this twin pylon, cable-stayed bridge over the Mississippi River.



The overlay consists of an epoxy and fabric underlayment system with embedded granite chips overlain by steel fiber reinforced concrete (SFRC). WJE's scope of work included review and modifications to the original overlay specifications to promote better constructability and performance, development of different overly repair methods to accommodate contractor materials on-hand, location and marking of overlay repairs, QA/QC during placement of the overlay repairs, and development and implementation of a long-term monitoring plan to assess the performance of the various repair methods. For the monitoring system, WJE installed a series of strain gages at each layer of the overlay system in order to determine the stability and long-term integrity of each selected patch repair. A duplicate set of gages were installed at each repair location for redundancy and comparison. The instrumentation reports to a central datalogger which transmits the data via cellular modem to a web-based server where it is displayed on a webpage. Over the next two years, WJE will monitor the three study patch repairs with the objective of providing recommendations to the DOTD for future overlay repair or replacement options.



As part of its work, WJE was tasked with assessing the cause of the current overlay failures. This included visual examination of the failures, in-situ bond tests of the SFRC to the epoxy underlayment, and petrographic examination of the concrete to epoxy bond surfaces. During overlay repairs, WJE engineers were present to provide QA services and technical guidance to the contractor. This work included Schmidt rebound hammer testing of concrete surfaces and subsequent petrographic examination of concrete removed from repair patches damaged by rain during placement.

TEAM MEMBERS INVOLVED: **J. MCGORMLEY, S. LAUER, M. ELBATANOUNY**

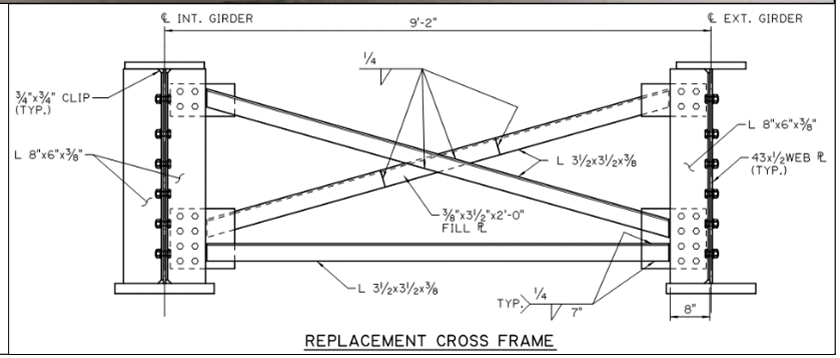
FIRM NAME	**Forte & Tablada, Inc.**		PAST PERFORMANCE EVALUATION CATEGORY(IES)*		**Bridge**
PROJECT NAME	**RETAINER CONTRACT FOR BRIDGE PRESERVATION – ATCHAFALAYA FLOODWAY**		FIRM RESPONSIBILITY (prime or sub?)		**Sub**
PROJECT NUMBER	**H.009461.5**	OWNER'S NAME	**Louisiana Department of Transportation and Development; C/O Stantec**		
PROJECT LOCATION	**West Baton Rouge, Iberville and St. Martin Parishes, LA**		OWNER'S PROJECT MANAGER		**Brian Johnson**
OWNER'S ADDRESS, PHONE, EMAIL	**1200 Brickyard Ln, Suite 400, Baton Rouge, LA 70802, brian.johnson2@stantec.com**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**10/15**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**04/19**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$118.2**

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

As part of a Bridge Preservation retainer contract with LADOTD, Forte and Tablada, Inc., as a sub consultant to Stantec, provided engineering services for the rehabilitation of multiple bridges along I-10 between Baton Rouge and Lafayette.

Bridge types included PPC and steel girder spans, steel grid deck, and slab spans. Scope of work included performing a detailed inspection, documenting deficiencies, and preparing rehabilitation plans for all bridges. Repairs included concrete spall repairs, concrete barrier rail repairs, joint replacements, heat straightening of steel girders impacted by over-height vehicles, painting of steel members, and steel grid deck repair/replacement. We also reviewed shop drawings and developed temporary barrier rail details that were used by the Contractor while making barrier rail repairs on the Atchafalaya Basin bridge.

TEAM MEMBERS INVOLVED: **J. COCO, J. EASLEY**



REPLACEMENT CROSS FRAME

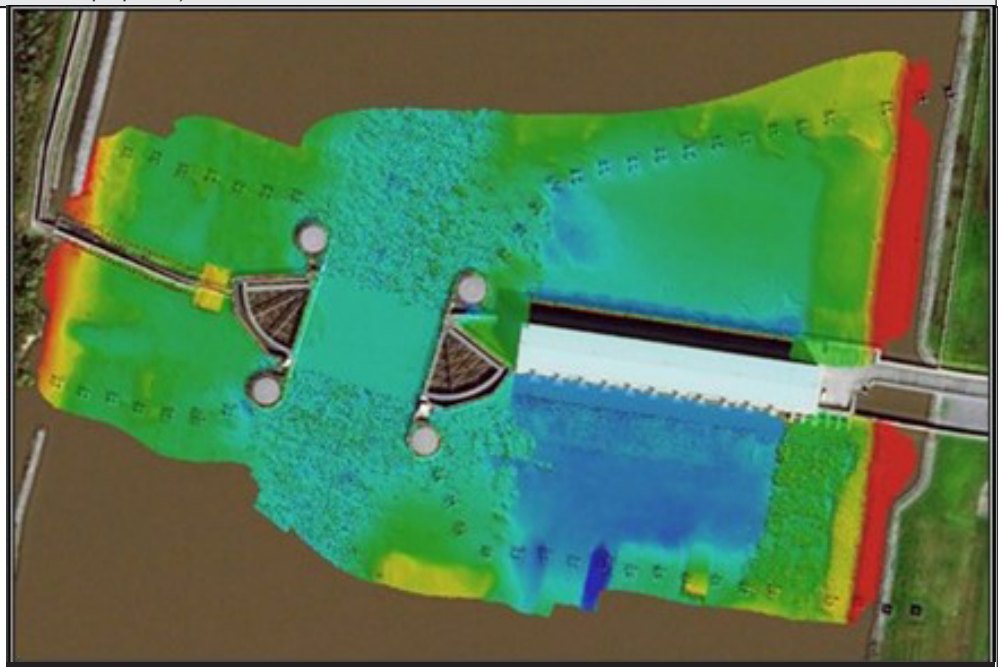
FIRM NAME	**Forte & Tablada, Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Survey**
PROJECT NAME	**WESTBANK CLOSURE COMPLEX MULTI-BEAM HYDROGRAPHIC SURVEY**			FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**N/A**	OWNER'S NAME	**South Louisiana Flood Protection Authority (SLFPA) - West**		
PROJECT LOCATION	**Belle Chase, LA**			OWNER'S PROJECT MANAGER	**Jesse Noel, PE**
OWNER'S ADDRESS, PHONE, EMAIL	**7001 River Rd., Marrero, LA, 70072 | 504.371.6847 | jnoel@slfpaw.org**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**09/21**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**09/21**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$12,500**

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

During Hurricane Ida, the South Louisiana Flood Protection Authority - West, operated the Westbank Closure Complex near pumping capacity and was interested to know whether or not scour had formed on the outfall and suction side of the pump station.

Forte and Tablada mobilized to the site within three days of Hurricane Ida's passing. Utilizing a shallow draft vessel equipped with advanced multi-beam sonar equipment, Forte and Tablada performed a comprehensive survey extended bank-to-bank of the station and beyond the protection fenders for a global depiction of scour. Scour results were presented in a color ramped elevation map, as well as imagery showing the presence of debris on an intake screen.

TEAM MEMBERS INVOLVED: **B. HOLLEMAN, J. COCO, B. CAMPBELL, S. RIMES**



Multi-Beam Hydrographic Survey of Closure Complex

FIRM NAME	**Forte & Tablada, Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Survey**
PROJECT NAME	**SUNSHINE BRIDGE EMERGENCY REPAIR**			FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**4400010587**	OWNER'S NAME	**Louisiana Department of Transportation and Development**		
PROJECT LOCATION	**St. James Parish, LA**			OWNER'S PROJECT MANAGER	**Stanley Ard**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capitol Access Rd, Baton Rouge, LA 70802 | 225.379.1292 | stanley.ard@la.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**10/18**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**12/18**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$618**

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

Forte and Tablada provided topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord.

The severity of the structural damage forced the closure of the bridge resulting in disruption and re-routing of a large volume of industrial and general population motorists. Due to the elimination of this major corridor for commerce and its consequences, an expeditious and time efficient rehabilitation was paramount. Forte and Tablada worked with a design team to formulate a practical solution for obtaining advanced measurements that were unachievable with traditional measuring practices which were required for the structural analysis and repair design for the bridge. Forte and Tablada surmounted the challenges of the repair effort through the use of LIDAR techniques employing innovative applications to provide the necessary data for the bridge repair analysis and inventive construction of an apparatus needed to apply these techniques.

Laser Scan Survey of Sunshine Bridge in Donaldsonville, LA

TEAM MEMBERS INVOLVED: **J. COCO, B. CAMPBELL, R. WILSON**

FIRM NAME	**GeoEngineers, Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Geotech**
PROJECT NAME	**DESIGN-BUILD US90 @ LA318 INTERCHANGE**			FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**S.P. H.004932**	OWNER'S NAME	**Louisiana Department of Transportation and Development**		
PROJECT LOCATION	**St. Mary Parish, LA**			OWNER'S PROJECT MANAGER	**Timothy Nickel, PE**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1110 | Timothy.Nickel@la.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**05/15**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**04/18**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$734**

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

The US90/LA318 Interchange project was in preparation for the conversion of US90 to future I-49 in St. Mary Parish and included construction of access ramps between US90 and LA318, realignment of the frontage road for local access parallel to US90, and elevating US90 over LA318.

As part of the design-build team with Gilchrist Construction Company, GeoEngineers provided geotechnical engineering design services and construction recommendations. Our work included completing preliminary designs for compliance with AASHTO LRFD and LADOTD standards. GeoEngineers also provided geotechnical design to the bridge, road and contractor teams as needed throughout the duration of the design-build construction process. Areas of geotechnical design include the following:

- Review of project geology and explorations previously completed.
- Providing explorations and laboratory testing for foundation, embankment and pavement design.
- Engineering analysis and recommendations for driven pile foundations for highway overpass bridges and drainage culvert design.
- Engineering analysis and recommendations for wick drains and surcharge to reduce post-construction embankment settlement, including field monitoring.
- Field monitoring of pile dynamic testing including WEAP and PDA analysis.

TEAM MEMBERS INVOLVED: **J. ARONSTEIN, C. HATCH, L. SANT, D. SAULS**

FIRM NAME	**Civil Design & Construction, Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Survey**
PROJECT NAME	**RURAL BRIDGE INITIATIVE**			FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**H.013955, H. 013956, etc.**	OWNER'S NAME	**Louisiana Department of Transportation and Development**		
PROJECT LOCATION	**Various Parishes, LA**			OWNER'S PROJECT MANAGER	**Sub to BKI**
OWNER'S ADDRESS, PHONE, EMAIL	**N/A**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**07/20**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**04/21**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$338**

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

The intent of this project was all necessary engineering and related services required for developing plans for the replacement of 35 bridges on the State Highway System and/or local roadways, LA.

CD&C provided survey for 6 of these sites. Those include H.013955, H.013956, H.013957, H.013958, H.013959, & H.013989. CD&C used Mobile LiDAR and traditional means and methods to survey the sites in accordance with LADOTD Location and Survey Manual.

CD&C's Role:

CD&C performed a topography within the existing right of way on each of the 6 sites our firm was tasked. CD&C also located all utilities within the designated areas of the bridge site and cross-sectioned each channel up and downstream of the bridge. Utilities were marked by LA One Call. 3D Terrestrial Scanning was used in conjunction with traditional surveying means and methods to collect data for the project.

TEAM MEMBERS INVOLVED: **R. BURGESS, C. BALLARD, P. DUPREE, JACOB STOEHR, JASON STOEHR, S. BENTON, T. NORRIS**

FIRM NAME	**Civil Design & Construction, Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Survey**
PROJECT NAME	**LA 58: PETIT CAILLOU BRIDGE REHABILITATION / SARAH BRIDGE**	FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**H.010006.5-3**	OWNER'S NAME	**Louisiana Department of Transportation and Development**
PROJECT LOCATION	**Terrebonne Parish, LA**	OWNER'S PROJECT MANAGER	**Thomas Gattle (Huval & Assoc)**
OWNER'S ADDRESS, PHONE, EMAIL	**922 W. Point Des Mouton Rd., Lafayette, LA 705007 | 337-234-3798 | tgattle@tgattle@huvalassoc.com**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**04/17**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**007/17**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$31**

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

The purpose of this project is to provide a structural, architectural, mechanical, and electrical rehabilitation of the movable bridge and approaches that shall allow it to remain in service for an additional 50 years with routine maintenance along with various other repairs and updates to the site. CD&C was tasked with performing the topographic survey and DTM for this movable bridge structure and site.

CD&C's Role:

CD&C performed a topography survey along LA 58 from Little Caillou Road to Bayside Drive within the existing right of way. Also, CD&C located all utilities within the designated areas of the bridge site and cross-sectioned this large bayou up and downstream of the bridge. Utilities were marked by LA One Call. 3D Terrestrial Scanning was used in conjunction with single beam hydrographic surveying in addition to traditional means and methods to collect data for the project. To obtain all critical information for design the bridge had to be scanned at both raised and lowered positions.

TEAM MEMBERS INVOLVED: **R. BURGESS, C. BALLARD, T. NORRIS**

FIRM NAME	**Civil Design & Construction, Inc.**		PAST PERFORMANCE EVALUATION CATEGORY(IES)*		**Survey**
PROJECT NAME	**I-10: LA 415 TO ESSEN LANE ON I-10 AND I-12**		FIRM RESPONSIBILITY (prime or sub?)		**Sub**
PROJECT NUMBER	**H.004100**	OWNER'S NAME	**Louisiana Department of Transportation and Development**		
PROJECT LOCATION	**West and East Baton Rouge, LA**		OWNER'S PROJECT MANAGER		**Nicholas Olivier**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access Rd, Baton Rouge, LA 70802 | 225-379-1232 | Nicholas.olivier@la.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**01/18**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**N/A**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$296**

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

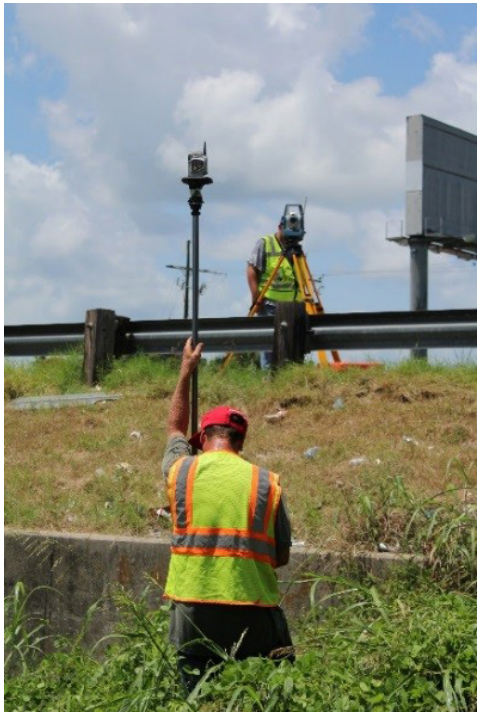
This project is located in West Baton Rouge and East Baton Rouge Parishes in the cities of Port Allen and Baton Rouge, LA.

A complete Topographic survey including all utilities (ASCE 38-02, QL "B") with depths and all drainage is required, along with Finish floor elevations of all buildings that fall within the survey limits. The survey begins 1,500 feet West of the western most entrance/exit ramps of the LA 415 and I-10 Interchange. From the I-10, I-12 split the survey shall proceed in southerly and easterly directions along the existing main alignment of I-10 for approximately 1.5 miles & I-12 for approximately 1.5 miles to end the route limits.

CD&C's Role:

CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.

TEAM MEMBERS INVOLVED: **R. BURGESS, C. BALLARD, P. DUPREE, JACOB STOEHR, T. NORRIS**



FIRM NAME	**Meyer Engineers, Ltd.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Other**
PROJECT NAME	**CAUSEWAY BRIDGE BASCULE BRIDGE TENDER'S HOUSE**	FIRM RESPONSIBILITY (prime or sub?)	**Sub**
PROJECT NUMBER	**N/A**	OWNER'S NAME	**Greater New Orleans Expressway Commission; Sub to GEC**
PROJECT LOCATION	**Jefferson Parish, LA**	OWNER'S PROJECT MANAGER	**Cary Bourgeois, PE**
OWNER'S ADDRESS, PHONE, EMAIL	**8282 Goodwood Blvd., Baton Rouge, LA 70806 | 225-405-9513 | cbourgeois@gecinc.com**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**01/22**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$25**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$25**

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

The project includes the rehabilitation of the upper two levels of the Bridge Tender's House located on the Causeway Bridge, Lake Pontchartrain, LA.

Meyer reviewed the existing conditions of the structure, and in conjunction with Gulf South Engineers & Consultants have determined that the Scope of Work is as follows:

- Removing and replacing all existing windows at the operator's level with new, impact resistant glazing. All new glazing will be tinted or have interior shading devices installed to minimize heat gain into the tender's work environment.
- Reconfigure one of the tender's windows into an impact resistant, operable door to allow direct access to the catwalk outside.
- Paint all interior surfaces.
- Remove and replace all finish flooring with new material.
- Remove and replace all furniture/millwork with new construction to facilitate a more efficient layout for tenders.
- Provide better lighting for nighttime operations.
- Reduce ambient noise by installing acoustical absorbent materials.
- Upgrade existing air conditioning units and ventilation.
- Remove and replace stair tread anti-slip strips.
- Recover existing roof surface with new seamless waterproofing membrane.
- Repair access ladder to roof and install new roof safety railings.
- Patch and repair any structural damage within the scope of work.

The lower level holds the critical electronic equipment vital to the operation of the bridge. Even though the room is provided with adequate air conditioning, the dispersal of tempered air from this room percolates into the upper two floors. This adds to the imbalance in the ambient air temperature making it uncomfortable for the tenders. This imbalance will be investigated and will be rectified as part of this project.

TEAM MEMBERS INVOLVED: **A. ROMERO**

FIRM NAME	**Meyer Engineers, Ltd.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Other**
PROJECT NAME	**NORTHSHORE TOLL PLAZA RENOVATION**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**N/A**	OWNER'S NAME	**Greater New Orleans Expressway Commission; Sub to GEC**		
PROJECT LOCATION	**St. Tammany Parish, LA**			OWNER'S PROJECT MANAGER	**Robert Lambert**
OWNER'S ADDRESS, PHONE, EMAIL	**3939 Causeway Blvd., Suite 201, Metairie, LA 70002 | 504-835-3118 | rlambert@gnoec.org**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**04/02**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$136**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**11/07**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$136**

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

The project consisted of miscellaneous modifications to the North Shore Toll Plaza.

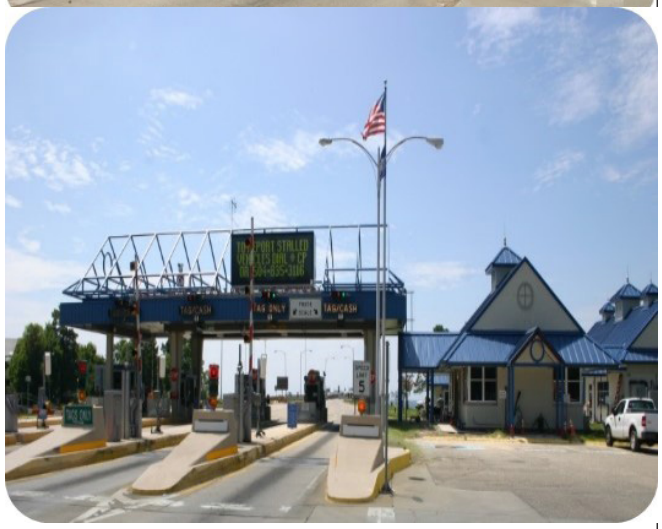
The work included new exterior beautification scheme for the entire complex along with renovations to two existing buildings: main office and the garage and landscaping the buildings and toll plaza.

The main office renovations consisted of interior and exterior work; computer room, interior and accessible restroom, an exterior accessible public restroom, and provide for accessibility to the building entrance, restrooms, and common areas.

The garage building renovations consisted of interior and exterior work; DWI interview room, employee locker/work room, multi-purpose break room, unisex restroom, tool maintenance office, mechanical/storage room, and electrical/technical room and p02rovide for accessibility to the building entrance, restrooms, and common areas.

Also assisted in the renovation of the Police Auxiliary Building.

TEAM MEMBERS INVOLVED: **A. ROMERO**



PROJECT UNDERSTANDING & CHALLENGES

This IDIQ consists of eight contracts that involves statewide Bridge Preservation Programs that are designed to upgrade bridges to promote motorist safety and benefit the economy. Task orders on these types of contracts are centered around a particular bridge site, or batch of bridges, and typically involve a variety of additional services including inspections, roadway, traffic, survey, geotechnical, environmental, and permitting. Repairing or upgrading bridges that do not meet the current specifications regarding strength and serviceability requirements, along with bridge replacements or new construction, are possible tasks.

Stantec has served LADOTD on several previous bridge focused IDIQs and understands expectations set forth in the scope of services. With this knowledge, the Stantec team is confident we have the expertise to address challenges while being cognizant of potential impacts.

TEAM APPROACH & METHODOLOGY

Stantec will serve as the prime consultant and will work closely with subconsultants Wiss Janey, Elstner Associates, Inc. (WJE), Forte and Tablada, Inc. (F&T), GeoEngineers, Civil Design and Construction (CDC), Meyer Engineers, Ltd., to provide the necessary services outlined in Attachment "A" of the advertisement related to Bridge Design (Fixed and Movable), Geotechnical, Roadway/Traffic, Surveying, Bridge Inspection, and Environmental and Permitting as outlined in the scope of services.

1. BRIDGE ENGINEERING SERVICES

- **FIXED BRIDGES**
  - » **INSPECTION AND CONDITION ASSESSMENT**

Stantec has been performing inspections on short, medium and long span bridges for many decades. Element level inspections of steel or concrete girder spans are generally completed using appropriate methods for each situation including from the ground, ladders, boats, manlifts, bucket boats, and under-bridge inspection units. Each inspection team member will be selected based on skill and expertise to complete the required work. From small efficient teams of two to four experienced bridge inspectors to larger teams, up to 12 highly trained engineers, can mobilize to tackle larger bridges in a shorter period. Larger inspection teams are strategically broken into smaller groups lead by seasoned team leaders to evaluate and complete certain bridge elements and components.

Having one team complete the evaluation of similar bridge elements and components helps keep collected data consistent.

Inspection personnel assigned to evaluate fracture critical details will have taken NHI Course 130078 - Fracture Critical Inspection Techniques for Steel Bridges. Inspectors will take care to concentrate efforts on fatigue prone details, out of plane bending locations, intersecting welds, floor beam & stringer connections, built-up members, previously noted cracks, areas where debris collects, and other historically problematic details. If a suspected crack is identified, the area will be thoroughly cleaned and Magnetic Particle or Dye Penetrant testing will be performed to mark termination points for future inspection tracking, stop drilling, or cold expansion repair to induce a compressive force.

Steel Truss Bridges: Rope access and special aid climbing techniques are an extremely efficient and cost-effective method to perform 100% hands-on inspections of truss members and elements. To expedite field work, mechanical lift equipment is commonly deployed under spans over land or from bridge deck shoulders if traffic conditions are suitable. Rope access techniques, sometimes combined with topside deck traffic control and under bridge inspection trucks, is commonly used to perform 100% hands-on inspection of the floor systems. Floor beams and stringer clip angle connections can, at times, be accessed by inspectors using specialized beam rollers or aiding techniques.

Rope Access Inspection of US 84 over Mississippi River, Natchez, MS

Cable-Stay and Suspension Main Span: On many modern cable-stayed structures, access to the main span's floor system and components is accomplished by utilizing either a built-in inspection traveler system, SPRAT climbing methods, UBITs, or a combination of all three. Access to the inside of towers is typically accomplished by climbing existing interior ladder systems or from rappelling above. Stay cable anchorage points along the supporting edge girders can be accessed off the side of the deck by using tie-off and fall protection methods or mechanical equipment. The length of the cables from the towers to the deck can be inspected by via numerous methods including drones, SPRAT rope access, or sighted visually from the top and bottom to identify potential anchorage boot conditions, sheathing cracking, rain & wind drip edging, moisture infiltration points, wind-tie problems, and other defects.

Stantec has completed several Detailed In-Depth Element Level Inspections for both conventional and complex bridges all over the country and understands LADOTD requirements and goals.

When necessary, a Transportation Management Plan (TMP) will be developed to perform inspection activities. TMP level is dependent on traffic volume and possible detour lengths. The TMP will show applicable temporary traffic control details, detour route signage as needed, and a basic public information release at the district level.

Coating System Inspection: will be performed by certified SSPC Protective Coatings Specialists or NACE Certified Professionals.

Rope Access Inspection of US 82 Cable Stay over Mississippi River, Greenville, MS

Underwater Diving Operations: will be performed in-house by certified ADCI divers. Services included are underwater element inspection, investigation & mapping channel bottom scour by taking depth measurements and soundings using acoustic imaging and side scanning techniques.

An In-depth inspection report summarizing the inspection findings along with repair recommendations will be prepared and submitted to LADOTD after the inspection has been completed.

» LOAD RATING AND STRUCTURAL ASSESSMENT

Using data and information gathered during the inspection phase, a bridge load rating analysis will be performed using AASHTOWare BrR, accompanied with other appropriate software packages, to identify areas and elements that may need to be strengthened or replaced to meet established rehab criteria.

Stantec and F&T were responsible for managing and performing load ratings on more than 635 statewide on-system bridges using the Load and Resistance Factor Rating (LRFR) method. Structure types included concrete slab spans, prestressed concrete girder spans, structural steel girder units, voided concrete decks, steel trusses, pile bents (timber, concrete, and steel), and concrete hammerhead piers. AASHTOWARE BrR was mainly used for these rating with exception of cases that were not covered by the software, where detailed finite element analysis (FEA) was utilized along with in-house developed spreadsheets. A report summarizing the load rating analysis procedure, assumptions and rating factors will be prepared. The report will also include repair recommendations, with associated estimated construction costs and expected construction schedules, to aid LADOTD in developing a scope of work for the rehabilitation. ***Stantec has been awarded many Bridge Inspections and Load Rating IDIQ Contracts in other states that involved In-depth inspections and load rating of various bridges from simple slab bridges to cable stayed bridges and steel trusses including both, fixed and movable spans.***

» BRIDGE REHABILITATION

When major deficiencies or damage is found during an inspection, at the request of LADOTD, the process of obtaining appropriate information to develop bridge rehabilitation and/or repair plans will be initiated. We will work with the LADOTD Project Manager to determine the appropriate and applicable level of rehabilitation for deficient bridge elements through the development of an assessment report. These reports will provide LADOTD will enough information to make a calculated decision on what approach to adopt for a rehabilitation project.

Milestones for preliminary and final plan development will be establish based on the project's complexity. Bridge design activities may include analyzing structures with repairs in place, new members to replace existing, or adding elements to strengthen existing members. Construction cost estimates, "as-designed" load rating reports, specifications, and calculation books will be included with the appropriate milestones established during the preliminary plans phase. Assistance will be provided to LADOTD during the bidding process to aid in answering bid questions, addressing potential plan revisions, and reviewing contractor bids.

Our team has extensive experience in repair and rehabilitation of deficient bridges using traditional and non-traditional techniques, e.g., advanced composite materials (also known as Fiber Reinforced Polymers) for concrete structures and heat straightening for steel structures. Under our most recent LADOTD Bridge Preservation IDIQ, Stantec designed, inspected, and rehabilitated several feature bridges including ***US 90 Ramp Improvements; LA 3064: Essen Lane Bridge Widening; LA 511: Jimmie Davis Bridge Rehabilitation; and I-10: Bridge Preventive Maintenance.***

» BRIDGE REPLACEMENT

When the final decision is to replace an existing deficient structure, roadway alignments and bridge type(s) shall be selected to consider minimizing impacts to maintenance of traffic, residents, and businesses, required right of way, utilities, construction challenges, and environmental issues. Challenges include replacing bridges while minimizing disruption to vehicular and navigation traffic, limiting required right of way acquisitions, and minimizing environmental impacts. Careful traffic control planning will be essential during the demolition and construction stages of the project. Once a final alignment is approved, our roadway, environmental, survey, and geotechnical teams will initiate services to establish minimum finish grade, appropriate span arrangements to minimize scour potential (if necessary) and appropriate foundation types. Span arrangements will be configured such that the span to depth ratios meet requirements for vertical and horizontal clearances. Span lengths will be selected to achieve an efficient design and be cost effective for the region.

Projects completed in LA include the new I-10 Loyola Interchange (Design-Build) in Kenner, Nelson Road Extension in Lake Charles, I-20 / Tarbutton Road Interchange in Ruston, McCain Creek Bridge Replacement in Caddo Parish, and I-210 / Cove Lane Extension and Interchange in Lake Charles.

- **MOVABLE BRIDGES**

» INSPECTION AND CONDITION ASSESSMENT

Our team may be required to inspect and evaluate different movable bridge types including bascule, swing, and vertical lift bridges. These inspections require knowledge and skills beyond that required for routine conventional bridge inspections due to the electrical, mechanical, and hydraulic systems. The LADOTD Bridge Inspection Manual, Appendix A-17, has a dedicated set of Agency Defined Elements (ADE) for the evaluation and documentation of movable bridge elements and components. The approach, methodology, and staffing needed to perform a fracture critical inspection of a steel lift, bascule, pontoon, or swing span structure

is like that of an in-depth truss inspection as the expected fatigue locations and deterioration expectations are generally the same. Higher stress areas around trunnion bearings, and at cantilevered beams, will receive close attention. A specialized team of mechanical and electrical engineers will be on-site to evaluate and code the LADOTD ADE's for the control panels, PLC's, motors, housings, gearing, bearings, hydraulic power units, cables, and other structure specific elements. Gears, shafts, couplers, and bearings will be evaluated for wear, vibration, proper lubrication, and any abnormal noises or vibrations will be investigated. It is critical to check and verify limit switches for proper function as well as to verify smooth span movement operations and balancing. Structural teams will inspect counterweights and towers for deterioration. Observations will be made to confirm that roadway safety items are properly in place and functioning, such as advanced warning signs and stop arms. Additionally, all navigation lights and fender systems are included in the inspection. Well recognized for expertise in this area, Stantec and WJE have built its movable bridge practice by bringing unmatched customer service combined with practical real-world solutions. Our team includes engineers and certified technicians with vast inspection experience in movable bridges.

» ELECTRICAL & MECHANICAL DESIGN

Services are anticipated to include all aspects of movable bridge engineering from inspection, evaluation and design to peer review and construction support services. WJE's approach to providing these services is to first determine LADOTD's objectives for the project, then prepare and execute a scope of work that addresses those expectations through effective project management and delivery of high-quality technical services. WJE's approach focuses on safety with respect to the employees working in the field, the vehicles and pedestrians that cross the bridge, as well as marine traffic that depends on reliable bridge operations. We understand the bridge is there to serve the public and that closure durations, or other disruptions to either vehicular or marine traffic, are to be minimized. By properly scheduling our work, we can provide engineering services that, when completed, will result in a bridge that is safe to operate and reliable over the long term.

» STRUCTURAL DESIGN

Movable bridges have unique features for structural systems allowing the span to move and function as an operating machine. Designs for swing spans, bascule spans and vertical lift spans are uniquely different, however, share common efforts and tasks. All designs are to meet AASHTO requirements including a structure that must serve multiple modes of transportation. The span designed is influenced by the desired methods of construction, needs to maintain existing modes of transportation, and ratings needed to place the span in service. The final design is also a function of span layout, placement of substructure elements, layout of flanking spans, and sizing of main members to ensure adequate navigation clearances. Main members may require additional analyses to account for member rotation, such as for a bascule. Skewed elements may also be included in the details requiring additional analyses to assure deflections and rating requirements meet the project needs.

Design responsibilities also include the development of operational components for movable spans. Placement of the operator's station and operation of the movement are critical elements of the design which greatly impact total design effort and costs. Preparing the equipment and providing adequate space for future maintenance will be included in design considerations. Additionally, the needs and desires for remote operation and/or monitoring may also be significant design considerations.

» MISCELLANEOUS

Services to be considered during the design will also include aesthetic feasibility, specifically referring to operator houses, and lighting both for the roadway and channel below the bridge deck.

2. SAMPLING, INSTRUMENTATION AND NON-DESTRUCTIVE TESTING

Sampling, Instrumentation, and Non-destructive testing services will be provided by WJE who has instrumented and tested hundreds of structures and material samples—in the laboratory and the field—with strain and displacement gages, accelerometers, environmental monitors, and other sensors. WJE's monitoring capabilities include wireless networks, interactive web and video feeds, database archival systems, and automated alarm systems. WJE also has pioneered the use of nondestructive testing (NDT) methods—such as impact-echo, infrared, ground-penetrating radar, half-cell, and magnetic particle testing. In-house laboratory facilities provide for quick analysis and efficient testing capacities. Application of these techniques and tools by WJE can provide the LADOTD with methods to evaluate structural behavior and measure the performance of repairs and retrofits.

The typical steps followed for an instrumentation project include initial assessment and plan development resulting in an instrumentation plan; system procurement (determination of sensors and associated components); coordination and mobilization including traffic plan and safety assessment; plan execution including instrumentation installation and maintenance; data acquisition and display; data analysis; structural analyses; QA/QC of deliverables; and reporting of a summary of findings and recommendations.

When needed, material samples for laboratory testing will be taken for the purpose of quantifying material properties, e.g., concrete compressive strength, or for coatings to determine the presence of heavy metals or the possibility of overcoating the existing coating. For each sample, the appropriate test methods will be determined and then reported.

NDT can be used to efficiently diagnose issues that otherwise may require expensive and disruptive exploratory openings and testing to detect and/or correct. NDE techniques also allow WJE to gain a broader understanding of a structure's condition and performance—information used to develop better targeted and more effective recommendations. WJE engineers and technicians trained in the use of this equipment are capable of properly interpreting the results and understanding when the results may be skewed by actual conditions, e.g., poor GPR data due to moist concrete. WJE's knowledge related to NDT techniques started with the use of reinforcing bar detectors in the 1950s, continued to expand through WJE's staffing and operation of the FHWA's NDE Validation Center in McLean, Virginia (1998-2008), and continues today as we test systems and provide suggestions to current NDE manufacturers.

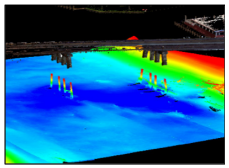
3. GEOTECHNICAL SERVICES

Geotechnical Services will be provided by GeoEngineers, with more than 30 years of experience on transportation-related projects and extensive experience working with LADOTD. Field investigations, laboratory testing and analysis, site characterization, soil boring logs, and construction services. Evaluation of bridge foundation types will be carried out in accordance with relevant LADOTD guidelines and national specifications.

4. ROADWAY/TRAFFIC DESIGN

Roadway and Traffic design services will be performed by Stantec which has highly qualified staff with knowledge and experience in delivering LADOTD projects. The identified key staff on the organizational chart are fully acquainted with LADOTD plan development process, and applicable LADOTD design guidelines, standards, and specifications. Services shall include development of preliminary and final plans, hydraulic analysis and design, traffic control design and data collection, and developing Transportation Management Plans (TMP). CDC will provide support by assisting with plan development.

5. SURVEYING AND TITLE WORK



Underwater Acoustical Imaging / 3D Laser Scanning Services will be provided by F&T utilizing the latest multi-beam and single beam hydrographic equipment. This equipment, combined with versatile fleet of vessels, including vessels capable of accessing shallow inland waterways, can be used to survey submerged bridge elements in open bays and lakes, to small streams, rivers, bayous, and canals. F&T utilize this equipment to identify scour, pier damage, pile degradation, pier movement, and geometry below the water.

Similarly, F&T is an industry leader in integrating laser-scanning (LiDAR) technology for bridge preservation, inspection, and instrumentation applications. Existing bridge components can be quickly, safely, and precisely captured for further design analysis, or even directly use in plan development. Further, complex as-built details can be developed for the bridge elements that have been field modified through their history, have been damaged, or where there are no existing plans. ***The power of those scanning technologies has been demonstrated on the Sunshine Bridge and Danziger Vertical Lift Bridge repair projects.***

Topographic Surveying Services will be performed by CDC who has served LADOTD on numerous projects providing topographic surveys, property surveys, base and final right of way maps, and construction surveying services, which makes them fully acclimated with LADOTD requirements. ***CDC has completed several projects performing topographic surveying services statewide including the Louisiana Rural Bridge Initiative; Petit Caillou Bridge Rehabilitation / Sarah Bridge, Terrebonne Parish; and LA 443 Tangipahoa River Emergency Bridge Replacement in Tangipahoa Parish.***

6. ENVIRONMENTAL AND PERMITTING

Stantec has extensive experience with handling environmental and permitting aspects for a variety of projects and applications. Starting with the initial assessment through final permits, our team can provide these services and assist LADOTD through each step. Permit requirements investigated may include Corps of Engineer 404 wetland requirements for each site, water quality certification, scenic stream permits, US Coast Guard Bridge permits and Levee permits.

PROJECT SCHEDULE

Schedules will depend on the structure type, project location, LADOTD task order scope and expectations, and inclusion of design and construction activities. A typical schedule for an all-inclusive task order, assuming a complex bridge, is expected to be as follows:

1. **Data Collection & Project Setup (4 months)** – work hour proposal, kick-off meeting, design criteria, project schedule, data gathering, field reconnaissance and preparation of inspection plan.
2. **Inspection, Sampling, Instrumentation and Non-Destructive Testing (5 months)** – necessary field work, data processing, report development, QC/QA of inspection findings report.

   Note: Per the NBIS and LADOTD Bridge Inspection Manual requirements, all inspections will be completed in the month assigned according to the recommended bridge inspection frequency or as otherwise directed by LADOTD. All reporting will be completed in AssetWise within 45 days of the inspection or sooner.
3. **Structure Assessment (4 months)** – load rating analysis, determination of repairs/rehabilitation recommendations for deficient members OR whether a Bridge Replacement would be necessary, cost estimates, collecting additional data (roadway, geotechnical, survey) when necessary, prepare TMP.
4. **Design & Plan Development (9-12 months)** – design and detail Rehabilitation Plans/ Bridge Replacement Plans, determine sequence of construction and TMP, Prepare Construction Cost Estimates, Perform "As-designed" load Rating Report.
5. **Construction Support (9-24 months)** – assist LADOTD during bidding process, address contractor RFIs, review shop drawings.

19. **Workload:**

FIRM	WORK TYPE(S)*	STATE PROJECT NUMBER	PROJECT NAME AND LOCATION	REMAINING UNPAID BALANCE**
Stantec Consulting Services Inc.	Bridge	S. P. No. 700-99-0430	Retainer Contract for Bridge Preservation [Statewide, Louisiana]	
			T.O. 701-65-1018 Bayou Tech Bridge	$1,053
Stantec Consulting Services Inc.	Bridge, Traffic	S. P. No. 700-10-0153	Nelson Road Ext. Bridge [Lake Charles, Louisiana]	$0
Stantec Consulting Services Inc.	Planning	S. P. No. 4400004128	Lafayette Regional Airport to I-10/I-49/US 167 Interchange [Lafayette Parish]	$1,453,450
Stantec Consulting Services Inc.	Traffic/ITS	S. P. No. 4400010670	Retainer Contract for Intelligent Transportation Systems (ITS) Design and Implementation Services [Statewide, Louisiana]	
			H.004104.5 Pecue Lane/I-10 Interchange Phase 3 [East Baton Rouge Parish]	$12,582
			H.011152.4 I-12 US 190 to LA 59 [St. Tammany Parish]	$36,195
			H.013261.6 I-110 ITS Deployment/Constr. [East Baton Rouge Parish]	$14,495
			H.013866.6 I-12: LA 21 to US 190 Roadway Widening [St. Tammany Parish]	$23,561
			H.014529.1 Baton Rouge Regional ITS Architecture Update [EBR & WBR Parishes]	$1,910
Stantec Consulting Services Inc.	Road, Bridge, ITS, Traffic	S. P. No. H.011670	Loyola Dr./I-10 Interchange to New Airport Terminal Design Build (Sub to Gilchrist Co., LLC) [Jefferson Parish]	$459,240
Stantec Consulting Services Inc.	Traffic/ITS	S. P. No. 4400017922	IDIQ Contract for Intelligent Transportation Systems (ITS) System Design, Integration and System Verification Services [Statewide, LA]	
			H.014515.1 ATMS and 511 Upgrade SEA [Statewide]	$710
Stantec Consulting Services Inc.	Traffic/ITS	S. P. No. 4400020058	IDIQ Contract for Intelligent Transportation Systems (ITS) Design and Implementation Services [Statewide, LA]	
			H.013710.6 I-10: US-61 to Laplace ITS Deployment [Ascension, St. James & St. John Parishes]	$4,628
			H.013842.5 I-10: WBR Queue Warning System Design [Iberville & WBR Parishes]	$1,585
			H.001234.6 LA 1: Port Allen Canal BR REPL (PHI) (HBI) [West Baton Rouge Parish]	$5,214
			H.002424.5 LA 70: Sunshine Bridge - LA 22 [St. James & Ascension Parishes]	$35,804
Stantec Consulting Services Inc.	Road/Bridge	S. P. No. 4400020064	IDIQ Contract for Electrical Services [Statewide, LA]	
			H.005967.5 I-12: Nelson Road Ext. & Bridge-Roadway Lighting Engineering [Calcasieu Parish]	$2,617
			H.014286.5 I-10: LA 26 (Jennings) Interchange Lighting [Jefferson Davis Parish]	$119,089
			H.014272.5 I-10: LA 97 (Jennings) Interchange Lighting [Jefferson Davis Parish]	$221,567

Wiss, Janney, Elstner Associates, Inc.	Bridge	4400009424, H.000303.6	Contract 4400009424, Task Order No. H.000303.6, Danziger Bridge Repair	$38,315
Wiss, Janney, Elstner Associates, Inc.	Bridge	4400009424, Task Order 5	Contract 4400009424, Task Order No. 5, Elastomeric Bearing Pad Testing	$ 44,646
Wiss, Janney, Elstner Associates, Inc.	Bridge	H.014280	Contract No. 4400017263, H.014280 Bayou Ramos	$142,599
Wiss, Janney, Elstner Associates, Inc.	Bridge	H.014673	I-49, US 165: Debonded PPC Girder Rehab I-49/US165, Rapides Parish	$24,498
Wiss, Janney, Elstner Associates, Inc.	Bridge	H.012617.6	I-310: I-10 to US 90, Hale Boggs Memorial (Luling) Bridge, Deck Overlay Repair Consultation, Instrumentation Services	$221,747
Wiss, Janney, Elstner Associates, Inc.	Bridge	4400001762, H.014899.6	I-10/310 Bonnet Carré Fire Damage Repair	$37,618
Forte and Tablada, Inc.	Bridge	H.012485.1	IDIQ Contract 4400010099, Task Order No. 4 Off System Bridge Load Rating, Statewide	$169,378
Forte and Tablada, Inc.	Bridge	H.012485.1	IDIQ Contract 4400010099, Task Order No. 5 Bridge and Culvert Load testing	$181,695
Forte and Tablada, Inc.	Survey	H.014628.5	IDIQ Contract 4400010587, Task Order No. 17 Turn Lanes at Rice Mill	$71,418
Forte and Tablada, Inc.	Survey	H.014219, H.014222, H.014228, H.014231, H.014236, H.013954, H.013979, H.013985, H.013992, H.013994, H.013995, H.013990	Contract 4400017598 Rural Bridge Replacement Initiative	$545,837
Forte and Tablada, Inc.	Survey	H.003931.5	IDIQ Contract 443015237 I-10 Calcasieu River Bridge Replacement	$1,975,621
Forte and Tablada, Inc.	Survey	H.004273.5	DOTD I-49 Connector (Lafayette Regional Airport to I-10/US 167 Interchange)	$197,924
Forte and Tablada, Inc.	Survey	H.011684	LA 327 Spur: Staring Lane Extension Route LA 327-S	$50,279
Forte and Tablada, Inc.	Survey	H.012072	LA 60 Drain Bridge	$1,428
GeoEngineers, Inc.	Geotech	H.003370	DB I-20 Barksdale/GT OV-QA	$79,902
GeoEngineers, Inc.	Geotech	H.004791	P3 Belle Chasse Bridge & Tunnel	$302,064
GeoEngineers, Inc.	Geotech	H.011670	Loyola Dr/I-10 Interchange	$2,000
GeoEngineers, Inc.	Geotech	H.002176	LA10 Bridges	$184,038
GeoEngineers, Inc.	Geotech	H.001779	Jimmy Davis Bridge Prelim Explorations	$166,919
Civil Design & Construction, Inc.	Survey	4400017597	Rural Bridge Replacement Initiative (Districts 03, 07, 61, & 62)	$7,000
Civil Design & Construction, Inc.	Survey	4400017091/ TO-2	LWI Statewide Modeling R5 – Task Order #2	$148,000

Civil Design & Construction, Inc.	Survey	4400017091/ TO-3	LWI Statewide Modeling R5 – Task Order #3	$246,000
Meyer Engineers, Ltd.	CE&I / OV	H.001498	LA 24 & LA 316 Company Canal Bridge	$377,489
Meyer Engineers, Ltd.	CE&I / OV	H.007331.6	Pakenham Drive (LA 46 – LA 39)	$4,783
Meyer Engineers, Ltd.	CE&I / OV	H.007175	Lapalco (Victory – Westwood)	$77,014
Meyer Engineers, Ltd.	Road	H.004727	Howard Avenue Extension (Loyola Avenue – LaSalle Street	$5,693
Meyer Engineers, Ltd.	CE&I / OV	H.014048	S. Tangipahoa Roads Pavement Rehab	$707,683

DO NOT SUM

(Add rows as needed)

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

** Round to the nearest dollar. **Do not** round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, please place N/A in the remaining unpaid balance column. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

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

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Gary Heitman
has attended
Traffic Control Technician-LA State Specific
Training Course

6/30/2020 to 6/30/2020
Date

Baton Rouge, LA
Location

Vice President of Member Services

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Gary Heitman
has attended
Traffic Control Supervisor-LA State Specific
Training Course

7/1/2020 to 7/2/2020
Date

Baton Rouge, LA
Location

Vice President of Member Services

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Brian Johnson

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Louisiana Department of Transportation & Development

Date: April 20-22, 2021
Location: Virtual Delivery, LA

Hours of Instruction: 18

Instructor

Instructor

Allison H. Landry
Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Brian Johnson

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Office of State Aid Road Construction

Date: April 19-21, 2016
Location: Jackson, Mississippi

Hours of Instruction: 18

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Brian Johnson

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

Office of State Aid Road Construction

Date: December 5-16, 2011
Location: Jackson, Mississippi

Hours of Instruction: 60

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

The American Traffic Safety Services Association

Hereby recognizes that

Cindy Hall
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

07/27/2018
Date

Baton Rouge, LA
Location

ATSSA SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

Certificate of Completion

presented to

Cindy Hall

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Cindy Hall

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Cindy Hall

for completing the

Traffic Engineering Analysis Process & Report Module 3

Date: March 11, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD

Stantec

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Ryan Nataluk

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Arizona Department of Transportation

Date: October 22-24, 2019
Location: Phoenix, AZ

Hours of Instruction: 18

Instructor

Instructor

Local Coordinator

Michael Davies, P.E.
Director, National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Ryan Nataluk

has participated in

Safety Inspection of InService Bridges

hosted by

Colorado Department of Transportation

Location: Denver, Colorado
Date: April 24 – May 5, 2006

Hours of instruction: 10 days

Instructor
Director, National Highway Institute
Federal Highway Administration

Coordinator
Director, Office of Professional and Corporate Development
Federal Highway Administration

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Ryan Nataluk

has participated in

Safety Inspection of InService Bridges

hosted by

Colorado Department of Transportation

Location: Denver, Colorado
Date: April 24 – May 5, 2006

Hours of instruction: 10 days

Instructor
Director, National Highway Institute
Federal Highway Administration

Coordinator
Director, Office of Professional and Corporate Development
Federal Highway Administration

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Ryan Nataluk

has participated in

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Colorado Department of Transportation

Location: Denver, Colorado
Date: January 24-27, 2005

Hours of instruction: 3.5 days

Instructor
Director, National Highway Institute
Federal Highway Administration

Coordinator
Director, Office of Professional Development
Federal Highway Administration

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT

Acknowledges that

RYAN MITCHELL NATALUK

has demonstrated through practical and written examinations, attainment of SPRAT's Certification Requirements for Rope Access Work, and is therefore

CERTIFIED

Level III Rope Access Technician

SPRAT #110325

AWARDED: March 13, 2020
Expires: March 13, 2023

ROBERT DUNSHEA, EVALUATIONS COMMITTEE CHAIR

WILLIAM McCOOK (TROLL), SPRAT PRESIDENT

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

national highway institute

Certificate of Training

David Severns, PE

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

TranSystems

Date: November 10-12, 2020
Location: Virtual Delivery, FL

Hours of Instruction: 18

Digitally signed by John P. Bogue, P.E.
Date: 2020.11.12 17:46:08 -05'00'

Instructor

Digitally signed by Calvin A. MacDonald, P.E.
Date: 2020.11.17 14:02:19 -05'00'

Instructor

Donville Lawes, CBI
Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

Association of Diving Contractors International

Cert. # 51670

Expires 05/13/2025

ADCI

MIXED GAS DIVING SUPERVISOR

DAVID SEVERNS I.D. 071192

Commercial Diver Certification Card

Association of Diving Contractors International

Cert. # 51670

Expires 04/10/2020

ADC INTERNATIONAL

MIXED GAS DIVING SUPERVISOR

DAVID SEVERNS I.D. 071192

Commercial Diver Certification Card

UNIVERSITY OF SOUTH FLORIDA
TAMPA • ST. PETERSBURG • FORT MYERS • SARASOTA

COLLEGE OF ENGINEERING
DEPARTMENT OF CIVIL ENGINEERING AND MECHANICS
TAMPA, FLORIDA 33620
813: 974-2581

October 6, 1986

David A. Severns
6781 Timberland Lane
Sarasota, FL 34241

Dear Mr. Severns:

Thank you for recently attending the Florida Bridge Inspector's Training Program in Tampa, Florida. I hope you found it enriching, rewarding, and beneficial.

I am happy to announce that you passed the final exam, which allows you to be able to qualify as a bridge inspector in the state of Florida.

My best to you in your future endeavors.

Sincerely

Larry Oline

Larry Oline, Ph.D.
Program Director

LWO/sb

Stantec

National Highway Institute

Certificate of Training

Brian M Stigner

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

California Department of Transportation

Date: January 5-8, 2021
Location: Virtual Delivery, CA

Hours of Instruction: 18

Instructor

Mohammad Popal Saeed
Local Coordinator

Instructor

Thomas Harman
Thomas Harman, Director
National Highway Institute

National Highway Institute

Certificate of Training

Michael Brodnax

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

Office of State Aid Road Construction

Date: August 2-13, 2021
Location: Ridgeland, MS

Hours of Instruction: 67

Instructor

Local Coordinator

Instructor

Thomas Harman
Thomas Harman, Director
National Highway Institute

The American Traffic Safety Services Association

Hereby recognizes that

Joseph Lefante
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

07/27/2018
Date
Baton Rouge, LA
Location

Training & Products Dept. Director
President, CEO

Transportation Professional Certification Board Inc.

certifies that

Joseph Michael Lefante

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

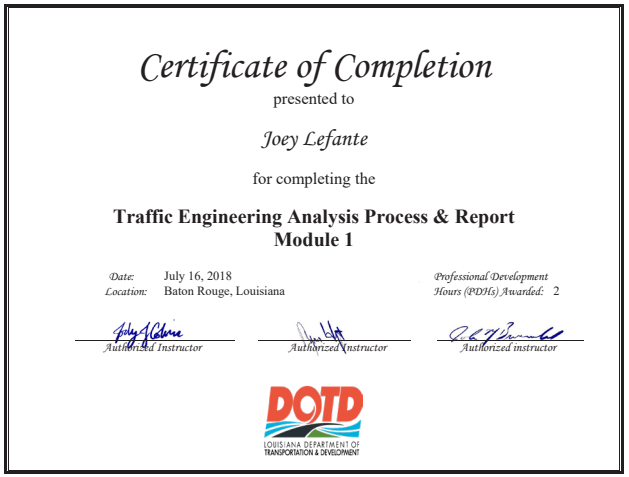
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn, by the Certification Board and subject to the provisions for renewal. Certificate number 3560 issued in Washington, D.C., U.S.A.

November 20, 2013

Chair

Executive Director



Certificate of Completion

presented to

Joey Lefante

for completing the

Traffic Engineering Analysis Process & Report
Module 1

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

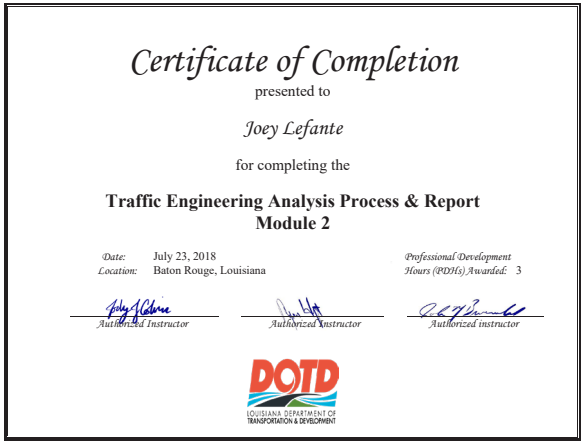
Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Joey Lefante

for completing the

Traffic Engineering Analysis Process & Report
Module 2

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

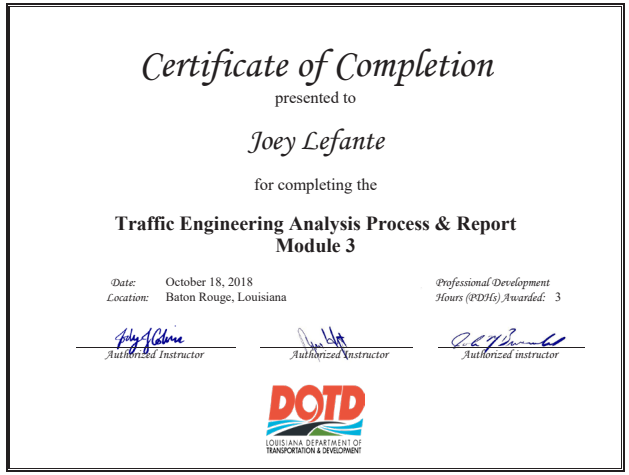
Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Joey Lefante

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 18, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The American Traffic Safety Services Association

Hereby recognizes that

Joseph Cains III
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

07/27/2018
Date
Baton Rouge, LA
Location

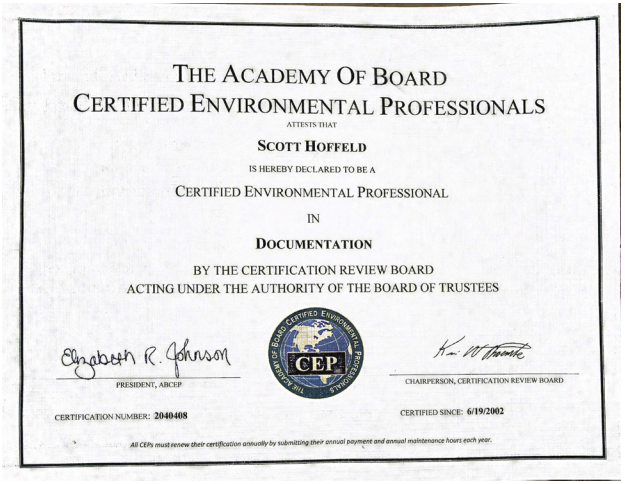
Training & Products Dept. Director
President, CEO

The American Traffic Safety Services Association

Hereby recognizes that
Scott Hoffeld
has attended
Traffic Control Technician-LA State Specific
Training Course

08/25/2015
Date
New Orleans, LA
Location

Training & Products Dept. Director
President, CEO



THE ACADEMY OF BOARD CERTIFIED ENVIRONMENTAL PROFESSIONALS

ATTESTS THAT

SCOTT HOFFELD

IS HEREBY DECLARED TO BE A

CERTIFIED ENVIRONMENTAL PROFESSIONAL

IN

DOCUMENTATION

BY THE CERTIFICATION REVIEW BOARD
ACTING UNDER THE AUTHORITY OF THE BOARD OF TRUSTEES

Elizabeth R. Johnson
PRESIDENT, ABCEP

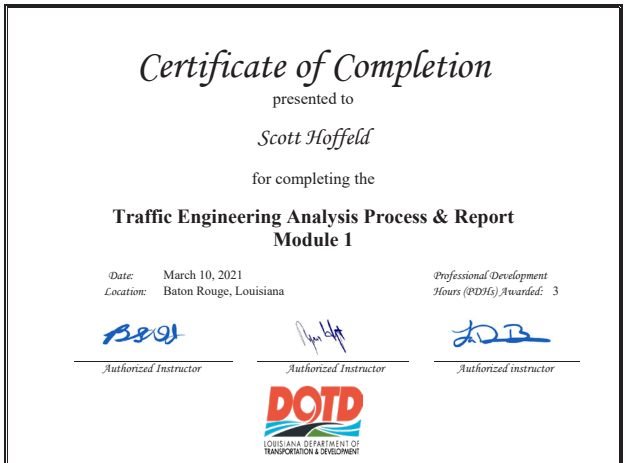
CEP

CHAIRPERSON, CERTIFICATION REVIEW BOARD

CERTIFICATION NUMBER: 2040408

CERTIFIED SINCE: 6/19/2002

All CEPs must renew their certification annually by submitting their annual payment and annual maintenance hours each year.



Certificate of Completion

presented to

Scott Hoffeld

for completing the

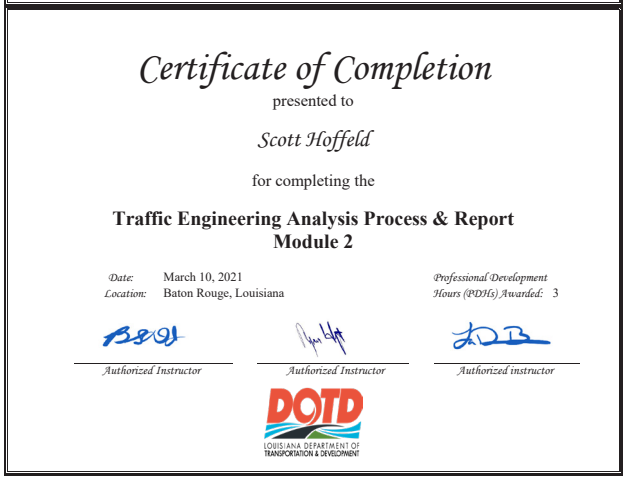
Traffic Engineering Analysis Process & Report
Module 1

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Scott Hoffeld

for completing the

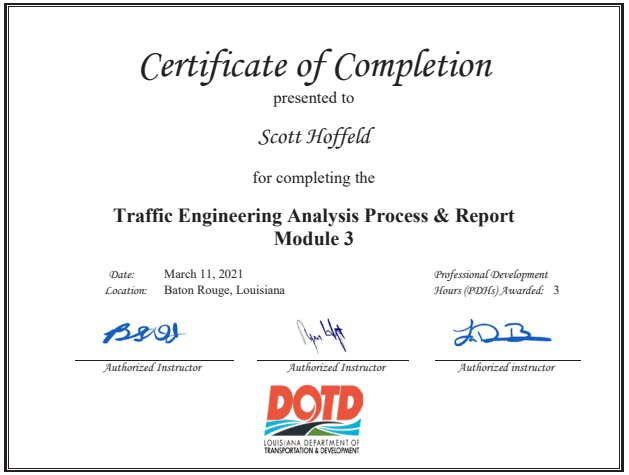
Traffic Engineering Analysis Process & Report
Module 2

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Scott Hoffeld

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: March 11, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The American Traffic Safety Services Association

Hereby recognizes that

Nick Prudhomme
has attended
Traffic Control Technician-LA State Specific
Training Course

07/24/2018
Date
Baton Rouge, LA
Location

Training & Products Dept. Director
President, CEO

ATSSA
SAFER ROADS SAVE LIVES

The American Traffic Safety Services Association

Hereby recognizes that

Nick Prudhomme
has attended
Traffic Control Supervisor-LA State Specific
Training Course

07/26/2018
Date
Baton Rouge, LA
Location

Training & Products Dept. Director
President, CEO

ATSSA
SAFER ROADS SAVE LIVES

The American Traffic Safety Services Association

Hereby recognizes that

Mary Bratton
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

07/27/2018
Date
Baton Rouge, LA
Location

Training & Products Dept. Director
President, CEO

ATSSA
SAFER ROADS SAVE LIVES

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI
NATIONAL HIGHWAY INSTITUTE

Certificate of Training

KUNAL MALPANI

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: January 7-9, 2019
Location: Baton Rouge, LA

Hours of Instruction: 18

Instructor
Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

NHI
NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Training

KUNAL MALPANI

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

Office of State Aid Road Construction

Date: July 14-25, 2014
Location: Jackson, Mississippi

Hours of Instruction: 67

Instructor
Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Jonathan McGormley

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

Parsons Brinckerhoff | Chicago Transit Authority

Date: August 10-21, 2009
Location: Chicago, IL

Hours of Instruction: 60

Instructor
Instructor
Local Coordinator
Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Steve Lauer

has participated in

FHWA – NHI - COURSE 130055

Safety Inspection of In-Service Bridges

hosted by

Structural Engineers Assn. of Illinois/SEI – IL Chapter

Date: May 2-13, 2011
Location: Chicago, IL

Hours of Instruction: 60

Instructor
Instructor
Local Coordinator
Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Curtis J. Schroeder

has participated in

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

HQ Installation Management Command

Date: 9-20 July 2012
Location: Fort Leonard Wood, MO

Hours of Instruction: 60

Instructor
Instructor
Local Coordinator
Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Jonathan C. McGormley

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Boston Society of Civil Engineers Section/ASCE

Date: October 1-3, 2019
Location: Boston, MA

Hours of Instruction: 18

Instructor
Instructor
Local Coordinator
Michael Davies, P.E.
Director, National Highway Institute

National Highway Institute

Certificate of Training

Steven Lauer

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Indiana Department of Transportation

Date: December 1-4, 2020
Location: Virtual Delivery, MI

Hours of Instruction: 18

Instructor
Instructor
William Dittrich
Local Coordinator
Thomas Harman
Thomas Harman, Director
National Highway Institute

National Highway Institute

Certificate of Training

Curtis J. Schroeder, PE

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

ASCE SEI-IL

Date: June 04-06, 2019
Location: Chicago, IL

Hours of Instruction: 18

Instructor
Instructor
Local Coordinator
Michael Davies, Director
National Highway Institute

National Highway Institute

Certificate of Training

Jonathan McGormley

has participated in

NHI-FHWA-130078-Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Wiss, Janney, Elstner Associates, Inc.

Date: November 5 - 7, 2013
Location: Northbrook, Illinois

Hours of Instruction: 21 Hours

Instructor
Instructor
Local Coordinator
Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Steve Lauer

has participated in

NHI-FHWA-130078-Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Wiss, Janney, Elstner Associates, Inc.

Date: November 5 - 7, 2013
Location: Northbrook, Illinois

Hours of Instruction: 21 Hours

Instructor
Instructor
Local Coordinator
Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Curtis Schroeder

has participated in

FHWA-NHI 130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Bi-State Development Agency

Date: February 18-21, 2020
Location: St. Louis, MO

Hours of Instruction: 25

Instructor
Instructor
Local Coordinator
Michael Davies, P.E.
Director, National Highway Institute

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jonathan McGormley
has attended
Traffic Control Technician-LA State Specific
Training Course

5/11/2021 to 5/11/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

JOFFREY EASLEY

has Successfully Completed

FHWA-NHI-130053
Bridge Inspection Refresher Training
hosted by
LA DOTD/LTRC

Date: *January 11-13, 2022* *Hours of Instruction:* 18
Location: *Baton Rouge, LA*

Instructor

Local Coordinator

Instructor

Thomas Harman, Director
National Highway Institute

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Brent Campbell
has attended
Traffic Control Supervisor-LA State Specific
Training Course

5/12/2021 to 5/13/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

SSPC The Society For Protective Coatings

PROTECTIVE COATINGS SPECIALIST SSPC PCS

Certifies that

Leonard Phelps, PCS

Has fulfilled the requirements of SSPC for recognition as a

PROTECTIVE COATINGS SPECIALIST

Valid Through December 31, 2025

2021-014-012
Certification Number

December 14, 2021
Original Date Issued

President

www.sspc.org | 800 Trumbull Drive, Pittsburgh, PA 15205-4365 | P:412.281.2331 T:877.281.7772 F:412.444.3591

LOUISIANA ASSOCIATED GENERAL CONTRACTORS, INC.
666 North Street – Baton Rouge, LA 70802
Phone: 225/344-0432 • Fax: 225/344-0458
www.lagc.org

March 16, 2021

To Whom It May Concern,

This is to verify that the below listed employee of Forte & Tablada has successfully completed LADOTD required ATSSA Traffic Control Training.

ATSSA Traffic Control Supervisor Refresher Training – January 27, 2021 – Brad Holleman

This letter will serve as temporary proof of training until above listed employees receive their official certificates from American Traffic Safety Services Association (ATSSA).

If there are any questions regarding this issue, please contact Mr. Brett Morgan of LADOTD at Headquarters in Baton Rouge, LA (225-379-1584) or Michael Demouy at the above captioned address.

Best Regards,

Michael Demouy – LAGC Manager

ATSSA
SAFER ROADS SAVE LIVES

Dear Certified Flagger:

Enclosed, please find your card signifying you as an ATSSA Certified Flagger. This card should be carried and presented to employers while performing work on our nation's roadways. Please be aware that the card is not valid without a Photo I.D.

We commend you on your decision to become an ATSSA Certified Flagger. This distinction reflects that you have been trained by the leader in roadway safety and also entitles you to be listed on our National Flagger Database. Please review your state requirements for expiration of your flagger card. Also, please inform us of any errors or changes in your name or address so we may keep our records up to date.

Once again, ATSSA thanks you for your dedication to ensuring that our work zones are safe and that lives will be saved with proper training. Please visit our website at www.atssa.com for additional training courses and work zone safety products.

Sincerely,

Director of Training

PROTECTIVE COATINGS SPECIALIST SSPC PCS

This card certifies that

Leonard Phelps, PCS

has fulfilled the examination and experience requirements of the SSPC Protective Coatings Specialist Program (PCS)

Certified: 12-14-2021
Expires: 12/31/2025
Certification ID#: 2021-014-012

SSPC President

SSPC Protective Coatings Specialist

The American Traffic Safety Services Association
Hereby recognizes that

Ross Wilson
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

07/27/2018
Date

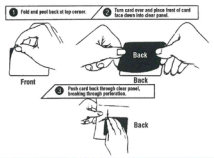
Baton Rouge, LA
Location

ATSSA SAFER ROADS SAVE LIVES

Training & Products Dept. Director

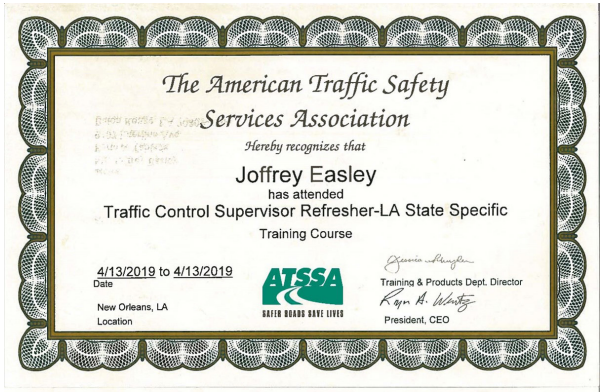
President, CEO

Laminating the front of your card with Dual Laminate:



ATSSA
AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION
This is to affirm that
Brent Campbell
has satisfied the requirements to be designated as a
CERTIFIED FLAGGER
Expiration Date 10/2/2023 State Issued in LA
Instructor Signature
Verification available by calling 1-877-642-4637 or at http://www.flagger.com

American Traffic Safety Services Association
15 Riverside Parkway, Suite 100 • Fredericksburg, VA 22406-1077
Office: 540-368-1701 • Toll-Free: 800-272-8772 • Fax: 540-368-1717
www.atssa.com



The American Traffic Safety Services Association

Hereby recognizes that

Joffrey Easley

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

4/13/2019 to 4/13/2019

Date

New Orleans, LA

Location

ATSSA

SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Joffrey Easley

has attended

Traffic Control Supervisor-LA State Spe

Training Course

04/30/2015

Date

Baton Rouge, LA

Location

ATSSA

SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

National Highway Institute

Certificate of Training

Joffrey Easley

has participated in

NHI Course No. 130055 -

Safety Inspection of In-Service Bridges

hosted by

LA DOTD/LTRC

Date: April 30-May 11, 2012

Location: Baton Rouge, LA

Hours of Instruction: 67

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director

National Highway Institute

National Highway Institute

Certificate of Training

Joffrey Easley

has participated in

FHWA - NHI Course No. 130078

Fracture Critical Inspection Techniques for Steel Bridges (3.5 Days)

hosted by

LA DOTD/LTRC

Date: August 11-14, 2015

Location: Baton Rouge, LA

Hours of Instruction: 25

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director

National Highway Institute

The American Traffic Safety Services Association

Hereby recognizes that

Cody Hatch

has attended

Traffic Control Technician-LA State Specific

Training Course

2/11/2020 to 2/11/2020

Date

Baton Rouge, LA

Location

ATSSA

SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Cody Hatch

has attended

Traffic Control Supervisor-LA State Specific

Training Course

2/12/2020 to 2/13/2020

Date

Baton Rouge, LA

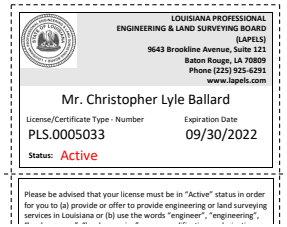
Location

ATSSA

SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)

9643 Brookline Avenue, Suite 121

Baton Rouge, LA 70809

Phone (225) 925-6291

www.lapels.com

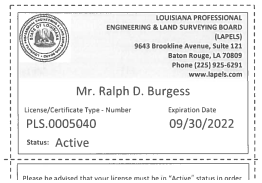
Mr. Christopher Lyle Ballard

License/Certificate Type - Number: PLS.0005033

Expiration Date: 09/30/2022

Status: Active

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering",



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)

9643 Brookline Avenue, Suite 121

Baton Rouge, LA 70809

Phone (225) 925-6291

www.lapels.com

Mr. Ralph D. Burgess

License/Certificate Type - Number: PLS.0005040

Expiration Date: 09/30/2022

Status: Active

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

SLOW

This is to affirm that

Jason Stoehr

has satisfied the requirements to be designated as a

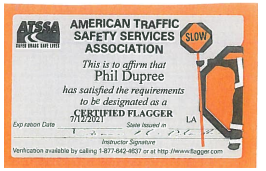
CERTIFIED FLAGGER

Expiration Date 5/25/2023

State Issued in LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com



AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

SLOW

This is to affirm that

Phil Dupree

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 7/1/2021

State Issued in LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

The American Traffic Safety Services Association

Hereby recognizes that

Philip S Dupree

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

2/8/2019 to 2/8/2019

Date

Baton Rouge, LA

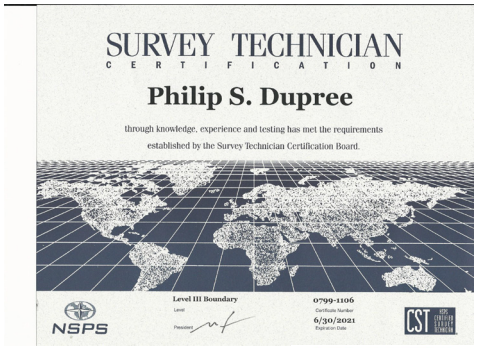
Location

ATSSA

SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO



SURVEY TECHNICIAN

CERTIFICATION

Philip S. Dupree

through knowledge, experience and testing has met the requirements established by the Survey Technician Certification Board.

NSPS

Level III Boundary

0799-1106

6/30/2021

CST

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

SLOW

This is to affirm that

Jacob Stoehr

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 3/5/2021

State Issued in LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

The American Traffic Safety Services Association

Hereby recognizes that

Jason Stoehr

has attended

Traffic Control Technician-LA State Specific

Training Course

08/01/2017
Date

Baton Rouge, LA
Location

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Jacob Stoehr

has attended

Traffic Control Supervisor-LA State Spec

Training Course

6/3/15 to 6/4/15
Date

New Orleans, LA
Location

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Jacob Stoehr

has attended

Traffic Control Technician-LA State Specific

Training Course

6/6/14 to 9/6/14
Date

Baton Rouge, LA
Location

Training & Products Dept. Director

President, CEO

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Scott Benton

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 3/1/2024 State Issued in LA

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Scott Benton

has attended

Traffic Control Technician-LA State Specific

Training Course

4/28/2020 to 4/28/2020
Date

Baton Rouge, LA
Location

Vice President of Member Services

President, CEO

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Scott Benton

has attended

Traffic Control Supervisor-LA State Specific

Training Course

4/29/2020 to 4/30/2020
Date

Location

Vice President of Member Services

President, CEO

RTA

DOTD

LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program (DBE)

Small Business Element (SBE)

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

Civil Design & Construction, Inc.

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

NC541330, NC541340, NC541350, NC541370

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

Certificate Eligibility: March 2022 to March 2023

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

Rhonda Wallace

Rhonda Wallace, DBE/SBE Programs Manager

Louisiana Department of Transportation & Development

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT

Acknowledges that

DONALD CRESSMAN

has demonstrated through practical and written examinations, attainment of SPRAT's Certification Requirements for Rope Access Work, and is therefore

CERTIFIED

Level II Rope Access Technician

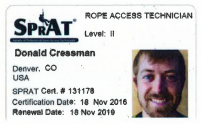
SPRAT #131178

AWARDED: November 18, 2016
Expires: November 18, 2019

CHARLEY RANKIN, EVALUATIONS COMMITTEE CHAIR

IAIN GAULT, SPRAT PRESIDENT

©2012 – Society of Professional Rope Access Technicians

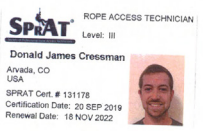


SPRAT ROPE ACCESS TECHNICIAN Level: II

Donald Cressman

Denver, CO
USA

SPRAT Cert. # 131178
Certification Date: 18 Nov 2016
Renewal Date: 18 Nov 2019



SPRAT ROPE ACCESS TECHNICIAN Level: III

Donald James Cressman

Arvada, CO
USA

SPRAT Cert. # 131178
Certification Date: 20 SEP 2019
Renewal Date: 18 NOV 2022

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT

Acknowledges that

RYAN MITCHELL NATALUK

has demonstrated through practical and written examinations, attainment of SPRAT's Certification Requirements for Rope Access Work, and is therefore

CERTIFIED

Level III Rope Access Technician

SPRAT #110325

AWARDED: March 13, 2020
Expires: March 13, 2023

ROBERT DUNSHEA, EVALUATIONS COMMITTEE CHAIR

WILLIAM McCOOK (TROLL), SPRAT PRESIDENT

©2012 - Present: Society of Professional Rope Access Technicians

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT

Acknowledges that

RYAN NATALUK

has demonstrated through practical and written examinations, attainment of SPRAT's Certification Requirements for Rope Access Work, and is therefore

CERTIFIED

LEVEL II ROPE ACCESS TECHNICIAN

AWARDED: MARCH 23, 2011
Expires: March 23, 2014

MATT HUDSON, SPRAT PRESIDENT

© 2011 The Society of Professional Rope Access Technicians

Quality Management Plan

CONTRACT NOS. 4400023921, 4400023922, 4400023923, 4400024185, 4400024186, 4400024187, 4400024188 and 4400024189
IDIQ CONTRACTS FOR BRIDGE PRESERVATION STATEWIDE

Stantec Project No.: TBD

Stantec

Brian Johnson, P.E. – Project Manager

Gary Heitman, P.E. – Principal-in-Charge

Document Date: May 10, 2022

Table of Contents

Foreword

Stantec recognizes the importance of quality for the captioned Bridge Preservation IDIQ Contract. We are committed to developing, implementing, and adhering to a detailed Quality Management Plan for all services provided as part of the Project. In addition, since the Project has a significant bridge component, our team is committed to the principles dictated in the LADOTD, Bridge Design Section, "Policy on Quality Control and Quality Assurance's Construction Plans".

This Quality Management Plan (**QMP**) is a "living document". As such, it will periodically be reviewed for performance and amended as necessary to achieve the quality commitments and goals. This QMP will also be amended as the Project moves into future phases of development.

In our commitment to quality, this **Quality Management Plan (QMP) will satisfy all criteria by**:

A. Creating guidelines, processes and protocols which clearly demonstrate that QC/QA is the full responsibility of our team and not a responsibility of the LDOTD.
B. Creating clear definitions of responsibility for our designers, checkers, reviewers, and various professionals of record.
C. Assigning designers and QC/QA personnel to the Project, who are exceedingly qualified to perform the work required of the Project.
D. Creating Project specific processes and protocols which are clearly described and effective in ensuring accuracy in our design and plan details.
E. Creating all the necessary QC/QA tools, such as checklists, standard forms and training materials. All our QC/QA tools will be well documented and well suited to the scope and the complexity of the Project.
F. Creating a focus on the QC/QA concepts for the bridge design elements of the Project by defining specific quality procedures for the major structures of the Project; describing how the QMP will support quality work for the Project; and creating clear definitions of QC/QA.
G. Provide training to all personnel working on the Project specific to their role in the Project.

The **goals of the QMP for this Bridge Preservation IDIQ Contract** are to:

- Increase the probability of meeting the LDOTD's expectations in terms of the finished product
- Improve analysis and design solutions
- Provide adequate detail on plans
- Reduce errors in reports and plans
- Reduce constructability issues
- Maintain schedule through all project phases
- Allow for efficient and effective innovative solutions, materials and techniques
- Minimize community impacts
- Enhance worker and public safety
- Minimize construction related traffic disruptions
- Accurately mitigate impacts of unforeseen conditions and events

Particularly with respect to the bridge elements of this Bridge Preservation IDIQ Contract, the LADOTD Bridge Section has specific QC/QA processes which must be addressed. This QMP conforms to Part I – Policy and Procedures; Chapter 3 - Policy for Quality Control and Quality Assurance (QC/QA) of the current LADOTD BRIDGE DESIGN AND EVALUATION MANUAL (BDEM).

This **QMP** contains seven (7) appendixes:

- APPENDIX A: GUIDELINES FOR DESIGN & DOCUMENT PREPARATION
- APPENDIX B: GUIDELINES FOR PROCESSES
- APPENDIX C: QC CHECKLIST & COMMENT FORMS
- APPENDIX D: QA CHECKLIST & COMMENT FORMS
- APPENDIX E: INDEPENDENT REVIEW & COMMENT FORM
- APPENDIX F: LADOTD BRIDGE DESIGN QC/QA PLAN
  - F1: LADOTD BRIDGE DESIGN (DESIGN CRITERIA CHECKLIST)
  - F2: LADOTD BRIDGE DESIGN (FINAL CALCULATION BOOK CHECKLIST)
  - F3: LADOTD BRIDGE DESIGN (QA INFORMATION PACKET CHECKLIST)
  - F4: LADOTD BRIDGE DESIGN (QC/QA CERTIFICATION)
  - F5: LADOTD BRIDGE DESIGN (PEER REVIEW RESOLUTION AGREEMENT)
  - F6: LADOTD BRIDGE DESIGN (CONSULTANT PROJECT BRIDGE DESIGN KICK-OFF MEETING AGENDA CHECKLIST)
- APPENDIX G: NON-CONFORMANCE REPORT FORM

This **QMP** will be distributed to all team members and reviewed to confirm understanding. All team members will be trained so that they understand their role and obligation in implementing the QMP. All personnel shall be held accountable to these high standards.

Revision Summary

To be completed by document owner and/or originator of revisions prior to issue to team.

Revision	Date	Section	Summary of Revision
1.0	05/09/2022	N/A	Transmitted to LADOTD

Required Reading Form

All members of this Bridge Preservation IDIQ Contract – Designers, Checkers, Reviewers, and Professionals of Record shall become acquainted with the contents of this document and related attachments. As a record of responsibility of the team, and a record of accountability by Stantec, this form shall be maintained on the Project.

Name	Signature	Date

SECTION 1. UNDERSTANDING OUR ROLE

1.1 STANTEC PHILOSOPHY AND POLICY ON QUALITY (ISO 9001 5.1, 5.2 AND 5.3)

Stantec clearly understands, and believes, that the responsibility for Quality in our services and deliverables is 100% ours. In satisfying the LADOTD's Policy on QC and QA, this QMP creates a commitment to continual improvement of project execution, product quality and the reduction of quality related costs. We believe that RESPONSBILITY is created through processes and guidelines that are integral to our team's thinking. We believe that ACCOUNTABILITY is created through purposeful reporting and measured results by our leaders. And we believe that SUCCESS is created by our team's ownership of the **QMP**. To this end, Stantec will provide experienced leadership, specifically tasked with developing, maintaining, enhancing and monitoring the performance of the overall system of quality for the Replacement of the two (2) Bridges.

1.2 QUALITY MANAGEMENT PLAN PHILOSOPHY

A critical component of our **QMP** will be to ensure that all Stantec staff involved in the Project are aware of the **QMP** and committed to following its direction. Our QC/QA Manager is responsible for providing Project staff with a copy of the **QMP** and encouraging its use throughout the life of the Project. This goal will be accomplished through an initial training process supplemented with ongoing training to present process revisions based on the results of QC/QA reviews and Project audits. In addition to our **QMP**, each Project team member, regardless of his/her role, will be responsible for the quality of his/her own work and will be expected to provide an appropriate level of quality control on that work.

1.3 QUALITY MANAGEMENT PLAN PRINCIPLES

The guidance for quality management of Stantec projects will be based on three quality principles:

- Client focus
- Project processes
- Measurement, analysis and improvement

1.3.1 Client Focus

Stantec knows and understands that our future depends on our Clients – which equates to satisfaction with our company and services. Therefore, our primary focus is to understand our Client's current and future needs, while continually striving to meet and exceed our Client's requirements and expectations.

For our Clients, our focus is on "**MAKING IT WORK**". We maintain this focus by:

- **Knowing our Client's View** – we strive to know what the expectations are within our Client's organization, including such things as design philosophy, cost expectations, and project purpose.

- **Knowing our Client's People** - we focus on relationships by knowing the point-of-contact for our Clients and understanding "who does he report to?", or "what is her background on this type of project?", or more personally "what makes him really excited? Or upset?"

- **Knowing our Client's Scope** – we strive to completely understand project requirements. We want to appreciate "what's behind that?" and pursue it until we get answers like, "that's very important to the project outcome," or "that's crucial to project approval," or "that's a particular area of project distinction".

- **Knowing our Client's Risk** – we appreciate and attempt to understand our Client's important issues such as "what keeps him up at night?"; or "what will create problems for her?"; or in a positive way, understanding "what outcome will give greatest value", or "what outcome will give greatest satisfaction."

Another area of Client focus is critical attention to project **time, cost and deliverables**. Stantec understands that these three factors have an impact on each other and requires evaluation - taking into consideration our Clients' requirements and expectations. We realize that on some projects - or with some Clients - the balancing of these three factors can be particularly delicate. Client focus in these cases is all about our ability to communicate and deliver the basic project requirements while managing expectations and outcomes.

Our Client focus always involves **effective communication**. Our goal is to be continual and timely, thus creating and building confidence with our Client that their expectations are being met and value is being achieved.

Stantec's Client focus also includes **interfaces with all Stakeholders**. These interfaces are crucial to Project success in facilitating the exchange of information, as appropriate, throughout the project. Our focus on behalf of the Client includes resolution of any conflicts between project requirements and Stakeholders requirements – with Client requirements taking precedence, except in the case of statutory or regulatory requirements.

Our focus on "MAKING IT WORK" becomes the Project's Quality Objective - not only for deliverables, but also for our Client's needs and expectations. This Quality Objective outlines the path to a high level of Client satisfaction.

STANTEC QUALITY CONTROL/QUALITY ASSURANCE CONCEPTS & DEFINITIONS

Our concept for QC/QA on this Bridge Preservation IDIQ Contract follows proven methods which include process controls, detailed QC procedures, QA reviews, and continual maintenance and updating of the **Project Design Criteria**. As a management tool of our **QMP**, quality audits and management reviews will also occur. The **QMP** is a living document that will be reviewed and amended throughout the Project cycle in a commitment to continual improvement.

Additionally, our **QMP** will support quality work through Independent Checks focused on Consistency, Constructability and Risk avoidance.

The following definitions of quality management, quality control and quality assurance will apply to the Replacement of the Two (2) Bridges.

Checking Stamp — An electronic or rubber stamp to be affixed on all QC documents and to be used as part of the **Five Step Process** for all **QC Checking**.

Five Step Procedure — A detailed checking procedure to be followed by all **QC Checkers.**

Independent Review — As part of the QA Review, an Independent Review will include one (are more) of the following:

- **Consistency review** of the plan details to assure uniformity of design, detailing, format and presentation;
- **Constructability review** of the plan details to identify possible design improvements to make construction easier, safer and less costly and/or reduce environmental impacts;
- **Operational Review** to understand how the Project functions, how it can be more user friendly and easier to maintain and how the design can be made more efficient; and,
- **Risk review** of areas of critical importance; areas where, based on the reviewer's experience, mistakes may be typically found; and areas that may be new to the design practice.

Inter-Discipline Reviews — A review focused on specific discipline elements or coordination between different disciplines – includes survey, roadway and bridge; bridge and geotechnical; roadway and traffic; etc.

Management Review Meetings — Review by Project leadership and QC/QA leadership to measure QC/QA compliance at various Project milestones. Review will also include

effectiveness of the **QMP** with the objective of continual improvement.

Primary QC Signature

Signature by Project Manager / Discipline Leader on all submittals and documents prepared under their control.

Quality Control (QC) Submittal Checking

Every work product requires a full review. Work products include plans, cost estimates, reports, evaluations, or studies. For the various submittals, responsibilities may include:

- **Checking** for completeness in accordance with guidelines approved by the Project Manager or Discipline Leader;
- **Ensuring** that the work product adequately and accurately presents the required information;
- **Verification** of all dimensions and quantity calculations;
- **Verification** of the accuracy of the preparer's work product;
- **Verification** that all design information is correctly and completely shown on the details and in accordance with the approved design calculations;
- **Verification** of conformance to standards of practice;
- **Verifications** of cost effectiveness & fitness for the purpose and function of the specified Project;
- **Performance** of CAD drawing reviews for formatting, layering and CAD Conform requirements; and
- **Performance** of redline checks of the work product (where deemed necessary); or production of an independent work product and comparison of the results.

QC Design Checking

A full review of the design calculations, survey calculations, software input and output, and cost estimates. Responsibilities will also include:

- **Verification** of the accuracy and adequacy of the preparer's work product;
- **Compliance** with specified codes, standards, and permits;
- **Conformance** to standards of practice;
- **Performance** of redline checks of the work product; or production of an independent work product and comparison of the results; and
- **Ensuring** that the work product adequately and accurately presents the required information. (The calculations of the Design Checker will also become a part of the calculation of record when independent checking calculations are produced.) (The Design Checker will not be the one who performed the original design.)

QC (LADOTD

In addition to the definitions above: This process involves the procedure of

Bridge Design)	checking the accuracy and consistency of calculations and drawings, detecting conflicts, design errors and omissions, and the procedure for resolution of internal comments, correcting and verification of revisions. Also, specific to bridge design, the process verifies that all bridge components are adequately designed for the specified limit states in the AASHTO LRFD Bridge Design Specifications and the LA DOTD Bridge Design Manual and Memoranda.
Quality Assurance (QA) Review	A review of QC documents to ensure that the QC process is complete and the work products (field rolls, designs, plans, cost estimates, reports, evaluations, and studies) are in accordance with the established Project practices, policies, and procedures.
QA (LADOTD Bridge Design)	**In addition to the definition above:** This process involves the review of the QC documents to verify that the quality control (QC) procedure has been completed in accordance with the LA DOTD Bridge QC/QA policy. In addition, the QA process verifies that the QC process was effective in preventing design and plan errors and assuring consistency.
QA Information Package	Package of Quality Control documentation submitted to the QA Reviewer. QA Information Packages will be prepared for all Project submittals and shall include appropriate designs, plans, cost estimates, reports, evaluations, or studies. QA Packages will include all QC documentation of the Project submittal such as calculations, plans, and estimates of probable construction costs and include checklists, comments and markups by the Project Professional, Design Checker and Detail Checker.
Quality Management Plan (QMP)	The documented requirements that establish and define responsibilities, performance measures, milestone audits and work procedures to ensure that the project deliverables meet predetermined requirements. It encompasses Quality Control, Quality Assurance, and Audit of the scope of work covered by the Project.

SECTION 2. QUALIFICATIONS AND RESPONSIBILITIES OF STANTEC LEADERSHIP AND STAFF

The following qualifications and responsibilities will apply to the leadership and staff of the Stantec team on the Bridge Preservation IDIQ Contract.

Designer

Engineer (LA licensed PE or EI) directly tasked with the development of design calculations, drawings, and estimates of probable construction costs. Responsibilities will include:

- Understanding and following the Project Design Criteria;
- Developing, organizing and maintaining design calculations;
- Communicating with the detailer and supervising the detailing work to ensure adequate and accurate presentation of design information;
- Checking his own work; and
- Updating design calculations to correct any errors or omissions discovered by the Design Checker.

Detailer

Individual directly responsible for the creation of CAD drawings. Responsibilities will include:

- Understanding of drawing formats;
- Understanding of layering requirements;
- Understanding of LADOTD's CAD Conform requirements; and
- Checking his own work for accuracy and completeness. .

Project Manager

Professional (LA licensed as required) (in most cases a Louisiana licensed PE) tasked with the duty to lead the Stantec team, with the following experience and responsibilities:

- **Experience** – Professional with technical and management experience of projects with similar scope and magnitude.
- **Responsibilities**
  - Serve as overall project leader and liaison with the LADOTD;
  - Develop and monitor overall project scope, schedule and budget;
  - Identify and obtain approval of any scope changes (when required);
  - Monitor the overall project development, deadlines and deliverables;
  - Work and coordinate with all Discipline Leaders through the

progression of the Project;

- Determine all required Inter-Discipline and Independent Review requirements of the Project;
- Establish and monitor protocol and procedures for communications with LADOTD, stakeholders and Discipline Leaders;
- Establish procedures for identifying and resolving project conflicts, constraints and other risks;
- Conduct Project Reviews to identify and track key issues, and provide recommendations for function and efficiency improvements. (Depending on the magnitude and schedule of the Project, reviews can also be post-mortem.)
- Monitor the overall QMP for QC/QA, including systems for tracking progress and completion;
- Accept final work products;
- Track and verify overall project archiving;
- Sign, or delegate responsibility to sign, all Deliverable Release Forms.
- Collaborate and effectively communicate with Stantec team;
- Lead meetings, forums and discussions with LADOTD, stakeholders, and Discipline Leaders in Project development and Project decisions;
- Assign and manage resources to execute the work in accordance with the Project schedule;
- Ensure checking and review by appropriate senior individuals that all deliverables are in accordance with the Project Design Criteria, the QMP for QA/QC, and LADOTD standards.
- Establish written agreement for the scope and budget for the Project;
- Achieve budget through effective control of the work;
- Provide prompt identification and submission for formal approval of all scope changes to the Client;
- Archive all Project data and Project deliverables (including surveys, designs, plans, cost estimates, reports, and studies) in accordance with the QMP. Responsibility also includes Bridge Design Section records retention policy.

Discipline Leader Professional (LA licensed as required) assigned to the specific discipline of the Project (Environmental, Surveying, Geometrics, Traffic, ITS, Roadway, or Bridge) and responsible for supervision and/or preparation of all deliverables and submittals as defined by the Project Scope for the assigned Discipline. Experience and responsibilities will include:

- **Experience** – Professional (LA licensed as required) with experience in executing similar Discipline assignments.
- **Responsibilities**
  - Collaborate and communicate on a regular basis with the Project Manager;
  - Take full responsibility for providing Discipline scope and schedule;
  - Develop, update and implement the Project Design Criteria as related to the Discipline;
  - Oversee the development, organization and maintenance of design (where required) and submittals as related to the Discipline;
  - Identify activities required for completion of the work for the Discipline;
  - Maintain a project deliverable list for the Discipline;
  - Maintain matrix (or list) of staff assigned as originators and checkers of the work product by the Discipline;
  - Determine the necessary technical knowledge and experience required for all Discipline activities;
  - Lead and guide the Discipline staff required for execution;
  - Oversee all procedures and forms related to the Disciple;
  - Approve and validate all software used by the Discipline staff;
  - Develop (as required) and adhere to Process Guidelines (PG's);
  - Sub-consultant oversight (as assigned) within the Discipline;
  - Inter-discipline Reviews (IDR) - as initiator or participant;
  - Implement the **QMP** for QC and QA to be performed for the Discipline;
  - **Appendix F contains special provisions for Bridge QC/QA. These special provisions outline additional and/or revised responsibilities for the Bridge Discipline Leader.**

Engineer-of-Record (EOR)

Engineer (LA licensed PE), designated by the Project Manager, responsible for supervision and/or preparation of plans, sealing calculations, plans, and special provisions. (The EOR can be the Designer, Design Checker, QA Reviewer, or Project Manager - who is directly involved in the project design activities.) The responsibilities of the EOR include:

- Ensure the QC/QA certifications are signed by all responsible parties
- Assemble design calculations from all designers, finalize the calculation book, and seal the cover sheet of the calculation book.
- Ensure the names of the Designer, Design Checker, Detailer, Detail Checker, and QA Reviewer are correctly shown on the title block of each plan sheet.

- Stamp all plan sheets or designate a Designer, Design Checker, or QA Reviewer developed under their supervision.
- Ensure all special provisions are accurately shown on the construction proposal and stamped by the Specification Engineer (or by the EOR).

Independent Reviewer (IR) — Engineer (LA licensed PE) responsible for conducting a totally independent review of all Project document and final deliverables. The Independent Reviewer and QA Reviewer may be the same and also occur at the same time.

QA Reviewer — Engineer, Surveyor or appropriate Professional (LA licensed PE or PLS where required) assigned QA Review responsibilities. The Reviewer must have experience related to the Project discipline.

QC Design Checker — Engineer (LA licensed PE) assigned QC Design Checking responsibilities.

QC Submittal Checker — Engineer, Surveyor or appropriate Professional (LA licensed PE or PLS where required) assigned QC Submittal Checking responsibilities.

QC/QA Leader — Engineer (LA licensed PE) responsible for coordinating the Quality Management practices across the Project and to ensure implementation of the **QMP** for the Project. Duties also include:

- **Establish** Process Controls and overall QMP for QA/QC;
- **Provide** QC and QA oversight;
- **Prepare** Quality Audit Reports (Proof of Compliance) to track quality trends, solicits feedback from the LADOTD on quality related issues;
- **Attend** Management Review Meetings conducted by the Project Manager and prepare report of findings and recommendations for improvement; and
- **Sign** Delivery Release Record attesting that all QC/QA documentation has been properly completed and authorized for release of the submittal.

SECTION 3. DESCRIPTION OF THE QC, QA & IR PROCESSES

3.1 QUALITY MANAGEMENT PLAN

The Quality Management Plan for the Bridge Preservation IDIQ Contract includes formats and templates for QC and QA that have been successful on many past projects. Our QMP processes will also focus on the following:

- **High risk elements** which will include the segmental concrete superstructures, signature structures, and unique foundation systems;
- **Rigorous verification elements** such as project geometrics; and
- **Refinement elements** such as superstructures and substructures with a high level of repetition - where efficiency of detail could yield financial benefit.

3.1.1 Project Meetings

Project meetings required for the Bridge Preservation IDIQ Contract task orders are as outlined and described in the Scope of Work. All project meetings will be guided by the principles and requirements as detailed in the **Process Guideline (Project Meetings)**.

3.1.2 Process Control

As required for more complex projects, this document should outline all aspects of preconstruction activities, design guidelines, environmental requirements, permitting, specifications, right-of-way, utility relocations, estimates, and financial.

Process control may include the following:

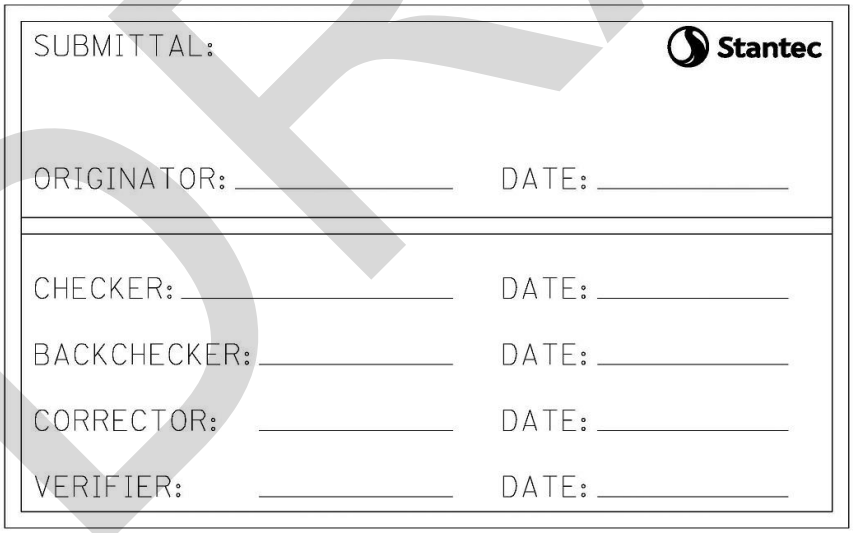
- Identify, confirm, document and communicate objectives, deliverables, schedule, work plan, standards and analysis methodology
- Obtain confirmation, and approval where required - by the LADOTD and other stakeholders
- Confirm the information provided for project implementation is complete and accurate
- Review site conditions, particularly those areas where conflicts and constraints may affect design or constructability
- Maintain a documented, indexed and traceable record of all work in a format that allows the project team access to all pertinent project information
- Ensure all deliverables are signed and stamped in accordance with LADOTD requirements
- Provide all documentation to the designated quality control checkers and quality assurance reviewers, including Non-Conformance Reports

3.2 QUALITY CONTROL

Quality control (**QC**) is the responsibility of each individual undertaking a component of the work. To assist in this process, the **Project Manager** will establish as part of this **QMP** responsibilities and procedures for checking technical accuracy of the work, identifying and correcting any discrepancies, rejecting product not meeting requirements if necessary, and accepting the final work product as well as defining the frequency of implementing some or all of the procedure and reviewing procedural performance. It is expected that this procedure will include checks by individuals knowledgeable of the technical requirements for a particular activity and with the relevant qualifications and experience in the discipline.

QC reviews will be conducted for all submittals at the required LDOTD Milestones. The **Project Manager** will work with the **Discipline Leaders** to identify **QC** reviews and who will have responsibility for **QC** of these reviews. As part of the **QC** accountability, the **Discipline Leader** will be the **Primary QC Signature** on all submittals and documents prepared under their control. As part of this **QMP, Discipline Leaders** will be responsible for the following:

- Complete **Section 4** of the **QMP** by assigning **QC Design Checkers** and **QC Submittal Checkers** possessing the technical skills, relevant qualifications and experience required to complete these efforts;
- Utilize the checklists included in **Appendix A**, or create checklists to assist in the reviews and provide documentation of the review;
- For **QC Design & Submittal Checking**, a **Five Step Procedure** will be used. For this purpose, the **Checking Stamp** shown below will be used. The **Checking Stamp** is available as an electronic image or a rubber stamp which must be affixed to the documents.



Checking Stamp

3.2.1 Five Step Procedure

Step 1. Once **Designer** & **Detailer** complete calculations and plans a **Check Print Stamp** will be placed on calculations and plans indicating a submittal name/division. **Designer/Detailer (Originator)** will sign and date on calculations/plans, and will provide calculations and/or plan sets to the **Checker**.

Step 2. The **Checker** will indicate with a highlighter that he agrees with, and use red marks that he would like to make comments. **Checker** will sign and date the calculations and/or plan sheets being checked and give it to **Backchecker** (can be the same person as the **Originator**).

Step 3. **Backchecker** will go through all the comments made by the **checker**. If he agrees he would put a green check beside the **Checker's** comments. But if the **Backchecker** disagrees with the **Checker's** comment he will resolve the disagreement with the **Checker**. If the **Checker's** comments needs to be changed the **Backchecker** will strike through the **Checker's** comments and update it using a **green pen**. The **Backchecker** will sign and date it.

Step 4. **Corrector** (can be the same person as the **Originator**) will correct all comments which are agreed upon. Once the correction is made he will circle the changes with a **green pen**. **Corrector** will sign and date it, he will give it to **Verifier**.

Step 5. **Verifier** (can be the same person as the **Checker**) will verify all changes, and will highlight the **green circles**. He will sign and date it to complete the process.

Quality Control Records will be checked documents *(including evidence of checking, evidence of verification, evidence of interdisciplinary review, and evidence of approval)*, memoranda, meeting notes, or checklists specific to the task.

3.2.2 Quality Control (LADOTD Bridge Requirements)

Refer to Appendix 'F' for details on completing **LDOTD Bridge QC/QA**. These procedures are tailored to satisfy the **LADOTD, Bridge Design Section, "Policy on Quality Control and Quality Assurance's Construction Plans."** These procedures augment the procedures described herein and are **required for all LDOTD Bridge work products**.

Quality Control (QC) Bridge will have the responsibilities as detailed in Appendix 'F'. In addition, **QC (Bridge)** will also include:

- For the simple and moderately complex elements of the Project, create checklists to assist in the reviews and provide documentation of the review.
- For the high-risk elements and complex structural components of the Project, institute the use of independent modeling and QC by independent design teams, rather than line-by-line checking to make sure that both math and methodology are checked in an effective way.

- Create Process Guidelines (PG's) as the basic tool to define standards, outline technical approaches, and define the salient points and objectives of design. PG's will be developed by Discipline Leaders and other senior technical staff.

  Particular components of the PG's will include:

  - Bridge PG's – create protocols to identify software to be used, the methodology and approach to structure interactions, construction preferences for materials and methods, specific LADOTD criteria, and project specific criteria. The purpose of the PG's is to serve as clear guides to keep design efforts focused and coordinated.
  - Bridge "Complex" Element PG's - will also establish protocols for elements defined as "complex" in preparing independent analyses and required calculations to ensure true independence for comparison to the original analyses and calculations used to perform a QC check of the bridge plans.

3.3 QUALITY ASSURANCE

As part of this **QMP,** the Quality Control/Quality Assurance (QC/QA) Manager will establish the following:

- Assign Quality Management Personnel (QA reviewers) for the Project and ensure these individuals possess the technical skills, relevant qualifications and experience required to complete the efforts (in particular, the bridge aspects of the project) (These individuals are summarized in Section 4);
- Verify that Quality Assurance (QA) Information Packages have been properly prepared for the QA reviewer's use;
- Complete the required QA certification (signed by the appropriate QA reviewer);
- Document QA reviewer's comments;
- Reconcile, and/or develop accepted course of action;
- Prepare QA Review Comment Form Reports or Non-Conformance Form Reports as appropriate to deal with issues noted in the review; and
- Confirm that all issues raised and actions identified are addressed.

For LADOTD Bridge Design, QA packages shall be prepared as detailed in **Appendix C**.

3.4 INDEPENDENT REVIEW AND CONSTRUCTABILITY REVIEW

An independent individual/team will be identified to develop additional ideas to assure that enhance innovation and construction for the Project.

As part of the QA Review, an Independent Reviewer will include be designated and identified in the Section 5, Quality Management (QC/QA) Personnel. The Independent Reviewer will perform consistency, constructability and risk reviews as defined in Section 2 of this document.

3.4.1 Document and Data Control

Quality related records, including hard copy and digital file documentation, will be received and maintained in accordance with Stantec best practices.

These records will include the following:

- Copy of the **QMP** and all revisions to the plan
- Copy of all **Quality Control** checklists and certifications for each milestone review
- Copy of all **Quality Assurance** certifications for each review
- Copy of all **Design Review Comment Forms**, **Non-Conformance Reports** and evidence of the corrective action and subsequent compliance for **QC** and **QA** reviews

For LADOTD Bridge Design, Calculation Books shall be prepared as detailed in **Appendix B**.

3.4.2 Control of Sub-Contracted Work

Sub-consultants will be required to provide a copy of their QMP for review by Stantec; or, be required to follow the Stantec **QMP**.

3.4.3 Control and Correction of Non-Conforming Work

Identified deviations from designs or non-conformances need to be assessed, documented, and communicated to affected parties. This process will be handled through Design Review Comment Forms and Non-Conformance Reports (NCRs).

The corrective action taken and any preventative actions identified as being appropriate to prevent future occurrences will be documented.

3.5 PROJECT DESCRIPTION AND SCOPE

3.5.1 Disciplines/Tasks

The general scope of services for this project and the tasks to be performed by the consultant are as follows:

Task 1: Bridge Design Services

General Bridge Engineering Services

Bridge design services shall be provided for fixed and movable bridges. Bridge types may include, but are not limited to, new bridges, bridge replacements, bridge rehabilitation, bridge preventive maintenance and repair, and roadway lighting. Bridge engineering services may include the following:

- Bridge/structural inspection and evaluation of existing bridges or other structures (sign trusses, fender systems, etc.). Associated reports shall be provided as required
- As-designed, as-built, and condition bridge ratings

- Design peer review of developed plans or conceptual designs to verify concept, constructability, and accuracy of designs along with associated reports, conclusions, calculations, and recommendations as needed
- Construction engineering support including construction drawing review, shop drawing review, request for information support, contractor proposals, etc.

Sampling, Instrumentation and Non-destructive Testing

These services include the following:

Sampling

- Collection of samples
- Evaluation of protective coating material samples for determination of compatibility with proposed coatings, analysis for heavy metals, proper procedures for treatment, handling, disposal of waste, etc.

Instrumentation

- Design of instrumentation plans. Installation of instrumentation, data acquisition, analysis, and evaluation of structure based on instrumentation plan
- Provision and installation of instrumentation, including all materials required to mount the instrumentation
- Provision of data acquisition systems, software updates, power supplies, communication to data servers, data hosting services, maintenance, and data access to DOTD
- Calibration services for instrumentation systems and sensors
- Maintenance services to repair and/or replace sensors, data acquisition systems, and power supplies
- Analysis and evaluation of accumulated data and final assessments and development of corresponding reports based on data and associated calculations

Non-destructive Testing

- Proof loading
- Estimation of concrete strength
- Assessment of reinforcement condition, cover, location, and diameter
- Detection of cracks, voids, and delamination in concrete
- Assessment of steel member condition

Task 2: Geotechnical Services

Consultant shall provide geotechnical services including investigations, analysis and design. Geotechnical field investigations including both shallow and deep soil borings, laboratory testing and analysis, preparation of soil boring logs, geotechnical analysis and design based on obtained data or data furnished by the DOTD and Construction related engineering services.

Task 3: Road Design and Traffic Services

Consultant shall provide services including preliminary and final roadway design and plan development; Hydraulic analysis and design; Traffic engineering, traffic control design, and data collection; and Transportation Management Plan (TMP) development.

Task 4: Surveying and Title Work Services

Consultant shall provide surveying and title work services necessary to perform topographic, and boundary surveying, develop right-of-way maps, and provide other existing site data. The services shall include topographic surveying, 3D laser scanning, and underwater acoustical imaging, property and boundary surveying, property title work including title research and reports and Construction related surveying services.

Task 5: Bridge Inspection Services

Consultant shall provide services to perform Statewide NBIS In-Depth Inspections of complex structures. The services may include detailed in-depth field inspection on all bridge components, including an element level inspection. An NBIS underwater bridge inspection may be required for submerged elements; assessment of the coating system, conducted by a certified SSPC Protective Coating Specialist or a certified NACE Bridge Coating Inspector and In-depth inspection report outlining recommended repairs, rehabilitation, and corrections.

Task 6: Environmental and Permitting Services

Consultant shall provide environmental and permitting services necessary to obtain project permits. Required permits may include, but are not limited to, the following:

- Coastal Use permits (CUP) from the LA Department of Natural Resources
- Wetland permits (404 and Nationwide) and Section 10 permits from the US Army Corps of Engineers
- Water Quality Certification from the LA Department of Environmental Quality
- Scenic Stream permits from the LA Department of Wildlife and Fisheries
- Bridge permits from the US Coast Guard
- Levee permits from various levee boards

3.5.2 Specifications and Standards

The Scope of Services requires that this contract be in compliance with AASHTO LRFD Bridge Design Specifications, 9th Edition, Manual for Bridge Evaluation, 3rd Edition with 2018 Interim Revisions, and the Louisiana Department of Transportation and Development's guidelines, manuals and standards, as applicable to the required services.

3.5.3 Project Schedule

Services will commence upon receipt of the task work order authorization and as directed by the Department’s Project Manager. The services will continue until notice is given by the Department’s Project Manager to end the services or when the approved cost for the services is exhausted.

Project submittals, associated schedule, and format shall be established in each Task Order. All bridge plan submittals shall be submitted in pdf format and the 100% signed final plans shall be submitted in full size paper and in pdf format. Design and rating calculations shall be submitted in pdf format no later than 30 days after the 100% final plan submittal.

SECTION 4. QUALITY MANAGEMENT (QC/QA) PERSONNEL

List of Personnel Assigned to Quality Management Tasks per Activity	**Project Manager** – Brian Johnson, PE
Bridge Design Services (Fixed and Movable)	
Designer(s)	Amir Botros, PhD, PE, Kunal Malpani, PE, Maggie YE, PE, Mickey Harrison, PE, Joffrey Easley, PE, Mohamed ElBatanouny, PhD, SE, Steven Lauer, SE, Curtis Schroeder, SE, John Williams, PE (Mechanical), Gareth Rees, PE (Electrical)
QC – Design & Plans	Robert Smith, PE, Amir Botros, PhD, PE, Jonathan McGormley, PE
QA – Design & Plans & Independent Review	Brian Johnson, PE, Tony Hunley, PhD, PE
Bridge Inspection Services	
Bridge Inspectors(s)	Ryan Nataluk, PE, Dave Severns, PE, Brian Stigner, PE, Michael Brodnax, EI, Donavon Cunningham, Leonard Phelps
Roadway and Traffic	
Designer(s)	Mary Frances O'Rourke, PE, Joey Lefante, PE, PTOE, Karla Weston, PE
QC – Design & Plans	Nick Prudhomme, PE, Joseph Cains, PE
QA – Design & Plans & Independent Review	Cindy Hall, PE, Gary Heitman, PE
Topographic, Property Surveys and Underwater imaging/ 3D Scanning	
Designer(s) and Technicians	Ross Wilson, PLS, Spencer Rimes, Brent Campbell, Chris Ballard, PLS, Philip Dupree, Jason Stoehr, Trent Norris, Scott Benton, Jacob Stoehr
QC – Design & Plans	Bradley Holleman, PLS, Ralph Burgess, PLS
QA – Design & Plans & Independent Review	Russell Coco, PE, Ralph Burgess, PLS
Geotechnical	
Designer(s) and Lab Technicians	Larry Sant, PE, Cody Hatch, PE, Kyle Kilfan, Wendy Allen, Karen Allen
QC – Design & Plans	David Sauls, PE

QA – Design & Plans & Independent Review	David Sauls, PE, James Aronstein, PE
Environmental and Permitting	
Designer(s)	Lindsay Grissom, Joe Cains, III, PE T (USCG Permits)
QC – Design & Plans	Scott Hoffeld, CEP
QA – Design & Plans & Independent Review	Cindy Hall, PE, Tony Hunley, PhD, PE

Appendix A20: Guidelines for Document Preparation

A.1 Purpose and Scope

A.1.1. The purpose of these Guidelines is to establish a method for consistently delivering quality project work that meets client needs and prevents rework.

A.1.2. These Guidelines are mandatory and apply to all project work.

A.1.3. Methods for rework prevention include reviewing project input; checking and verifying project work by someone other than the **Originator**; conducting **Interdisciplinary Reviews**, where required; and **Approving** project work for further use or delivery.

A.1.4. It is recognized that some projects do not result in the "traditional" deliverables of calculations, designs, contract documents, studies/reports, etc. Nonetheless, the principles underlying **Checking** and **Verification** must be applied.

A.1.5. These Guidelines are to be supplemented by the Appendix F – **LDOTD Bridge QC/QA**.

A.2 Preparation of Calculations

A.2.1. Terms and Definitions

A.2.1.1 Calculations – Mathematics-based computations that transform input data into a result that is used as further input to the delivered project work, or is delivered directly to the client to meet contract obligations.

A.2.1.2 Assumptions – Estimated or presumed information used as input to a calculation.

A.2.1.3 Confirmation – Verification that an assumption was correct based on actual data.

A.2.2. Procedure

A.2.2.1 Calculation Preparation

(i) **Discipline Leaders** shall assign qualified individuals the task of preparing calculations and are responsible for monitoring compliance with this guideline.

(ii) **Calculations** are to be neat, legible and suitable for reproduction. They are to be prepared using company calculation pads, where available, including a header with space for identifying the calculation title, page numbers, project name and number, and the **Originator's** and **Checker's** names, initials and dates.

(iii) **Calculations** must be organized and logically presented, and are to include sufficient notes, explanations and sketches to make the calculation easily

followed. The intent is to make calculations understandable by an individual competent in the subject matter without going back to the originator.

(iv) The following information should be provided in the calculation, or on a cover or summary page:

(a) Objective – A statement of the problem or question to be solved (if not obvious from the title).

(b) Method – Identify the methods to be used, including software.

(c) Assumptions – Clearly state any assumptions applied.

(d) References and Inputs – Identify the inputs and the references for inputs, equations, methods, etc. Design inputs used as the basis for calculations shall be verified by the **Originator** as obtained from a reliable source. Design equations, tables, field data, etc., shall be referenced to the specific section of the applicable design code or manual. Any information not readily available to a reviewer should be attached as an appendix to the calculations.

(e) Conclusions – Clearly state the conclusions of the calculations including any limitations, conditions and/or exceptions.

(v) Confirmations – Critical assumptions need to be tracked and confirmed by the **Originator** as soon as valid and current data becomes available. The impact of any variances between assumptions and confirmed information must be evaluated, and any necessary revisions to calculations made.

(vi) In assembling larger sets of calculations, or where providing summary information will be useful, the use of a calculation cover page may be helpful.

(vii) Prior to the results of a calculation being utilized for subsequent design work, relevant calculations shall be checked and verified in accordance with **Checking** and **Verification Procedure** and documented accordingly.

A.2.2.2 Computer Calculations

(i) Computer calculations shall include or reference documentation clearly explaining the program's function, nomenclature, and sign conventions utilized. All technical software must be validated in accordance with the **Software Validation Procedure**.

(ii) Calculations utilizing computer programs to perform analyses or design shall include the following:

(a) Name of the program including version or revision level.

(b) Paper copies of computer output files, or portions thereof, that are required to satisfy the documentation requirements of this procedure shall be labelled and filed.

(c) Identification and/or location of associated electronic files.

(iii) Spreadsheet calculations shall be documented and organized so that formulae used in the spreadsheet can be checked for accuracy of incorporation into the spreadsheet, using a calculator or other method. After validation of the spreadsheet calculations the spreadsheet shall be protected to prevent inadvertent modification of the embedded formulae.

A.2.2.3 Revisions to Calculations

Revisions (or cancellations) may be required after an initial set of calculations has been reviewed. These revisions may be a result of client comments, scope changes, or errors found during subsequent reviews. Revisions to the calculations do not necessarily warrant a second review of the entire set of calculations. Only the revised portion of the calculations may need to be reviewed. Required revisions shall, therefore, be completed as follows to appropriately document the revisions made:

(i) Revisions shall be reviewed and approved in the same manner as the original. The **Originator** and **Reviewer** of the calculations shall be responsible for the revision. The revision to the calculation shall be clearly identified and dated or shall be replaced by a new calculation.

(ii) Revisions shall be prepared in a manner that provides a clear record of the content of the calculation, both prior to and after the revision. The reason for the revision should be identified.

(iii) Revisions to calculations that impact other disciplines shall be immediately reported to the **Project Manager** and the affected disciplines.

A.2.2.4 Control of Calculations

(i) All calculations shall be organized and adequately indexed to facilitate retrieval of results and verification of completeness. A calculation index may be useful as a tool to help plan and organize the work, or may be developed upon completion of the calculations for record and archival purposes.

(ii) On completion of the calculation review process, original calculations including calculation cover pages, checklists, index pages and other associated documents shall be controlled.

A.3 Preparation of Studies/Reports

A.3.1. Terms and Definitions

A.3.1.1 **Technical Study or Report** – A hardcopy or electronic document based on technical information gathered and evaluated with professional insight and delivered to the client. Generally, a technical study or report contains conclusions and often contains recommendations.

A.3.2. Procedure

A.3.2.1 Style and Format

(i) The report should be prepared following the client-specific preference and project standardized format. If the client has a specific preference or the office or group preparing the report has a previously used style with that client, these factors should be considered in developing the report format.

(ii) The format (organization and content) of project technical studies and reports shall be based on the client's requirements. Absent client-specified format, the **Project Manager** and/or the originating **Discipline Leader** shall determine the format based on the scope and complexity of the report.

A.3.2.2 Development and Review

(i) **Discipline Leaders** shall assign qualified individuals the task of preparing study and report content and are responsible for monitoring compliance with this guideline.

(ii) **Discipline Leaders** shall arrange for reviews in accordance with the **Checking** and **Verification Procedure** and documented in the associated forms.

(iii) In addition to discipline reviews, the **Project Manager** shall review the study/report for overall adequacy, completeness, and contractual requirements including compliance with applicable client requirements.

A.3.2.3 Distribution and Filing

(i) **Project Manager** shall distribute copies of technical reports and studies and any changes thereto to personnel/organizations requiring them.

(ii) If multiple reports are expected, it is suggested that the **Project Manager** or designee maintain an index of project technical studies and reports.

A.3.2.4 Changes

(i) Technical reports and studies should be maintained current with significant changes identified during technical development.

(ii) Changes to issued technical reports and studies shall be processed in the form of revision/addenda, approved and distributed.

(iii) Changes incorporated in technical reports and study revisions that are to be reissued should be identified. The reasons for changes should also be provided when it would be helpful for users. The revision date shall be added to the cover.

A.3.2.5 Use of Photographs or Digital Images

(i) Photographic or digital images used in the **Study or Report** depicting conditions relevant to the findings or conclusions shall be dated. Electronic files of images of photography taken by project staff or subconsultants shall be retained in project files along with a record print. Photos used in a report from a source other than project photography shall be attributed to the proper source.

A.4 Preparation of Drawings

A.4.1. Procedure

A.4.1.1 General Guidelines

(i) **Discipline Leaders** shall assign qualified individuals the task of preparing drawings and are responsible for monitoring compliance with this guideline.

(ii) At project inception, a project drawing list is to be developed, or updated from one prepared during the proposal phase, by each discipline. Drawing lists will be updated at each milestone to help the **Project Manager** in estimating progress or completion status.

(iii) Drawing Numbers and File Naming – Drawings and drawing files shall be uniquely identified with drawing numbers in accordance with the system applicable to the project.

(iv) CAD Standards –The CAD Standards to be used on the project shall be as identified in the scope of services, or through detailed discussions with the client.

(v) Origin of Drawings – **Discipline Leaders** are responsible for assigning the preparation of drawings to a **Designer** who may work with the **Detailer** working under the direction of a CAD Manager. Each **Designer** shall be responsible for seeing that the required information is transmitted to the **Detailer** via sketches, marked-up prints, electronic data, and/or written or verbal instructions.

(vi) Duplication of information is to be avoided on drawings, and between drawings and specifications.

A.4.1.2 Review of Drawings During Preparation

(i) **Designer** will conduct periodic reviews of drawings in progress to see that proper scales, orientation, standards, formats and design information are being utilized and that the design input has been interpreted, applied properly, and is being coordinated with other disciplines. This type of "over-the-shoulder" review takes place as the work progresses, and precedes the formal reviews that occur as part of the **Checking** and **Verification Procedure**.

(ii) Where available, the **Designer** may use discipline-specific, client-specific, project-specific or other similar checklists to verify that design, construction and presentation aspects and details are being adequately addressed.

A.4.1.3 Client Requests for Unchecked In-progress Drawings

(i) Clients occasionally request non-contractual, unscheduled, interim or in-progress submittals of drawings for any number of purposes. Given the risks associated with providing unchecked documents to a client and the potential for client complaints, it is always intended that drawings be reviewed in accordance with the **Checking** and **Verification Procedure** prior to submission. However, when circumstances demand, unchecked drawings may be released if the following minimum requirements are met:

(a) The **Project Manager** shall review the drawing set to confirm that the drawings have progressed to the completion level anticipated by the client and to confirm that the non- contractual progress submittal would not be deemed as unacceptable by the client in any way.

(b) A disclaimer statement (or bold stamp) shall be placed on the drawing set indicating that "IN-PROGRESS" and are being provided for "INFORMATION ONLY" at the request of the client."

(c) The **Project Manager** shall submit the non-contractual progress submittal with a cover letter stating that the drawing set is being provided for "INFORMATION ONLY" as requested by the client. The cover letter shall also state that the IN-PROGRESS submittal has not yet been reviewed in accordance with project procedures and is subject to revision in concept and detail as work progresses.

A.4.1.4 Signing and Sealing of Drawings

(i) Drawings issued for construction shall be signed and sealed in accordance with the laws of the applicable State, typically that where the project is located, not where the design takes place. **Discipline Leaders** shall be responsible for understanding the practice and implementing on the project. Any discrepancy or confusion shall be brought to the attention of **Project Manager**.

A.5 Software Validation Procedure

A.5.1. Purpose and Scope

A.5.1.1 This procedure describes minimum requirements to ensure that technical software used on the project has been validated before use.

A.5.1.2 This procedure applies to software used for any of the following:

(i) Performing calculations;

(ii) Developing input for use in calculations;

(iii) Creating designs or drawings using embedded calculations;

(iv) Generating output provided directly to clients;

(v) Generating output included in deliverables to clients; or

(vi) Software that is developed and delivered to a client as a contractual obligation.

For purposes of this procedure, such software is referred to as "technical software." Exclusions from this procedure include software:

(i) That does not conform to the definitions provided in the list above;

(ii) Used to produce output that is checked and verified manually;

(iii) Inherent to equipment for measuring and testing, which is periodically verified and calibrated in accordance with the manufacturer's specifications; or

(iv) Designed to enable the operation and maintenance of a computer system and its associated programs (systems software).

A.5.1.3 Mathematical, formulaic and logic-based programming developed within standard office-type platforms such as Excel and Mathcad may typically be validated as calculations in accordance with the **Checking** and **Verification Procedure**. Advanced or complex programs that are not amenable to standard checking/verification shall be validated in accordance with this procedure.

A.5.2. Terms and Definitions

A.5.2.1 **Approver** – The individual, independent of the **Validator**, that reviews the validation output and accepts the software for use on the project.

A.5.2.2 **Industry-Standard Software** – Commercially available technical software that is widely used and accepted in a discipline or practice area, and that does not require significant adaptation.

A.5.2.3 **Legacy Software** – Technical software regularly used in the current version for at least three years and for which no problems have been reported, or for which problems have been reported and corrected.

A.5.2.4 **Non-Standard Software** – Technical software that is not widely used and accepted in the industry.

A.5.2.5 **Software Register** – An up-to-date listing of validated technical software maintained by each **Discipline Leader** and posted in a location accessible to all staff.

A.5.2.6 **Validation** – The process of accepting technical software for use by an LCP Company.

A.5.2.7 **Validator** – The individual that performs the validation.

A.5.3. Procedure

A.5.3.1 Staff Responsibilities with Technical Software

All staff using technical software shall help ensure that technical software is used properly, that it is appropriate for the task at hand, and that any resulting errors, input/processing problems, or questionable output are reported to their **Discipline Leader**.

A.5.3.2 Technical Software Register

Discipline Leaders shall maintain a register, accessible to project staff that lists technical software that has been validated for use. The register shall include, at a minimum, the vendor name, software name/description, and version number.

A.5.3.3 Responsibility for Software and Validation

Discipline Leaders are responsible for monitoring the use of technical software within their departments, disciplines and/or practice areas and ensuring that such software meets the requirements of this procedure. When appropriate, **Discipline Leaders** may serve as Validators and/or Approvers.

A.5.3.4 Software Classification

Technical software shall be classified by the appropriate **Discipline Leader** into one of the following categories, as defined above:

(i) Legacy Software

(ii) Industry-standard Software

(iii) Non-standard Software

A.5.3.5 Validation Process

The appropriate **Discipline Leader** shall assign a **Validator** and **Approver** who shall process the technical software in accordance with its classification as follows:

(i) Legacy Software – Acceptance is based on previously documented and satisfactory internal production experience.

(ii) Industry-Standard Software – The software developer/vendor shall be requested to provide a signed statement or certification that the software has undergone a quality control validation process confirming that it performs as intended. Based on this certification, such software requires no further validation other than a run with sample data to verify that the program functions properly. When no such statement or certification is available, the software shall be treated as Non-standard Software.

(iii) Non-standard Software – Shall be validated using either of the following test procedures:

(a) Run the software using input from a known solution and verify that the program output matches the known solution. All significant design options/methodologies offered by the program shall be verified.

(b) Perform a manual calculation to verify the results obtained using the software.

A.5.3.6 Validation Approval

The **Validator** shall provide the results and documentation of the validation process to the assigned **Approver**, who shall review the information and, if found acceptable, approve the software for use. The **Approver** shall take the necessary steps to have the technical software added to the LCP validated software register. Technical software shall not be used in production until it has been accepted by the **Approver**.

A.5.3.7 Validation of Software Revisions

(i) New versions of technical software that have been previously validated shall be reviewed by a **Validator** by running the input file or database from the previous version and comparing results. Any differences between the outputs shall be justifiable.

(ii) When approving new versions, changes that may affect previous output shall be noted and communicated by the **Validator** to the **Discipline Leader**.

(iii) The widespread use and acceptance of the new version of the software in our industry, without apparent concern regarding its performance, may also be considered as a basis for accepting new versions.

(iv) New versions of technical software shall not be used prior to acceptance by the **Approver**.

(v) Consideration shall be given to whether only the latest version of the software is to be maintained, keeping in mind that the use of older versions may still be required by the client or for continuity with earlier output.

A.5.3.8 Software Validation Documentation

The validation process shall be documented.

A.5.3.9 Software Errors

Errors discovered by any user in previously validated software that have the potential to affect completed work shall be reported to the appropriate **Discipline Leader**. The **Discipline Leader** shall then be responsible for:

(i) Notifying the software developer/vendor and **Project Manager**

(ii) Identifying projects that have used or are using the software

(iii) Assessing the impact of the error on both completed and ongoing projects, including notification of other **Discipline Leaders** as appropriate.

(iv) Developing a corrective action plan for all affected projects

(v) Revising the validation documentation, including the software register, as necessary

Appendix B: Guidelines for Processes

B.1 Project Processes

We believe that a Project's desired result is achieved more efficiently when activities and related resources are managed as a Process. In achieving desired results, Process Guidelines must be identified and documented. Stantec develops typical Process Guidelines based upon past experiences. Unique Process Guidelines (PG's) are also developed for certain projects.

Our PG's are defined as those functions necessary for managing the Project as well as those that are necessary to realize the project's deliverable. Project processes include:

- administrative processes; and,
- technical processes

Our QMP provides Process Guidelines (PG's) for all known project processes. PG's outline a quality process to be performed; and becomes part of the QMP for the Project.

Basic Elements of a Process Guideline should include:

- purpose
- process description
- key elements
- responsibility/authority

Appendix C: QC Checklist & Comment Forms

QC DESIGN CHECKLIST & COMMENT FORM

PROJECT ELEMENT

ORIGINAL CALC ☐ Yes ☐ No **IF REVISED, REV'N NO.**

DESIGNER **QC DESIGN CHECKER**

ENGINEER OF RECORD

CALCULATION TYPE ☐ Hand calculation ☐ Spreadsheet ☐ Vendor Software ☐ Other

1.	If SPREADSHEET, has it been approved by Stantec's Project Manager?	☐ Yes	☐ No
2.	If VENDOR SOFTWARE, is it on the LDOTD, Bridge Design Section website, pre-approved list?	☐ Yes	☐ No
3.	If not on pre-approved list, has it been approved for use by LDOTD, Bridge Design Section?	☐ Yes	☐ No
4.	If OTHER, please describe		

DESIGN INPUT VERIFICATION

1.	Has design input been generated from another source?	☐ Yes	☐ No
2.	Has source information been checked and approved?	☐ Yes	☐ No

CALCULATION CHECK (If response is <u>No</u>, provide applicable comments)

1.	Has the DESIGNER signed and dated the calculation?	☐ Yes	☐ No	☐ N/A
2.	Is the calculation in accordance with a standard approach to preparing the design?	☐ Yes	☐ No	☐ N/A
3.	Is the calculation consistent with contractual requirements of the Scope of Work?	☐ Yes	☐ No	☐ N/A
4.	Are any new DTM's by LDOTD required to be implemented in this design?	☐ Yes	☐ No	☐ N/A
5.	Has the Project Design Criteria been included & followed?	☐ Yes	☐ No	☐ N/A
6.	Is a Project "GO-BY" required for this design?	☐ Yes	☐ No	☐ N/A
7.	Has the Project "GO-BY" been followed?	☐ Yes	☐ No	☐ N/A
8.	Have assumptions for the design been reviewed and confirmed?	☐ Yes	☐ No	☐ N/A
9.	Are results & conclusions consistent & reasonable considering the inputs & approach?	☐ Yes	☐ No	☐ N/A
10.	Are special provisions or Non-Standard Specification required for this design?	☐ Yes	☐ No	☐ N/A
11.	Have any NON-CONFORMANCE REPORTS been prepared?	☐ Yes	☐ No	☐ N/A

Comments:

QC DESIGN CHECKER SIGNATURE _____ **DATE:**

QC DETAIL CHECKLIST & COMMENT FORM

PROJECT DRAWINGS CHECKED

ORIGINAL DRAWINGS ☐ Yes ☐ No **IF REVISED, REV'N NO.**

ORIGINATOR(S) **QC DETAIL CHECKER**

CHECK LEVEL ☐ 30% Final ☐ 95% Final ☐ 98% Final ☐ PS&E

DESIGN, QUANTITIES, MATERIALS, SPECIFICATIONS & NOTES		
1.	Has the DESIGN INFORMATION been checked and approved?	☐ Yes ☐ No ☐ N/A
2.	Have the QUANTITIES been checked and approved?	☐ Yes ☐ No ☐ N/A
3.	Are the MATERIALS properly coordinated with the Project specifications?	☐ Yes ☐ No ☐ N/A
4.	Are special provisions or Non-Standard Specifications required for any of the design elements or materials shown on the DRAWINGS?	☐ Yes ☐ No ☐ N/A
5.	Do the NOTES include proper references for DESIGN & MATERIALS and proper cross-references to other DRAWINGS?	☐ Yes ☐ No ☐ N/A
DRAWING CHECK (If response is <u>No</u>, provide applicable comments)		
1.	Are titles and sheet numbers properly shown & matching the Sheet Index?	☐ Yes ☐ No ☐ N/A
2.	Have comments from previous internal reviews been addressed?	☐ Yes ☐ No ☐ N/A
3.	Have comments from previous LDOTD reviews been addressed?	☐ Yes ☐ No ☐ N/A
4.	Is the DESIGN INFORMATION properly and correctly presented?	☐ Yes ☐ No ☐ N/A
5.	Is completeness sufficient for the REVIEW LEVEL?	☐ Yes ☐ No ☐ N/A
6.	Have the appropriate CAD standards been followed?	☐ Yes ☐ No ☐ N/A
7.	Are the DRAWINGS properly formatted in accordance with the "GO-BY"?	☐ Yes ☐ No ☐ N/A
8.	Are there any constructability issues presented on the DRAWINGS?	☐ Yes ☐ No ☐ N/A
9.	Have the appropriate CAD standards been followed?	☐ Yes ☐ No ☐ N/A
10.	Have dimensions been independently verified?	☐ Yes ☐ No ☐ N/A
11.	Are critical dimensions and clearances correct?	☐ Yes ☐ No ☐ N/A
12.	Have redundancy and duplication issues been eliminated?	☐ Yes ☐ No ☐ N/A
13.	Have the DRAWINGS' information been properly interfaced with other disciplines?	☐ Yes ☐ No ☐ N/A
14.	Have Project geometrics been verified with other discipline drawings?	☐ Yes ☐ No ☐ N/A
15.	Have any NON-CONFORMANCE REPORTS been prepared?	☐ Yes ☐ No ☐ N/A

Comments:

QC DETAIL CHECKER SIGNATURE _____ **DATE:**

Appendix D: QA Checklist & Comment Forms

QA REVIEW & COMMENT FORM

DESCRIPTION OF QA PACKAGE:

Designs Included in Package:

Drawings Included in Package:

QA REVIEWER

REVIEW LEVEL ☐ 95% Final ☐ 98% Final ☐ PS&E

QA PAKCAGE PREPARATION

Has the QA PACKAGE been properly prepared for review?	☐ Yes ☐ No
Have INDEPENDENT CHECKS been properly prepared & included in the QA PACKAGE?	☐ Yes ☐ No

Comments:

PACKAGE REVIEW (If response is No, provide applicable comments)

1. Have all DESIGNS been properly checked in accordance with the 5-step method?	☐ Yes ☐ No ☐ N/A
2. Have all DESIGN COMMENTS been properly resolved?	☐ Yes ☐ No ☐ N/A
3. Have all DRAWINGS been properly checked in accordance with the 5-step method?	☐ Yes ☐ No ☐ N/A
4. Have any NON-CONFORMANCE REPORTS been prepared?	☐ Yes ☐ No ☐ N/A

Comments:

QA REVIEWER SIGNATURE _____ **DATE:**

Appendix E: Independent Review & Comment Form

INDEPENDENT REVIEW & COMMENT FORM

DESCRIPTION OF QA PACKAGE:

Designs Included in Package:

Drawings Included in Package:

INDEPENDENT REVIEWER

REVIEW LEVEL ☐ **95% Final**

IR PAKCAGE PREPARATION

Has the IR PACKAGE been properly prepared for review?	☐ **Yes** ☐ **No**

Comments:

COMPLETENESS & CONSTRUCTIBILITY REVIEW (If response is No, provide applicable comments)

1.	**Do the PLANS & SPECIFICATIONS satisfactorily complete the Project SOW?**	☐ **Yes** ☐ **No** ☐ **N/A**
2.	**Are the design concepts & technical solutions suitable to the Project's SOW?**	☐ **Yes** ☐ **No** ☐ **N/A**
3.	**Are the PLANS & SPECIFICATIONS presented with completeness for bidding?**	☐ **Yes** ☐ **No** ☐ **N/A**
4.	**Do the PLANS & SPECIFICATIONS provide the contractor with clear, concise information that can be utilized to prepare a competitive, cost-effective bid?**	☐ **Yes** ☐ **No** ☐ **N/A**
5.	**Can the Project, as detailed in the PLANS & SPECIFICATIONS, be constructed using standard construction methods, materials and techniques?**	☐ **Yes** ☐ **No** ☐ **N/A**
6.	**When constructed in accordance with the PLANS & SPECIFICATIONS, can be the Project be maintained in a cost-effective manner?**	☐ **Yes** ☐ **No** ☐ **N/A**

Comments:

INDEPEDENT REVIEWER SIGNATURE _____ **DATE:**

Appendix F: LADOTD Bridge Design QC/QA Plan

In addition to the **QC/QA** procedures described in this **QMP**, **LADOTD Bridge Design and Evaluation Manual (2014)** have established requirements for all bridge design and rating projects. This **Appendix F** has been developed with respect to the current **LADOTD Bridge policies**. Stantec's **QMP** program is well aligned with the **LADOTD Bridge Policy**.

Consistent with our **QMP** program, Stantec clearly understands, and believes, that the responsibility for Quality in our services and deliverables is **100% ours**. We also recognize that expectation of LADOTD Bridge and its staff is only to provide oversight on the design and rating process. For typical LADOTD Bridge assignments, the following Checklists are incorporated and become the requirement of the project/assignment. Where discrepancies arise between the Stantec QMP and the LADOTD Bridge Design QC/QA Plan, the LADOTD Bridge Design QC/QA Plan shall govern.

F1: LADOTD Bridge Design (Design Criteria Checklist)

F2: LADOTD Bridge Design (Final Calculation Book Checklist)

F3: LADOTD Bridge Design (QA Information Packet Checklist)

F4: LADOTD Bridge Design (QC/QA Certification)

F5: LADOTD Bridge Design (Peer Review Resolution Agreement)

F6: LADOTD Bridge Design (Consultant Project Bridge Design Kick-Off Meeting Agenda Checklist)

F1: LADOTD Bridge Design (Design Criteria Checklist)

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

__ **Cover sheet** - The following information must be included on the cover sheet:
- LADOTD project number
- Project name
- Revision date
- The Supervisor or Team Leader's signature and date

__ **Governing Design and Construction Specifications and Other References** - A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.

__ **Design Assumptions and Design Exceptions** - All design assumptions and design exceptions received must be included in this section along with supporting documents.

__ **General Information** - The general information as listed below should be included in this section:
- Bridge information (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Other relevant information

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

__ **Design Factors** - The ductility factor η_D, redundancy factor η_R, and operational importance factor η_I shall be listed in this section.

__ **Design Loads** - All design loads (dead load, live load, wind load, thermal loads, vessel collision loads, seismic load, wave loads, etc.) used for the project shall be included in this section.

__ **Limit States** - All applicable limit states for this project shall be listed in this section.

__ **Bridge Barrier** - The design criteria, types, and test levels for bridge barriers shall be listed in this section. Standard plans and special details should be listed if they are utilized.

__ **Guardrail** - The design criteria, types, and test levels for guardrails shall be listed in this section. Standard plans and special details should be listed if they are utilized.

__ **Approach Slab -** Design criteria for approach slab shall be included in this section. Standard plans and special details should be listed if they are utilized.

__ **Deck and Deck Drainage** - All design criteria for deck and deck drainage design shall be included in this section. Standard plans and special details should be listed if they are utilized.

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

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

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

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

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

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

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

___ **Electrical/Lighting Design** - All electrical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

___ **As-Designed Bridge Rating Criteria** - All as-designed bridge rating criteria shall be included in this section.

___ **Software** - All software used for design and check shall be included in this section.

F2: LADOTD Bridge Design (Final Calculation Book Checklist)

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

__ **Cover Sheet** - The following information must be included on the cover sheet:
- LADOTD project number
- Project name
- The title of “Final Calculation Book”
- The EOR’s seal with signature and date

__ **Final Calculation Book Check List**

__ **QC/QA Certifications**

__ **Peer Review Resolution Agreement (if peer review is performed)**

__ **Design Criteria**

__ **Final Hydraulic Analysis Report from Hydraulic Engineer**

__ **Final Geotechnical Analysis Report from Geotechnical Engineer**

__ **Superstructure Design Calculations**

__ **Substructure Design Calculations**

__ **Quantity Calculations**

__ **Special Provisions/NS-Items**

__ **Construction Cost Estimate**

__ **As-Designed Rating Report**

__ **List of All Final Electronic Design Files and File Locations (ProjectWise directory name)**

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

__ **A PDF File of the Calculation Book**

__ **All Electronic Design Files**

__ **A PDF File of the As-Designed Rating Report Only**

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

F3: LADOTD Bridge Design (QA Information Packet Checklist)

QA INFORMATION PACKAGE CHECKLIST (Bridge Design Section QC/QA Policy (October 2012) – Appendix C)			
PROJECT NO.: **Project Description:**			
PREPARER			
REVIEW LEVEL	☐ **95% Final**	☐ **98% Final**	☐ **PS&E**
QA PAKCAGE CHECKLIST			
Are the CALCULATION BOOKS included?			☐ **Yes** ☐ **No**
Are the PLANS included?			☐ **Yes** ☐ **No**
Are the SPECIAL PROVISIONS included?			☐ **Yes** ☐ **No**
Is the COST ESTIMATE included?			☐ **Yes** ☐ **No**
Are there OTHER DOCUMENTS included?			☐ **Yes** ☐ **No**
OTHER DOCUMENTS:			
PREPARER SIGNATURE _____			**DATE:**

F4: LADOTD Bridge Design (QC/QA Certification)

QC/QA CERTIFICATION (Bridge Design Section QC/QA Policy (October 2012) – Appendix D)						
Team Members	Name	LA PE No.	Responsibility			Signature
			Plan Sheet(s)	Special Provision(s)	Cost Estimate	
Designers						
Design Checkers						
Detailers						

QC/QA CERTIFICATION (Bridge Design Section QC/QA Policy (October 2012) – Appendix D)						
Detail Checkers						
Reviewers						
Peer Reviewer						
Geotech Engineer						
Hydraulic Engineer						
EOR						

F5: LADOTD Bridge Design (Peer Review Resolution Agreement)

Project No.:
Project Name:

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

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

F6: LADOTD Bridge Design (Consultant Project Bridge Design Kick-Off Meeting Agenda Checklist)

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

__ Introduce LADOTD Bridge Task Manager and the Consultant's Key Team Members (The Supervisor or Team Leader and Key Designers/Design Checkers/Reviewers)

__ Discuss Consultant's Staffing Plan and Implementation of QC/QA Plan Document (The staffing plan should include names and responsibilities of the designers, detailers, checkers, reviewers, and the EOR.)

__ Determine Schedules for Project Submittals (Design Criteria, TS & L, 30%, 60%, 90%, 100% of Preliminary Plans and Final Plans, Final Calculations, etc.)

__ Share Expectations and Consultant Rating Criteria (Consultant rating will be performed for all project submittals shown on the project submittal schedule.)

__ Discuss Design Criteria

__ Discuss Budget, Supplemental Requests, Invoices, and Importance of Avoiding Claims (Staff shown on invoices will be reviewed in accordance with the staffing plan.)

Appendix G: Non-Conformance Report Form

NON-CONFORMANCE REPORT

NCR # _____

Activity #: _____

Activity: _____

Location: _____

NCR Prepared By: Name: _____ Date: _____

Company: _____

NCR Given to: Name: _____ Date: _____

Company: _____

Non-Conformance Description: _____

_____

_____

□ No Impact or Assessed Impact: _____

_____

_____

□ No Action or Action Required: _____

_____

References/Attachments _____

_____

Action(s) To Be Implemented By (Name & Date): _____

_____

Action(s) Completed By
(name & signature): _____ Date: _____

Remarks: _____

_____

Date copied: _____ Fax No. _____

Comments: _____

_____

Guidelines for NCR use

1. NCRs record non-conforming work incorporated into the project and could include, but not be limited to, deviations from design requirements, unexpected soil conditions, material defects, dimensional defects or other deviations in the work.

2. NCRs do not replace routine inspections, diary entries, or materials delivery or testing reports, but can refer to them.

3. Ideally, the person whose actions or decisions create the need for a NCR will issue it, but in other cases the person who finds the non-conformance issues the NCR.

4. The person who issues the NCR ensures it is completed to the point where a copy can be sent within 24 hours to the Quality Assurance Manager.

5. It is implicit that if non-conforming work is not to be repaired or replaced (i.e., no assessed impact) the finished deliverable will meet project requirements.

6. The assessment of the situation will include a review of whether or not the non-conformance is likely to re-occur and if so, a description of the measures that will be implemented to prevent this.

7. The NCR event should be resolved at the lowest appropriate decision making level and escalated only if necessary. The NCR process is not meant to replace quick decision-making in the field or replace communications between the parties involved.

8. The status of unresolved NCRs shall be reviewed in any regular progress meetings and in the Quality Audit summaries done by the Project Quality Assurance Manager.

22. **Sub-consultant Information:**

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and Email Address	Phone Number
Wiss, Janney, Elstner Associates, Inc.	330 Pfingsten Road, Northbrook, IL 60062	Jonathan McGromley jmcgormley@wje.com	847-753-7234
Forte and Tablada, Inc.	9107 Interline Ave. Baton Rouge, Louisiana 70809	Russell "Joey" Coco, Jr. jcoco@forteandtablada.com	225-927-9321
GeoEngineers, Inc.	11955 Lakeland Park Boulevard, Suite 100 Baton Rouge, LA 70809	Larry Sant, PE Lsant@geoengineers.com	225-663-1522
Civil Design & Construction, Inc.	3251 Southern Pacific Road Port Allen, LA 70767	Karla Weston, PE kweston@cdcbr.com	225-765-1803
Meyer Engineers, Ltd.	4937 Hearst Street, Suite 1B Metairie, LA 70001	David Dupre, P.E. ddupre@meyer-e-l.com	504-885-9892

23. **Location:**