IDIQ CONTRACT FOR BRIDGE LOAD RATING
Statewide, LA

Contract No. 4400025865
January 11, 2023

Stantec

DOTD FORM: 24-102

(Revised March 1, 2022)

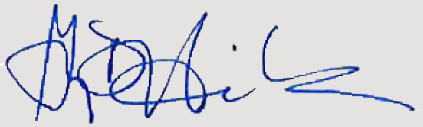
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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 CONTRACT FOR BRIDGE LOAD RATING**
2.	Contract number(s) as shown in the advertisement	**No. 4400025865**
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.** Stantec
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: January 11, 2023
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): L30 Traffic Consulting, LLC Firm(s)' %: 2%

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)	L30 Traffic Consulting, LLC
Bridge	100%	98%	2%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.			
Percent of Contract	100%	98%	2%

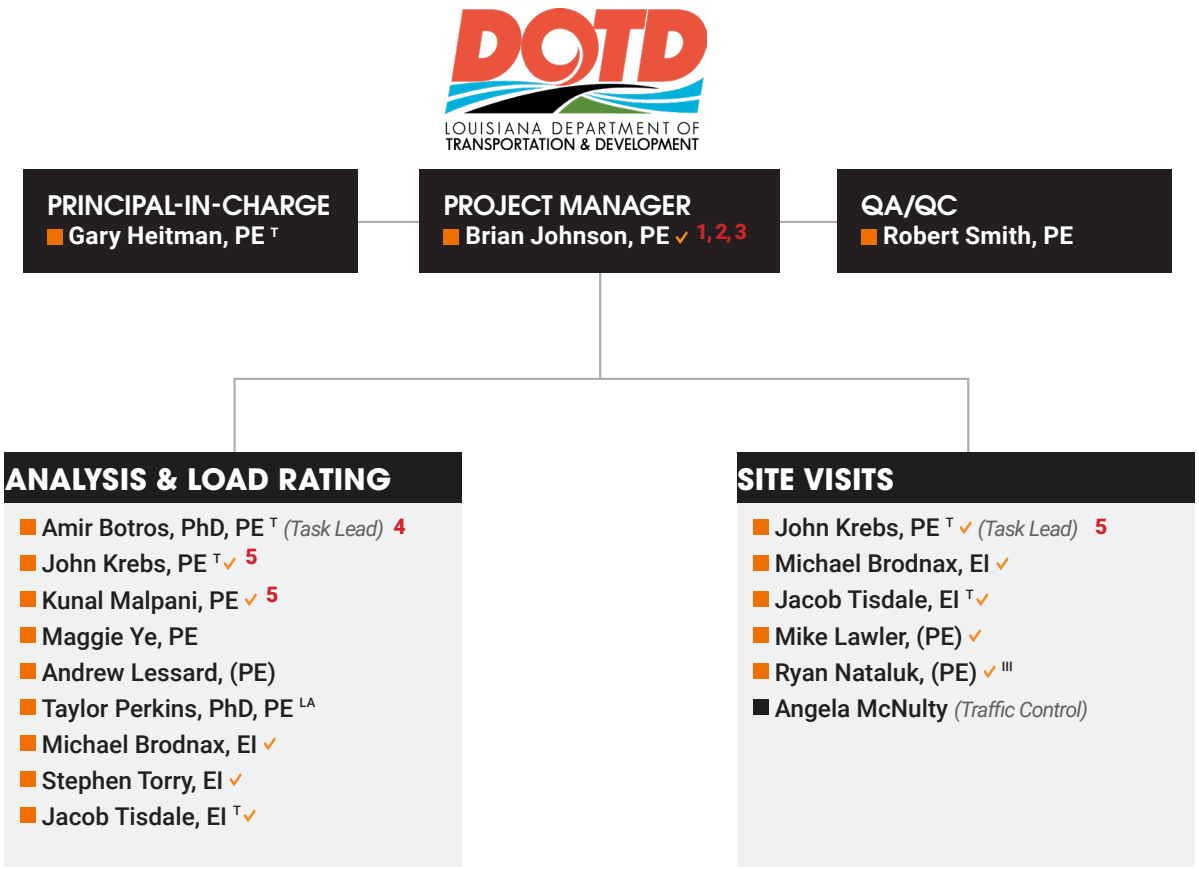
13. **Firm Size:**

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	2
Stantec Consulting Services Inc.	Engineer	3	8
Stantec Consulting Services Inc.	Inspector - Bridge	3	15
Stantec Consulting Services Inc.	Technician	1	3
Stantec Consulting Services Inc.	Engineer Intern	4	16
L30 Traffic Consulting, LLC	Inspector	4	40

14. Organizational Chart:

Legend

- Stantec Consulting Services Inc.
- L30 Traffic Consulting, LLC
- # Denotes MPR Minimum Personnel Requirement No.
- PE (LA) Pending Louisiana PE
- (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)



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	9/30/2024
2.	Brian Johnson, PE	Stantec	PE No. 31273	LA	9/30/2024
3.	Brian Johnson, PE	Stantec	PE No. 31273	LA	9/30/2024
4.	Amir Botros, PE	Stantec	PE No. 43701	LA	3/31/2024
5.	John Krebs, PE	Stantec	PE No. 37259	LA	9/30/2024
	Kunal Malpani, PE	Stantec	PE No. 43016	LA	3/31/2023

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 | 9/30/2024**			
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).
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.
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.
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 | 9/30/2024**			
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.
01/17 - 10/18	**LOAD RATING AND POSTING OF 110 ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** Project Manager. Brian was responsible for managing load rating activities, scheduling progress meetings, managing the status of each bridge, delivering progress submittals, and coordination with LADOTD. This project involved the load rating and posting of 110 on-system bridges for LADOTD. Bridges were located throughout the state and were load rated in accordance with current LADOTD and AASHTO specifications. AASHTOWare BrR, CSI Bridge, and RC-Pier were used to determine rating factors and posting requirements.
03/13 - 03/17	**LOAD RATING AND POSTING OF 630+ ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** Project Manager. Brian was responsible for managing load rating activities, scheduling progress meetings, managing the status of each bridge, delivering progress submittals, and coordination with LADOTD. A monthly meeting was scheduled with the client to assist with addressing incomplete data needs and modeling approaches for more complicated structures. Over 630 bridges statewide were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR, CSI Bridge, STAAD and RC-Pier to determine rating factors and bridge posting requirements. Structure types included structural steel plate girders and rolled beams, prestressed concrete girders, concrete slab spans, hammerhead and multi-column concrete bents, and steel beam bents.
02/19 - 11/22	**ALDOT BRIDGE LOAD RATING | ALDOT | Statewide, AL** Project Manager. Brian managed three different task orders with ALDOT to perform load ratings on 84 bridges. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, voided concrete slabs, and post-tensioned channel beams. AASHTOWare BrR was used for modeling and analysis. Ratings were in accordance with the AASHTO LFR method and current ALDOT standards. Brian's responsibilities included performing quality assurance on load rating reports and transmitting deliverables to ALDOT.
10/17 - 01/19	**AASHTOWARE BRR BRIDGE LOAD RATING | MDOT | Statewide, MS** Project Manager. Brian served as the project manager for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with current MBE standards. Brian was responsible for managing project activities, developing rating criteria, scheduling internal and external progress meetings, performing QC/QA, and delivering final reports.
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.

10/09 - 06/11	**US 90 INTERCHANGE AT LA 85 DESIGN-BUILD | LADOTD | Iberia Parish, LA** Structural QA/QC. Brian managed QC review on the structural elements for this project to elevate the rural arterial to urban interstate standards. These included a cast-in-place concrete deck and rail, Type III and Type IV pre-stressed girders, multicolumn bents with pile footings, pile supported end bents, and bearing pads. All independent designs were in accordance with AASHTO LRFD Bridge Design Specifications and as-designed / as-built load ratings were in accordance with AASHTO MBE.
12/20 - 04/22	**TRUSS BRIDGE INSPECTION AND LOAD RATING | MDOT | Statewide, MS** Project Manager. This project consisted of inspecting and load rating four unique steel through trusses. Brian served as project manager and was responsible for coordinating inspection schedules, overseeing report development, reviewing load rating reports, and communications with MDOT. Detailed, arm's length, inspections were performed on the steel truss spans only. Load ratings were performed in accordance with the AASHTO LFR method and MDOT standards. Results from the analyses were used to determine fracture critical members that could not be determined from traditional structural mechanics. Final inspection reports will be used by MDOT to develop repair / rehabilitation plans
03/14 - 05/15	**LA 511 JIMMIE DAVIS BRIDGE REHABILITATION | LADOTD H.010662 | Bossier, LA** Project Manager. Total structure length is 2,823 linear ft., including three main steel truss simple spans 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. Load rating analyses were performed for each superstructure type and gusset plates on the as-rehabilitated bridge.
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.
08/19 - 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 BRIDGE REPAIRS | LADOTD | St. Martin & Iberville Parishes, LA** Project Manager. Brian managed the design and plan development efforts of repairs on 19 different bridges along the Atchafalaya Floodway Basin. The project included field verification of structure deficiencies, condition findings summary report, development of a traffic management plan, bridge design, and plan development. Repairs consisted of concrete patching, bearing replacements, girder strengthening, and bridge painting. During construction Brian led construction support efforts which included shop drawing reviews and addressing contractor RFIs.
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.
05/16 - 12/16	**US 82 OVER MISSISSIPPI RIVER IN-DEPTH BRIDGE INSPECTION | MDOT | Greenville, MS** Project Manager. Brian 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, in-depth inspection of the cables, hydrographic survey of the river channel, and elevation survey of the cable stay spans deck surface.
04/17 - 08/17	**MOVABLE BRIDGE INSPECTIONS (SR 605 OVER THE INDUSTRIAL WATERWAY & SR 609 OVER OLD FORT BAYOU BRIDGE INSPECTIONS) | MDOT | Gulfport, MS** Project Manager. Brian was responsible for coordinating inspection activities, developing the inspection plans, and reviewing the draft and final reports. Final reports were submitted 60 days after the inspection. Stantec performed an in-depth inspection of two bascule bridges on the Mississippi Coast. Inspections included an element level inspection, an in-depth inspection on the structural, mechanical, and electrical components of the bascule spans, and fracture critical inspections.

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 | 9/30/2024**			
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 **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.
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.
01/16 - Ongoing	**WIDEN FLORIDA'S TURNPIKE (SR 91) FROM SOUTH OF US 192 TO OSCEOLA PARKWAY | Florida's Turnpike Enterprise (FTE) | Osceola County, FL** Engineer-of-Record. Robert is responsible for preliminary and final design of structures. Project will widen SR-91 from MP 241 to MP 248.93. This widening will expand the Turnpike Mainline from four to eight lanes. Project will introduce All Electronic Tolling (AET) throughout the corridor, replacing existing ramp tolling features, and adding mainline AET facilities. Includes replacement of bridges at six sites: two Turnpike mainline bridge sites and four local roads crossing the Turnpike. Two of the six bridges will be framed with steel plate girders, the remaining four will used Florida I-Beams. Other structures include extension of 3 box culverts; extension of 3 bridge culverts; retaining walls; noise walls; and sign, signal, and toll structures. SR 91 is an Urban Principal Arterial – Expressway and is part of the National Highway System (NHS) and the State Highway System (SHS). SR 91 is also part of the Strategic Intermodal System (SIS) within a limited access right-of-way with a design speed of 70 MPH.
01/15 - Ongoing	**I-4 BEYOND THE ULTIMATE RECONSTRUCTION & WIDENING, SEGMENT 4 EAST OF US 17/92 TO ½ MILE EAST OF SR 472 | FDOT District 5 | Volusia County, FL** Structural Engineer-of-Record. Project includes reconstruction and widening of I-4 in Volusia County as part of the I-4 Beyond the Ultimate concept. Project limits are within a 10-mile segment of I-4. Proposed improvements include widening the six-lane divided interstate to a ten-lane divided rural interstate including a 44-foot transit corridor within the median of I-4. Design proposes the addition of 2 new barrier separated express lanes in each direction, resulting in a total of ten dedicated lanes. Involves the reconstruction of 3 interchanges with Debary Ave, Saxon Blvd, CR 472 and one new interchange. Includes the widening of St John's River Bridge from six to ten lanes.
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.
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.

01/13 - 10/14	**HOMESTEAD EXT., NORTH OF BIRD ROAD TO SR 836 DESIGN-BUILD | Florida's Turnpike Enterprise | FL** Engineer-of-Record. Robert was responsible for review and load rating of existing structures and conceptual design of widenings, replacement bridge carrying Coral Way (SW 24th Street) over HEFT and two new continuous steel plate girder connector ramp bridges; evaluation of retaining walls and sound barrier walls. The purpose of this project is to develop an RFP to allow the FTE to advertise for procurement of Design/Build services for final design and construction of this project. The project includes widening two dual (NB & SB) mainline bridges over local roads; replacement of bridge carrying Coral Way (SW 24th Street) over HEFT; traffic railing upgrade on Ramp A over C-2 canal bridge; replacement of Ramp SW over C-4 Canal bridge; and two new continuous steel plate girder ramp bridges connecting express lanes between HEFT and SR 836. The project also includes retaining walls, sound barrier walls, and miscellaneous structures for signs and electronic tolling equipment.
06/09 - 02/11	**DIXIE HIGHWAY FLYOVER DESIGN-BUILD | FDOT DISTRICT 4 | FL** Engineer-of-Record. Robert was responsible for superstructure design and post design services for the 1,398-foot long Dixie Highway bridge over FEC RR and Hillsboro Canal. Also responsible for QC reviews for the NE 2nd Avenue bridge over Hillsboro Canal, the bulkhead retaining wall, and the MSE retaining walls. The project included the following structures: Dixie Highway (CR 811) over FEC RR and Hillsboro Canal is a 1,390-foot long curved steel box-girder bridge with an S-Curve alignment. The superstructure is comprised of curved steel box girders with integral steel box girder diaphragms, and is a single eight-span unit (104', 130', 3 @ 160', 2@ 209', 2 @ 200', 218'). The bridge carries two lanes for both NB and SB traffic, as well as bicycle lanes and sidewalks. The total width is 91'-2", with a bridge area of 126,720 SF.; NE 2nd Avenue over Hillsboro Canal is a 215-foot long FIB girder bridge, 37'-2" wide (7,990 SF).; Steel box girder pedestrian bridge over Hillsboro Canal. This bridge was designed as a single span with fixed supports to control the natural frequency; Numerous retaining walls, including MSE walls and two sheet pile bulkhead walls along the canal.
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.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Amir Botros, PhD, PE**	YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**	
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	As lead engineer, Amir will supervise the structure engineering team on the load rating tasks under this retainer contract. Additionally, he will perform complex structural analysis/finite element analysis (if necessary), and review load rating reports prepared by structural team members. Amir has been a member of the precast prestressed concrete institute (PCI) for many years and has participated in many of the PCI research projects. Amir will serve as **ANALYSIS & LOAD RATING TASK LEAD** 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.
03/21 - Ongoing	**MID-BRETON MISSISSIPPI RIVER DIVERSION | LADOTD | Plaquemines, LA** Lead Structural Engineer. LA-39 is a north-south Louisiana state highway that serves Plaquemines Parish and shall be aligned onto a new alignment that routes traffic over the gate structure and back onto existing southbound HWY LA_39 roadway. Proposed bridge consists of three units with a total length of 630 ft. and a clear roadway width of 40 ft. Amir supervises design tasks for the bridge and development of the final bridge plans.
01/21 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Lead Structural Engineer. Amir oversees QA/QC load rating analyses for over 200 bridges annually. Inspections performed by Stantec assist with developing load rating models and performing analysis using AASHTOWare BrR, RC Pier, and STAAD. Load ratings are performed in accordance with AASHTO MBE and 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, reinforced concrete girders and slabs, reinforced concrete box culverts, and prestressed concrete girders.
10/21 - 04/22	**MDOT TRUSS INSPECTIONS AND LOAD RATINGS | MDOT | Statewide, MS** Lead Structural Engineer. Project included inspecting and load rating four complex steel through truss bridges. Amir’s responsibilities included performing quality reviews of load ratings for the four truss bridges. AASHTOWare BrR was used to model and analyze all truss members including main members, floor beams, stringers, and gusset plates. LFR method was used at the request of MDOT and to have the ability to compare with the original designs.
03/22 - 06/22	**ALDOT LOAD RATING OF 12 COMPLEX BRIDGES | ALDOT | Statewide, AL** Lead Structural Engineer. Project consisted of rating of 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised continuous cast in place concrete T beam spans, Post-tensioned Channel beams and continuous steel plate-girders and steel I beam encased girders. Amir reviewed the as-built plans/standard plans of the bridges, determined appropriate load rating method, supervised engineers on load rating analysis and reviewed load rating reports.
03/20 - 06/20	**ALDOT LOAD RATING OF 42 BRIDGES | ALDOT | Statewide, AL** Lead Structural Engineer. Load rating of 42 bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised cast in place simple and continuous concrete T beam spans, Post-tensioned Channel beams and continuous steel plate-girders. Amir reviewed 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. Results were verified through diagnostic testing of a sample of culverts representing the existing LA inventory. Amir’s responsibilities included building 3D FE analytical models of the parametric study, designing instrumentation and diagnostic load test procedure, development of load rating guidelines and 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. Load rating of 396 bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. 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. Substructures comprised various components including reinforced concrete caps, timber caps, timber piles and steel H piles. Amir determined the appropriate load rating method, supervised engineers on the load rating analysis and reviewed load rating reports.
11/19 - 01/20	**EVALUATION AND LOAD TESTING OF FIVE BRIDGES | LADOTD H.009859.5 | Cameron, LA** Lead Structural Engineer. Five bridges were posted for a load lesser than LA State Legal Loads and/or Special Hauling Vehicles. Based on vast experience with similar bridges, load test coupled with detailed three-dimensional Finite Element Analysis reveal that bridges can carry higher loads than those estimated by design codes. Amir's responsibilities included supervising the crew on performing the load tests, developing Finite Element models, and performing refined analysis for the controlling span of the five bridges with the aim of removing current load posting.
05/20 - 07/20	**MERMENTAU BRIDGE REPAIRS | LADOTD Order No.10 H.014288.5 | Cameron, LA** Lead Structural Engineer. Mermentau Bridge main span is a swing steel low truss (Pony Truss) with a span length of 204 ft. Bridge is posted to 10-15 tons weight. Amir's responsibilities included development of a 3D finite element model using Midas Civil for the bridge. Configuring and design of the diagnostic testing procedure for the identified deficient members. Revising the rating analysis after consideration of the benefit from the test results. Design of appropriate strengthening systems for the legal deficient members with the objective of removing the posting weight.
11/19 - 12/20	**US-90 MACARTHUR INTERCHANGE PHASE II | LADOTD | Jefferson, LA** Lead Structural Engineer. Elevated section of this freeway extends from Westwood Drive to Crescent City Connection Bridge across the Mississippi River. Tasks included designing two access ramps to/from the service roads to the elevated viaduct. Ramps structures consisted of complex structural elements including precast-prestressed U-shaped girders and LG-girders, inverted-T piers, complex columns, and foundations. Amir's responsibilities included Supervising engineers on the final design of the ramp elements including deck, prestressed LU girders, inverted-T piers and foundation design for the 22 spans off-ramp and the 24 spans on-ramp.
01/19 - 09/19	**27 COMPLEX OFF-SYSTEM BRIDGES RATING AND EVALUATION | LADOTD H.009859.5 | Statewide, LA** Lead Structural Engineer. Project consisted of rating of 27 complex bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised prestressed concrete girders, steel plate-girders, truss bridges, truss and plate girder swing spans and steel trapezoidal girders. Amir's 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. 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. Design of 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 and preparation of the rehab plans of the bridge elements.
03/16 - 09/16	**US 80 RED RIVER TEXAS STREET BRIDGE: INSPECTION AND LOAD RATING | LADOTD H.011484 | Bossier, LA** Structural Engineer. Bridge consists of 45 spans with a total length of 2,895 ft. Amir's responsibilities included 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.
04/16 - 03/17	**LOAD RATING OF 100 BRIDGES | LADOTD H.009859.5 | Statewide, LA** Structural Engineer. Project was to assess and rate 100 bridges that are located on state-approved truck routes, with the goal of determining if posting was required. Inspection reports were provided by LADOTD. Bridges were various types and span lengths including precast concrete slab units, timber trestle with I-beam stringers, continuous curved steel plate girder bridges, and prestressed concrete girders bridges. Amir's responsibilities included developing the BrR and RC pier analysis models for selected bridges and preparation of load rating reports.
01/06 - 10/09	**SOBA ROADWAY BRIDGE OVER THE BLUE NILE | Sudan** Structural Engineer. Soba Roadway Bridge links Soba Kingdom and Soba Al-Hila on the western bank of the Blue Nile and consists of three parts: 200 meters Reinforced Concrete Box Girder East Approach, main part crossing the Blue Nile which is 420 meters Prestressed Concrete Segmental Box Girder and 200 meters Reinforced Concrete Box Girder West Approach. Amir performed 3D finite element analysis, designed and prepared plans for the superstructure and substructure of the east approach. He developed a 3D finite element model for the main part of the bridge over the Nile using Sap 2000 program.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**John Krebs, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**11**
TITLE	**Senior Bridge Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**2**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2008 | Civil Engineering; BS | 2007 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 37259 | LA | 9/30/2024**			
YEAR REGISTERED	**2012**	DISCIPLINE	**Civil Engineering**	

Contract role(s) / brief description of responsibilities	John has 13 years of engineering of experience providing engineering design and load ratings for bridges and interchanges for LADOTD, MDOT, and KYTC and currently serves as a project manager in the Structural Division at Baton Rouge. His primary expertise lies in the engineering analysis and design of a variety of structure types such as prestressed concrete girders, reinforced concrete substructure elements, and retaining walls. He has been heavily involved in the inspection and load rating of existing bridges in both Louisiana and Mississippi. John has an excellent working knowledge of AASHTO LRFD and the LADOTD Bridge Design Manual. He is proficient in several commercial software packages including AASHTOWare BrR, RC-Pier, CONSPAN, MDX, and STAAD. John will perform **ANALYSIS & LOAD RATING** and **SITE VISITS** for this contract. **John meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 5** 
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.
07/15 - 06/18	**US 90 INTERCHANGE AT LA 318 DESIGN-BUILD | LADOTD | St. Mary Parish, LA** Structural Engineer. This stretch of US 90 has been designated as the future I-49 corridor. The bridges consisted of LG-54 prestressed concrete girder spans with lengths up to 111-ft supported by multi-column concrete bents. John assisted in the proposal development by performing preliminary designs of the major structural elements, and, later, managed the construction support efforts.
04/11 - 03/15	**I-210: COVE LANE INTERCHANGE AND IMPROVEMENTS PROJECT| LADOTD H.010151 | Lake Charles, LA** Project Engineer. John was responsible for the design and plan development of three bridges and an MSE wall system load transfer platform. The bridge along I-210 consists of a single 130-ft long LG-54 prestressed concrete girder span founded on true abutments (spread footings). The remaining bridges consist of concrete slab spans founded on concrete pile bents. All design was performed in accordance with AASHTO LRFD Bridge Design. Project received the Highways/ Bridges: Award of Merit from the Engineering News Record for Texas and Louisiana in October 2016.
12/15 - Ongoing	**NELSON ROAD EXTENSION AND BRIDGE | LADOTD Contract No. H.005967 | Lake Charles, LA** Structural Engineer. John worked on the bridge and structural design efforts during preliminary plans. Project tasks included preliminary 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 completed the vessel study report detailing the expected water-borne vessel traffic and establishing the need for pier protection structures.
03/20 - 10/22	**LA 121: CALCASIEU RIVER BRIDGES | LADOTD Contract No. H. 009498 | Hineston, LA** LADOTD Bridge Task Manager. John was responsible for the independent design and plan review of the three LA 121 bridges. Bridge design items included reinforced concrete deck, LG-36 prestressed concrete girders, steel reinforced elastomeric bearing pads, and reinforced concrete end bent and intermediate bent caps. John also managed plan changes as well as quantity input into the AASHTOWare Project database. In addition to design, John updated the internally-cured concrete special provision for colloidal nano silica. The three bridges consisted of a total of five three-span deck units, and a testing scheme was noted in the plans applying the updated special provision.
08/20 - 06/22	**LA OVER I-20 | LADOTD Project No. H.001799 | Minden, LA** LADOTD Bridge Design Engineer. John was tasked with the independent design of the LG-36 prestressed, the intermediate multi-column bent, and the drilled shaft loads for both the end bent and the intermediate bent. John also determined the pier protection barrier rail and guard rail layout for the intermediate bent columns in the I-20 median. John was part of the QC effort on the plan details, quantities, and elevations.

10/17 - 01/19	**AASHTOWARE BRR BRIDGE LOAD RATING | MDOT | Statewide, MS** Project Engineer. John served as a project engineer for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with the current MBE standards. John was responsible for day-to-day support of the load rating engineers and performing QC/QA on finished load ratings.
03/13 - 03/17	**LADOTD LOAD RATING AND POSTING OF 630+ ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** Project Engineer. John served as a project engineer for the load rating of over 630 on-system bridges. The bridges were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR, CSI Bridge, STAAD and RC-Pier to determine rating factors and bridge posting requirements. Structure types included structural steel plate girders and rolled beams, prestressed concrete girders, concrete slab spans, hammerhead and multi-column bents, and steel beam bents.
08/10 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid and Road Construction | Statewide, MS** Project Engineer and Inspection Team Leader. John serves as a project engineer and inspection team leader. As an inspection team leader, John is qualified to direct a team in the field to inspect and document bridge deficiencies according to the National Bridge Inventory standards. As a project engineer, John assists in load rating of bridge structures using AASHTOWare BrR and RC-Pier in accordance with the latest Manual for Bridge Evaluation (MBE) as well as QC/QA of bridge load rating calculations and reports. Structure types on this project include steel trusses, steel plate girders, prestressed concrete, concrete boxes, concrete channel beams, masonry arches, steel railroad flat cars, and box culverts.
08/10 - Ongoing	**MISSISSIPPI STATEWIDE TIMBER BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid and Road Construction | Statewide, MS** Project Engineer and Inspection Team Leader. John serves as a project engineer and inspection team leader. As an inspection team leader, John is qualified to direct a team in the field to inspect and document bridge deficiencies according to the National Bridge Inventory standards. As a project engineer, John assists in load rating of bridge structures using AASHTOWare BrR and RC-Pier in accordance with the latest Manual for Bridge Evaluation (MBE) as well as QC/QA of bridge load rating calculations and reports. The bridges for this project are located across 10 different Mississippi counties. Superstructure types include concrete channel beams, prestressed concrete girders, timber stringers, and steel girders. These bridges are predominantly supported by timber piles categorizing them as timber structures.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Kunal Malpani, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**9**
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 9 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 perform **ANALYSIS & LOAD RATING** for this contract. **Kunal meets the following Minimum Personnel Requirements (MPRs) as specified in the advertisement for this project: 5** 			
Experience dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “Designed drainage”, “designed girders”, “designed intersection”, etc.			
03/13 - 03/17	**LADOTD LOAD RATING AND POSTING OF 630+ ON-SYSTEM BRIDGES | LADOTD | Statewide, LA** Engineer Intern. Kunal was responsible for performing load ratings and developing summary reports on a variety of structures including prestressed concrete girders, concrete slab spans, structural steel spans, timber and steel pile bents, and concrete hammerhead piers. More than 630 bridges statewide were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR and RC-Pier to determine rating factors and bridge posting requirements.			
09/13 - 11/17	**LADOTD RETAINER CONTRACT FOR BRIDGE LOAD RATING | LADOTD | Statewide, LA** Load Rating Engineer. Kunal was responsible for developing LFR rating procedure using AASHTOWare 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.			
01/17 - 10/18	**LOAD RATING AND POSTING OF 110 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 and posting of various bridge superstructure types including slab spans, prestressed concrete girders, rolled steel girders, and built-up steel plate girders. Bridges are located throughout the state and were load rated in accordance with LADOTD and AASHTO specifications. ASHTOWare BrR, CSI Bridge, and RC-Pier were used to determine rating factors and posting requirements. Highlight of the project was rating an 18,000 ft. long bridge with 268 spans on I-10 over New Orleans City Streets.			
10/17 - 01/19	**AASHTOWare BrR BRIDGE LOAD RATING | MDOT | Statewide, MS** Load Rating Engineer. Project included load rating of 120 bridges in MS. Load ratings were performed in accordance with the AASHTO LRFR or LFR method and current MDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, concrete slabs, and reinforced concrete multi-cell box girders (integral and non-integral). Kunal was responsible for load ratings and performing QC/QA. Highlight of project was modeling the integral concrete box girders which took an extreme (up to 40 hours) to run in the software.			
02/19 - 03/19	**ALDOT BRIDGE LOAD RATING, STATE OWNED STRUCTURES | ALDOT | Statewide, AL** Load Rating Engineer. The project included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with the AASHTO LFR method and current ALDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0. Kunal was responsible for load ratings and performing QC/QA.			

06/16 - Ongoing	**MISSISSIPPI STATE AID COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Load Rating Engineer and Inspection Team Leader. Project included inspection and load rating of over 100 off-system bridges in 17 different Mississippi Counties. 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. Kunal is responsible for field inspections, load ratings, inspection reports, and QC/QA on load ratings.
08/19 - Ongoing	**MISSISSIPPI STATE AID TIMBER BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Load Rating Engineer and Inspection Team Leader. Kunal is responsible for inspecting and load rating 120 bridges with timber elements in 10 different Mississippi Counties. Inspections are at arms-length and in accordance with NBIS. Load ratings are performed using AASHTOWare BrR, RC Pier, and in-house analysis tools for timber and in accordance with ASD and LFR guidelines. Predominately the bridges consist of timber piles; however, a large number are full timber structures.
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.
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.
01/16 - 06/20	**SR145 BRIDGE REPLACEMENTS | Prentiss County, MS** Project Engineer. Kunal was responsible for the substructure design, calculating quantities, performing as-designed load ratings, and reviewing construction submittals. Stantec was responsible for designing and detailing the replacement of five structurally deficient bridges along MS SR 145 in Prentiss County. The bridges consist of AASHTO and Bulb-T PSC girder spans supported by steel pipe pile & concrete caps. The project's proximity to potential seismic activity warranted the consideration of seismic forces in the substructure designs.
07/18 - Ongoing	**SR 12 OVER SUNFLOWER RIVER | Humphreys, Washington County, MS** Project Engineer. Kunal was responsible for directing and checking the analysis, design, load rating, and detailing of the 910 ft. 3-span continuous steel plate girder bridge carrying SR 12 over sunflower river. The substructure consisted of multi-column bents supported on drilled shafts.
01/19 - Ongoing	**I-10 LOYOLA DESIGN-BUILD | LADOTD Contract No. H.011670 | New Orleans, LA** Structural Design Engineer. Kunal 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 - 03/22	**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.
02/19 - Ongoing	**LA 12 BRIDGE REPLACEMENTS | LADOTD | Calcasieu Parish, LA** Project Engineer. Kunal is responsible for overseeing all superstructure and substructure design elements, performing load ratings, and reviewing construction submittals. As part of value engineering, Stantec is responsible for designing and detailing the replacement of six structurally deficient bridges along LA State Route 12 in Calcasieu Parish. The project is being executed in two phases of construction, with the first phase of widening to one side in order to accommodate two lanes of traffic, and a second phase to complete the reconstruction. This would allow structure replacement without the requirement of temporary bridges. All bridges consist of LA Quad beam girder spans supported on pile bents.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Maggie Ye, PE**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**
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 | 3/31/2024**			
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 perform **ANALYSIS & LOAD RATING** 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	**Andrew Lessard, PE*, LEED AP**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**24**
TITLE	**Principal, Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 1999 | Civil Engineering; BS | 1997 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 22652 | CT* | 1/31/2024**			
YEAR REGISTERED	**2002**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Andrew brings over 24 years of experience designing and analyzing bridges of various types and configurations. He has led the structural design for rehabilitation or replacement of more than 50 structures. He has extensive experience load rating bridges of all types, having led the rating of hundreds of bridges using the LRFR method. Andrew will perform **ANALYSIS & LOAD RATING** for this project.			
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	**LRFR LOAD RATING FOR BRIDGES STATEWIDE | Connecticut Department of Transportation | Statewide, CT** Project Manager. As part of a Task Order Engineering assignment, currently providing management and leading the structural analysis for the LRFR load rating of over 1,000 bridges throughout Connecticut. The ratings are being performed using AASHTOWare BrR, CSi Bridge, and STAAD analysis software. Bridges rated include a number of complex steel truss bridges as well as two movable bridges (bascule and lift spans). Also developed QC/QA manual tailored to CTDOT requirements to ensure the ratings are performed in a consistent and accurate manner.			
07/08 - 07/11	**ENGINEERING AND FEASIBILITY STUDY OF THE DEVON BRIDGE | Connecticut Department of Transportation | Milford/Stratford, CT** Project Manager of the feasibility study for the rehabilitation of the Devon Bridge, a 1,067 foot long through truss bridge with a single leaf bascule span carrying Metro-North Railroad, Amtrak, and freight service over the Housatonic River. During the inspection phase of the project, Andrew led the in-depth inspection, load rating analysis, fatigue analysis, lift span inspection, and coordination with subconsultants. Responsible for the preparation of the feasibility study report, including repair, rehabilitation, and replacement alternatives with in-depth engineering analysis including a detailed life cycle cost review. The feasibility study includes an investigation of multiple replacement lift span types, including bascule and vertical lift configurations.			
12/18 - Ongoing	**REHABILITATION OF BRIDGE 03998, FERRY STREET OVER AMTRAK | Connecticut Department of Transportation | New Haven, CT** Project Manager. Provided project management and lead the structural design for the rehabilitation of an existing steel truss bridge constructed in 1912. The project included replacing the existing bridge deck, purlins, and stringers with a new exodermic flooring system and stringers, as well as miscellaneous steel repairs and bearing replacement. Work also included a detailed load rating of the bridge using a 3D model developed in CSi Bridge for existing, construction, and final conditions.			
05/12 - 01/17	**REPLACEMENT OF BRIDGE 00249, SOCIETY ROAD OVER I-95 | Connecticut Department of Transportation | New Haven, CT** Project Manager. Managed and provided structural design for a new structure carrying Society Road over I-95. The new bridge was constructed offline to accommodate an improved horizontal and vertical roadway alignment for Society Road. The new bridge consists of curved steel plate girders supported by concrete abutments and a center pier. Work also included providing a detailed load rating of the bridge using a 3D model with MDX software.			

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Taylor Perkins, PhD, PE***		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**15**
TITLE	**Senior Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**PhD | 2017 | Structural Engineering; MS | 2008 | Civil Engineering; BS | 2007 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**LA Pending PE; PE No. 28347 | KY* | 6/30/2024**			
YEAR REGISTERED	**2011**	DISCIPLINE	**Civil Engineering; Certified Rope Access Level I**	
Contract role(s) / brief description of responsibilities	Taylor has been involved in the plan preparation, design, load rating, and rehabilitation of complex highway and rail bridges of nearly every type. His experience includes concrete bridges, structural steel bridges, long span bridges, seismic evaluation and retrofit, and various types of foundation systems. Taylor has completed Sprat Level I rope access training and has assisted in a wide range of bridge inspections. Taylor will perform **ANALYSIS & LOAD RATING** 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 - 12/19	**TBTA BIENNIAL BRIDGE INSPECTION - ROBERT F. KENNEDY BRIDGE LOAD RATING | New York, NY** Technical Lead for the load rating of the 200+ ft spans of the Robert F. Kennedy Bridge over the East River and Bronx Kill in NYC. The rated portions include a suspension bridge unit with 1,380-ft main span and 672-ft side spans as well as several through-truss spans. Ratings were performed for both the LRFR and ASR methodologies and incorporated AASHTO specialized hauling vehicles and FHWA FAST act's emergency vehicles. For the suspended spans, a nonlinear finite element model was built in CSi Bridge analyze the large displacements and stress-stiffening effects of the suspension cables. Ratings included stringers, floorbeams, and stiffening trusses, including gussets. Ratings for the Bronx Kill truss spans included stringers, floorbeams, main truss members, and gusset plates. The project also includes ratings for the orthotropic steel decks, which were modeled in 3-D using Ansys.			
09/18 - Ongoing	**STATEWIDE FRACTURE CRITICAL INSPECTION SERVICES (PACKAGE 2) SIMON KENTON BRIDGE LOAD RATING | Kentucky Transportation Cabinet | Maysville, KY** Load Rating Lead Engineer/EOR for the Simon Kenton Bridge, a 1990-ft long suspension bridge over the Ohio River. Structure consists of 465-ft side spans and a 1060-ft main span. The load rating includes 3-D finite element modeling of the full structure in CSi Bridge, with nonlinear effects included to account for large displacements and stress-stiffening of the cables. Components included in the load rating are stringers, floorbeams, stiffening trusses, including gussets, hanger cables with connections, main suspension cables, steel tower piers, and suspension cables anchorages. Rating is performed using LRFR methodology, the rating vehicles include HL-93, four state posting vehicles, four specialized hauling vehicles, and FHWA FAST act's emergency vehicles.			
11/18 - Ongoing	**I-70 BRIDGES UPGRADE DESIGN & QAM SERVICES (WVDOH) | West Virginia Highways | Wheeling, WV** Structural Engineer. Project required rehabilitation to bring the inventory rating of the 70-year old bridge up to HL-93 standards. Taylor is responsible for technical oversight of the rehabilitation plan as well as QA/QC of the 3-D finite element Arch analysis model and capacity checks for the in-situ and rehabilitated structural elements of the bridge including, arch rib, tie chord, hangers, and floor system members. Evaluation of the arch included extensive global stability evaluations of arch rib buckling modes.			
09/16 - 08/18	**STATEWIDE BRIDGE LOAD RATING - PACKAGE 1 - ARCH LOAD RATINGS | Kentucky Transportation Cabinet | Various Locations, KY** Load Rating Engineer-of-Record for three arch bridges. Structures include: 535-ft twin tied arches that carry I-24 over the TN River, 186-ft open spandrel steel arch that carries Highland Ave. over I-471 in Campbell Co., and 100-ft concrete infill arches that carry KY 90 over the Cumberland River. 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.			
06/09 - 08/15	**US 460 CONNECTOR DESIGN-BUILD | Virginia Department of Transportation | Buchanan County, VA** Structural Engineer. The 1,728-ft long six-span twin bridges feature two PPC I-beam approach spans and a four-span cast-in-place, post-tensioned segmental concrete box girder unit with box girder depths of 31 feet at the continuous piers. The substructures consist of unique H-column piers, integral with superstructure, with heights up to 230 ft. Taylor performed QC checking of the longitudinal and transverse load ratings of the as-built superstructure.			
09/17- 04/21	**KY 676 LOAD RATING AND TESTING | Kentucky Transportation Cabinet | Frankfort, KY** Load Rating Engineer Lead for the twin 3-span post-tensioned segmental box bridge. LRFR ratings, completed under the 2015 Statewide Fracture Critical Bridge Inspection Package 3, were performed for HL-93 load, four state posting vehicles, four specialized hauling vehicles, state superload vehicles, and FHWA FAST act's emergency vehicles. Analysis for the structure included two independent models in CSi Bridge and BD2 to capture the stage construction effects of the balance cantilever erection. After the load ratings, Taylor supported a load testing of the bridge, which was performed by the Kentucky Transportation Center.			

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 perform **SITE VISITS** 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 - 05/16	**LOAD RATING AND POSTING OF ON-SYSTEM BRIDGES | WVDOT | Statewide, LA** Project Manager, Senior Team Leader and 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. Careful maintenance of ropes and hand-held inspection equipment allowed our inspectors to complete the inspection without the use of mechanical equipment, traffic control, or traffic disruptions. The bridge, which carries US 35 across the Ohio River from West Virginia into Ohio, was completed in 1969 as a replacement and monument for an earlier structure, the Silver Bridge. The original Silver Bridge collapsed in a historic tragedy that led the United States Congress to establish NBI and NBIS Standards between 1968 and 1971.
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.
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.
01/20 - Ongoing	**BRIDGE INSPECTION AND LOAD RATING FOR LOCAL PUBLIC AGENCY AND PRIVATELY OWNED BRIDGES | North Dakota DOT | ND** Principal. Ryan is leading all inspections using the National Bridge Elements and North Dakota's own Agency Developed Elements and Bridge Management Elements. The data is captured in Bridge Intelligence's inspectX platform with associated material defects, photographs, critical findings, and alert codes. In addition to maintenance and rehabilitation recommendations, our teams provide streambed profiles and vertical clearance information, owner and railroad coordination, and FAA clearances for unmanned aerial vehicle (UAV) flights. Our work captures critical findings within the system and sends alert code notifications to the bridge owners. Load ratings are completed using AASHTOWare Bridge Rating software or other software for unusual structures.
05/12 - 10/14	**COOS BAY BRIDGE INSPECTION | Oregon International Port of Coos Bay | Coos Bay, OR** Inspector. Ryan performed a deteriorated rivet count along fracture critical members to determine the number of replacement bolts needed to rehabilitate the members. He used conventional rock climbing and rappelling techniques to access the structure.
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.

05/16 - 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. 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.
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.
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.
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. Stantec performed 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 approx. 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. Inspection of the cables included induced vibration measurements 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	**Michael Brodnax, EI**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**
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 | 3/31/2024**			
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 perform **ANALYSIS & LOAD RATING** and **SITE VISITS** 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 200 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. Michael load rates 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 designs prestressed concrete girders and concrete decks. He designs and develops 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.
05/20 - Ongoing	**SR27 BRIDGE REPLACEMENTS | MDOT, Contract No. BR-0054-02(025)/106113-101200 | Hinds County, MS** Bridge Designer. This project consists of designing and preparing final bridge plans for a new prestressed concrete girder structure in Hinds County. Michael designs and rates the prestressed concrete girders using CONSPAN software.
07/19 - Ongoing	**ALDOT TRANSPORTATION SUPPORT SERVICES | ALDOT, Contract No.2350 | Statewide, AL** Bridge Load Rater. This project consists of transportation services ranging from environmental studies, preparing bridge plans, traffic signal designs, ITS services, bridge inspections and ratings. Michael load rates various complex structures such as steel trusses and floor beam stringer systems using AASHTOware BrR.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Stephen Torry, EI**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**3**
TITLE	**Structural Engineer-in-Training**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**1**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2019 | Civil Engineering; BS | 2018 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**EI No. 33810 | LA | 3/31/2023**			
YEAR REGISTERED	**2018**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Stephen will perform load rating and analysis for deliverables produced under this contract in accordance with the DOTD BDEM Part I, Chapter 3. Stephen has previous experience in rating a variety of different bridge structures which include curved steel superstructures, cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate girders, channel beams, timber floor beams, timber stringers, culverts, and reinforced concrete beams. Stephen has experience in rating reinforced concrete caps, timber caps, concrete piles, timber piles, and steel H piles. In addition to load rating, Stephen has experience in field inspection that he has utilized to improve his ability to spot critical failure locations when performing load rating analysis. Stephen has rating experience in AASHTOWare Bridge Rating, LEAP RC-PIER, LEAP CONSPAN, MIDAS Civil, and STAAD. Stephen will perform **ANALYSIS & LOAD RATING** 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.			
01/20 - Ongoing	**LOAD RATING AND POSTING OF ON-STATE SYSTEM BRIDGES | MDOT | Statewide, MS** Structural Engineer Intern. Stephen performed load rating of bridge superstructures and substructures included in the project. Bridge types included steel I girders, prestressed concrete beams, channel beams, timber stringer systems, and culverts. Superstructure was rated using AASHTOWARE Bridge Rating. Substructure was comprised various components including concrete caps, timber caps, timber piles, and steel H piles. Substructure ratings were performed using LEAP RC-Pier.			
01/20 - Ongoing	**COMPLEX BRIDGE INSPECTION AND LOAD | MDOT Contract No. NBIS (114)/106281-10500 | Statewide, MS** Structural Engineer Intern. Stephen performed load rating of various bridges. Complex bridge types include steel I girders, prestressed concrete beams, and steel rail carts (which have since been converted into small bridge spans) using AASHTOWARE Bridge Rating. Substructure included reinforced concrete caps using LEAP RC-Pier.			
02/21 - 03/21	**MALL OF LOUISIANA BOULEVARD | EVANS GRAVES ENGINEERS, 12-CS-HC-0043 | Baton Rouge, LA** Structural Engineer Intern. Stephen performed load rating of three bridges in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating. Superstructure spans included skewed prestressed AASHTO girders that supported a curved deck, as well prestress quad beam spans. Superstructure was rated using AASHTOWARE Bridge Rating. Substructure ratings were of concrete pile bents using LEAP RC-Pier.			
08/20 - 09/20	**NELSON ROAD EXTENSION BRIDGE | LADOTD Contract No. H.005967 | Lake Charles, LA** Structural Engineer Intern. Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating. Superstructure ratings included prestressed LG Girders and slab spans using AASHTOWARE Bridge Rating. Substructure ratings were of concrete pile bents using LEAP RC-Pier.			
05/19 - 10/19	**LOAD RATING OF 396 OFF SYSTEM BRIDGES | LADOTD Contract No. H.012485.5| Statewide, LA** Structural Engineer Intern. Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Evaluation. Bridge types included cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel I plate girders, and RC box culverts. The substructures comprised various components including reinforced concrete caps, timber caps, timber piles and H piles			
05/19 - 10/19	**27 COMPLEX OFF-SYSTEM BRIDGES RATING AND EVALUATION | LADOTD Contract No. H.009859.5 | Statewide, LA** Structural Engineer Intern. Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Evaluation. Bridge types rated include steel plate-girders and prestressed concrete girders. Bridge superstructures involved complex irregular geometry for their on/off ramps which were not analyzed using AASHTO approximate methods and therefore those bridge/ramp junctions were analyzed using finite element models developed using MIDAS civil software.			

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Mike Lawler, PE***		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**24**
TITLE	**Principal, Structural Engineer**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**MS | 2006 | Civil Engineering; BS | 1997 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**PE No. 23093 | KY* | 6/30/2022**			
YEAR REGISTERED	**2003**	DISCIPLINE	**Civil Engineering; NBIS Certified Team Leader**	

Contract role(s) / brief description of responsibilities	Mike is a certified NBIS team leader for bridge inspections and leads one of Stantec's rope access bridge inspection teams. His railroad and highway bridge inspection experience includes timber, concrete, and steel girder, thru-truss, deck truss, suspension, and cable-stayed bridges. Mike has also developed repair designs and performed load rating analysis of various bridges. Training: SPRAT Level 1 Certification 2008-2011, SPRAT Level II Certification 2014-2017; Structures IV Training, ACEC of WV/WVDOH, 2005; Bridge Coatings Inspector Course, Kentucky Transportation Cabinet, 2000; Safety Inspection of In-Service Bridges, National Highway Institute, KY, 2005; Fracture Critical Inspection Techniques for Steel Bridges, National Highway Institute, KY, 2008; Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures, National Highway Institute, KY, 2011; Project Manager's Boot Camp Xpress Training, Kentucky Transportation Cabinet, 2017. Mike will perform **SITE VISITS** 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.
01/17 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Inspection Task Leader, Team Leader and Rope Access Team Leader. Mike is responsible for the element-level inspection of two steel through truss bridges: Bridges 105 and 150 in LeFloure County. Conventional and rope access techniques were used to get within arm’s reach of fracture critical members and any past deficiencies. The load ratings were computed in accordance with AASHTO LFR requirements. Mike has performed the inspection of these trusses for three consecutive cycles.
01/16 - 12/16	**US 82 CABLE STAY IN-DEPTH NBI INSPECTION | MDOT | Washington County, MS** Bridge Inspector and Rope Access Team Member responsible for fracture critical and element level inspection of the US 82 cable-stayed bridge over the Mississippi River. The total inspected bridge length was 13,763 ft and consisted of 81 approach spans and three cable-stayed spans. Rope access techniques were used to perform an arm’s length inspection of two towers (all faces) and all the stay cables.
01/16 - 01/17	**KYTC STATEWIDE BRIDGE LOAD RATINGS - PACKAGE #1 | Kentucky Transportation Cabinet (KYTC) | Statewide, KY** Project Manager. Mike was responsible for the load rating of four arch bridges as part of 2016 Statewide Bridge Load Ratings for KYTC. The load ratings performed were in accordance with the Manual of Bridge Evaluation and KYTC’s Bridge Load Rating Procedures Manual. Eight posting vehicles (KY Types 1-4 and AASHTO SU4-SU7) in addition to the FAST Act’s emergency vehicles (EV2 and EV3) were used for the load ratings. The bridges included in the project consisted of a 460-ft long earth filled concrete arch, parallel (twin) steel tied arch bridges, and a 311-ft long steel two hinge bridge.
01/17 - 10/18	**KYTC STATEWIDE BRIDGE LOAD RATINGS - PACKAGE #2 | Kentucky Transportation Cabinet (KYTC) | Statewide, KY** QA/QC Manager and Field Evaluation Engineer. Mike assisted with the load rating of 18 bridges as part of 2017 Statewide Bridge Load Ratings for KYTC. The load ratings performed were in accordance with the Manual of Bridge Evaluation and KYTC’s Bridge Load Rating Procedures Manual. Eight posting vehicles (KY Types 1-4 and AASHTO SU4-SU7) in addition to the FAST Act’s emergency vehicles (EV2 and EV3) were used for the load ratings. The project consisted of load rating: (1) concrete arch culvert, (1) welded steel girder bridge (2) wooden covered bridges, (2) post-tensioned concrete bridges, (3) steel truss bridges, and (9) prestressed concrete bridges.

FIRM EMPLOYED BY	**Stantec Consulting Services Inc.**			
NAME	**Jacob Tisdale, EI**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**4**
TITLE	**Structural Engineer-in-Training**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**0**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 2018 | Civil Engineering**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**EI No. 34026 | LA | 9/30/23**			
YEAR REGISTERED	**2019**	DISCIPLINE	**Civil Engineering**	
Contract role(s) / brief description of responsibilities	Jacob currently serves as a design engineer in the Baton Rouge Structural Division. He has been involved in structural designs ranging from deck, prestressed box girder and concrete substructure. He has been involved in the load rating and inspections of numerous State Aid Complex and Timber Bridges. Jacob is familiar with several design and analysis software programs including RC-Pier, CONSPAN, and AASHTOWare Bridge Rating. Jacob will perform **ANALYSIS & LOAD RATING** and **SITE VISITS** 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.
12/18 - Ongoing	**MISSISSIPPI STATEWIDE COMPLEX BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Engineer Intern. Stantec is responsible for inspecting and load rating over 400 bridges in 20 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Jacob is responsible for performing load rating analyses of inspected structures in accordance with current AASHTO requirements. Structures include prestressed concrete girders, structural steel girders, concrete box culverts, and precast prestressed channel beams.
12/18 - Ongoing	**MISSISSIPPI STATEWIDE TIMBER BRIDGE INSPECTIONS & LOAD RATINGS | Mississippi Office of State Aid Road Construction | Statewide, MS** Engineer Intern. Stantec is responsible for inspecting and load rating over 100 bridges in 17 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Jacob is responsible for performing load rating analyses of inspected structures in accordance with current AASHTO requirements. Structures include prestressed concrete girders, structural steel girders, and precast prestressed channel beams with timber substructures.
12/18 - 01/19	**AASHTOWARE BRIDGE RATING | MDOT | Statewide, MS** Engineer Intern. The project included load rating of 120 bridges in Mississippi. Load ratings were performed in accordance with the AASHTO LRFR or LFR method and current MDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, concrete slabs, and reinforced concrete multi-cell box girders (integral and non-integral). Jacob assisted in performing load ratings and developing summary reports
08/19 - Ongoing	**I-10 LOYOLA DESIGN-BUILD INTERCHANGE | LADOTD Contract No. H.011670 | New Orleans, LA** Design Engineer Intern. Jacob serves as a 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. Jacob's responsibilities include the design of slab spans, substructure elements, reviewing shop drawings, and performing as-designed load ratings on structural components.
03/20 - 06/22	**ALDOT BRIDGE LOAD RATING | ALDOT | Statewide, AL** Engineer Intern. Jacob was responsible for performing load ratings and developing summary reports on this contract that included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with AASHTO LFR method and current ALDOT standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0.

FIRM EMPLOYED BY	**L30 Traffic Consulting, LLC**			
NAME	**Angela McNulty**		YEARS OF EXPERIENCE WITH THIS FIRM/EMPLOYER	**8**
TITLE	**President**		YEARS OF EXPERIENCE WITH OTHER FIRM(S)/EMPLOYER(S)	**15**
DEGREE(S) / YEARS / SPECIALIZATION	**BS | 1997 | Mechanical Engineering; MBA | 2000 | Electronic Commerce Focus**			
ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE	**N/A**			
YEAR REGISTERED	**N/A**	DISCIPLINE	**N/A**	
Contract role(s) / brief description of responsibilities	Angela will perform **TRAFFIC CONTROL** 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.
01/19 - Ongoing	**FDOT HIGHWAY FLY-OVER PROJECT TRAFFIC CONTROL | FDOT | Panama City Beach, FL** Traffic Control. Angela provided the following traffic control services and devices for the design and build of a highway fly-over: supplied certified WTSs (Worksite Traffic Supervisors), certified TCTs (Traffic Control Technicians) and certified Flaggers; scheduled and coordinated Traffic Control Officers (with uniform and official police vehicle); provided TMA (Truck Mounted Attenuators) with operators; setup multiple lane closures, flagging operations, crossings and diversions; provided DOT approved temporary traffic control devices (cones, signs, drums, barricades, arrow boards, message boards, attenuator trailers, stop/slow paddles, bridge mounted signs); installed temporary crash cushions; installed temporary and permanent post mounted signs and installed pedestrian detours using LCD channelizing devices.
01/16 - Ongoing	**STATE AID BRIDGE INSPECTIONS | Mississippi Office of State Aid Road Construction| Statewide, MS** Traffic Control. Angela provided the following annual traffic control services: supplied certified WTSs, certified TCTs and certified Flaggers; scheduled and coordinated Traffic Control Officers (with uniform and official police vehicle); provided TMA with operators; setup multiple lane closures, flagging operations, crossings and diversions; provided DOT approved temporary traffic control devices (cones, signs, drums, barricades, arrow boards, message boards, attenuator trailers, stop/slow paddles, bridge mounted signs).
01/16 - Ongoing	**MDOT COMPLEX BRIDGE INSPECTIONS | MDOT | Statewide, MS** Traffic Control. Angela provided the following annual traffic control services: supplied certified WTSs, certified TCTs and certified Flaggers; scheduled and coordinated Traffic Control Officers (with uniform and official police vehicle); provided TMA with operators; provided Traffic Control Safety Boat with operator; setup multiple lane closures, flagging operations, crossings and diversions; provided DOT approved temporary traffic control devices (cones, signs, drums, barricades, arrow boards, message boards, attenuator trailers, stop/slow paddles, bridge mounted signs); conducted mobile operations on Interstates using TMAs and Traffic Control Officers and designed Traffic Control Plans.
01/17 - 12/19	**FDOT PENSACOLA BAY BRIDGE REBUILD TRAFFIC CONTROL DESIGN-BUILD | FDOT | Pensacola, FL** Traffic Control. Angela provided the following traffic control services and devices for the rebuild of the Pensacola Bay Bridge: supplied certified WTSs, certified TCTs and certified Flaggers; scheduled and coordinated Traffic Control Officers (with uniform and official police vehicle); provided TMA with operators; setup multiple lane closures, flagging operations, crossings and diversions; provided DOT approved temporary traffic control devices (cones, signs, drums, barricades, arrow boards, message boards, attenuator trailers, stop/slow paddles, bridge mounted signs); installed temporary traffic separators; installed temporary crash cushions and three beam bridge connections; installed temporary and permanent post mounted signs and installed pedestrian detours using LCD channelizing devices.

17. **Staff Experience:**

FIRM NAME	**Stantec Consulting Services Inc.**	PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**LADOTD Bridge Load Rating Retainer**	FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**N/A** / OWNER'S NAME	**Louisiana Department of Transportation and Development**	
PROJECT LOCATION	**Statewide, Louisiana**	OWNER'S PROJECT MANAGER	**Billy Metcalf**
OWNER'S ADDRESS, PHONE, EMAIL	**1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1741 | william.metcalf@la.gov**		
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**03/13**	TOTAL CONSULTANT CONTRACT COST ($1,000's)	**$ 2,993**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**03/17**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)	**$2,110**

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

Stantec was responsible for managing and performing load ratings on 635 statewide on-system bridges using the Load and Resistance Factor Rating (LRFR) method.

PROJECT RELEVANCE:

- ☑ Condition Verification
- ☑ Bridge Load Rating
- ☑ Existing Document Review
- ☑ Bridge Status Log

The scope of services included plan and document review, condition verification, load rating analyses, and developing reports with posting recommendations. 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.

During the initial stage of the project, Stantec was responsible for gathering as-built plans, shop drawings, original design calculations (if available), documentation of repairs and rehabilitations, and previous inspection reports. These documents were reviewed to develop bridge models and determine deficiencies to be included.

Superstructure elements were analyzed using AASHTOWare Bridge Rating. Substructure units, such as pile bents and hammerhead piers, were analyzed using RC-Pier and/or STAAD. The models were used to load ratings based on the present condition, capacity, and loads (dead and live) of each bridge.

Over the course of the project, Stantec established several processes to assist with tracking data gathered and the status of each bridge to be load rated. The most effective process was the scheduling of monthly progress meetings with LADOTD representatives to discuss analysis procedures and establish ground rules on assumptions and modeling. Meeting minutes were used to document decisions made, identify action items to assist with data gathering, and adjust the design criteria regularly. In addition to meetings, a bridge database was developed, and updated weekly, to assist with tracking the status of bridge types (slab spans, medium spans, long spans, and complex) and tracking missing and needed information to complete the load rating for each bridge. To improve the checking process, an overall project Quality Management Plan (QMP) was developed that included a set of checklists to be included in the QA/QC documentation.

TEAM MEMBERS INVOLVED: **B. JOHNSON, K. MALPANI, J. KREBS, A. BOTROS* (**NOT W/STANTEC*)**

FIRM NAME	**Stantec Consulting Services Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**ALDOT Bridge Load Rating**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**BR-SP19(900)**	OWNER'S NAME	**Alabama Department of Transportation**		
PROJECT LOCATION	**Statewide, Alabama**			OWNER'S PROJECT MANAGER	**Daniel Jones**
OWNER'S ADDRESS, PHONE, EMAIL	**1409 Coliseum Blvd, Montgomery, AL 36110 | 334-242-6484 | jonesdan@dot.state.al.us**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**02/19**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$263**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**11/22**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$263**

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

Stantec was responsible for performing bridge load ratings on three different occasions for the Alabama Department of Transportation (ALDOT) Maintenance Bureau.

PROJECT RELEVANCE:

- ☑ Bridge Load Rating
- ☑ Prestressed Concrete Girders
- ☑ Steel Plate Girders

Load ratings were performed using AASHTOWare BrR and current ALDOT standards. Only superstructure elements were considered for the load rating analysis.

The first task, completed in April 2019, consisted of 30 different structures. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and precast prestressed concrete voided slabs.

In February 2021, ALDOT assigned an additional 42 structures which included the following types: continuous and simple span concrete T-beams, prestressed concrete girders, structural steel plate girders, steel girder and floor beam systems, and precast post-tensioned concrete channel beams. This assignment was completed in July 2021.

More recently, the third assignment was completed which included 12 different structures. These types included rolled steel girders, concrete T-beams, structural steel plate girders, and precast post-tensioned concrete channel beams.

ALDOT provided the existing plans and load rating report templates. Prior to commencing the load rating efforts, a design criteria and quality management plan was submitted for ALDOT's approval. The bridges were divided into four batches which allowed ALDOT to review our models before proceeding with all the bridges.

Specific challenges faced during this project included obtaining some missing information that was identified during the data gathering phase.

A final load rating report summarizing the results and any posting requirements was delivered to ALDOT for each bridge analyzed. The final batch of bridges was submitted two weeks ahead of the scheduled deadline.

TEAM MEMBERS INVOLVED: **B. JOHNSON, K. MALPANI, J. KREBS, A. BOTROS, M. BRODNAX, J. TISDALE, S. TORRY**

FIRM NAME	**Stantec Consulting Services Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**AASHTOWare Bridge Load Rating**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**SPR-1(104) / 107518-101000**	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 39215 | 601-359-7200 | swesterfield@mdot.ms.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**10/17**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$492**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**01/19**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$492**

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

Stantec was tasked with performing superstructure load ratings for 120 unique structures using AASHTOWare BrR.

PROJECT RELEVANCE:

- ☑ Bridge Load Rating
- ☑ Concrete Box Girders
- ☑ Steel Plate Girders

Structure types included 5 steel plate girders, 36 prestressed concrete girders, 32 reinforced concrete T-beams, 11 reinforced concrete slab spans, and 36 integral reinforced concrete multi-cell box girders. Structure ages ranged from 92-year-old reinforced concrete T-beams to newly constructed (2016) prestressed concrete girder bridges.

MDOT provided available existing plans and shop drawings, latest inspection reports, and load rating report templates. Over the course of the project, Stantec coordinated with MDOT to obtain missing bridge data and information for some of the structures. Prior to commencing full load rating efforts, a design criteria and quality management plan was transmitted to MDOT for review and approval. In addition, one model was developed for each structure type and delivered to MDOT for review and approval before proceeding with the remaining bridges. This exercise allowed a refinement of the modeling methods to ensure MDOT's expectations were being met.

Of the structure types, the integral reinforced concrete multi-cell box girder bridges proved to be the biggest challenge. Due to complexities with geometry, such as skewed girder ends, and the girders sections being heavily reinforced which required detailed reinforcing steel patterns to be entered manually. With these added inputs, AASHTOWare BrR would average analysis times of 24-36 hours per model. The software was limited on the amount of data that could be read; however, to ensure an accurate and complete load rating analysis was being performed, these generation times were required.

After completing all the load ratings on schedule, MDOT requested Stantec to incorporate some of the models in the latest software version published in November 2018. In particular, the concrete box girder bridges proved to run much quicker (4 to 6 hours per model) in the new version. Similar results from the previous version were observed for each structure type. Load rating summary sheets were updated accordingly.

Deliverables included final load rating reports, summarizing analysis results and posting requirements, and the AASHTOWare BrR models.

TEAM MEMBERS INVOLVED: **B. JOHNSON, K. MALPANI, J. KREBS**

FIRM NAME	**Stantec Consulting Services Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**Mississippi Complex Bridge Inspection and Load Rating**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**N/A**	OWNER'S NAME	**Mississippi Office of State Aid Road Construction**		
PROJECT LOCATION	**Statewide, Mississippi**			OWNER'S PROJECT MANAGER	**David Barrett**
OWNER'S ADDRESS, PHONE, EMAIL	**412 Woodrow Wilson Ave., Jackson, MS 39215 | 601-359-7129 | dbarrett@osarc.state.ms.us**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**08/20**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$1,567**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**Ongoing**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$1,289**

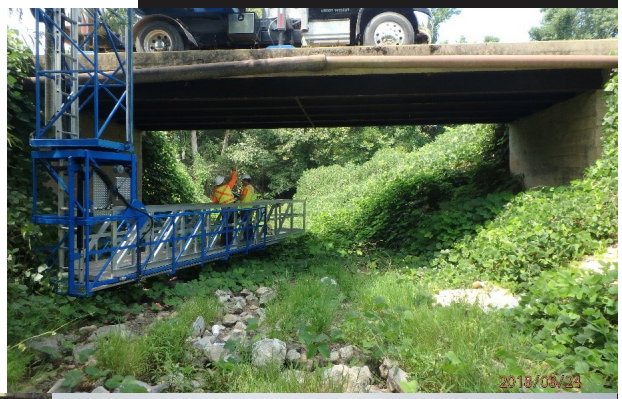
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

The Mississippi Office of State Aid Road Construction implemented a bridge inspection program on bridges that have been identified by county engineers as complex bridges in 2010.

PROJECT RELEVANCE:

- ☑ Bridge Load Rating
- ☑ Rope Access Techniques
- ☑ Bridge (NBIS), Element Level & Fracture Critical Inspections

Stantec is responsible for performing bridge inspections and determining bridge load ratings for complex bridges located in 11 different counties in Mississippi. An arm's length inspection is required for each bridge component which requires us to use an underbridge access platform truck on some bridges and introduce truss climbing on others. Structure types range from concrete and steel to timber and masonry. Currently in our inventory are two steel truss bridges which require truss climbers to perform a detailed inspection. All Stantec team leaders are NBI certified.



During field operations, we are responsible for coordinating with local emergency responders and county engineers when traffic is impacted. When a lane or bridge closure is required to perform the inspection, we are responsible for providing the necessary equipment, supplies, and manpower to operate the closure. All closures are in accordance with current MUTCD requirements.

Bridge load ratings are performed in accordance with AASHTO Load Factor Rating (LFR) or Allowable Stress Design (ASD) requirements. Each structure's inspection and load rating results are documented using InspecTech for that particular year. Stantec has been awarded this project on a two-year term contract since 2011. Stantec's inventory on the most recent contract exceeded 151 different bridges.

TEAM MEMBERS INVOLVED: **B. JOHNSON, J. KREBS, K. MALPANI, A. BOTROS, M. YE, M. BRODNAX, J. TISDALE, S. TORRY, R. NATALUK, T. PERKINS, M. LAWLER, A. MCNULTY* (**NOT W/STANTEC**)**

FIRM NAME	**Stantec Consulting Services Inc.**			PAST PERFORMANCE EVALUATION CATEGORY(IES)*	**Bridge**
PROJECT NAME	**TRUSS BRIDGES INSPECTION AND LOAD RATING**			FIRM RESPONSIBILITY (prime or sub?)	**Prime**
PROJECT NUMBER	**NBIS(140) / 108451-101000**	OWNER'S NAME	**Mississippi Department of Transportation**		
PROJECT LOCATION	**Itawamba, Leflore, Quitman and Stone Counties, Mississippi**			OWNER'S PROJECT MANAGER	**Neal Terry**
OWNER'S ADDRESS, PHONE, EMAIL	**401 North West Street, Jackson, MS 39201 | 601-359-7200 | nterry@mdot.ms.gov**				
SERVICES COMMENCED BY THIS FIRM (MM/YY)	**12/20**	TOTAL CONSULTANT CONTRACT COST ($1,000's)			**$461**
SERVICES COMPLETED BY THIS FIRM (MM/YY)	**04/22**	COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM ($1,000's)			**$461**

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

Stantec performed detailed inspections and load ratings for four steel through trusses.

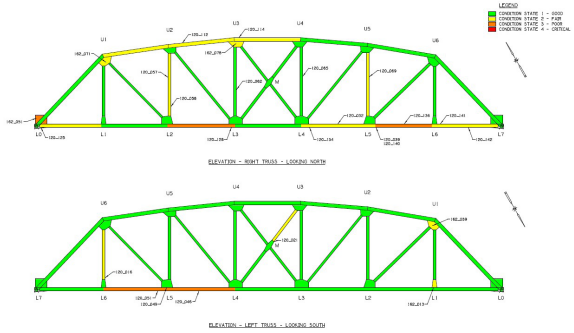
PROJECT RELEVANCE:

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

MDOT initiated this project to establish process and procedures to assist with future maintenance needs on other trusses. The project's goal was to develop an inspection report, including a load rating summary, that could be used to develop rehabilitation and/or repair plans without performing extensive field work.

MDOT originally selected six trusses; however, due to scope of work modifications two of the bridges were removed. Each of these trusses were constructed in the late 1940s and early 1950s with lengths varying from 120'-1" to 180'-1". A few have suffered damage due to vehicular impacts while in service.

An in-depth, hands-on inspection of every truss member, with the superstructure, was performed. Climbing techniques were implemented when required to access areas unreachable by ladder. Prior to the field work, available data for each bridge was reviewed and used to develop inspection field sketches in the field. Detailed measurements were required to confirm existing shop drawings to ensure the load rating model depicted accurate field conditions. Existing shop drawings, when available, were verified in the field. To supplement existing bridge files, additional CAD sketches were developed based inspection findings. A final inspection report, which included available data, field observations, and element quantities was delivered to MDOT for each structure.



Using the gathered data and field measurements, models were developed in AASHTOWare BrR to perform load ratings. Each truss member, including gusset plates, were analyzed in accordance with the Load Factor Rating (LFR) method for inventory, operating, MDOT legal, and emergency vehicle loads. Once the load rating was accepted by MDOT, the inspection reports were updated to account for any adjustments in the fracture critical member schematic.

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

THE STANTEC TEAM

"Stantec has a proven record of Bridge Load Rating by receiving an average rating of 4.4 on their previous project."

Stantec Consulting Services Inc. (Stantec) is pleased to present our proven team for your consideration on the **IDIQ Contract for Bridge Load Rating Services Statewide (Contract No. 4400025865).** Stantec has an outstanding record of performance on load rating services with the LADOTD Bridge Section, as well as with Mississippi DOT (MDOT), Mississippi Office of State Aid Road Construction (OSARC), and Alabama DOT (ALDOT) – with experience that is both recent and comprehensive.

Stantec, along with L30 Traffic Consulting, LLC (L30), can provide the necessary resources and redundancy for key elements to complete any assigned task order. Stantec has served LADOTD on several retainer contracts, including a wide scale load rating IDIQ, and offers a team with various levels of experience necessary to provide efficient and real-time service in an IDIQ setting. Stantec has been tracking this Contract for over six months and met with LADOTD PM, **Mr. Corey Bourgeois**, and LADOTD Bridge Inspection Engineer, Ms. Stephanie Dolittle to understand the Contract details and LADOTD's expectations for a successful outcome.

Stantec bridge design leadership offers experience in directly serving LADOTD on previous bridge load rating assignments including an IDIQ for Mr. Billy Metcalf which included task order assignments to load rate over 600 structures. Stantec worked diligently alongside Mr. Metcalf to discuss issues, brainstorm solutions, track missing information, and collaborate on load rating processes and procedures for more complex structures – such as the 260 span, 18,000-ft long structure along I-10 in New Orleans which involved 100 unique superstructure models.

PROJECT UNDERSTANDING + CHALLENGES

Stantec understands this IDIQ Contract will consist of task orders involving bridge load rating assignments, as well as developing schematic recommendations to improve/eliminate load posting when warranted. A key activity will be gathering existing, available information through document retrieval and site investigations, as needed. According to the meeting with LADOTD, some complex structures will be included in task orders along with a number of bridges that can be categorized as "standard."

Through previous experience, a variety of challenges associated with load rating contracts can arise through the course of an assignment including:

DATA GATHERING PROCEDURES

Priorto performing load rating analyses, bridge data and information will be collected and reviewed. Stantec plans to mitigate this challenge by performing a detailed due diligence to gather all available data through as-built drawings, shop drawings, inspection reports, and existing load rating reports. Through previous load rating contracts with LADOTD, Stantec became familiar with the LADOTD General Files procedures for plan and document retrieval. In addition, Stantec has extensive experience working with AssetWise through their current IDIQ Master (On-Call) Contract for Bridge Inspection and Related Services with OSARC. For a specific bridge inventory list, asset values determined through bridge inspection and load rating reports are uploaded and maintained by Stantec using AssetWise.

STRUCTURE ASSESSMENT

When an exhaustive search still lacks comprehensive data, site investigations and structure assessments can be performed to produce accurate field sketches representing current conditions. This step is particularly important for bridges that have been in service for a significant period, usually more than 100 years, or repaired / rehabilitated bridges that may be lacking detailed records. When warranted, Stantec can mobilize seasoned bridge inspectors that have performed inspections on a variety of structure types across the nation. Most of the structures on Stantec's current and previous OSARC Contracts lack bridge data in the form of existing plans and construction records. Detailed field sketches have been developed for each bridge component to assist with developing bridge models for load rating purposes.

In addition to establishing an accurate as-built record, a site investigation can be used to validate low load rating results. Older bridges often do not meet current design standards and legal vehicular loading demands with respect to strength and serviceability requirements. In many cases, analyses using current codes produce low rating factors; however, field observations may indicate the structure is not experiencing high stress levels. This behavior might be attributed to the fact that actual response of the structure cannot be captured using code analysis solely.

SOFTWARE MODELING / ANALYSIS LIMITATIONS

Most bridges can be accurately modeled using AASHTOWare BrDR; however, as with all analysis software, some complex structures may need a more robust analysis. Examples may include actual load distribution in lieu of AASHTO distribution factors, effects of transverse ties (used in

precast slab panels), nontraditional framing systems, secondary members affecting primary member deformations in floor beam and truss systems, and enhanced material strengths. Stantec has dealt with this scenario on a variety of load rating projects for LADOTD, OSARC, and the Connecticut DOT. When these aspects can provide benefit, a higher level of refined analysis might be considered to accurately mimic actual structure response and avoid unnecessary structure strengthening. Alternative software packages, such as CSI Bridge and Midas Civil, can be employed to consider these benefits. To overcome these challenges, suggestions will be presented to the LADOTD PM through in person meetings where an agreed-on analysis approach will be implemented.

PRIORITIZATION

Another identified challenge is identifying structure order of importance and establishing analysis criteria. With knowing the types, locations, and conditions of each structure, Stantec will work with the LADOTD PM to establish a structure list and schedule to meet their expectations in a timely manner. In addition, a load rating criteria will be established to avoid trivial back and forth communication with LADOTD. This will include assumptions, structural assessment needs, modeling preferences, approved alternative software, and deliverable expectations.

QUALITY CONTROL

When large task orders are assigned, one of the major challenges is ensuring quality control is achieved at each stage and for each element. Task orders on this contract will be no exception. Stantec has provided a draft quality management plan (QMP) at the end of this proposal. This presents the quality assurance and quality control steps taken for each task. This includes reviewing the data gathered, field sketches, load rating procedures and assumptions, the analysis itself, and the final report. Independent reviews will be performed on selected elements by engineers who are not directly associated with the task order. Quality reviews will be documented and available for LADOTD PM inspection upon request.

TEAM APPROACH + METHODOLOGY

Stantec has been awarded Bridge Load Rating IDIQ Contracts in LA and other states that involved load rating of various types of bridges from simple slab bridges, precast slab units, prestressed concrete girder bridges, steel plate girder bridges, concrete box culverts, cable stayed bridges and steel trusses. As with previous IDIQ load rating contracts, Task Orders in this IDIQ will be prioritized and tailored to assure that appropriate staff is available to execute each task order proficiently and expeditiously.

Stantec team has a comprehensive understanding of the three main tasks outlined in Attachment A – Scope of Services as will be presented in the following sections:

TASK 1 - Plan and Document Retrieval + Review

Upon receiving an executed task order, Stantec will begin obtaining available data for the assigned bridges using the sources outlined in Attachment A with the goal of collecting all available information for each bridge. The following sources will be examined in order:

- Available inspection reports (current and previous).
- Available plan sheets, sketches, or partial drawings including repair/ rehab plans for the structure.
- Identify year of construction and locating standard plans, if any, used at that time.
- Existing load rating documents, including the performing firm.
- Engineer of Record / firm that designed the structure.
- Entity that constructed the structure (State / local government, contractor, etc.).

Stantec has established the following successful protocol on obtaining data files for bridges which was followed in our previous load rating contracts for MDOT, LADOTD, and OSARC.

1. Establish file storing protocol with LADOTD PM (local server, LADOTD ProjectWise, etc.)
2. Develop needed document checklist & contact information list (LADOTD personnel, local government, EOR, contractor, fabricator)
3. Appoint a team member to begin the process at LADOTD General Files
4. Weekly review progress and status
5. Contact LADOTD District to gather missing information from LADOTD General Files search
6. Contact local government to gather remaining missing information
7. If needed, contact original EOR, contractor, and/or fabricator to gather available information
8. File information gathered, by structure.

TASK 2 - Site Visits

Site visits shall be planned for bridges where an exhaustive data search results in insufficient data to properly perform a load rating. These investigations will be used to collect measurements, create engineering

sketches and assess the structural condition of bridge elements to be load rated. Prior to a site visit, an inspection plan, comprising of a bridge-specific field assessment procedure for opportunities to improve efficiency and reduce traffic impacts will be developed. When needed, arrangements with the local LADOTD District will be made to have the bridge thoroughly cleaned to remove dirt and debris that would inhibit visual observations and measurements. Safe and appropriate access methods for achieving an arm's-length reach of all components will be identified and utilized. Climbing techniques will be implemented, when possible, to minimize/eliminate mechanical access and/or traffic control.

Should critical observations or findings be encountered during the field visit, the field team will immediately notify the LADOTD PM. Stantec has extensive experience in reporting critical findings through the previous and ongoing OSARC On-Call Contracts, where some of these reports resulted in bridge closures or lowering load posting. At the conclusion of the site visit, an assessment report, including field sketches, will be developed and provided to LADOTD for inclusion in the bridge files. This report will be reviewed by a senior team member for accuracy and completeness prior to transmitting to LADOTD.

TASK 3 - Load Rating and Structural Assessment

Using data and information gathered from the preceding tasks, a bridge load rating analysis will be performed using AASHTOWare BrDR, accompanied with other appropriate software packages, as needed. Key structural elements will be evaluated to determine if the bridge mandates closure or posted for load restrictions. The analysis will consider the current bridge condition and critical element notes as depicted in the most recent inspection report and/or site visit. Stantec is up to date with the current LADOTD BDEM and recent BDTMs relevant to load rating guidelines.

In the event an analysis results in load posting restrictions, schematic recommendations will be developed to assist with improving structural capacity and possibly eliminating any load posting. Further, bridge elements needing to be rehabilitated/strengthened will be identified in accordance with established criteria to meet the desired operating load level.

All structures shall be rated using the load rating provisions in the current AASHTO Manual for Bridge Evaluation, the latest revision for LADOTD Bridge Design and Evaluation Manual and the latest technical memorandums BDTMs published and featuring load rating recommendations.

Situations where the AASHTOWare BrDR model approach results in deficient load ratings, this could be the inability of the software to represent actual behavior and/or load carrying capacities for superstructure or substructure elements. A more robust, refined analysis (CSI Bridge, LUSAS or Midas Civil) may be warranted to accurately capture the actual response of the structure and produce rating factors that more accurately assess structure behavior. Stantec has the required expertise in both condition assessment and refined analysis techniques, with proven records of performing complex finite element analysis on numerus load rating contracts. On several occasions, this refined analysis has resulted in removing or improving load posting restrictions of deficient bridges.

When a structural element is analyzed in a software other than AASHTOWare BrDR, influence lines will be generated and provided to LADOTD in the final load rating summary report. Influence lines are primarily used for determining controlling load rating factors when an overload vehicle, not within the family of legal loads, is anticipated to cross a structure. Longitudinal influence lines typically depict how elements will respond to a specific load traveling along the structure. Transverse influence lines are used to capture primary load effects at the ***critical sections*** of substructure elements and is dependent on positioning of the vehicle relative to the roadway width. Where influence lines are required to be generated, Stantec will use the following procedure:

1. Identify controlling bridge member(s) that influence lines need to be developed.
2. Identify critical sections that exhibited controlling rating factors (positive moment, negative moment, or shearing force). Critical sections will be determined based on rating results obtained for the legal vehicles.
3. Build a model for the subject substructure using FE software (CSI Bridge, Midas Civil, etc..)
4. Run the analysis and establish longitudinal and transverse influence lines at critical sections
5. Develop influence line charts in a spreadsheet that can be easily used by LADOTD to determine vehicle rating factors.

Traditionally, Stantec performs substructure load ratings using LADOTD approved software, Leap Concrete (RC Pier) along with in-house analysis tools to accurately perform the load rating. Stantec has also developed expertise in load rating of pier caps with low span-to-depth ratios, such as hammerhead piers or multicolumn piers (span/depth ratio < 1.5), where

traditional beam theory and beam analysis concept does not apply. A "Strut and Tie" approach is more appropriate and will more accurately predict the load transfer mechanism for such deep beams. Strut and Tie analysis is generally performed using RC pier or FE software.

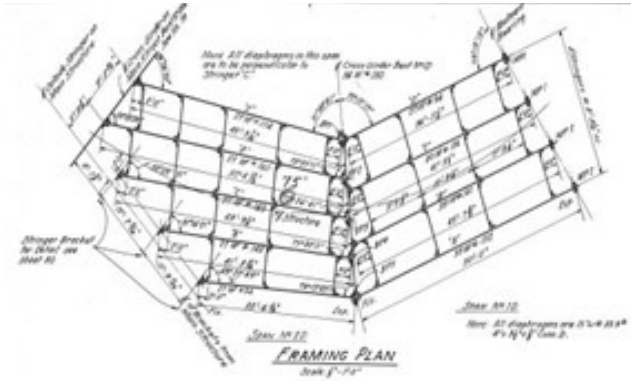
Some substructure units with special characteristics, such as hammerheads and multicolumn piers with small span/depth ratio, have found to produce erroneous results when modeled using Leap Concrete (RC Pier). Stantec has developed a procedure to address these issues and has implemented the use of in-house analysis tools to accurately perform the load rating.

Some superstructure elements may have irregular geometry where the framing plan cannot be modeled with the given geometric limitations in AASHTOWare BrDR. Examples may include spans with flaring girders, spans on curves utilizing chorded beams, ramps framing into mainline spans, and spans with additional beams used to accommodate widening. Through previous experience, a variety of challenges have been encountered during modeling, analyzing and rating specific members in these spans. A refined analysis is required to more accurately predict structure response and obtain internal forces developed in structural members under the effect of dead and vehicular live loads. For conventional concrete and steel bridges, numerical models utilizing elastic material properties and small deflection theory, such as finite element analysis, are very common to be used for structural analysis. Stantec has encountered similar situations during previous load rating tasks with LADOTD and successfully modeled numerous bridges with complex geometry using finite element analysis.

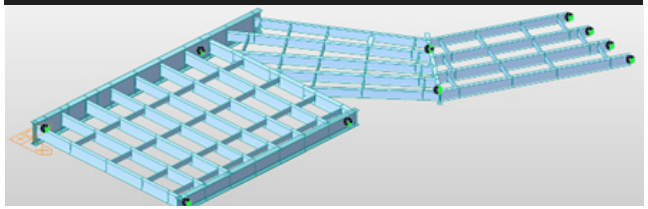
A report summarizing the load rating analysis procedure, assumptions, and rating factors will be prepared and delivered for each bridge. When needed, this report will include repair recommendations, associate estimated construction costs, and expected construction schedules, to aid LADOTD in developing a scope of work for a structure rehabilitation project. A Louisiana licensed professional engineer will seal the load rating summary report after performing a high-quality detailed check of the analysis.

Stantec's team is experienced in electronic plan delivery in conformance with LADOTD Software and Deliverable Standards. All work shall be performed in accordance with all applicable LADOTD policies, procedures, and manuals.

Stantec served LADOTD on managing and performing load ratings for 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 BrDR and Leap Concrete (RC Pier) were mainly used for these ratings with exception of a few structures that could not be modeled by the software; finite element analysis (FEA) was utilized along with in-house developed spreadsheets.



Examples of irregular geometry from previous load rating projects



PROJECT SCHEDULE

Schedules will depend on task order size, scope of work, complexity level, and LADOTD expectations. A tentative schedule for an all-inclusive task order consisting of 100 bridges with typical level of complexity, is expected to be as follows:

Project Setup (2-3 months) – Kick-off meeting, negotiate work hours, develop task order schedule, execute task order.

Data Collection (1-2 months) – Establish rating criteria, gather data and information, document available data.

Site Visits (1-2 months) – Assume 25% bridges need field investigation; Prepare site visit (inspection) plans, perform site visits, prepare assessment reports including field sketches.

Stantec can allocate additional resources for site visits to expedite.

Analysis and Load Rating (6-8 months) – Load rating (AASHTOWare BrDR, finite element, influence lines), schematic recommendations to improve posting

Reporting (1 to 2 months) – Update rating files, prepare load rating summary reports

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.		S. P. No. 700-10-0153	Nelson Road Ext. Bridge [Lake Charles, Louisiana]	
	Road		Roadway	$2,500
	Bridge		Bridge	$2,500
Stantec Consulting Services Inc.		S. P. No. 4400004128	Lafayette Regional Airport to I-10/I-49/US 167 Interchange [Lafayette Parish]	
	Planning		Prog. Mgmt.; Context Sensitive Design Process; Impl. Strategies	$513,320
	Traffic		Traffic Engineering	$34,581
	ITS		ITS	$16,585
	Road		Geometric Design/Analysis	$17,646
	Bridge		Structure & Bridge	$472,050
	ROW		ROW Acquisition	$85,420
	Survey		Survey	$22,731
	Other		Public Relations/Comm.; Lighting; Aviation	$69,326
Stantec Consulting Services Inc.	Other/Lighting	S. P. No. 4400011353	IDIQ Contract for Electrical Services (Sub to Buchart Horn, Inc.) [Statewide, Louisiana]	
			H.014302.6 US 165 Roadway Lighting [Ouachita Parish]	$22,491
Stantec Consulting Services Inc.		S. P. No. H.011670	Loyola Dr./I-10 Interchange to New Airport Terminal Design Build (Sub to Gilchrist Co., LLC) [Jefferson Parish]	
	Road		Roadway	$181,738
	ITS		ITS	$38,409
	Traffic		Traffic	$0
	Bridge		Bridge	$95,828
	Other/Lighting		Aesthetic Lighting	$300,168
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]	$16,211
			H.013842.5 I-10: WBR Queue Warning System Design [Iberville & WBR Parishes]	$12

			H.001234.6 LA 1: Port Allen Canal BR REPL (PHI) (HBI) [West Baton Rouge Parish]	$1,879
			H.002424.5 LA 70: Sunshine Bridge - LA 22 [St. James & Ascension Parishes]	$474
			H.015136 Statewide ITS Architecture Update [Statewide]	$109,915
			H.013261.6 I-110 ITS Deployment [East Baton Rouge Parish]	$36,154
			H.011152.6 I-12: US 190 to LA 59 [St. Tammany Parish]	$41,003
			H.013866.6 I-12: LA 21 to US 190 [St. Tammany Parish]	$40,756
Stantec Consulting Services Inc.		S. P. No. 4400020064	IDIQ Contract for Electrical Services [Statewide, LA]	
	Road		H.005967.5 I-12: Nelson Road Ext. & Bridge-Roadway Lighting Engineering [Calcasieu Parish]	$9,311
	Other (Lighting)		H.014286.5 I-10: LA 26 (Jennings) Interchange Lighting [Jefferson Davis Parish]	$11,417
			H.014272.5 I-10: LA 97 (Jennings) Interchange Lighting [Jefferson Davis Parish]	$85,545
			H.014287.5 I-10: LA 99 (Welsh) Interchange Lighting [Jefferson Davis Parish]	$192,417
Stantec Consulting Services Inc.		S. P. No. H.012685.5	LA 385: Ryan Street Intersection Improvements [Calcasieu Parish]	
	Road		Roadway	$341,882
	Traffic		Traffic	$178,064
L30 Traffic Consulting, LLC	N/A	N/A	N/A	N/A

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

Vice President of Member Services

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

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Amir Botros
has attended
Traffic Control Technician-LA State Specific
Training Course

11/29/2022 to 11/29/2026
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

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

John Krebs
has attended
Traffic Control Technician-LA State Specific
Training Course

11/29/2022 to 11/29/2026
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

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

Vice President of Member Services

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

ATSSA TRAINED

PROOF OF TRAINING

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Amir Botros
has attended
Traffic Control Supervisor-LA State Specific
Training Course

11/30/2022 to 11/30/2026
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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ATSSA American Traffic Safety Services Association ATSSA.com

ATSSA TRAINED

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has attended
Traffic Control Supervisor-LA State Specific
Training Course

11/30/2022 to 11/30/2026
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

nhi national highway institute

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

Digitally signed by Calvin A. MacDougall, P.E. Date: 2021.04.27 13:47:37 -04'00'
Instructor

Digitally signed by Randall Leonard, P.E. Date: 2021.04.22 14:23:51 -05'00'
Randall Leonard, P.E.
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

nhi national highway institute

Certificate of Training

John P. Krebs

has Successfully Completed

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Office of State Aid Road Construction

Date:
Location: *August 30-September 01, 2022*
Ridgeland, MS

Hours of Instruction: 18

Instructor

Instructor

Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

National Highway Institute

Certificate of Training

JOHN KREBS

has participated in

FHWA-NHI-130053

Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: January 24-26, 2017 Hours of Instruction: 18

Location: Baton Rouge, LA

Instructor — Local Coordinator: Allison H. Landry

Instructor — Valerie Briggs, 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 Hours of Instruction: 67

Location: Ridgeland, MS

Instructor — Local Coordinator: Marie Allbritton

Instructor — Thomas Harman, Director, National Highway Institute

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jacob Tisdale

has attended

Traffic Control Technician-LA State Specific

Training Course

11/29/2022 to 11/29/2026

Training Valid Through

Director of Training

Baton Rouge, LA

Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA

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 Hours of Instruction: 18

Location: Baton Rouge, LA

Instructor — Local Coordinator: Allison H. Landry

Instructor — Michael Davies, Director, National Highway Institute

National Highway Institute

Certificate of Training

Stephen Torry, Jr.

has Successfully Completed

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

hosted by

Office of State Aid Road Construction

Date: March 21-April 01, 2022 Hours of Instruction: 67

Location: Ridgeland, MS

Instructor — Local Coordinator: Marie Allbritton

Instructor — Thomas Harman, Director, National Highway Institute

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jacob Tisdale

has attended

Traffic Control Supervisor-LA State Specific

Training Course

11/30/2022 to 11/30/2026

Training Valid Through

Director of Training

Baton Rouge, LA

Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA

National Highway Institute

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 Hours of Instruction: 67

Location: Jackson, Mississippi

Instructor — Local Coordinator: Marie Allbritton

Instructor — Richard Barnaby, Director, National Highway Institute

National Highway Institute

Certificate of Training

JACOB TISDALE

has Successfully Completed

FHWA-NHI-130055

Safety Inspection of In-Service Bridges

hosted by

LA DOTD/LTRC

Date: November 29 – December 10, 2021 Hours of Instruction: 67

Location: Baton Rouge, LA

Instructor — Local Coordinator: Allison H. Landry

Instructor — Thomas Harman, Director, National Highway Institute

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

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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

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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

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SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT

Acknowledges that

MICHAEL LAWLER

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 #080220

AWARDED: February 24, 2017
Expires: February 24, 2020

CHARLEY RASKIN, EVALUATIONS COMMITTEE CHAIR

WILLIAM McCOOK (TROLL), SPRAT PRESIDENT

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U.S. Department of Transportation
Federal Highway Administration

Office of Professional and Corporate Development
Main Office: 4600 N. Fairfax Dr., Suite 800
Arlington, VA 22203

HQ Office: 400 Seventh St., S.W., Suite 4208
Washington, DC 20590

September 4, 2007

Michael A. Lawler, P.E.
ENTRAN
400 East Vine Street, Suite 300
Lexington, KY 40507

Dear Mr. Lawler:

We are pleased to inform you that you successfully completed NHI Course No. 130055: Safety Inspection of In-Service Bridges, given 09/12/2005 – 09/23/2005 in Frankfort, KY. You fulfilled the requirements necessary to obtain 6.0 Continuing Education Units for this course.

We thank you for selecting NHI for your training development and look forward to your participation in NHI courses in the future. Should you have any questions or concerns regarding this letter, or other NHI activities, please don't hesitate to call us at (703) 2535-1212.

Richard Barnaby
Chief, Training Programs Manager
National Highway Institute

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

RTA DOTD

LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program

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

L30 Consulting, LLC

Is a Certified Disadvantaged Business Enterprise (DBE) in the following specialties:

NC488410, NC541690, NC561612, NC238990

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

Certificate Eligibility: (September 2021 to September 2022)

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

No Change Affidavit

I_Angela McNulty_____, swear[1] (or affirm) that there have been no changes in
Insert name of DBE firm owner(s)
L30 Consulting, LLC _____circumstances affecting its ability to meet the size, disadvantaged
Insert name of DBE firm
status, ownership, or control requirements of 49 CFR Part 26 and 13 CFR Part 121. I swear (or affirm) there have been no material changes in the information provided with _L30 Consulting, LLC_____
Insert name of DBE firm
application for certification, except for any changes about which I have provided written notice to Louisana Department of Transportation and Development_____pursuant to 49 CFR § 26.83(i).
Insert name of DOT recipient

I swear (or affirm) that I am socially disadvantaged because I have been subjected to racial or ethnic prejudice or cultural bias, or have suffered the effects of discrimination, because of my identity as a member of one or more of the groups identified in 49 CFR § 26.5, without regard to my individual qualities.

I further swear (or affirm) that my personal net worth does not exceed $1.32 million, and that I am economically disadvantaged because my ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same or similar line of business who are not socially and economically disadvantaged.

I specifically swear (or affirm) L30 Consulting, LLC_____continues to meet the Small Business
Insert name of DBE firm
Administration (SBA) business size criteria and the overall gross receipts cap of 49 CFR Part 26 and L30 Consulting, LLC____ average annual gross receipts (as defined by SBA rules) over the previous
Insert name of DBE firm
three fiscal years do not exceed _$7 Million_____. I provide the attached size and gross receipts documentation to support this affidavit.
Insert dollar amount

Signature Angela A McNulty *Date* 12/9/22

On this_9th__day of_December, 2022 before me appeared (name)_Angela McNulty_____, to me personally known, who, being duly sworn, did execute the foregoing affidavit and did state that he or she was properly authorized by (name of firm) L30 Consulting, LLC_____, to execute the affidavit and did so as his or her free act and deed.

(SEAL/STAMP)

Notary Public William A Park Commission Expires_____

Notary Public State of Florida
William A Park
My Commission
HH 271295
Exp. 9/26/2026

[1] Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. Section 1001 (False Statements) and could subject you to fines, imprisonment or both.

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

QA/QC Section attached at the end of this proposal.

QA/QC PLAN WAS DELETED PER PAGE 5 OF ADVERTISEMENT

22. **Sub-consultant Information:**

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and Email Address	Phone Number
L30 Traffic Consulting, LLC	3276 W. Scott Street Pensacola, FL 32505	Angela McNulty angela@L30consulting.com	850-890-8408

23. **Location:**