DOTD FORM: 24-102

(Revised June 1, 2021)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

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

1. Contract title as shown in the advertisement	IDIQ CONTRACT FOR BRIDGE INSPECTION SERVICES STATEWIDE
2. Contract number(s) as shown in the advertisement	CONTRACT NOS. 4400023510, 4400023511, 4400023512
3. State Project Number(s), if shown in the advertisement	
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	Wiss, Janney, Elstner Associates, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0002573
6. Prime consultant mailing address	Wiss, Janney, Elstner Associates, Inc. 330 Pfingsten Road Northbrook, IL 60062
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Jonathan C. McGormley, Principal, 847-753-7234, jmcgormley@wje.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Jonathan C. McGormley, Principal, 847-753-7234, jmcgormley@wje.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: 2/24/2022
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): Firm(s)' %:

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

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

The past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other. The crosswalk from the old categories to the new categories can be found at the link below:
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/General%20Information/CPPR%20Crosswalk%20to%20New%20Evaluation%20Disciplines.pdf. (same link as in the advertisement)

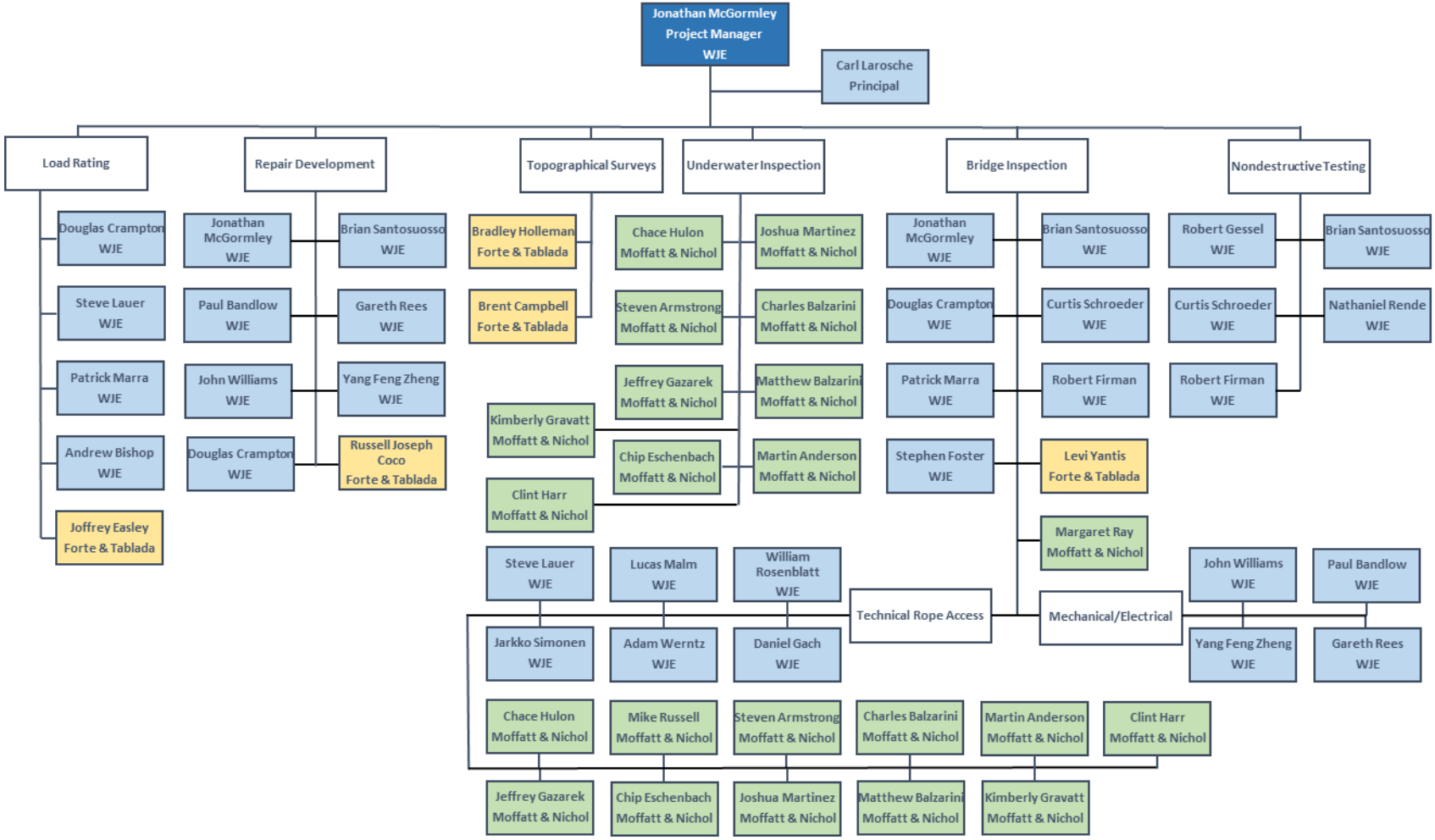
Sub-consultants are allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 19 of the DOTD Form 24-102*, the name of each firm that is part of the proposal, and the percentage of work in 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.				
Evaluation Discipline(s)	% of Overall Contract	Wiss, Janney, Elstner Associates, Inc. (WJE)	Forte and Tablada, Inc. (F&T)	Moffatt & Nichol (M&N)
Bridge	100	60	15	25
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.				
Percent of Contract	100%			

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)
Wiss, Janney, Elstner Associates, Inc.	CADD Technician	2	5
Wiss, Janney, Elstner Associates, Inc.	Clerical	2	6
Wiss, Janney, Elstner Associates, Inc.	Engineer	1	1
Wiss, Janney, Elstner Associates, Inc.	Engineer Intern	10	34
Wiss, Janney, Elstner Associates, Inc.	Engineer - Other	8	30
Wiss, Janney, Elstner Associates, Inc.	Geologist		2
Wiss, Janney, Elstner Associates, Inc.	Principal	6	40
Wiss, Janney, Elstner Associates, Inc.	Professional	1	19
Wiss, Janney, Elstner Associates, Inc.	Senior Technician	12	59
Wiss, Janney, Elstner Associates, Inc.	Supervisor - Eng	4	16
Wiss, Janney, Elstner Associates, Inc.	Supervisor - Other	15	108
Wiss, Janney, Elstner Associates, Inc.	Technician	1	4
Forte and Tablada, Inc.	Administrative		3
Forte and Tablada, Inc.	CADD Technician	4	8
Forte and Tablada, Inc.	Clerical		4
Forte and Tablada, Inc.	Engineer	1	4
Forte and Tablada, Inc.	Inspector		3
Forte and Tablada, Inc.	Instrument Man	1	1
Forte and Tablada, Inc.	Party Chief	2	6
Forte and Tablada, Inc.	Engineer Intern		9
Forte and Tablada, Inc.	Principal	1	3
Forte and Tablada, Inc.	Rodman	1	11
Forte and Tablada, Inc.	Senior Technician	1	3
Forte and Tablada, Inc.	Supervisor Eng	1	4
Forte and Tablada, Inc.	Supervisor Other		2
Forte and Tablada, Inc.	Surveyor	1	5
Moffatt & Nichol	Accountant	1	10
Moffatt & Nichol	CADD-Technician	1	25

Moffatt & Nichol	Engineer	6	25
Moffatt & Nichol	Inspector-Bridge	12	50
Moffatt & Nichol	Supervisor-Eng	2	8
Moffatt & Nichol	Technician	5	12

14. **Organizational Chart**:



 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

15. **Minimum Personnel Requirements:**

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR.

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	Jonathan C. McGormley	Wiss, Janney, Elstner Associates, Inc.	PE.0043912	LA	03/31/2022
2	Carl J. Larosche	Wiss, Janney, Elstner Associates, Inc.	PE.0037811	LA	09/30/2023
3	Jonathan C. McGormley	Wiss, Janney, Elstner Associates, Inc.	PE.0043912	LA	03/31/2022
4	Chace Hulon	Moffat & Nichol	PE.39701	LA	09/30/2023
5	Bradley S. Holleman	Forte and Tablada, Inc.	PLS 5082	LA	09/30/2022

(Add rows as needed)

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Jonathan C. McGormley		Years of relevant experience with this employer	28	
Title	Principal		Years of relevant experience with other employer(s)	1	
Degree(s) / Years / Specialization			BS, 1992, Civil Engineering, University of Cincinnati MS, 1994, Civil Engineering, Purdue University		
Active registration number / state / expiration date			***In addition to LA, Mr. McGormley is licensed in 7 other states and is a licensed Structural Engineer in IL.***		
Year registered	2019	Discipline	PE LA, License No. 43912 / expires 3/31/2022		
			NBIS Certified Team Leader and Program Manager		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)		
			ATSSA Traffic Control Technician Training/ TC Supervisor Training		
Contract role(s) / brief description of responsibilities			Mr. McGormley fulfills MPRs 1 and 3 and will serve as Project Manager responsible for ensuring all task orders are appropriately defined, budgeted, staffed, and executed. He will actively participate in task orders including bridge inspections, non-destructive evaluation, repair design, and load rating.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).				
07/19–ongoing	**Danziger Lift Span Bridge, US 90, over the Industrial Canal, New Orleans, LA:** Project Manager responsible for overseeing an experienced team to complete the inspection of portions of the lift span contributing to reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the bridge's long-term functionality and reliability. Oversaw the development of a unique monitoring and sensor installation plan, the installation of instrumentation and monitoring equipment, and the creation of a web-accessible reporting platform to evaluate the bridge's operations over an extended period. Assisted with development of plans and specifications to address emergency repairs including the installation of polyester polymer concrete lift span orthotropic deck overlay repairs, replacement of failed pinion bearings, elimination of lift span-to-approach span contact issues, and improving the lift span seating by counterweight movements and air buffer repairs. Bridge monitoring is ongoing.					
05/19–08/19; ongoing	**I-255 Jefferson Barracks Bridge over the Mississippi River, Emergency Repairs, Mehlville, MO:** Project Manager responsible for emergency repairs to the westbound structure. Following the discovery of a six-foot crack in the steel tie girder during a fracture critical inspection, performed an in-depth inspection of similar details, obtained material samples for laboratory testing, coordinated emergency repairs, oversaw repair installation, and prepared investigation report. The twin				

	structures consist of a main span 910-ft long tied-arch structure with a steel box arch and a 12-foot deep steel I-shaped tie girder. Completed bridge rehabilitation plans for both structures with construction ongoing.
06/20-02/22	**New Harmony Bridge over Wabash River, New Harmony, IN:** Project Advisor assisting the bridge commission with reopening the bridge. Work so far has included a limited routine and fracture critical inspection, including rope access and use of an unmanned aerial vehicle (drone), as-constructed load ratings, and an underwater inspection of the four through truss span structure. Prepared summary report and assisted bridge commission with prioritizing work.
02/19–07/19	**Lake Shore Drive Bridge over the Chicago River, Girder Fracture Investigation, Chicago, IL:** Project Manager leading the girder fracture investigation, bridge stabilization, and repair installation after a corner of the bridge deck dropped about 7 inches resulting in closure of the bridge. Oversaw temporary shoring and hydraulic jacking operations to restore the deck profile for traffic the next morning. Developed procedures for the removal of the two fractured girder ends, the collection and evaluation of section loss and crack growth measurements at the failed girders as well as at other similar girder ends throughout the structure. Directed the removal of samples for materials testing, the analysis of stresses in fracture regions, metallographic examination and fracture assessment, preparation of jacking procedures, jacking and repair installation of 76 girder ends, and preparation of an investigation report.
07/17-01/19	**Complex and Timber Bridge Inspections, Various Locations, MS:** Project Manager responsible for bridge inspections, load ratings and reports that included maintenance and repair recommendations for over 100 bridges. The inspections were part of an FHWA-MDOT agreement to improve inspection practices for local bridges throughout Mississippi after several bridge failures occurred. WJE was among several consultants selected to inspect all local bridges within Mississippi over a two-year period. Bridge structures included multi-girder steel bridges with steel, concrete, or timber decks; multi-girder precast concrete with concrete decks; concrete slab bridges, and complex steel structures including pony trusses, steel girder and floor beam, and railroad flat car bridges. The timber structures included timber component bridges with wood superstructures and bents. Load ratings were primarily done using AASHTOWare BrR. Inspections were performed utilizing WJE's Plannotate tablet-based inspection tool. The inspection information was then converted for input into MDOT's InspectTech report system.
03/15–06/17	**IH-345 Inspection, Analysis, and Retrofit Design, Dallas, TX:** Project Manager for a fracture critical inspection of the 1.6-mile long steel structure connecting I-35, I-45, and US 75 with local city streets, visual examination of substructure elements, and a visual and exploratory study of the PT deck. Oversaw instrumentation and field load testing for finite element method model calibration and trial retrofit installations. Developed fatigue retrofit contract documents and provided on-site construction observation and technical support throughout construction.
04/10–04/11	**Hylebos Bridge, Tacoma, WA:** Project Engineer conducting the visual inspection of the double-leaf bascule bridge in preparation for its rehabilitation.
02/10–08/10	**Scherzer Rolling Lift Bridges, Joliet, IL:** Project Manager for fracture critical inspections and gusset plate load rating of three lift bridges.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Carl Joseph Larosche		Years of relevant experience with this employer	18	
Title	Principal		Years of relevant experience with other employer(s)	18	
Degree(s) / Years / Specialization			BS, 1993, Civil Engineering, University of Texas at Austin MS, 1999, Structural Engineering, University of Texas at Austin		
Active registration number / state / expiration date			***In addition to LA, Mr. Larosche is a licensed PE in 13 other states.***		
Year registered	2013	Discipline	PE LA, License No. PE.0037811 / expires 9/30/23		
			AWS Certified Welding Inspector		
			AWS Certified Welder and Welding Operator		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)		
Contract role(s) / brief description of responsibilities			Mr. Larosche fulfills MPR 2 and will provide supervisory responsibilities for design and construction projects with expertise in concrete structures and their repair.		

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).
02/19–ongoing	**Bayou Ramos Bridge at US 90, PCC Beam Cracking, Morgan City, LA:** Project Advisor overseeing the work by WJE engineers to determine the cause of cracking at the ends of numerous precast, prestressed concrete (PPC) girders as well as developing repair strategies to address the long-term performance of the structure consistent with the Louisiana DOTD Bridge Design and Evaluation Manual. Consulted on the available instrumentation and inspection data collected by others to evaluate the cause of cracking. Based on WJE's data analysis, a current, ongoing project has begun to complete additional detailed finite element method (FEM) cracking analyses and to develop and test potential remediation methods associated with the cracking.
09/20–01/21	**Routine Bridge Inspections, SH-99 Houston, TX:** Project Manager and Project Engineer performing routine safety inspections of all bridges, bridge-class culverts, retaining walls, and ancillary structures along the NE quadrant of SH 99 (Grand Parkway) in Houston, TX. The assignment includes the routine inspections of 150+ bridges, 130+ retaining walls, and 50+ other ancillary structures—with all field work conducted within a 2-month period. Bridge inspections were conducted per NBIS, and WJE developed inspection strategies and reporting forms for other elements. Load ratings were or load-rating reviews as needed of all bridge structures. Follow-up in-depth investigations and analyses to evaluate critical distress conditions are ongoing.
08/16–10/19	**H&E Equipment Services Concrete Pavement Assessments, Baton Rouge and Kenner, Louisiana:** Project Manager for the visual and non-destructive assessment of heavy and standard duty pavements specified to conform with the Louisiana

	Standard Specifications for Roads and Bridges. Developed repair concepts to remediate damage associated with construction defects and exposure of the pavement to steel-tracked heavy equipment.
03/15–06/17	**IH-345 Inspection, Analysis, and Retrofit Design, Dallas, TX:** Project Advisor and Project Engineer for a fracture critical inspection of the 1.6-mile long steel structure connecting I-35, I-45, and US 75 with local city streets, visual examination of substructure elements, and a visual and exploratory study of the PT deck. The work also included instrumentation and field load testing for finite element method model calibration and trial retrofit installations.
01/16–11/16	**Houston METRO Rail Bridge Inspections, Houston, TX:** Project Manager and Project Engineer for the baseline inspections, including elemental data, of the two LRT-only bridges, and routine inspections, including baseline elemental inspections, for the vehicular bridges. Designed a custom report template for METRO which included Bridge Inventory Record, Bridge Condition History Form, Bridge Inspection Record, Elemental Inspection Forms, and Follow-up Action Worksheet.
06/14–04/16	**Pressler Bridge Design, Austin, TX:** As Project Manager oversaw the development structural design concepts and bridge programming for new vehicular and pedestrian bridge.
01/14–01/15	**Port of Corpus Christi Bridge & Culvert Assessments, Corpus Christi, TX:** Served in capacities as Project Manager and Project Engineer for various assignments. Performed TxDOT-compliant inspections and prepared reports for six bridge/culvert structures. Reviewed available project documentation and then performed a baseline visual inspection of the six structures, in compliance with standard TxDOT bridge inspection protocol for both routine and elemental inspections, to document the general condition of the existing structure as well as distressed conditions. Performed structural analyses of the structures for load rating in accordance with the AASHTO Manual for Bridge Evaluation. Presented findings and recommendations to the client in a written report. Provided repair design services and construction period services for two of the structures.
01/00–12/13	**NHI - Bridge Maintenance Training Course** Lead instructor and project manager of the Bridge Maintenance Training Course (NHI Course 134029), which focuses on cost-effective bridge maintenance and repair procedures performed by typical transportation agency crews. Included are step-by-step instructions for the preparation and performance of maintenance and repair on common bridge elements. Bridge preservation is emphasized throughout. WJE taught this course to more than a dozen DOTs annually throughout the United States. (Course Instructor)

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.				
Name	Brian J. Santosuosso		Years of relevant experience with this employer	20
Title	Principal		Years of relevant experience with other employer(s)	n/a
Degree(s) / Years / Specialization			BS, 2001, Civil Engineering, Lehigh University MS, 2003, Civil Engineering, Lehigh University	
Active registration number / state / expiration date			***In addition, Mr. Santosuosso is a licensed PE in 4 other states.***	
Year registered	2006	Discipline	SE IL, License No.: 081-006388 / expires 11/2022	
Year registered	2008	Discipline	PE IN, License No.: PE10809231 / expires 7/2022	
			AWS Certified Welding Inspector	
			NBIS Certified Team Leader/Program Manager	
			NHI 130078 - Fracture Critical Inspection Techniques for Steel Bridges	
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)	
Contract role(s) / brief description of responsibilities			Mr. Santosuosso will serve as a Bridge Inspection Team Leader and provide expertise in non-destructive testing and weld evaluation.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/08–ongoing	**On-Call Bridge Inspections - Indiana Department of Transportation:** Project Manager for various inspection and testing on complex bridges. Assignments included Routine and Fracture Critical Inspections; rehabilitation design for steel welding, steel cracking, and grouted stay cable void problems; Visual and NDE inspection during construction and evaluation of design, inspection, serviceability, and construction problems; Routine and Fracture Critical Inspection of rolling lift bascule bridges; design and direction of counterweight adjustments and construction observation services for rolling lift bascule bridge; Special Inspection including post-tensioning tendon grout void evaluation; Special Inspection of three concrete box girder bridge non-permit controlled confined spaces; Special Inspection including NDE of steel cross frame connections for three multi-girder curved weathering steel bridges; and Special Inspection including evaluation of cast-in-place post tensioned concrete pier cap beam and a unique application for high load multi-rotational bridge bearings.
06/11–ongoing	**Pin and Link Replacement for 23 CDOT Bridges, Chicago, IL:** Project Manager for pin and link visual inspection, assessment, and design for replacement to IDOT standards
03/17–11/17, 09/2019–11/19, 09/21–11/21	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Project Manager for in-depth and fracture critical inspection of tied arch truss bridge, approach trusses and Indiana approaches, instrumentation and load rating of deteriorated floor beam and stringer members, and design and installation of stringer and floor beam repairs. Performed a service life analysis and developed asset management plan to extend service life of the structure through 2050 at best value to owner. Truss spans have a total bridge length of 2,053 feet and support a double-deck roadway. Inspection was performed

	using a combination of lifts positioned on the bridge deck, an underbridge inspection vehicle, and industrial rope access techniques. The work was typically performed during non-peak hours to minimize the disruption to traffic. A comprehensive deck assessment was also included as part of the inspection work.
07/18–07/19	**106th Street Bascule Bridge Emergency Repairs, Chicago, IL:** Project Manager responsible for the visual examination and investigation to identify the source of rack and pinion gear interference. Performed in-place hardness testing and removal of rack segment casting samples for chemistry. Developed rack segment welding procedure for refurbishment. Directed laser scan measurements of existing machinery frame, drive shaft, rack segment, and trunnion alignments. Proof tested existing anchor bolt stubs using hydraulic cylinder and custom test rig. Designed foundation modifications to accept new machinery frame. Developed machinery frame installation procedures. Extracted concrete counterweight core samples for materials testing. Designed concrete counterweight concrete and steel repairs. Provided on-site assistance to contractor throughout implementation of emergency repair work. Assisted with commissioning of structure and bascule leaf balance testing following substantial completion of construction.
03/15–06/17	**IH-345 Inspection, Analysis, and Retrofit Design, Dallas, TX**: Project Engineer for a fracture critical inspection of the 1.6-mile long steel structure connecting I-35, I-45, and US 75 with local city streets, visual examination of substructure elements, and a visual and exploratory study of the PT deck. Performed data acquisition system design.
02/12–01/13	**Martin Olav Sabo Pedestrian Bridge, Minneapolis, MN:** Project Manager for the fracture investigation and stay cable connection retrofit for the cable-stayed structure. WJE was retained to determine the cause of the cable diaphragm plate fractures, assess the remaining in-service diaphragm plates, and review the overall structural integrity of the bridge. The investigation required several steps: assistance on site during stabilization of the structure; inspection of the remaining in-service diaphragm plates using non-destructive test methods; an independent peer review of the original design for the cable stayed portion; documentation and removal of the fracture surfaces of the failed connection plates from the structure; development and implementation of an instrumentation plan to determine structural responses to ambient events such as wind; and recommendations for repair and retrofit options to return the bridge to full service. Following determination that wind-induced cable vibrations ultimately caused the cable diaphragm plate fractures, WJE was selected to design and install cable diaphragm plate retrofits. WJE designed and installed a three-ply steel plate assembly bolted to the steel pylon using four steel angles, offering an internally redundant connection with improved fatigue resistance.
08/06–12/08	**Metropolitan Highway System, Stem-to-Stern Safety Review, Boston, MA:** Performed a Stem-to-Stern safety audit of the Big Dig Central Artery/Tunnel (CA/T) project to reroute Interstate 93 through the heart of Boston into a 3.5 mile tunnel under the city and extend I-90 east to the airport under Boston Harbor. Project initiated following a fatal tunnel ceiling panel collapse. Mr. Santosuosso was involved with review and assessment of all steel viaduct/overpass structures and all ancillary project structures including overhead sign structures, light poles, and high-mast light towers. Mr. Santosuosso performed document review, field inspection and evaluation, deficiency identification and reporting work for this project.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Steven L. Lauer		Years of relevant experience with this employer	11	
Title	Supervisor-Other		Years of relevant experience with other employer(s)		
Degree(s) / Years / Specialization			BS, 2009, Civil Engineering, Purdue University MS, 2010, Civil Engineering, Purdue University		
Active registration number / state / expiration date			***Mr. Lauer also is a licensed PE in 2 other states.***		
Year registered	2015	Discipline	PE IL, License No.: 062-068057 / expires 11/30/2023		
Year registered	2016	Discipline	SE IL, License No.: 081-007838 / expires 11/30/2022		
			Bridge Program Manager, Element, Louisiana		
			NBIS Certified Team Leader/Program Manager		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)		
			Society of Professional Rope Technicians/ Level I		
			Transportation Worker Identification Credential (TWIC)		
			Indiana Bridge Load Rating Engineer, IN000551-2022-ATL-F-LRE		
Contract role(s) / brief description of responsibilities			Mr. Lauer will serve as a Bridge Inspection Team Leader, technical rope access inspector, and Load Rating Engineer.		

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).
08/21–10/21	**IA 9, Black Hawk Bridge, over the Mississippi River, Lansing, IA:** Project Manager and inspection team leader for fracture critical, in-depth, element level, and pin inspection of the three-span through truss river crossing unit, a five-span deck truss unit and single span multi-girder approach span. Inspection performed with lifts on the narrow roadway,an under bridge inspection vehicle (snooper), and structure climbing techniques.
10/21–12/21	**IN 46 over East Fork White River, Columbus, IN:** Team leader for the routine and fracture critical inspection of the cable stayed bridge with center steel pylon and post-tensioned deck that required traditional and rope-access techniques.
10/19–11/21	**Sherman Minton Bridge - I-64 over the Ohio River, New Albany, IN:** Project Engineer for instrumentation and monitoring, crack arrest hole retrofit installation, and Team Leader of fracture critical and routine inspections of truss members, using rope-access and structure climbing techniques of the double-decker bridge having tied arch trusses as the main spans and approach span combination deck/through trusses.
5/21–7/21	**I-40 over the Mississippi River, Memphis, TN:** Project engineer who performed instrumentation installation using rope-access techniques following the fracture of the tie-girder in the two-span continuous tied arch.

6/21	**I-294 under St. Charles Road, Berkley, IL:** Project manager for evaluation of steel multi-beam structure directly exposed to vehicular fire to determine fitness to return to service. Performed limited inspection, field hardness testing, and steel core extraction for benchtop hardness testing at WJE's Northbrook, IL laboratory and unilateral static tensile tests.
7/20	**Elm Tree Bridge, Walden East Bridge, and Walden West Bridge, Lake Forest, IL:** Project engineer who performed inspections of the steel arch, steel girder, and steel deck truss bridges using structure climbing techniques.
12/19–5/20, 11/18–1/19	**Indianapolis Boulevard over Lake George Canal, East Chicago, IN:** Team leader for routine and fracture critical inspection of two-girder double-leaf bascule bridge with multi-beam approaches. Load rating engineer for typical vehicles and heavy permit vehicles carrying 180-kip loads. Engineer on-site for largest heavy permit passage and performed pre and post passage special inspections.
9/19–10/19	**Various Off-System Trusses, OK:** Team leader performing fracture critical inspection of ten off-system trusses of varying styles that required rope access techniques.
9/19–10/19, 1/17–2/18	**US 20 Julien Dubuque Bridge over the Mississippi River, Dubuque, IA:** Project engineer who performed fracture critical, in-depth, and element level inspections using traditional access and structure climbing techniques. Structure is comprised of twenty-three two-girder spans on the east; continuous three-span arch truss; and six multi-beam spans with seven two-girder spans on the west. Load rating engineer to determine load rating of the three-span continuous through-truss bridge to that received a major rehabilitation to increase design load from H20 to HS20 and exhibits deterioration.
08/17–02/19	**Mississippi Complex and Timber Bridge Inspections - Various Counties, MS:** Project Engineer for inspection of in-service deteriorated timber, steel, and concrete bridges, some requiring rope access techniques and load rating inspections. Load rating engineer for more than 200 load ratings.
08/17–11/17	**Iowa 136 Bridge over the Mississippi River, Clinton, IA:** Project Manager for routine, in-depth, element level, fracture critical, and ultrasonic testing (UT) of pins for the three truss spans and approach spans. Provided inspection report and repair recommendations.
04/16–07/16	**I-74 Murray Baker Bridge over the Illinois River, Peoria, IL:** Project manager for in-situ rivet hardness testing and sample extraction for laboratory testing to improve load rating that was controlled by rivet strength.
9/15–1/16	**US 169 and BUS/US 20 Bridges over the Des Moines River, Fort Dodge, IA:** Project engineer who performed routine and fracture critical inspections of the bridges using traditional and rope-access techniques. Both the original five-span riveted steel deck truss with precast concrete bulb-tee approaches and the adjacent steel multi-girder bridge were inspected.
9/15–10/15	**IN 62 over the Wabash River, Mt. Vernon, IN:** Project engineer who performed fracture critical inspection of a three-span continuous steel tied arch truss measuring more than 1,000 feet long using rope access techniques.
9/13–10/13	**US 34 Great River Bridge over the Mississippi River, Burlington, IA:** Project engineer who performed routine, fracture critical, in-depth, and element level inspections of cable-stayed main span, multi-girder steel approach spans, and multi-girder PPC approach spans, including inspection of concrete pylon using rope access techniques.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Patrick J. Marra			Years of relevant experience with this employer	6
Title	Supervisor-Other			Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization			BS, 2012, Civil Engineering, University of Delaware MS, 2013, Civil Engineering, University of Delaware		
Active registration number / state / expiration date			***Mr. Marra also is a licensed PE in 4 other states***.		
Year registered	2019	Discipline	SE IL, License No.: 081-008336 / expires 11/2022		
Year registered	2016	Discipline	PE MD, License No.: 50271 / expires 2/2023		
			NBIS Certified Team Leader/Program Manager		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges		
			ATSSA Traffic Control Technician Training		
			ATSSA Traffic Control Supervisor Training		
Contract role(s) / brief description of responsibilities			Mr. Marra will serve as a Bridge Inspection Team Leader and Load Rating Engineer.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/19–ongoing	**Danziger Lift Span Bridge, US 90, over the Industrial Canal, New Orleans, LA:** Project Engineer for the inspection of portions of the lift span contributing to reported operational issues, and development of repairs to restore the bridge's long-term functionality and reliability. Assisted in the installation of instrumentation and monitoring equipment to evaluate the bridge's operations over an extended period. Assisted with development of plans and specifications to address emergency repairs. Bridge monitoring is ongoing.
10/21–12/21	**U.S. 34 Great River Bridge over the Mississippi River, Burlington, IA:** Project Manager and Inspection Team Leader for the fracture critical and in-depth inspection for the structure, which consists of a two-span steel multi-girder Iowa approach unit, a three span cable stayed and steel multi-girder main river crossing, and a five span precast prestressed concrete multi-beam Illinois approach unit. Performed the inspection of the main stay cables, substructure elements, deck elements, and select approach spans, and prepared the inspection summary report.
8/21–10/21	**Iowa 9 over the Mississippi River, Lansing Iowa:** Inspection Team Leader for the inspection of the structure, which consists of a three-span through truss river crossing unit, a five-span deck truss unit and single span multi-girder approach span. Performed the routine and fracture critical inspection of the truss members, floor beams and floor system using an under-bridge inspection truck (UBIT).

09/20–12/20	**Franklin Street over Trail Creek Bascule Bridge, Michigan City, Indiana:** Inspection team leader for the routine and fracture critical inspection of the double-leaf bascule bridge carrying Franklin St. over Trail Creek in Michigan City. Performed the inspection of the bascule trusses, floor beams, floor system and counterweight structural components. Prepared the inspection summary report for the structural inspection.
9/20–11/20	**U.S. 34 Bridge over the Missouri River, Mills County, Iowa:** Project Manager and Inspection Team Leader for the routine and in-depth inspection of the three span steel multi-girder main unit and four (Nebraska) and eleven (Iowa) approach span PPC girder units. Inspection also included non-destructive testing (NDT) of anchor bolts in the PPC approach spans. Performed the inspection of the approach span units, deck elements, and substructure elements. Also assisted in the NDT of anchor bolts using an underbridge inspection vehicle.
04/19– 11/19 03/21–08/21	**Jefferson Barracks Bridge over the Mississippi River, Mehlville, MO:** Project Engineer and Bridge Inspection Team Leader for the routine NBI and fracture critical inspections of the twin tied-arch structures and multi-girder approach spans. Following the discovery of a six-foot crack in the steel tie girder, performed an in-depth inspection of similar details, obtained material samples for laboratory testing, and coordinated emergency repairs. In a follow-up project, performed in depth investigation of similar weld details, and developed repair drawings and specifications for incorporation into a larger bridge rehabilitation package.
02/19– 07/19	**Lake Shore Drive Bridge over the Chicago River, Girder Fracture Investigation, Chicago, IL:** Project Engineer for the girder fracture investigation, bridge stabilization, and repair installation after a corner of the bridge deck dropped about 7 inches resulting in closure of the bridge. Assisted with temporary shoring and hydraulic jacking operations to restore the deck profile for traffic the next morning. Assisted with development of procedures for the removal of the two fractured girder ends, the collection and evaluation of section loss and crack growth measurements at the failed girders as well as at other similar girder ends throughout the structure. Assisted with preparation of jacking procedures, jacking and repair installation of 76 girder ends, and preparation of an investigation report.
10/18– 01/19	**Sunshine Bridge over the Mississippi River, St. James Parish, LA:** Project Engineer for the development and implementation of a monitoring plan to provide information about the redistribution of loads during the installation of repairs to the truss bottom chord damaged by impact. Assisted with the design of the jacking system, review of member repair design, site observations, preparation of shop and jacking procedure drawings, field technical assistance, and chord jacking operations oversight.
05/17– 10/17 11/19–01/20	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Project Engineer for the in-depth and fracture critical inspections of the tied arch truss bridge and approach span trusses, load rating of deteriorated members, and preparation of summary inspection report with recommendations. The inspection was performed using a combination of lifts positioned on the bridge deck, an underbridge inspection vehicle, and industrial rope access techniques. A comprehensive deck assessment was also included as part of the inspection work. Served as Inspection Team Leader in subsequent inspection (in 2019), which included similar methods of access and involved the inspection of select fracture critical elements in conjunction with a larger inspection effort lead by INDOT.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	John Williams		Years of relevant experience with this employer	3	
Title	Supervisor-Other		Years of relevant experience with other employer(s)	23	
Degree(s) / Years / Specialization			BS /Engineering Science / The Pennsylvania State University / 1996		
Active registration number / state / expiration date			***In addition to LA, Mr. Williams is licensed in 13 other states and 5 Canadian Provinces.***		
Year registered	2020	Discipline	**PE LA**, License No.: PE.0044300 / expires 09/30/2022		
Contract role(s) / brief description of responsibilities			Mr. Williams will serve as Lead Mechanical Engineer responsible for task orders involving movable bridges.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/19–ongoing	**Danziger Lift Span Bridge, US 90, over the Industrial Canal, New Orleans, LA:** Senior Mechanical Engineer for the inspection of portions of the lift span contributing to reported operational issues, an in-depth inspection of the lift bridge machinery systems, and development of repairs to restore the bridge's long-term functionality and reliability. Assisted with the development of a unique monitoring and sensor installation plan, the installation of instrumentation and monitoring equipment, and the creation of a web-accessible reporting platform to evaluate the bridge's operations over an extended period. Assisted with development of plans and specifications to address emergency repairs including replacement of failed pinion bearings and improving the lift span seating by counterweight movements and air buffer repairs. Based on the findings from the investigation, performed strain gage testing to measure span balance and implementation of weight changes to improve seating of the span. Strain gage testing also showed that the span drive differentials on both towers were not functioning properly. Worked with the manufacturer to sort out how to adjust the clutches in the differentials to function properly.
08/15–ongoing	**3rd Street Bascule Bridge over Islais Creek - San Francisco, CA:** Project Manager and Lead Mechanical Engineer for the design of a replacement bridge that includes new span operating machinery, new span support machinery for the new leaf to be supported by the existing substructure and development of complex construction staging to address constraints for the number and duration of outages for MUNI light rail services. The project started with a detailed scoping inspection including a rating assessment of the structure, mechanical, and electrical systems that identified critical deficiencies leading to the decision to replace the bascule span superstructure in its entirety.
07/20–1/20	**St. Claude Avenue Bridge Construction Engineering Services - New Orleans, LA:** Project Manager and Senior Mechanical Engineer for construction engineering services on an expedited basis to assist with the replacement of the second link pins which connect the counterweight truss to the balance link. Services included balance testing, design of the counterweight support system, development of a sequence of work for supporting the structure, unloading and removing the pins,

	completing the repairs and restoring the bridge to service within a marine navigation closure that was controlled by repairs to the adjacent lock. Mechanical engineering services were provided on an expedited basis due to the short time-period between the award of the project and the start of the marine navigation closure.
10/14–07/19	**St. Peters Canal Swing Bridge Replacement, Cape Breton, NS, Canada:** Project Manager and Engineer of Record for the mechanical and hydraulic machinery for this new hydraulically operated center bearing swing bridge. Responsibilities included design and backchecking of design calculations plans preparation and detailing, and preparation of Contract Specifications and construction cost estimates during the design phase of the project. During the construction phase, responsibilities included coordination of a team of mechanical and electrical engineers and inspectors to review and approve all of the construction submittals and provide complete shop and field inspection of all mechanical/electrical aspects of the rehabilitation project.
08/08–08/18	**Columbus Road Lift Bridge - Cleveland, OH:** Senior Mechanical Engineer for the rehabilitation project with the objective to maintain the historic character of the structure while significantly reducing maintenance requirements and improving overall system efficiency. A scoping inspection of the mechanical machinery determined suitability for continued long-term service and compliance with current AASHTO code requirements. The new mechanical design provides for complete replacement of all span support machinery, span drive machinery, and span locks.
07/14–02/18	**Burlington Canal Lift Bridge - Hamilton, ON, Canada:** Movable Bridge Construction Specialist and Heavy Machinery Specialist for the Contractor as part of a major electrical and minor mechanical rehabilitation of this critical vertical lift bridge. The electrical scope of work included complete replacement of the electrical power and control systems for the bridge including an aerial cable installation and skew control of the lift span. The mechanical scope of work included replacement of the high-speed end of the span drive machinery (brakes, speed reducer, shaft, and couplings). The scope of work required the contractors engineer to sign and seal all submittals including shop drawings.
03/10–11/17	**Sir Ambrose Shea Lift Bridge Replacement - Placentia, NL, Canada:** Project Manager and Mechanical Engineer of Record responsible for the design of span drive machinery, span lock machinery and span support machinery for a new tower drive lift bridge. Duties included preparation and review of all relevant calculations (sized motor, gear tooth strength calculations, sized brakes, shaft calculations for moment and torsion, sized couplings, designed machinery base plates, sized span lock bars, sized span lock and lockbar actuator, performed fatigue analysis of trunnion shaft and sized trunnion bearings), and preparation of design drawings, specifications and cost estimates during the design phase of the project. During the construction phase, responsibilities included review of Contractor's shop drawings and procedures for conformance to Contract requirements, disposition of non-conformance reports (NCR's) and responding to requests for information or changes from the Contractor.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Paul Bandlow		Years of relevant experience with this employer	3	
Title	Principal		Years of relevant experience with other employer(s)	36	
Degree(s) / Years / Specialization			BS / Mechanical Engineering / University of Massachusetts / 1983		
Active registration number / state / expiration date			***Mr. Bandlow has a P.E. in 8 states in addition to PA.***		
Year registered	1989	Discipline	PE PA, License No.: PE039031E / expires 09/30/2023		
Contract role(s) / brief description of responsibilities			Mr. Bandlow will serve as the primary QA/QC reviewer for movable bridge mechanical work and will, as needed, assist with field investigations and rehabilitation designs.		

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).
11/16–ongoing	**Hood River Lift Bridge, Port of Hood River, OR:** Served as the Project Engineer for this tower drive vertical lift bridge. Internal inspection of the trunnion bearings, span drive shaft bearings, and span drive enclosed speed reducers to evaluate the components to address operational issues of the lift span and performed balance testing to determine the balance condition and operating loads of the span drive machinery.
02/18–07/18	**West Third Street Vertical Lift Bridge, Cleveland, OH:** Provided mechanical engineering for the replacement of the aerial cables and upgrades to the span drive machinery. Prepared PS&E for the rehabilitation of the mast bearings at mid-span, jacking the auxiliary counterweight, providing new brake wheels and incorporating an electric motor into the auxiliary drive system for use during construction. As part of the work, prepared detailed balance calculations and a step-by-step testing procedure for initial operation of the auxiliary drive.
06/17–03/18	**BNSF Ft. Madison Swing Bridge, Fort Madison IA:** Led a detailed inspection of the mechanical and electrical systems on this 525 ft. long double deck swing bridge over the Mississippi river. The inspection included operational testing and visual inspection of all mechanical and electrical systems. Measurements of mechanical components were taken based on observed conditions. Chart recording were created for all electrical motors during operation, and all safety interlocks were verified as part of the inspection. The inspection included span drive machinery, center bearing assembly, end wedge machinery, rail lift machinery, centering devices, and air buffers.
11/09–02/18	**SR A1A Flagler Memorial Bridge, Palm Beach County, Florida DOT District 4:** Senior mechanical engineer responsible for the completion of a PD&E study with the goal of determining the most appropriate alternative for replacing or rehabilitating the existing low-level bascule bridge. The study involved preliminary engineering design for the replacement, including the evaluation of alignment alternatives and the associated environmental analyses and supporting technical documents for each design option, as well as evaluation of bridge type options, including rehabilitation of the existing bridge; low-level and mid-level bascule bridges to meet U.S. Coast Guard and FDOT vertical and horizontal clearance requirements.

	The final approved alternate recommended replacing the existing bridge with new parallel double-leaf bascule bridges built on an alignment within the existing right-of-way but south of the existing bridge alignment in order to build the new bridge in stages while maintaining four lanes of traffic throughout construction.
11/14 – 03/17	**Massachusetts Bay Transportation Authority - Beverly Drawbridge Value Engineering Study, Beverly, MA:** Served as mechanical engineering Team Member for the VE study of this 130-year-old movable swing span on the MBTA rail system. The study involved looking at design concepts, code compliance, maintaining traffic during construction, constructability and coordination among the various engineering disciplines required to design and construct a movable bridge. Determined that it would be significantly less expensive, and result in less disruption to train traffic, if the existing bridge was replaced with a new bridge rather than proceeding with the proposed rehabilitation. The recommendation to replace the bridge with a new bridge was implemented by the MBTA and construction of the new bridge has been completed.
02/04 – 08/13	**Mystic Brown Bascule Bridge, Mystic, CT:** Provided engineering services for this unique Brown Bascule span for CTDOT and a contractor working on the moveable span. Engineering services have included in-depth inspection and analysis of the machinery, span balance analysis, strain gage testing and detailed component specific inspections. Served as Project Engineer for the mechanical rehabilitation of this structure and was responsible for the preparation of the mechanical plans, specifications and cost estimates. The mechanical rehabilitation included precision surveying to isolate geometry problems with the span, rehabilitation of the span drive machinery, counterweight trunnion replacement, hanger and butt link assembly replacement and development of a site-specific traffic barrier. The rehabilitation also included replacement electrical power and control systems and structural modifications.
2/`13 – 8/16	**Haystack Railroad Bridge - Petaluma, CA:** Served as lead mechanical engineer on relocation, rehabilitation and reassembly of a single leaf rolling lift bascule span included the verification of all existing machinery for conformance to AREMA specifications, design of new machinery at the high-speed end of the span drive, reinforcement of machinery supports, design of new span locks, development of inspection and alignment criteria and services during construction.
9/19 – ongoing	**Bayville Bridge Design - Nassau County, NY:** Served as principal-in-charge and responsible for quality control on project involving scoping inspection and rehabilitation design. Rehabilitation design for a double-leaf rolling lift bascule bridge included replacement of span drive machinery, curved and flat treads, and tail lock machinery.
8/19 – 10/19	**Cherry Street Bascule Bridge - Toronto, ON, Canada:** Provided Mechanical Engineering services to investigate the cause of a failure at the bridge and to develop a plan to lower the bridge to the fully seated position
04/20 -6/20	**O'Rorke Bascule Bridge - Rochester, NY:** Lead Mechanical Inspector for a field inspection of the mechanical machinery systems on the bridge. Strain gage recordings were performed on the rack pinion shafts on both leaves of the bridge to assess the machinery loading during operation and the current balance condition of the bridge.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Gareth Rees		Years of relevant experience with this employer	3	
Title	Principal		Years of relevant experience with other employer(s)	51	
Degree(s) / Years / Specialization			College Associateship Electrical Engineering (Bsc electrical equivalent) / 1968 / Polytechnic of Wales (now University of South Wales).		
Active registration number / state / expiration date			***In addition to LA, Mr. Rees is a licensed P.E. in 17 other states, the UK, and 6 Canadian Provinces.***		
Year registered		Discipline	PE LA, License No.: PE.0040754 / expires 09/30/2022		
Contract role(s) / brief description of responsibilities			Mr. Rees will oversee the electrical systems evaluation for movable bridges.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/19–ongoing	**Danziger Lift Bridge - New Orleans, LA:** Lead Electrical Engineer performing an inspection of relevant portions of the main span contributing to the reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the long-term functionality and reliability of the bridge. Based on the findings from the investigation, design was provided for a new lift span skew control system that was required after existing components were removed from the bridge and cannot be relocated or replaced in kind, and for electrical controls for the clutches associated with the span drive differentials. The design is complete and implementation is ongoing.
08/15–ongoing	**3rd Street Bascule Bridge over Islais Creek - San Francisco, CA:** Senior Electrical Engineer for the design of a replacement bridge that includes design of a new electrical power and control systems which will be integrated with the MUNI light rail traction power and signal system. The project started with a detailed scoping inspection including a rating assessment of the structure, mechanical, and electrical systems.
03/20–12/20	**Skew Detection System Replacement on Vertical Lift Bridges - Louisiana:** Principal Investigator for a study that included a review of alternatives for skew control, monitoring, and indication for tower drive vertical lift bridges based on effective management of skew and minimizing advanced electronic equipment. The study included a literature review, interviews with current owners and maintainers of vertical lift bridges, and interviews with industry control specialists experienced in skew control systems. As a result of the study, Mr. Rees recommended a preferred system of skew control for the DOTD that combines the use of direct skew measurement with an inclinometer for skew monitoring and trip indication, and indirect measurement of skew using encoders for controlling skew during operation. To minimize maintenance, mean-time-to-repair, and to limit dependency on PLC systems, it was recommended that control integration be achieved using SMART relays (that contain self-diagnostics) that may easily be replaced in the event of an issue.
03/18–02/20	**Charles Berry (Erie Ave) - Lorain 6 Bascule Bridge Rehabilitation - Lorain, OH:** Movable Bridge Project Coordinator for the rehabilitation of the operating and support systems for this historic double leaf deck truss bascule bridge including

	complete replacement of the drive machinery and electrical power and controls control systems. Services included review, coordination and integration of the mechanical, electrical, and structural systems, review of all shop drawings for fit-up and constructability; shop inspection of critical components; field oversight during construction for critical assemblies; verification of final alignment of machinery; shop and field acceptance testing of the electrical system installation, commissioning of the installed operating systems, strain gage operational testing and power recordings to confirm satisfactory performance of the newly installed systems, and development of the Operations and Maintenance Manual.
04/13–10/19	**Fort Madison Toll Bridge - Fort Madison, IA:** Engineer of Record and Project Manager for the rehabilitation of this double decker swing span bridge over the Mississippi in Iowa. The work has been divided into multiple phases. The first phase was the design of a new aerial and submarine power cable installation for the bridge. The new installation to be configured as redundant power sources for the bridge. The design of the submarine cable installation included all necessary surveying of the existing submarine cable, routing of the new cable as well as designing and specifying the cable. The work also included excavation requirements and developing an approved trenching system to satisfy environmental constraints. The design and contract documents were developed based on staged construction to satisfy marine, railroad and highway operations as well as satisfying Coast Guard and emergency services with respect to bridge operating outages. The engineering also involved construction services such as shop drawing review, installation inspection and testing and cut over of the completed installation.
03/10–11/17	**Sir Ambrose Shea Lift Bridge, Placentia, NL, Canada:** Engineer of Record for the design of a replacement tower drive vertical lift bridge with two duty motors and brakes in each tower and two sets of span locks. The bridge operator's control house is located at roadway level and remote from the bridge with CCTV surveillance and fiber optic communications to the towers. The PCL-based control system was designed Hot standby redundant PLC's, a human machine interface (HMI), and control console and a redundant fiber optic communications transmission backbone. The electric services are distributed to state-of-the-art intelligent MCC's located in each of the bridge towers and have internal communications capabilities and interface directly with the bridge control system PLC for bridge operation, drive monitoring and data acquisition.
06/14–06/16	**East Roundbunch Road over Cow Bayou - Orange County, TX:** Lead Electrical Engineer for design for provision of new drives, controls, and field devices for the span drive machinery and the end wedge machinery to rehabilitate this historic structure to provide long-term reliable service. Span drive machinery was comprised of components with a proven history of utilization on movable bridges and was powered by an electric motor. Design and integration of new traffic control features, bridge and maintenance lighting, and a CCTV system.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.				
Name	Yang Feng Zheng		Years of relevant experience with this employer	3
Title	Supervisor-Eng		Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization			MS / Electrical Engineering / Polytechnic Institute of NYU / 2009 BS / Electrical and Computer Engineering / Lafayette College / 2006 BS / Physics / Lafayette College / 2006.	
Active registration number / state / expiration date			***In addition to LA, Mr. Zheng is a licensed P.E. in 8 other states.***	
Year registered		Discipline	PE LA, License No.: 45341 / expires 09/30/2021	
Contract role(s) / brief description of responsibilities			Mr. Yang Zheng will serve as a senior electrical engineer for movable bridge electrical systems design, electrical inspections, field survey, and power quality testing, and troubleshooting.	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/19–ongoing	**Danziger Lift Bridge - New Orleans, LA:** Senior Electrical Engineer performing an inspection of relevant portions of the main span contributing to the reported operational issues, an in-depth inspection of the lift bridge electrical systems, and development of repairs to restore the long-term functionality and reliability of the bridge. Based on the findings from the investigation, design was provided for a new lift span skew control system that was required after existing components were removed from the bridge and cannot be relocated or replaced in kind, and for electrical controls for the clutches associated with the span drive differentials. The design is complete and implementation is pending.
06/19–ongoing	**North Coast Harbor Bascule Bridge - Cleveland, OH:** Senior Electrical Engineer for the design of the double leaf bascule bridge. The electrical design included electrical utility service, underground electrical distribution system, submarine power and control cables, motor control centers, bridge machineries, PLC control system, operator control console, field instrumentation and feedback devices, facility and auxiliary power distribution system, CCTV and security systems, bridge lighting system, and navigational aids in accordance with Coast Guard requirements. The control of the bridge consists of hydraulic power units with a simplistic Programmable Logic (PLC) based control system. This control console and CCTV system provide the operator with good visibility of the bridge operation and the navigable channel for the safe and reliable operation of the bridge.
08/15–ongoing	**3rd Street Bascule Bridge over Islais Creek - San Francisco, CA:** Senior Electrical Engineer for the design of a replacement bridge that includes design of a new electrical power and control systems to be integrated with the MUNI light rail traction power and signal system. The project started with a detailed scoping inspection including a rating assessment of the structure, mechanical, and electrical systems.

03/16–ongoing	**Vertical Lift Rehabilitations at Fairport and Spencerport - Fairport and Spencerport, NY:** Senior Electrical Engineer for the rehabilitation of all electrical drive and control components to modernize the systems and provide the appropriate safety interlocks and safeguards required of present code and will provide construction support services to include shop drawing review and response to contractor RFIs and NCRs and oversight of field testing and commissioning of the newly installed electrical operating and control systems
06/18- ongoing	**Ohio Street Lift Bridge - Buffalo, NY:** Senior Electrical Engineer for the rehabilitation of the bridge that included plans and specifications for replacement of the control system and modifications to the electrical distribution system, as well as replacement of the counterweight ropes, removal of obsolete and abandoned machinery components, and replacement of the deteriorated span drive brakes. The project commenced with a mechanical and electrical inspection to the bridge to determine the status in terms of safety, reliability, and longevity of the mechanical and electrical systems. Presently performing construction support services including review of shop drawing and mechanical installation submittals, shop inspection, field inspection and oversight of field start-up and commissioning when the new systems are installed.
10/14-07/19	**St. Peters Canal Swing Bridge Replacement - Cape Breton, NS, Canada:** Senior Electrical Engineer for the electrical design of a new center bearing, bobtail swing bridge with electro-hydraulic operating machinery to replace the existing bridge. Responsibilities included design and backchecking of design calculations plans preparation and detailing, and preparation of contract specifications and construction cost estimates during the project's design phase. Also provided services during construction including review and approval of construction submittals and shop and field inspection.
04/13-10/19	**Fort Madison Toll Bridge - Fort Madison, IA:** Senior Electrical Engineer for the rehabilitation of this double decker swing span bridge over the Mississippi. The first phase was the design of a new aerial and submarine power cable installation for the bridge. The new installation to be configured as redundant power sources for the bridge. The design of the submarine cable installation included all necessary surveying of the existing submarine cable, routing of the new cable as well as designing and specifying the cable. The work also included excavation requirements and developing an approved trenching system to satisfy environmental constraints. The design and contract documents were developed based on staged construction to satisfy marine, railroad and highway operations as well as satisfying Coast Guard and emergency services with respect to bridge operating outages. The engineering also involved construction services such as shop drawing review, installation inspection and testing and cut over of the completed installation**.**
03/10–11/17	**Sir Ambrose Shea Lift Bridge - Placentia, NL, Canada:** Assistant Electrical Engineer for the design of a replacement vertical lift bridge. Provided electrical engineering design services for the electrical power and control systems associated with the new tower drive lift bridge. The design also included pedestrian, vehicular and marine traffic control. All traffic control equipment was designed to ensure reliable operation of the bridge and minimize the down time in the event of failure. All traffic control equipment was designed in accordance with MUTCDC, CHBDC, Coast Guard requirements, and Safety codes. The work included the production of bidding documents and specifications.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Robert D. Gessel			Years of relevant experience with this employer	35
Title	Senior-Technician			Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization					
Active registration number / state / expiration date					
Year registered	2005	Discipline	ASNT NDT Level III MT & UT/expires 11/26		
			AWS Certified Welding Inspector/expires 6/22		
			AWS Certified Radiographic Interpreter/expires 5/22		
			Certified Concrete Technologist		
			Safety Inspection/In-Service Bridges (NHI 130055) (& Refresher 130053)		
			Fracture Critical Insp/Steel Bridges (NHI 130078)		
Contract role(s) / brief description of responsibilities			Mr. Gessel will serve as Lead UT and MT technician for inspections and investigations requiring nondestructive testing.		

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).
11/17–9/18 & 11/21–ongoing	**WMATA Aerial Structures, Falls Church, VA:** Lead Nondestructive Testing Technician for UT examinations of anchor rods and MT inspections of in-service welds.
11/21–2/22	**Susquehanna River Bridge, Perryville/Havre deGrace, MD:** PAUT and conventional ultrasonic evaluation of selected transfer-pins in 115 year old truss supported structure
04/21–06/21	**Indiana DOT SR 66 Bridge over I-64, Carefree, IN:** Lead Nondestructive Testing Technician for pinned hinge joints in the bridge. Included MT and visual examinations of welded pin plates, and UT examinations of transfer pins.
04/21–06/21	**Hawthorne Bridge Sheave Trunnion Examination, Portland, OR**: Project Manager for examinations of sheave trunnions in a vertical lift bridge after cracks in several trunnion journals were reported by others. Assessments were based on wet fluorescent magnetic particle and ultrasonic examinations, including thru-bore scans of critical regions.
03/21–06/21	**Hood River Bridge Sheave Trunnion Examination, Hood River, OR**: Lead Nondestructive Testing Technician for UT and MT inspections for retrofit of trunnions in vertical lift bridge. for examinations of sheave trunnions in a vertical lift bridge after cracks in several trunnion journals were reported by others. Assessments were based on wet fluorescent magnetic particle and ultrasonic examinations, including thru-bore scans of critical regions.
05/19–06/21	**Burlington Bristol Bridge Sheave Examinations, Burlington, NJ, Bristol, PA**: Lead Nondestructive Testing Technician for MT inspections of the rope track in sheaves of the vertical lift bridge.

04/19–12/19	**Jefferson Barracks Bridge over the Mississippi River, Mehlville, MO:** Following the discovery of a six-foot crack in a steel tie girder, performed MT and UT to define the length and depth of cracks. Oversaw field welding during the emergency repairs. The main navigational span is a tied-arch structure with a steel box arch and a 12-foot deep steel I-shaped tie girder.
05/19 – 08/19	**Whirlpool Rapids Bridge, Niagara Falls, ON:** Project Manager for the inspection of pinned truss connections using conventional and phased array ultrasonic testing to investigate ultrasonic indications in select pins. The Whirlpool Rapids Bridge was constructed in 1897 as a railroad bridge with a lower deck for non-rail traffic. The bridge spans the Niagara River between Niagara Falls, New York and Niagara Falls, Ontario. Nine of the transfer pins in side-span trusses were examined after indications produced in ultrasonic examinations by another firm exceeded an established threshold of the test procedure. Evaluations of the pins were based on studies of the ultrasonic response and visual inspections of the connections.
02/19 – 07/19	**Lake Shore Drive Bridge over the Chicago River, Chicago, IL:** Lead Nondestructive Testing Technician for girder fracture investigation that included stabilization and repair installation after the southeast corner of the bridge deck dropped approximately 7 inches resulting in closure of the bridge. UT of similar girder ends to determine remaining cross sections.
08/17 – 12/18	**Complex and Timber Bridges, MS**: Bridge inspection Team Leader responsible for multiple fracture critical bridge inspections and report preparations. The structures include multi-girder steel bridges with steel, concrete, or timber decks; multi-girder precast concrete with concrete decks; concrete slab bridges, and complex steel structures including pony trusses, steel girder and floor beam, and railroad flat car bridges.
11/17 – 06/18	**I-20 Valley Street Bridge, Jackson, MS:** CWI responsible for weld repair inspection and nondestructive testing during the fatigue repairs of curved parallel structures with the eastbound structure consisting of 17 spans for a total length of 1,110 feet and a westbound structure containing 20 spans for a total length of 1,285 feet.
11/14 – 01/18	**Burlington Bristol Bridge Trunnion Examination and Retrofit, Burlington, NJ, Bristol, PA**: Lead Nondestructive Testing Technician for UT and MT inspections for retrofit of trunnions in vertical lift bridge. Grinding and polishing operations completed within the fillet region of eight trunnion journals for the bridge eliminated all trunnion cracks, as well as many potential stress risers.
10/17–12/17	**Materials Testing for LADOTD Bridges, Metairie, Port Allen, and Baton Rouge, LA:** Project Engineer for materials testing projects including the removal of steel samples from the Causeway Boulevard Bridge over Earhart Expressway in Metairie, LA, to determine material strength properties and chemical composition and the removal of forty-five concrete cores from the substructure elements of select bridges along I-10 in Port Allen and Baton Rouge, LA for testing and petrographic evaluation.
03/17 – 12/17	**Iowa 136 Bridges over the Mississippi River, Clinton, IA:** Bridge inspector for routine, in-depth, element-level, fracture critical, and UT of pins for the three truss spans and approach spans.
05/17 – 10/17	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Bridge inspector for fracture critical inspection of tied arch truss bridge and approach span trusses. The truss spans have a total bridge length of 2,053 feet and support a double-deck roadway. The work was typically performed during non-peak hours to minimize the disruption to traffic. A comprehensive deck assessment was also included as part of the inspection work.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.				
Name	Curtis J. Schroeder		Years of relevant experience with this employer	3
Title	Engineer-Other		Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization			BS, 2009, Civil Engineering, Michigan Technological University MS, 2011, Civil Engineering, Purdue University PhD, 2018, Civil Engineering, Purdue University	
Active registration number / state / expiration date			***Dr. Schroeder also is a licensed PE in two other states***.	
Year registered	2021	Discipline	SE IL, License No.: 081.008638 / expires 11/2022	
Year registered	2015	Discipline	PE WI, License No.: 44013 / expires 7/2022	
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges	
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)	
			AWS Certified Welding Inspector	
			NDT Ultrasonic Technician - Level II	
			NDT Magnetic Particle Testing - Level II	
Contract role(s) / brief description of responsibilities			Dr. Schroeder will serve as a Bridge Inspection Team Leader and provide assistance with nondestructive testing, focused on phased array UT.	

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).
11/21–ongoing 06/19–07/20	**Purdue-Fort Wayne Pedestrian Bridge - Fort Wayne, IN:** Project engineer assisting with UT and PAUT inspection of CJP welds, review of repair design calculations, and visual, MT, and UT inspection of repairs. Project engineer performing load rating of cable stay bridge.
01/21–ongoing	**Chicago Skyway Bridge - Chicago, IL:** Project engineer assisting with visual inspection and load rating of primary members and gusset plates on steel deck truss bridge and steel piers.
11/21–02/22	**Susquehanna River Railroad Bridge - Havre de Grace, MD:** Project engineer assisting with UT and PAUT inspection of 45 pinned connections of deck truss railroad bridge with known indications.
01/22–01/22 05/21–06/	**SR 66 over I-64 - Carefree, IN:** Team leader for special inspection of bridge containing 18 pinned hinge connections, including visual inspection, ultrasonic testing (UT), and magnetic particle testing (MT). Assisting with development and implementation of repairs for cracked pin plate fillet welds.
09/21–12/21	**Water Street Bridge - Pittston, PA:** Project engineer assisting with UT of ten transfer pins in steel through-truss bridge.
08/21–10/21	**Black Hawk Bridge - Lansing, IA:** Project engineer assisting with UT and PAUT of 21 pinned connections in steel through truss and suspended spans. Assisted with fracture critical inspection of steel through-truss spans.

07/21–08/21	**Hernando de Soto Bridge - Memphis, TN:** Project engineer assisting with fracture investigation of tie girder and repair installation. Performed UT, PAUT, and wet fluorescent MT of fractured specimen and steel cores. Performed verification of PAUT inspection procedure. Installed strain gages for monitoring of repair installation and load testing.
03/21–08/21 05/19–09/19	**Jefferson Barracks Bridge - St. Louis, MO:** Project engineer assisting with initial fracture critical inspection of tie girder bridge and performing PAUT and MT inspection of tie girder welds during emergency repair work to estimate extent and size of cracking. Performed inspection of welded repairs as a certified welding inspector (CWI). Project engineer assisting with follow-up MT inspection of tie girder welds and review of weld repair design.
05/21–08/21 09/19–11/19	**Burlington-Bristol Bridge Sheave Inspections - Burlington, NJ:** Project engineer performing phased array ultrasonic testing (PAUT) of surface indications on thrust face of vertical lift bridge cast sheave and wet fluorescent MT inspection of cast sheaves. Assisted with development of repair recommendations.
04/21–06/21	**Hawthorne Bridge - Portland, OR:** Project engineer assisting with UT and wet fluorescent MT inspection of vertical lift bridge trunnions, including through-bore examinations.
01/21–05/21	**US 136 over Wabash River - Covington, IN:** Team leader for special inspection of a post tensioned concrete trapezoidal box girder bridge. This work included visual inspection of epoxy-injected cracks in the web wall, Ground Penetrating Radar (GPR) inspection to locate vertical shear reinforcement, and concrete core removal for testing of concrete strength.
01/21–04/21	**Franklin Street Bridge - Michigan City, IN:** Project engineer assisting with development of tread casting crack repairs and performing visual and MT inspection of field welded repairs.
09/20–01/21	**North Dakota DOT Pin and Link Inspections:** Project manager for phased array ultrasonic testing (PAUT) of 344 bridge pins on 17 bridges with both pin and hanger and pinned hinge connections.
10/20–11/20	**Eagle's Nest Bridge - Hebron, ND:** Project manager for repair of cracked pin plates at bridge pinned hinges. Developed weld repair solution and performed MT and CWI inspection of welded repairs.
08/20–11/20	**Charles Berry Bridge - Lorain, OH:** Project engineer assisting with UT inspection of bascule bridge trunnions, including through-bore examinations.
04/20–06/20	**US 6 over SR 331 - Bremen, IN:** Team leader for special inspection of bridge containing 14 pinned hinge connections, including visual inspection, ultrasonic testing (UT), and magnetic particle testing (MT). Assisted with development of repair recommendations for cracked pin plate fillet welds.
05/19–08/19 01/17–03/17	**Delaware River Bridge - Bristol, PA:** Project engineer developing PAUT inspection plan to locate weld filled holes in truss members within a gusset plate connection. Assisted with PAUT technician performance testing. (2017) Project engineer developing UT inspection plan to locate weld filled holes in truss members. Assisted with investigation of bridge member fracture.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.				
Name	Nathaniel S. Rende		Years of relevant experience with this employer	17
Title	Supervisor-Other		Years of relevant experience with other employer(s)	N/A
Degree(s) / Years / Specialization			BS, 2004, Civil Engineering, University of Illinois, Urbana-Champaign MS, 2005, Structural Engineering, University of Illinois, Urbana-Champaign	
Active registration number / state / expiration date				
Year registered	2012	Discipline	SE IL, License No.: 081-007243 / expires 11/2022	
Year registered	2014	Discipline	PE IA, License No.: 22184 / expires 12/2023	
Year registered	2016	Discipline	PE MO, License No. 2016022884 /expires 12/2022	
Year registered	2020	Discipline	PE FL, License No. 89268 / expires 2/2023	
Contract role(s) / brief description of responsibilities			Mr. Rende will provide non-destructive testing of structural elements to determine as-built conditions, material properties, and to evaluate distress and deterioration. Mr. Rende will lead NDT teams for the evaluation of concrete elements using GPR, ultrasonic-based methods, including ultrasonic tomography, and other NDE methods.	

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).
01/11–ongoing	**Prequalified monitoring consultant for Iowa DOT:** Completed over 40 projects involving the development and implementation of instrumentation/monitoring plans designed to protect buildings, culverts, sewers, and bridges adjacent to major bridge and road reconstruction projects. Instrumentation included vibration, crack, displacement and tilt monitoring. Provided blast demolition consulting services, including vibration attenuation analysis, on several projects.
03/20–ongoing	**O'Hare Airport United Baggage Handling Post-Tensioned Roof Structure, Chicago, IL:** Project Manager for the evaluation of post-tensioned (PT) roof structure supporting aircraft loading of active taxiway and gate areas. The evaluation consisted of visual inspection, non-destructive testing to determine as-built reinforcing and PT system details using ground-penetrating radar, grout void detection using shearwave tomography (MIRA), corrosion evaluation using half-cell potential mapping, inspection openings of bonded and grouted PT systems, and material sampling and laboratory testing. Condition evaluation data being used to analyze the roof structure and design retrofit repairs for increased aircraft loading.
02/18–11/18	**Completed research project for Iowa DOT titled Performance Evaluation of Recent Improvements of Bridge Abutments and Approach Backfill:** This research evaluated the effectiveness of the current approach to slab design standards in mitigating deterioration and settlement of bridge approaches. Fieldwork consisted of visual condition assessment of approach slabs and abutments and investigation of approach slab settlement using nondestructive testing

	and surveying methods. Recommended improvements to bridge approach design and construction to prevent commonly-observed deterioration mechanisms.
03/18–10/18	**Henry Hudson Bridge Deck Assessment, New York, NY:** Project Manager for field investigation of the upper level composite deck system (stay-in-place steel forms with steel grid and concrete overfill). The evaluation included visual assessment; material sampling for laboratory testing (chloride profile determination, carbonation, and petrographic evaluation); ground-penetrating radar testing; and half-cell corrosion potential mapping. Developed conceptual repair options to extend the service life of the deck and reduce future maintenance.
09/17–04/18	**Bridge Condition Assessment for I-10: LA 415 to Essen (LaDOTD Task Order H.004100.2-1, PO No. 2-306790):** Led field and laboratory efforts involving nondestructive testing, concrete core sampling, and petrographic evaluation and laboratory testing of concrete samples to identify potential long-term degradation issues.
10/17–12/17	**Materials Testing for LADOTD Bridges, Metairie, Port Allen, and Baton Rouge, LA:** Project Engineer for materials testing projects including the removal of steel samples from the Causeway Boulevard Bridge over Earhart Expressway in Metairie, LA, to determine material strength properties and chemical composition and the removal of forty-five concrete cores from the substructure elements of select bridges along I-10 in Port Allen and Baton Rouge, LA for testing and petrographic evaluation.
01/16–07/16	**Ramp Structures A and D of I-55/64 Poplar Street Complex, East St. Louis, IL:** Completed condition assessment of structures, which include 16 framing units consisting of two, three, four, and five span, two-girder systems and single span, multi-girder systems. Inspection and analysis of the deck, superstructure, and substructure of the structures were performed. Performed concrete assessment, corrosion testing, and ground-penetrating radar testing of deck and substructure elements.
05/13–07/14	**Slip Formed Bridge Parapet Research and Design Improvements, Various locations, IA and IL:** Completed research study on the applicability of using NDT methods for the assessment of construction-related defects and corrosion of doweled connections within slip formed bridge parapets for the Iowa and Illinois transportation departments. Recommended methods and testing procedures for use during quality assurance and acceptance processes during construction and for future parapet condition surveys. WJE developed testing procedures and performed trial-testing of slip formed and cast-in-place barriers on several in-service bridges and barriers. Mr. Rende led the research and laboratory and field testing specific to evaluation of the applicable NDT methods.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Robert J. Firman			Years of relevant experience with this employer	10
Title	Supervisor-Other			Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS, 2010, Civil Engineering, Bucknell University MS, 2011, Structural Engineering, Purdue University		
Active registration number / state / expiration date					
Year registered	2015	Discipline	PE DC, License No.: PE908229 / expires 8/2022		
Year registered	2015	Discipline	PE VA, License No.: 0402054441 / expires 5/2023		
Year registered	2020	Discipline	PE MD, License No.: 55574 / expires 1/2024		
Year registered	2015	Discipline	PE NJ, License No.: 25GE05240800 / expires 4/2022		
			NHI 130055 - Safety Inspection of In-Service Bridges		
			Transportation Worker Identification Credential (TWIC)		
Contract role(s) / brief description of responsibilities			Mr. Firman will serve as Bridge Inspection Team Leader and provide nondestructive testing expertise for steel and concrete structures.		

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).
11/21–ongoing	**Grand Parkway Project – Houston, TX:** Project engineer as part of a team involved in routine inspection and load rating of bridges, culverts, overhead sign structures, high-mast structures, and MSE retaining walls.
07/19–ongoing	**Danziger Lift Span Bridge, US 90, over the Industrial Canal, New Orleans, LA:** Project Engineer for the inspection of portions of the lift span contributing to reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the bridge's long-term functionality and reliability. Assisted in the installation of instrumentation and monitoring equipment to evaluate the bridge's operations over an extended period. Assisted with development of plans and specifications to address emergency repairs including the installation of polyester polymer concrete lift span orthotropic deck overlay repairs, and improving the lift span seating by counterweight movements and air buffer repairs. Bridge monitoring is ongoing.
03/19–ongoing	**Montana DOT Bridge Deck Instrumentation, - Butte, MT:** Project Engineer for bridge deck cracking consulting services. Responsibilities included document review, visual inspections, instrumentation, laboratory testing, and finite element modeling. The instrumentation system consists of embedded vibrating wire strain gages, relative humidity sensors, and temperature sensors to measure early-age strains and temperatures of a concrete bridge deck after placement.
2015–ongoing	**Metrorail Elevated Structures - Washington, DC:** Project Engineer responsible for performing non-destructive testing (e.g., visual, magnetic particle, and ultrasonic testing of welded joints and anchor rods), destructive testing (e.g., concrete core

	sampling and inspection openings), and developing a stary current instrumentation system. Responsibilities have also included evaluating via ultrasonic testing and repairing a rolling defect in steel box girder.
1/21 – 4/21	**Pencoyd Bridge Philadelphia, PA:** Project engineer as part of a team involved in performing an in-depth inspection of a privately-owned, fracture critical steel truss bridge. The work included a hands-on inspection consistent with FHWA, NBIS, and PennDOT standards and guidelines.
08/17–01/19	**Mississippi Bridge Inspection and Load Rating - MS:** Project Engineer for the inspection and evaluation services on selected bridges throughout the state of Mississippi. Bridges included fracture critical steel girder bridges and/or elements, movable span, timber, and truss bridges. Following inspections, WJE prepared Bridge Inspection Reports that documented the inspection findings, summarized element level and fracture critical data, and presented results of any required load ratings.
10/17–02/18	**I-64 Over Kanawha River Pier Assessment - Nitro, WV:** Project Engineer for the condition assessment of the concrete piers supporting the I-64 Bridge over the Kanawha River responsible for document review, field investigation, materials testing, and concrete service life modeling. The field assessment included crack density surveys, non-destructive testing (e.g., reinforcement cover surveys, half-cell potential testing, and relative humidity testing), and destructive testing (e.g., concrete core sampling for materials testing).
07/17–09/17	**North Carolina East End Connector Concrete Evaluation - Durham, NC:** Project Manager responsible for performing non-destructive testing via ground penetrating radar (GPR) of concrete pavement to identify internal voids after placement.
01/15–06/16	**Nottoway Reservoir Bridge - Nottoway County, VA:** Project Manager and lead Project Engineer for the condition assessment of the Nottoway Reservoir Bridge. Responsible for performing document review, visual observations, acoustic sounding, non-destructive testing, materials testing, fatigue life assessment, and concrete service life assessment. WJE's assessment was incorporated into a larger feasibility project aimed at determining whether the existing bridge needs to be repaired or replaced in order to accommodate plans for future use of the bridge.

16. **Staff Experience:**

Firm employed by	Wiss, Janney, Elstner Associates, Inc.				
Name	Douglas D. Crampton		Years of relevant experience with this employer	22	
Title	Principal		Years of relevant experience with other employer(s)	0	
Degree(s) / Years / Specialization			BS, 1998, Civil Engineering, University of Illinois, Urbana-Champaign MS, 2000, Civil Engineering, University of Texas at Austin		
Active registration number / state / expiration date			***In addition to the S.E. below, Mr. Crampton is a licensed P.E. in 6 states.***		
Year registered	2004	Discipline	SE IL, License No.: 081-006108 / expires 11/2022		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)		
Contract role(s) / brief description of responsibilities			Mr. Crampton will serve as a Bridge Inspection Team Leader and Load Rating Engineer.		

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).
05/20–ongoing	**New Harmony River Bridge, New Harmony, IN:** Project Manager for project to re-open bridge. Work so far has included a limited routine and fracture critical inspection, including rope access and use of an unmanned aerial vehicle (drone), as-constructed load ratings, and an underwater inspection of the four through truss span structure. Prepared summary report and assisted bridge commission with prioritizing work.
08/20–ongoing	**On-Call Load Rating Contract with Indiana Department of Transportation:** Project Manager for LRFR and LFR load rating of over 100 structures to date. Structures include complex in-service bridges, design review for rehabilitation and new structures, and structures with condition change due to deterioration or collision.
06/09–ongoing	**Consultant Program Manager Services, Glencoe, IL:** Project Manager for routine inspection of four bridges, monitoring of various conditions, prioritized repair recommendations.
09/19–ongoing	**Vehicular and Pedestrian Bridge Inventory, Lake Forest, IL:** Project Manager for inspection of bridge inventory and development of maintenance program with prioritized repairs. Design drawings completed for replacement of two structures.
03/17–11/17	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Project Engineer for routine, in-depth, and fracture critical inspection of double-decker steel truss conventional lifts and climbing techniques. Repair of cracked stringers and MT/UT evaluation of fatigue-sensitive details, and coring of deck for service-life studies.
08/15–11/16	**I-65 and SR-46 Cable-Stayed Bridges, Columbus, IN:** Project Engineer for fracture critical inspection of two cable stay bridges. MT/UT evaluation of fatigue-sensitive details, and coring of deck for service-life studies.
04/19–11/19	**Jefferson Barracks Bridge over the Mississippi River, Mehlville, MO:** Project Engineer and Inspection Team Leader for routine NBI and fracture critical inspections of the twin tied-arch structures with multi-girder approach spans during with a six-foot crack in a steel tie girder was discovered. Performed an in-depth inspection of similar details, obtained material

	samples for laboratory testing, and coordinated emergency repairs. Each of the two structures consists of fourteen approach spans and one 910-ft long navigational span. The main navigational span is a tied-arch structure with a steel box arch and a 12-foot deep steel I-shaped tie girder.
08/18– 03/19	**Interstate I-5 Southbound Bridge over the Columbia River, Portland, OR:** Project Manager for detailed analysis and load rating of the main lift-span truss, two tower-span trusses, one navigational span truss, and the seven approach span trusses in order to improve the calculated load rating for previously-identified deficient members. The bridge consists of a sixteen-span superstructure. Eleven of the sixteen spans are through-truss structures, which were the focus of these load rating revisions.
07/18–12/18	**US 77 Veterans Bridge over the Mississippi River, Sioux City, IA:** Project Manager for routine, in-depth, fracture critical, and element-level inspections of tied-arch main span and multi-girder approach spans. The bridge consists of one steel tied-arch span and seven steel multi-girder approach spans: three continuous welded plate girder approach spans on the Nebraska (south) side totaling 482 feet, a 425-foot long tied-arch span, and four continuous welded plate girder approach spans on the Iowa (north) side totaling 592 feet.
05/13– 08/18	**US 34 Great River Bridge over the Mississippi River, Burlington, IA:** Project Manager for load rating analyses of the cable-stayed main span, transverse steel box hinge, multi-girder steel approach spans, and multi-girder PPC approach spans after performing routine, fracture critical, in-depth, and element level inspections in previous years. Also included was an inspection of selected stay cable live and dead end anchorages, measurements of main span bearings, and an investigation of concrete cracking problems on the main span pylon using rope access techniques. A follow up project was performed to investigate the crack in the main span pylon. Maintenance recommendations were developed to increase the durability of the concrete in the main span pylon.
08/17 – 04/18	**CTA Structures, Chicago, IL:** Project Manager for NBIS inspection and load rating services of three concrete and steel structures within the Chicago Transit Authority right-of-way which required special access to inspect the structures.
06/17–11/17	**Iowa 92 Bridge over the Mississippi River, Muscatine, IA:** Project Manager for routine, in-depth, and fracture critical inspections of the through truss, two-girder, and pre-cast-prestressed beam spans. The bridge consists of one steel through-truss main span, four approach spans that utilize a two-girder steel structure, and nineteen approach spans comprised of precast-prestressed concrete beams.
07/16–09/18	**Fracture Critical Inspections for IDOT District 1, Cook County, IL:** Project Manager for NBIS, fracture critical, and element-level inspections of through-truss bridges, including detailed documentation of section loss, load rating of deteriorated members, and design repairs. Included were inspections of fatigue-sensitive framing details. A barge-mounted aerial telescoping lift was used for inspections of structures over the Cal-Sag Channel and the Sanitary & Ship Canal to minimize disruptions to traffic. Each fracture critical member was visually inspected at arm's length and included physical measurement as necessary to assist in the characterization of the member geometry and condition. Detailed member and gusset plate measurements were performed, including section loss measurements, in order to perform a load rating and/or implement steel plate repairs for these elements.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Andrew R. Bishop			Years of relevant experience with this employer	6
Title	Supervisor-Other			Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS, 2014, Civil Engineering, University of Illinois, Urbana-Champaign MS, 2015, Civil Engineering, University of Illinois, Urbana-Champaign		
Active registration number / state / expiration date					
Year registered	2021	Discipline	SE IL, License No.: 081008640 / expires 11/2022		
Year registered	2019	Discipline	PE IL, License No. 062.071579 / expires 11/2023		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges		
Contract role(s) / brief description of responsibilities			Mr. Bishop will serve as a Bridge Inspection Team Leader and Load Rating Engineer.		

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).
08/20–ongoing	**On-Call Load Rating Contract with Indiana Department of Transportation:** Load Rating Engineer for LRFR and LFR load rating of over 100 structures to date. Structures include complex in-service bridges, design review for rehabilitation and new structures, and structures with condition change due to deterioration or collision.
04/19–ongoing	**Jefferson Barracks Bridge over the Mississippi River, Mehlville, MO:** Project Engineer and Bridge Inspector for routine NBI and fracture critical inspections of the twin tied-arch structures and multi-girder approach spans. Following the discovery of a six-foot long crack in the steel tie girder, performed an in-depth inspection of similar details, obtained material samples for laboratory testing, performed structural analysis, and coordinated emergency repairs.
02/16–ongoing	**Poplar Street Complex Bridges, East St. Louis, IL:** Project engineer and bridge inspector for fracture critical and in-depth inspections of several spans of two-girder steel superstructure. Also performed were concrete coring of the substructure and deck, steel superstructure load rating, preparation of repair drawings, and construction administration services.
10/21–12/21	**US 34 Great River Bridge over the Mississippi River, Burlington, IA:** Project Engineer and Bridge Inspector for Fracture critical, in-depth, and arms-length inspection performed on non-redundant steel elements of the bridge superstructure subject to tension, including floor beams and portions of the edge girders in the stay cable spans, and a welded box girder.
09/21–11/21	**I-10/I-310 Bridge Fire Response, Kenner, LA:** Project engineer and bridge inspector for emergency load ratings precast prestressed concrete beam bridge damaged by fire and the follow-up scoping inspection for repairs.
07/19–07/21	**Consultant Program Manager Services, Glencoe, IL:** Project Engineer and Bridge Inspection Team Leader for routine inspection of four bridges, monitoring of various conditions, prioritized repair recommendations.

05/19–05/21	**Vehicular and Pedestrian Bridge Inventory, Lake Forest, IL:** Project Engineer and Bridge Inspection Team Leader for inspection of bridge inventory and development of maintenance program with prioritized repairs. In-depth inspections included material sampling for compression and chloride tests as well as other non-destructive testing. Design drawings have been completed for replacement of two structures.
01/21– 02/21	**US 136 over the Wabash River, Covington, IN:** Special inspection included arms-length visual inspection of concrete surfaces and appurtenances on the interior of the trapezoidal concrete box girder cells, detailed shear crack mapping, ground penetrating radar mapping, and removal and compressive strength testing of concrete core samples.
06/16–10/20	**Truss Bridges Over Calumet-Sag Channel, Cook County, IL:** Project Engineer and Bridge Inspector for inspection of four truss bridges for the Illinois Department of Transportation. Repair drawings were prepared for one of the structures.
12/19–01/20	**US 12 (Indianapolis Blvd) over Lake George Canal, East Chicago, IN:** Project Engineer for load rating of bascule girders, floor beams, anchors, and approach span girders for legal and heavy permit vehicles.
08/19–11/19	**Iowa 926 Bridge over the Des Moines River, Fort Dodge, IA:** Project Engineer and Bridge Inspector for in-depth and fracture critical inspections of a truss bridge, including an element-level inspection.
08/18–03/19	**Interstate I-5 Southbound Bridge over the Columbia River, Portland, OR:** Project Engineer for detailed analysis and load rating of the main lift-span truss, two tower-span trusses, one long-span (navigational span) truss, and the seven approach span trusses in order to improve the calculated load rating for previously identified deficient members.
09/18–11/18	**US 61 Bridge over the Mississippi River, Dubuque, IA:** Project Engineer and Bridge Inspector for routine NBI and fractural critical inspections of a tied-arch main span and several steel beam and steel girder approach spans.
05/17–06/18	**IL 83 over the Calumet-Sag Channel, Cook County, IL:** Project Engineer and Bridge Inspection Team Leader for fracture critical inspection and preparation of repair drawings for a truss bridge for the Illinois Department of Transportation
06/17– 11/17	**IA 92 over Mississippi River, Muscatine, IA:** Project Engineer and Bridge Inspector for fracture critical inspection of truss, two-girder, and precast multibeam superstructure systems
03/16– 07/17	**Leo Frigo Bridge, Green Bay, WI:** Project Engineer for analysis of steel tied arch bridge to determine adequacy of members upon removing select suspender cables
05/16–11/17	**Ferry Hall Bridge, Lake Forest, IL**: Project Engineer and bridge inspector for the investigation of concrete slab bridge failure, including deck and retaining wall coring, followed by deck replacement design and construction administration services.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.				
Name	Adam T. Werntz		Years of relevant experience with this employer	3
Title	Engineer-Intern		Years of relevant experience with other employer(s)	
Degree(s) / Years / Specialization			BS, 2017, Civil Engineering, University of Illinois, Urbana-Champaign MS, 2019, Civil Engineering, University of Illinois, Urbana-Champaign	
Active registration number / state / expiration date				
Year registered		Discipline	EIT.IL.061040032	
			NHI 130055 - Safety Inspection of In-Service Bridges	
			Society of Professional Rope Technicians/ Level I	
Contract role(s) / brief description of responsibilities			Mr. Werntz will serve as a Bridge Inspector with technical rope access inspection capabilities.	

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).
12/19–ongoing	**Load Ratings for Bridges with Inadequate Rating Factors, Oregon:** Project Engineer and Load Rating Engineer of steel, concrete, and timber bridges and culverts.
10/21	**US 34 Great River Bridge over the Mississippi River, Burlington, IA:** Project Engineer for in-depth and arms-length inspection of substructure elements and cable anchorages utilizing rope access techniques, including the center pylon and tie-down pier components.
05/20–08/20	**New Harmony River Bridge, New Harmony, IN:** Project Engineer for project to re-open bridge. Work so far has included a limited routine and fracture critical inspection, including rope access and use of an unmanned aerial vehicle (drone), as-constructed load ratings, and an underwater inspection of the four through truss span structure. Prepared summary report and assisted bridge commission with prioritizing work.
11/19	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Project Engineer for the in-depth and fracture critical inspections of the tied arch truss bridge and approach span trusses and preparation of summary inspection report with recommendations. The truss spans have a total bridge length of 2,053 feet and support a double-deck roadway. The inspection was performed using a combination of lifts positioned on the bridge deck, an underbridge inspection vehicle, and industrial rope access techniques.
10/19–11/19	**I-74 Suspension Bridges over the Mississippi River, Bettendorf, IA:** Project Engineer for in-depth and arms-length inspection of suspension cables, steel pylons, cable anchorages, and abutments.
10/19	**SR-46 Cable-Stayed Bridge, Columbus, IN:** Project Engineer for fracture critical inspection of cable-stayed bridge, including cables, cable anchorages, and floor system.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	William G. Rosenblatt		Years of relevant experience with this employer	6	
Title	Engineer Intern		Years of relevant experience with other employer(s)	0	
Degree(s) / Years / Specialization			BS, 2016, Architectural Engineering, California Polytechnic State University MS, 2016, Architectural Engineering, California Polytechnic State University		
Active registration number / state / expiration date					
Year registered	2015	Discipline	EIT.CA.156117		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges		
			Society of Professional Rope Technicians/ Level I		
Contract role(s) / brief description of responsibilities			Mr. Rosenblatt will serve as a Bridge Project Engineer and technical rope access inspection lead.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/21–ongoing	**Skyway Toll Bridge over the Calumet River – Chicago, IL:** Project Engineer and Team Leader for in-depth inspection of deteriorated steel piers for the purpose of performing a load rating and for developing repairs. Inspection consisted of removing corrosion product to bare steel, measuring section loss with hand tools, and performing detailed section loss measurements using UT. Connection layouts and detailed field measurements were also recorded and inputted into WJE's Plannotate tablet-based inspection tool for post-processing. Refined analysis techniques were used to evaluate gusset plates and members, and repair drawings were developed for members identified as deficient.
02/20–ongoing	**Oregon Department of Transportation Load Rating Refinement:** Project engineer for load rating refinements of bridges and culverts with deficient rating factors.
09/19, 09/20-01/21, ongoing	**Perrine Bridge Mitigation - Twin Falls, ID:** Project Engineer for detailed corrosion assessment and load rating of steel truss arch bridge. Work consisted of removing corrosion product within spandrel columns and performing detailed section loss measurements to assist with refined load ratings. Accessing interstitial spaces between diaphragms was performed by coring holes through the diaphragms to permit access. Access was done using swing-stages and industrial rope access. Subsequent detailed load ratings were performed for the areas of distress, as well for the entire bridge.
09/20, 11/21	**Baxter Cable Stay Building Inspection – Deerfield, IL:** Project engineer for inspection of a cable-stayed building-structure using industrial rope access. Inspection of approximately 100 spelter sockets were conducted from arms-length by ascending the steel cables. Detailed extension and pullout measurements of the spelter sockets were recorded for comparison for future inspections.

11/19, 09/21	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Project Engineer for the in-depth and fracture critical inspections of the tied arch truss bridge and approach span trusses. Using MT, a limited number of connections were inspected. The inspection was performed using a combination of lifts positioned on the bridge deck, an under bridge inspection vehicle, and using industrial rope access techniques.
06/21–07/21	**New Harmony Toll Bridge over the Wabash River– Crossville, IL:** Project Engineer for project to re-open bridge. Work so far has included a limited routine and fracture critical inspection, including rope access and use of an unmanned aerial vehicle (drone), as-constructed load ratings, and an underwater inspection of the four through truss span structure. Prepared summary report and assisted bridge commission with prioritizing work.
08/17, 05/21	**Iowa 136 over the Mississippi River - Clinton, IA:** Project Engineer for in-depth, element-level, and fracture-critical inspection of steel multi-girder, steel 2-girder, and steel truss bridge. Follow-up work consisted of detailing and installing CIF repairs and performing MT.
11/19	**I-74 Iowa-Illinois Memorial Suspension Bridge – Bettendorf, IA:** Project engineer for special inspection of floor beam and stringers of truss approach spans using industrial rope access. Using MT, crack like indications at stringer ends were identified and recorded for future repair scope.
07/17–01/19	**Mississippi Complex Bridge Inspections - Various Counties, MS:** Project Engineer and for inspection and load rating of in-service deteriorated timber, steel, and concrete bridges. Load ratings were primarily done using CSI SAP2000. Inspections were performed utilizing WJE's Plannotate tablet-based inspection tool. The inspection information was then converted for input into MDOT's InspectTech report system.
10/18–01/19	**Sunshine Bridge over the Mississippi River, St. James Parish, LA:** Project Engineer for the development of a structural analysis model, incorporating a jacking system, using SAP2000. The jacking system provided the redistribution of loads during the installation of repairs to the truss bottom chord damaged by impact. After development of the structural analysis model was complete, the model was used to corelate the behaviors recorded by the monitoring system, during jacking operations.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Jarkko T. Simonen			Years of relevant experience with this employer	17
Title	Supervisor-Other			Years of relevant experience with other employer(s)	
Degree(s) / Years / Specialization			BS, 2002, Civil Engineering, Auburn University MS, 2004, Civil Engineering, University of Texas at Austin		
Active registration number / state / expiration date					
Year registered	2008	Discipline	PE TX, License No. 121144PE / expires 03/2022		
Year registered	2010	Discipline	PE OR, License No. 84299PE / expires 06/2022		
Year registered	2011	Discipline	PE WA, License No. 47945 / expires 11/2022		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			NHI 130055 - Safety Inspection of In-Service Bridges (& Refresher 130053)		
			Society of Professional Rope Technicians/ Level III		
Contract role(s) / brief description of responsibilities			Mr. Simonen will serve as a Bridge Inspection Team Leader and technical rope access inspector.		

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).
02/21–ongoing	**Oahu Bridge Inspections - Various, HI:** Project Manager, Bridge Inspection Team Leader, and Difficult Access Team Lead for inspection of in-service deteriorated timber, steel, and concrete bridges.
10/21–12/21	**U.S. 34, Great River Bridge, over the Mississippi River, Burlington, IA:** SPRAT level III Inspection Team Leader for the fracture critical and in-depth inspection for the structure, which consists of a two-span steel multi-girder Iowa approach unit, a three span cable stayed and steel multi-girder main river crossing, and a five span precast prestressed concrete multi-beam Illinois approach unit.
09/19–10/19	**Julian Dubuque, over the Mississippi River, Dubuque, MO:** Inspection Team Leader and SPRAT level III Difficult Inspection Team lead for the fracture critical and in-depth inspection for the structure, which consists of a two span double tied arch bridge.
10/18–02/19	**Railroad Bridge, over the Missouri River, Kansas City, MO:** Project Manager and Inspection Team Leader for the fracture critical and in-depth inspection for the structure, which consists of a multi span steel truss with double girder approach spans.
07/17–01/19	**Mississippi Complex Bridge Inspections - Various Counties, MS:** Project Engineer, Bridge Inspection Team Leader, and Difficult Access Team Lead for inspection of in-service deteriorated timber, steel, and concrete bridges
05/18–07/18	**3rd Avenue Bridge - Minneapolis, MN:** Bridge Inspection Team Leader. Project Engineer
05/17–10/17	**I-64 Sherman Minton Bridge over the Ohio River, New Albany, IN:** Difficult access inspector for the in-depth and fracture critical inspections of the tied arch truss bridge and approach span trusses. The truss spans have a total bridge length of

	2,053 feet and support a double-deck roadway. The inspection was performed using a combination of lifts positioned on the bridge deck, an underbridge inspection vehicle, and industrial rope access techniques. The work was typically performed during non-peak hours to minimize the disruption to traffic. A comprehensive deck assessment was also included as part of the inspection work.

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Lucas A. Malm		Years of relevant experience with this employer	13	
Title	Supervisor-Other		Years of relevant experience with other employer(s)		
Degree(s) / Years / Specialization			BS, 2006, Civil Engineering, Purdue University MS, 2008, Structural Engineering, University of Michigan		
Active registration number / state / expiration date					
Year registered	2011	Discipline	PE MN License No. 49031 / expires 6/2022		
Year registered	2014	Discipline	PE WI License No. 43389-6 / expires 7/2022		
Year registered	2019	Discipline	PE IA License No. P25311 / expires 12/2022		
			Society of Professional Rope Technicians/ Level III		
Contract role(s) / brief description of responsibilities			Mr. Malm will serve as a Bridge Inspection Team Leader and technical rope access inspection lead.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/19 and 10/21	**Indiana SR-46 Bridge, Columbus, IN:** Project Engineer performing structure climbing, rigging descent lines, and belaying for fracture critical steel bridge inspection
09/21	**Sherman Minton Bridge, New Albany, IN:** Project Engineer performing structure climbing for fracture critical steel bridge inspection
06/21	**Skyway Bridge, Chicago, IL:** Project Engineer performing structure climbing and rappelling steel bridge for detailed gusset section loss documentation
07/20	**Third Avenue Bridge, Minneapolis, MN:** Project Engineer performing rigging and structure climbing of concrete bridge
06/20	**New Harmony Bridge, New Harmony, IN:** Project Engineer performing structure climbing for steel bridge inspection
09/19	**Julien Dubuque Bridge, Dubuque, IA**: Project Engineer performing structure climbing, rigging descent lines, and belaying for fracture critical steel bridge inspection
07/17-01/19	**Mississippi Complex Bridge Inspections - Various Counties, MS:** Project Engineer and Difficult Access Team Lead for inspection of in-service deteriorated timber, steel, and concrete bridges.
10/18	**Hannibal Bridge, Kansas City, MO:** Project Engineer performing structure climbing, rigging descent lines, and belaying for steel bridge inspection

16. **Staff Experience:**

Firm employed by Wiss, Janney, Elstner Associates, Inc.					
Name	Daniel A. Gach		Years of relevant experience with this employer	22	
Title	Supervisor-Other		Years of relevant experience with other employer(s)		
Degree(s) / Years / Specialization			BS, 1998, Architectural Studies, University of Illinois at Urbana-Champaign MS, 2000, Architectural Studies, University of Illinois at Urbana-Champaign		
Active registration number / state / expiration date					
Year registered	2006	Discipline	Architect CO License No. 401297 / expires 10/2023		
Year registered	2007	Discipline	Architect IL License No. 001019981 / expires 10/2022		
			NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges		
			Society of Professional Rope Technicians/ Level III		
Contract role(s) / brief description of responsibilities			Mr. Gach will oversee technical rope access inspections and provide QA for these inspections.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/18–10/18	**Hannibal Bridge over the Missouri River, Kansas City, MO:** Provided SPRAT Level 3 Supervision and rigging for the fracture critical inspection of the steel structure.
05/16–05/16	**Hood River White Salmon Interstate Bridge over the Columbia River, Hood River, OR and White Salmon, WA:** Provided SPRAT Level 3 Supervision and rigging for the rope access portion of the fracture critical inspection of the truss bridge with a vertical lift.
09/15–10/15	**Julienne Dubuque Bridge, US 20 over Mississippi River, Dubuque, IA:** Provided SPRAT Level 3 Supervision and rigging for the fracture critical inspection of the through truss bridge
01/11–02/11	**Bridge of the Americas, Panama City, Panama:** Provided SPRAT Level 3 Supervision and rigging support for evaluation of steel bridge structure and concrete piers for the 5,427-feet long bridge over Pacific Ocean entry to the Panama Canal

16. **Staff Experience:**

<table>
<tr><td colspan="6">Firm employed by Wiss, Janney, Elstner Associates, Inc.</td></tr>
<tr><td>Name</td><td colspan="3">Stephen W. Foster</td><td colspan="2">Years of relevant experience with this employer</td><td>12</td></tr>
<tr><td>Title</td><td colspan="3">Supervisor-Other</td><td colspan="2">Years of relevant experience with other employer(s)</td><td>6</td></tr>
<tr><td colspan="4">Degree(s) / Years / Specialization</td><td colspan="3">BS, 2008, Architectural Engineering, University of Texas at Austin
MS, 2010, Architectural Engineering, University of Texas at Austin</td></tr>
<tr><td colspan="4">Active registration number / state / expiration date</td><td colspan="3"></td></tr>
<tr><td>Year registered</td><td>2013</td><td>Discipline</td><td colspan="4">PE TX License No. 116280 / expires 9/2022</td></tr>
<tr><td>Year registered</td><td>2018</td><td>Discipline</td><td colspan="4">PE FL License No. 86065 / expires 2/23</td></tr>
<tr><td>Year registered</td><td>2014</td><td>Discipline</td><td colspan="4">SE AZ License No. 58400 / expires 9/2023</td></tr>
<tr><td colspan="3" rowspan="5"></td><td colspan="4">Transportation Worker Identification Credential (TWIC)</td></tr>
<tr><td colspan="4">NACE Certified Cathodic Protection Technician</td></tr>
<tr><td colspan="4">NACE Certified Corrosion Technician</td></tr>
<tr><td colspan="4">NACE Certified Coating Inspector - Level 2</td></tr>
<tr><td colspan="4">NHI 130078 - Fracture Critical Inspection Techniques of Steel Bridges</td></tr>
<tr><td colspan="4">Contract role(s) / brief description of responsibilities</td><td colspan="3">Mr. Foster will serve as a coating and corrosion expert.</td></tr>
<tr><td>Experience dates (mm/yy–mm/yy)</td><td colspan="6">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).</td></tr>
<tr><td>03/19–ongoing</td><td colspan="6">Cathodic Protection System Evaluations and Monitoring, Corpus Christi, TX, Project Engineer and Manager: Mr. Foster serves as Project Manager and a Project Engineer performing visual assessments at the Park Road 22, US 181, and Oso Bay bridges. The intent of the assessments was to determine locations and quantify condition in CP systems, including thermal spray metalized coatings; conduct half-cell potential testing, electrical testing, and metalizing evaluation to assess metallized and fiberglass jacketed CP systems; and collect samples for laboratory and petrographic examination.</td></tr>
<tr><td>11/18–ongoing</td><td colspan="6">Port of Houston - Corrosion Management Program, Houston, TX, Project Manager, Engineer, and Team Lead: Mr. Foster served as a Project Manager, Engineer, and Team Lead for the development and implementation of a corrosion management (CM) program to supplement the Facility Inspection and Condition Assessment Program (FICAP) previously developed by WJE. FICAP assists PHA with asset management by providing structural and functional condition ratings for their maritime assets. The CM program characterizes the current condition and expected future performance of corrosion protection elements, including all protective coatings, and corresponding base metals using prescribed inspection and condition assessment procedures. Mr. Foster led the inspection and condition assessments of three wharfs. Field measurements involved corrosion potential surveys, current readings, coating thickness and adhesion testing, and thickness measurements of metals.</td></tr>
</table>

5/16–2/21	**Bay County Water Treatment Plant (WTP) – Trains 1 and 2 Condition Assessment and Repair, Panama City, FL, Project Manager and Engineer, Coatings and Corrosion**– Mr. Foster served as a Project Engineer performing visual observations of reported leakage and deterioration at Trains 1 and 2 of the WTP. Testing services included encompassed both destructive and nondestructive evaluation methods, such as: coating system adhesion testing, reinforcement and cover depth surveys, in-situ half-cell potential testing, material sampling and carbonation testing, petrographic examination, chloride ion content testing, and rapid chloride penetration (RCP) testing. Based on the findings of the assessment, Mr. Foster developed repair drawings and specifications, including repair of coating systems and joints.
6/18–8/20	**Queen Isabella Causeway (QIC) - In-Depth Assessment of Cathodic and Corrosion Protection Systems, South Padre Island, TX, Project Engineer, Coatings and Corrosion:** Mr. Foster served as the Project Engineer, leading WJE's efforts to assess the existing corrosion and cathodic protection (CP) systems installed at the QIC. With particular focus on the current performance and expected remaining service life of the existing CP systems, Mr. Foster performed visual observations to identify, locate, and quantify distress for eventual repairs; evaluation of metallized and fiberglass jacketed CP systems, including use of half-cell potential testing, corrosion rate testing.
9/13–2/17	**East Roundbunch Swing Bridge – Assessment of Historic Bridge, Orange County, TX, Project Engineer Coatings**– Mr. Foster served as a Project Engineer, performing the review of existing coating systems, specifications of new coatings, including metalizing and galvanizing, and construction administration and consulting during installation of new coatings.
10/16–2/17	**US87 Bridge Assessment, Big Spring, TX, Project Engineer, Coatings:** WJE performed an assessment of the 6-span steel superstructure bridge, including a visual inspection of deck, superstructure, substructure, backwalls, and wingwalls. The assessment included a detailed, arms-length inspection of structural steel elements using an under-bridge access vehicle (snooper) and an evaluation of steel coating system, including remaining thickness on steel members and pull-off adhesion testing at select locations. Mr. Foster was the lead coatings investigator and developed recommendations and specifications for coating repair and replacements. (Project Engineer)

16. **Staff Experience:**

Firm employed by Forte and Tablada, Inc.				
Name	Russell Joseph "Joey" Coco, Jr. P.E.		Years of relevant experience with this employer	14
Title	President/CEO		Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization			BSCE / 2000 / LSU MBA / 2006 / LSU Coastal Engineering Certificate / 2008 / Old Dominion University	
Active registration number / state / expiration date			31337 / LA / 09/30/2022	
Year registered	2004	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Principal-in-Charge of Forte and Tablada's portion of the scope	

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).
03/18–ongoing	**LA DOTD Retainer Contract for Off-System Bridge Load Rating – Statewide, LA** – QA/QC review engineer for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 –Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 –Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
03/14–03/17	**Load Rating of On-System Bridges – Statewide, LA** – LA DOTD – QC/QA review engineer for over 200 slab span and girder bridges across Louisiana. Utilized Virtis load rating software.
06/16–04/20	**St. Tammany Parish Off-System Bridge Load Ratings, St. Tammany Parish, LA** – QC/QA review engineer for the data collection, inspection, and load rating of numerous slab span, girder, and railcar bridges in St. Tammany Parish.
11/16–10/20	**Livingston Parish Off-System Bridge Load Ratings – Livingston Parish, LA** – QC/QA review engineer for the inspection and load rating of numerous existing slab span bridges and culverts in Livingston Parish In accordance with FHWA Metric 13, which requires a current load rating of all Off-System bridges.
04/11–10/16	**Iberville Parish Bridge Ratings and Prioritization – Iberville Parish, LA** – Served as a project engineer for continued off-system bridge ratings, repairs, and repair/replacement prioritization recommendations for Iberville Parish.
05/19–09/19	**H.000303.6-Danziger Bridge Rehabilitation - Orleans Parish, LA** - Principal overseeing survey investigation of Danziger Bridge. Included laser scanning and comparison of actual conditions to original plans.
10/18–12/18	**4400010587- Sunshine Bridge Repair- St. James Parish, LA**- LADOTD- Principal overseeing topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord.

05/17–10/18	**Belle Chasse Bridge and Tunnel Replacement Hydrographic Survey- Plaquemines Parish, LA**- Principal-in-charge for comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
11/19–11/20	**S.P. No. H.012083.5- Calcasieu River Bridge Investigation- Calcasieu Parish, LA**- LADOTD- Principal overseeing laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA.
08/19–ongoing	**H.011670-I-10/Loyola Interchange Improvements - Kenner, LA** – Principal-in-Charge overseeing Topographic Survey, Right-of- Way Survey, and Drainage Survey. The project stretches from the levee in Kenner to the Williams Blvd. off ramp, as well as Loyola Avenue and portions of Veterans Blvd.
11/18–04/19	**H.011684.5-LA 327 Spur: Staring Lane Extension – East Baton Rouge Parish** – Principal-in-Charge for comprehensive topographic surveying services and developing a drainage map for the Staring Lane Extension project for LA DOTD. Included in this work was a survey performed utilizing traditional methods and terrestrial laser scanning of roadway surfaces.
01/10–12/12	**I-10: Siegen Lane to Highland Road Design Build ITR — East Baton Rouge Parish, LA** – LA DOTD – Served as leader of Independent Technical Review of all bridge structures.
09/17–12/19	**S.P. No. H.011808.5- Palmetto Co. Canal Bridge - St. Landry Parish, LA** - Principal-in-Charge to provide property surveys, title take-offs, and right-of-way map services for the removal and replacement of a timber trestle bridge that spans Bayou Des Glaises, located along La. Hwy. 10 in St. Landry Parish near the town of Palmetto, La.
01/09–12/10	**I-12: O'Neal Lane to Range Road Design Build ITR – East Baton Rouge Parish, LA** – LA DOTD – Served as leader of Independent Technical Review of all bridge structures.
01/09–12/10	**S.P. Nos. 454-01-0047 & 454-02-0025- I-12: O'Neal Lane to Range Road Design Build ITR – East Baton Rouge Parish, LA** – LA DOTD – Served as leader of Independent Technical Review of all bridge structures.
03/15–02/18	**Holly Drive Bridge Replacement, St. Tammany Parish, LA** – Served as a project principal for an existing timber bridge replacement in St. Tammany Parish.
03/15–07/15	**Bossier Parish Bridge Priority Study, Bossier Parish, LA** – Served as the project manager and engineer for prioritizing the repair and maintenance of twelve bridges owned by Bossier Parish Police Jury.
11/14–09/19	**Railroad Bridge Replacement, Plaquemines, LA** – Served as a project principal for the replacement of an existing railroad bridge structure in an industrial plant.
12/14–11/15	**Westdale Road Bridge over Bayou Pierre, DeSoto Parish, LA** – Served as a project principal for laser scanning, inspection, and repair plans for an existing closed bridge.

16. **Staff Experience:**

Firm employed by Forte and Tablada, Inc.					
Name	Joffrey Easley, M.S., P.E			Years of relevant experience with this employer	14
Title	Project Manager			Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization			BSCE / 2000 / LSU MSCE / 2003 / LSU		
Active registration number / state / expiration date			31542 / LA / 03/31/2023		
Year registered	2004	Discipline	Civil Engineering		
Contract role(s) / brief description of responsibilities			Project Engineer		

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).
03/18-ongoing	**LA DOTD Retainer Contract for Off-System Bridge Load Rating – Statewide, LA** – Project Manager, Load Rating Engineer, and Team Leader for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 – Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
03/14-03/17	**Load Rating of On-System Bridges – Statewide, LA** – LA DOTD – Load rating engineer for over 200 slab span and girder bridges across Louisiana. Utilized Virtis load rating software.
05/16-10/19	**Retainer Contract for Complex Bridge Rating, Statewide, LA**- LA DOTD- Project Manager to perform a load rating for the US 90 West Middle River Bridge near the Louisiana/Mississippi border. A detailed inspection of the steel through-trusses was also provided.
06/16-04/20	**St. Tammany Parish Off-System Bridge Load Ratings, St. Tammany Parish,** LA - Project Manager to collect all available bridge files from all available resources, including LADOTD and Parish records, for numerous slab span, girder, and railcar bridges in St. Tammany Parish and perform inspections and load ratings for the bridges.
11/16-10/20	**Livingston Parish Off-System Bridge Load Ratings – Livingston Parish, LA** – Inspection and load rating of numerous existing slab span bridges and culverts so that Livingston Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated.
04/18-09/18	**Tangipahoa Parish Off-System Bridge Load Ratings – Tangipahoa Parish, LA** – Inspection and load rating of 2 railroad flatcar bridges and a slab span bridge to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.
05/20-07/20	**St. James Parish Off-System Bridge Load Rating – St. James Parish, LA** – Inspection and load rating of a slab span bridge to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.
08/19-02/20	**LA DOTD Retainer for In-Depth Bridge Inspections – Simmesport, LA** – Inspection of the approach spans, consisting of rolled steel and plate girder spans supported by column bents, of the LA 1 bridge over the Atchafalaya River.

04/11-10/16	**Iberville Parish Off-System Bridge Load Ratings and Prioritization – Iberville Parish, LA** – Inspection and load rating of 42 existing off-system bridges so that Iberville Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated. Also developed a repair and replacement report for all bridges.
12/12-ongoing	**Cook Road Expansion** – Designed and produced plans for new bridges over Gray's Creek to provide additional access to the Juban Crossing shopping center by extending Cook Road off of Pete's Highway. Bridge includes special details to accommodate sidewalks for pedestrian use.
10/18 - 5/19	**H.000445.1-1- US 190 over UPRR and Little Teche Bayou, St. Landry Parish, LA** - Project Engineer for this project that developed a scoping document for the replacement or rehabilitation of the EB and WB US 190 bridges over the Union Pacific Railroad (UPRR) near I-49 and over Little Teche Bayou in St. Landy Parish, LA. Based on the findings, a Bridge Evaluation Report outlining the feasibility and preliminary cost estimates for several construction phasing alternatives, as well as a recommended scope of work, was developed.
11/14-08/16	**Westdale Road over Bayou Pierre Repairs – DeSoto Parish, LA** – Inspected, laser scanned, developed plans, and provided construction administration services for the repairs of a timber bridge that had been closed due to its deteriorated condition. Provide a load rating following the completion of the repairs. Repairs allowed the bridge to be re-opened to vehicular traffic.
01/16 - 01/21	**Whittington Road Bridge Replacement – Livingston Parish, LA** – Design engineer for the replacement of an existing timber bridge over Grays Creek with a new concrete slab span bridge through the LADOTD off-system bridge replacement program.
12/13-05/14	**Million Dollar Road Bridge Rating – St. Tammany Parish, LA** – Served as a rating engineer for load rating of a slab span bridge in St. Tammany Parish. Utilized Virtis load rating software.
06/15-06/16	**East Baton Rouge Parish Bridge** Replacements – Provided design services and load rated multiple slab span bridges that incorporated sidewalks. Design services included determination of pile loads, superstructure and substructure design, and independent technical review of completed plans.
05/13-12/14	**Musson Lane Bridge Replacement, Iberville Parish, LA** – Performed a detailed structural inspection and load rating of the existing bridge constructed of precast concrete spans and timber caps and piles. Developed plans and specifications for the replacement of the existing bridge with a new precast concrete slab span bridge.
02/13-11/14	**2012 Livingston Parish Bridge Replacement Program** – Replacement of seven bridges with precast concrete slab spans and precast concrete arch bridges in an effort to improve drainage. Reviewed final plans and designed precast concrete arch bridge substructures.

16. **Staff Experience:**

Firm employed by Forte and Tablada, Inc.					
Name	Levi Yantis, P.E		Years of relevant experience with this employer	7	
Title	Project Manager		Years of relevant experience with other employer(s)	2	
Degree(s) / Years / Specialization			BSCE / 2013 / LSU		
Active registration number / state / expiration date			42390 / LA / 09/30/2022		
Year registered	Civil Engineering	Discipline	Civil Engineering		
Contract role(s) / brief description of responsibilities			Project Engineer / Bridge Inspector		

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).
02/22-ongoing	**Ascension Parish Load Ratings – Ascension Parish, LA** – Team leader for the inspection of Ascension Parish owned bridges. Also serving as the lead load rating engineer for the bridges after inspection.
01/22-ongoing	**Mall of Louisiana Boulevard Modified Bent Redesign – East Baton Rouge Parish, LA –** Redesigning a bent cap that had a pile misdriven during PDA. Pile load checks and a modified bent load rating were performed also.
03/18-ongoing	**LA DOTD Retainer Contract for Off-System Bridge Load Rating – Statewide, LA** – TO1 – Led and assisted in 12 complex moveable bridge inspections and load ratings throughout the state. The bridge types included a single leaf bascule span, a vertical lift truss span, several steel vertical lift spans, multiple pontoon bridges, a steel plate girder swing bridge, a small steel truss/cable swing span, and a non-moveable steel truss. Task Order 2 – Led and supervised the load ratings of 200 off-system slab span bridges throughout the state of Louisiana. To avoid posting bridges lower than necessary, bridge inspections were done for several bridges that had severe deterioration noted in their inspection reports to collect additional deterioration measurements to accurately determine the bridge member's load carrying capacity. Task Order 5 – Load testing and refined load rating analysis of slab span bridges and culverts that previously received low or closed load postings.
03/21-10/21	**TDOT Complex and Standard Bridge Load Ratings – Statewide, TN** - Oversaw a team of load raters performing 35 AASHTOWare BrR load ratings in 4 months and was responsible for the quality control of the model inputs and outputs, troubleshooting bridge models, and assisting in load ratings. The bridge types load rated using AASHTOWare BrR software were prestressed I-beams and box girders, reinforced concrete multi-cell box bridges, reinforced concrete T-beams, continuous steel plate girders, and steel girder-floorbeam-stringer systems.
01/20-10/21	**LA DOTD Retainer for Complex In-Depth Bridge Inspections – Statewide, LA** – Served as Team Leader for the structural, mechanical and electrical in-depth inspections for multiple movable bridges. Bridge types included vertical lift span bridges and steel swing bridges (through girders and through trusses). Also served as the task manager for preparing the in-depth inspection reports. There was also a task order under this contract to perform emergency repairs on an US 71 Bridge in Shreveport, LA. Led the superstructure design for the emergency repairs.

01/20-10/21	**Florida Department of Environmental Protection (FDEP), Palatka Trail Pedestrian Bridge** - Served as lead structures designer for a two-span, 210' structure over US-601. The two-span structure includes the design of FIB concrete girders with an intermediate hammerhead pier, pile supported stub abutments and wrap-around MSE retaining walls.
01/20-12/20	**TDOT Complex Bridge Load Ratings – Statewide, TN** – This project was to load rate a total of 41 complex bridges within a short time period to help the State meet a critical FHWA Deadline. Levi was involved in the quality control process of multiple bridge load ratings.
06/16-04/20	**St. Tammany Parish Off-System Bridge Load Ratings, St. Tammany Parish, LA** – Led and assisted in bridge inspections and served as the load rating engineer for bridges throughout the parish of St. Tammany. The bridge types include slab spans, prestressed girder spans, and bridges constructed from retired railroad flatcars.
05/16-10/19	**Retainer Contract for Complex Bridge Rating, Statewide, LA- LA DOTD** – Bridge inspector and load rater for a through truss bridge over a branch of the Pearl River. The bridge consisted of 3 pony truss spans and reinforced concrete T-beams and was load rated utilizing AASHTOWare BrR, Leap Bridge Concrete and Mathcad software.
11/18-12/18	**Port of New Orleans, St. Claude Avenue Bridge Permit Load Rating, New Orleans, LA** - Performed a permit load rating for an overload vehicle to safely pass the single bascule span on St. Claude Avenue.
03/14-03/17	**LA DOTD Load Rating of On-System Bridges – Statewide, LA – LA DOTD** – Assisted in load rating of approximately 200 existing bridges across the state of Louisiana. Bridges range from slab span bridges on local roads to elevated curved steel interstate bridges in metropolitan areas.
12/17-ongoing	**Cook Road Expansion** – Slab span superstructure and pile bent substructure design. Also assisted in the bridge plan development.
12/13-05/14	**Million Dollar Road Bridge Rating – St. Tammany Parish, LA** – Assisted in the field inspection of the bridge and carried out the structure's substructure load rating.

16. **Staff Experience:**

Firm employed by Forte and Tablada, Inc.					
Name	Bradley S. Holleman, P.L.S., E.I.		Years of relevant experience with this employer	1	
Title	Senior Vice President, Survey/Advanced Measurements & Modeling		Years of relevant experience with other employer(s)	214	
Degree(s) / Years / Specialization			BSCE /2009 / Civil Engineering		
Active registration number / state / expiration date			5082 / LA / 9/30/2022		
Year registered	2015	Discipline	Land Surveying		
Contract role(s) / brief description of responsibilities			Surveyor		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/12–09/12	**H.009456 – Tchefuncte River Bridge** – Surveyor-in-Charge for the topographic survey and existing drainage map. This project was for a bridge replacement over the Tchefuncte River in Tangipahoa Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
01/13–09/13	**H.009489 Jefferson Highway Overpass** - Surveyor-in-Charge for the bridge monitor survey, topographic survey and existing drainage map. This project was monitoring and the overpass replacement of Jefferson Highway over Airline Highway in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
07/13–10/13	**I-12 to Bush Route La 3241 Survey Control –** Surveyor-in-Charge for setting the primary static control and digital levels for future phases of the project. This project was for the construction of a new connecting route from Interstate 12 to Bush Louisiana. The work consisted of setting deep rod monuments along the proposed route and conducting over 40 miles of digital levels between the deep rod monuments.
09/13–03/14	**H.002375 Amite River Bridge Near French Settlement** – Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for constructing a new bridge over Amite River in French Settlement Louisiana to the replace the existing swing bridge. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
09/14-02/15	**H.011158 LA 3139** – Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for constructing a replacement span because of a damaged girder on the LA 3139 overpass over I-10. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.

12/14–03/16	**H.011137 & H.011152 I-12 (LA 21 to LA 59), St. Tammany Parish, LA**– Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for widening of Interstate 12 from LA 21 to La 59 in St. Tammany Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
09/15-11/15	**H.011923 Hooper Road Roundabout at Sullivan Road –** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for construction of a roundabout at Hooper Road and Sullivan Road in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
06/16-02/17	**H.000263 Chef Menteur Pass Bridge** - Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for the design of new bridge to replace the existing swing bridge on US 90 over Chef Menteur Pass. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
03/17-03/18	**H004987 US 190 Collins Blvd, St. Tammany Parish, LA -** Surveyor-in-Charge for the topographic survey, 3D laser scanning and existing drainage map. This project was for the design of capacity improvements on US 190 in Covington. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
05/18-11/18	**I-10: Loyola Interchange Improvements, Kenner, LA** - Surveyor-in-Charge for the control survey, utility survey and 3D mobile laser scanning. This project was for the design of new exit for the New Orleans Airport. The work consisted of completing a utility and control survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths that fell within the survey limits.
06/20-12/20	**4400017597 DOTD Rural Bridge Replacement** - Surveyor-in-Charge for the topographic survey. This project was for design of multiple bridge replacements throughout south Louisiana. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.
01/18 – 04/20	**H.004100 I-10: LA 415 to Essen Lane -** Surveyor-in-Charge for the topographic survey and 3D Mobile laser scanning. This project was for the widening design of Interstate 10 from LA 415 to Essen Lane in East Baton Rouge Parish. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits.

16. **Staff Experience:**

Firm employed by Forte and Tablada, Inc.			
Name	Brent M. Campbell	Years of relevant experience with this employer	8
Title	Advanced Measurements and Modeling Technician	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S. / 2013 / Construction Management	
Active registration number / state / expiration date			
Year registered		Discipline	
Contract role(s) / brief description of responsibilities		Advanced Measurements and Modeling	

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).
9/21	**Westbank Closure Complex Multi-Beam Hydrographic Survey, Belle Chasse, LA**- Utilizing a shallow draft vessel equipped with advanced multi-beam sonar equipment, Forte and Tablada performed a comprehensive survey extending bank-to-bank of the station and beyond the protection fenders for a global depiction of scour. Scour results were presented in a color ramped elevation map, as well as imagery showing the presence of debris on an intake screen. Brent served as Advanced Measurements technician for the project.
1/20 - 10/20	**H.012588, H.012169, H.012587 I-10: Atch Basin Br-W. Baton Rouge P/L, I-10: Iberville P/L-W End Miss Br, I-10: W End of Br 290-W End of LA 415- West Baton Rouge & Iberville Parishes-** AMM Technician for complete topographic survey, approximately 18.3 miles, from the East end of the Atchafalaya Bridge to the West end of the I-10/LA 415 Interchange.
10/19-10/20	**H.012485.1- Inspection of Metal Culverts- Statewide, LA**- Laser scanning technician to provide inspections and data acquisition for approximately 230 culvert locations statewide. Culvert measurements were acquired with a mixture of 3-D laser scanning, sonar, and LIDAR.
12/19 – 9/20	**H.011970- Bayou Terrebonne Bridges** – Responsible for laser scanning the Bayou Terrebonne bridge along with the entire intersection and adjacent roads.
05/19-09/19	**H.000303.6- Danziger Bridge Rehabilitation, Orleans Parish, LA**- Laser scanning and project technician for survey investigation of Danziger Bridge. Included laser scanning and comparison of actual conditions to original plans.
05/17-10/18	**H.004791.5- Belle Chasse Bridge and Tunnel Replacement Hydrographic Survey- Plaquemines Parish, LA**- Responsible for laser scanning for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
11/19 – 12/20	**H.012083- Calcasieu River Bridge Investigation, Calcasieu Parish, LA-** Laser scanning and project technician to provide laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA. Terrestrial scans were done underneath the

	bridge for 10 spans on the East and West side, on top the deck to capture the superstructure, as well as from the water below to capture the sub structure. In addition to the terrestrial scans, mobile Lidar was done for future planning.
1/22- On going	**Hat Creek Permit Survey, Bossier Parish, LA**- Advanced Measurements technician for UAV based aerial LiDAR and hydrographic surveys to provide plan and profile plans for permitting purposes. The project included flying approximately 200 acres on the Red River to provide a bare earth model to our engineers. This method allowed us to rapidly capture survey grade data versus traditional survey methods. A hydrographic survey of the Red River was performed using a sonarmite mounted on a shallow water vessel due to the low levels of the river. This hydrographic survey data was also provided to our engineers where it was integrated with the aerial LiDAR to provide the client with plan and profile plans for permit applications.
10/21- On going	**Merryville Aerial LiDAR, Beauregard Parish, LA** – Advanced Measurements technician for UAV based aerial LiDAR to quickly capture the site topography. The project included flying approximately 175 acres in Merryville, LA to provide a bare earth model to our engineers. Due to the projects tight schedule constraints, we were able to do an initial topo survey of the site in a single day, then produce a surface model and contours for our engineers two days later. The surface model was used for preliminary site design and drainage flow characteristics.
11/18-04/19	**LA 327 Spur: Staring Lane Ext. Route LA 327-S- East Baton Rouge Parish, LA**- Responsible for laser scanning between the intersections of La 42 (Burbank Dr.) and Staring Ln. and La 327 (Gardere Ln.) and La 30. A complete Topographic survey including all utilities with depths and all drainage was required, along with finish floor elevations of all buildings that fall within the survey limits.
02/17-03/18	**H.010753.5 – US 90 / I-310 Interchange – St. Charles Parish, LA – LA DOTD** – Project Technician responsible for topographic surveying and 3-D laser scanning at the intersection of US90 and I-310 in St. Charles Parish. This project will allow improvements for safety and efficiency. The complete topographic survey includes all utilities with depths and all drainage required along with finish floor elevations of all buildings that fall within the survey limits.
8/14-ongoing	**H.004273.5 -I-49 Connector – Lafayette Parish, LA – LA DOTD** – Responsible for laser scanning services for the I-49 Connector. The project is in a dense urban area and is approximately 5 miles long. Forte and Tablada, Inc. completed laser scanning services for much of the congested corridor as a means to obtaining topographic data without endangering surveyors.
01/13-12/13	**H.009933 MacArthur Interchange Project Phase 1B – Orleans Parish, LA – LA DOTD** – Responsible for laser scanning general areas in support of topographical survey including location and elevation surveys, for redundancy and volume.
01/13-03/13	**H.009250 I-10 (Highland to LA 73) – East Baton Rouge and Ascension Parishes, LA – LA DOTD** – Responsible for laser scanning of several bridges overpassing I-10, and extracting/coding survey coordinates and alignments. Also determined minimum horizontal and vertical clearances.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Chace Hulon, PE, ADCI			Years of relevant experience with this employer	7
Title	Program Manager and NBIS Team Leader			Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization			BS / 2005 / Civil Engineering / Norwich University, Vermont		
Active registration number / state / expiration date			Professional Engineer: 39701 / LA / Exp. 09/30/23		
Year registered	2015	Discipline	Civil Engineer, Environmental Engineer		
Contract role(s) / brief description of responsibilities			NBIS Team Leader/ ADCI-certified Dive Supervisor / SPRAT Rope Access Technician. Mr. Hulon will fulfill MPR 4 as an underwater imaging expert.		

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).
11/19 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** MN Project Manager and Team Leader for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of both cable-stayed bridges in Louisiana (Audubon and Luling) with rope access techniques to inspect a total of 208 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques. Performed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles.
01/20 - ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** MN Project Manager and Team Leader for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed and lead the structural, mechanical, and electrical inspections of six (6) movable bridges utilizing detailed, nondestructive and laboratory testing methods with hand sketches.
09/14 - ongoing	**LADOTD IDIQ for Statewide NBIS Underwater Bridge Inspection, Louisiana.** Project Director and Team Leader for the third cycle of contracts in which we have performed 1,375 underwater bridge inspections statewide. Bridge types included movable bridges, long-span bridges with caissons and deep foundations, timber bridges with multiple bents in the water, culverts and multi-span bridges up to 14 miles in length. Assisted DOTD with several emergency response requests within hours utilizing local team members.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Mike Russell, EIT		Years of relevant experience with this employer	1	
Title	NBIS Team Leader and Rope Access Supervisor		Years of relevant experience with other employer(s)	11	
Degree(s) / Years / Specialization			BS / 2015 / Civil Engineering, Central Connecticut University		
Active registration number / state / expiration date			Engineer-in-Training: #35255 / TN		
Year registered		Discipline	Civil Engineer		
Contract role(s) / brief description of responsibilities			NBIS Team Leader / SPRAT Rope Access Supervisor-Level III / FAA Remote Drone Pilot		

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).
08/21 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspections, Louisiana.** Team Member, Drone Operator, and Rope Access Supervisor for one of the current five-year retainer contracts (2019-2024) as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on fracture critical members and UAS drone access techniques on columns, secondary members and connections. Responsible for inspecting the steel substructure units utilizing fall protection techniques and a work boat platform with a rope access safety management plan. Responsible for inspecting the lower chord of the main span steel arched through truss utilizing fall protection and rope access techniques. Responsible for working together with other supervisors and team leaders on site to communicate the hazards and mitigation techniques for safe operations and rescue pre-plans. Documented field notes and sketches utilizing traditional methods amenable to the project team leader for standardized report processing. Organized electronic files per the quality management plan and reviewed the draft report for consistency and accuracy.
04/19 – ongoing	**LADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana.** Team Leader and Rope Access Supervisor for both five-year retainer contract to perform over 1700 sign truss inspections throughout Louisiana, including the Orleans District along this corridor. Lead the development of the new Sign Truss Inspection Program by implementing policies and standard operating procedures. Managed and utilized the fall protection safety program with rope access techniques and rescue plans. Lead the development of an application for an internal tablet-based inventory management system. Non-destructive testing was performed on all anchor rods at all cantilever structures, base plates with excessive standoff distances, and where deficiencies were observed at steel and aluminum welds. Managed the QC report review process and the QA field and office review process. Managed and planned the Temporary Traffic Control plans and setups for lane closures throughout the state along with all of the District traffic engineers. Analyzed altered load paths.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Steven Armstrong, PE, ADCI		Years of relevant experience with this employer	7	
Title	NBIS Team Leader		Years of relevant experience with other employer(s)	2	
Degree(s) / Years / Specialization			BS / 2005 / Civil and Environmental Engineering / University of New Orleans MS / 2019 / Civil Engineering / University of New Orleans		
Active registration number / state / expiration date			Professional Engineer: 44405 / LA / Exp. 09/30/22		
Year registered	2020	Discipline	Civil		
Contract role(s) / brief description of responsibilities			NBIS Team Leader / FAA Remote Drone Pilot / SPRAT Rope Access Technician / ADCI-certified Diver		

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).
11/19 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** Team Member for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of the Audubon cable-stayed bridge with rope access techniques to inspect a total of 136 cables, the HDPE protection, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge (New Bridge) completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed draft inputs and consolidated notes from multiple teams to present proper data consistently throughout the report.
1/20 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** Team Member for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed the structural inspections of six (6) movable bridges along with the M&E team. Utilized nondestructive UT methods to accurately document section loss in fracture critical members. Performed draft inputs and consolidated notes from multiple teams to present proper data consistently throughout the report.
09/15 – ongoing	**LADOTD IDIQ for Statewide Underwater Bridge Inspection Retainer Contract, Statewide**. NBIS Team Leader for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Responsible for leading underwater inspection teams to complete field work, inspection reports, and quality control reviews. Bridge types inspected consisted of movable bridges, truss bridges, timber stringer bridges, cable-stayed bridges, and single and multi-span girder bridges up to fourteen miles in length. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol			
Name	Jeffrey Gazarek, ADCI	Years of relevant experience with this employer	6
Title	NBIS Team Leader and Safety Officer	Years of relevant experience with other employer(s)	14
Degree(s) / Years / Specialization		Commercial Diving with Concentration in Subsea Inspection / 2005 / Divers Institute of Technology	
Active registration number / state / expiration date		N/A	
Year registered	Discipline		
Contract role(s) / brief description of responsibilities		NBIS Team Leader / Safety Officer / Equipment Manager / SPRAT Rope Access Technician / ADCI-certified Diver	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/15 – ongoing	**LADOTD IDIQ for Statewide Underwater Bridge Inspection Retainer Contract, Statewide**. NBIS Team Leader for the third cycle of contracts in which we have performed 1,375 underwater bridge inspections statewide. Responsible for leading dive operations for underwater inspection teams to complete field work, writing inspection reports, and performing quality control reviews. Bridge types inspected consisted of movable bridges, truss bridges, timber stringer bridges, cable-stayed bridges, and single and multi-span girder bridges up to fourteen miles in length. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions.
04/16 – ongoing	**LADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana.** Team Leader and Rope Access Supervisor for both five-year retainer contracts to perform approximately 40% 1700 sign truss inspections throughout Louisiana. Utilized the fall protection and rope access techniques with rescue plan development. Performed non-destructive testing on all anchor rods at all cantilever structures, base plates with excessive standoff distances, and where deficiencies or impacts were observed at steel and aluminum welds. Drafted and reviewed inspection reports per the quality management plan. Monitored the TTC lane closures and reviewed the TTC plans for over 10 lane closures throughout the state.
11/19 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** Team Member for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspection of the I-10 Horace Wilkinson Bridge (New Bridge) completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol			
Name	Christopher (Chip) Eschenbach	Years of relevant experience with this employer	4
Title	NBIS Team Member	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization		Associates / 2015 / Welding Technology	
Active registration number / state / expiration date		N/A	
Year registered	Discipline		
Contract role(s) / brief description of responsibilities		NBIS Underwater Inspector / SPRAT Rope Access Technician / ADCI-certified Diver	

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).
11/19 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** NBIS Team Member for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of both cable-stayed bridges in Louisiana (Audubon and Luling) with rope access techniques to inspect a total of 208 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques. Performed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's.
1/20 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** NBIS Team Member for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed and lead the structural, mechanical, and electrical inspections of six (6) movable bridges utilizing detailed, nondestructive and laboratory testing methods with hand sketches. Hands-on management and implementation of the QC/QA plan is vital to the continued success of this project.
08/18 – ongoing	**LADOTD IDIQ for Statewide Underwater Bridge Inspections, LA**. Bridge Inspector for bridges in district 62. Responsibilities included the underwater portion of the bridge inspection. Tasks for inspection of said bridges included inspection of all underwater members, gathering sediment depths around bridges, listing any additional defects not listed in previous reports, taking photos and updating current information on each bridge. Responsibilities for the job compiled of equipment preparations, driving the truck and company boat, diving on bridges and assisting with the inspection and data collection for the bridges above the water. The diving operations were conducted from the Baton Rouge pontoon boat using surface-supplied diving or scuba diving techniques to ensure safe practices as well as clear and precise notations.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Joshua Martinez, PE, ADCI			Years of relevant experience with this employer	7
Title	NBIS Team Leader and Diver			Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization			BCE / 2009 / Structural Engineering, United States Air Force Academy MCE / 2013 / Structural Engineering, North Carolina State University		
Active registration number / state / expiration date			Professional Engineer: 42085 / LA / 3/31/22		
Year registered	2013	Discipline	Civil		
Contract role(s) / brief description of responsibilities			NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified Diver		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/17 – ongoing	**LADOTD IDIQ for NBIS Underwater Bridge Inspection Retainer Contract, Statewide.** NBIS Team Leader for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions. Responsible for leading underwater inspection teams to complete field work, inspection reports, and quality control reviews.
09/13 – 06/17	**LADOTD 2013 NBIS Underwater Bridge Inspection Retainer Contract, Statewide.** NBIS Inspector for the previous five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Responsible for underwater inspection field work, inspection reports, and quality control reviews. UAI techniques were utilized to locate structural deficiencies, identify potential undermining, observe the limits of scour, and document the limits of riprap installations.
03/17 – 08/19	**Statewide Topside Inspection of Bridges for the North Carolina Department of Transportation, North Carolina.** NBIS Team Leader responsible for topside inspection of bridges. Inspected single and multi-span bridges as well as concrete, steel, and timber. Mr. Martinez was responsible for rating the overall bridge condition and determining critical maintenance items per state requirements. He also developed and generated reports rating to the element base level. Mr. Martinez familiarized himself with several inspection vehicles including a bucket truck, snooper, and under-bridge platform. He served as engineer reviewer for reports to ensure accuracy and proper rating per National Highway Institute (NHI) guidance.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Charles Balzarini, PE		Years of relevant experience with this employer	9	
Title	NBIS Team Leader and Diver		Years of relevant experience with other employer(s)	7	
Degree(s) / Years / Specialization			BS / 2008 / Civil Engineering, University of Alaska, Anchorage		
Active registration number / state / expiration date			Professional Engineer: 13854 / AK / Exp. 12/31/2023		
Year registered	2013	Discipline	Civil		
Contract role(s) / brief description of responsibilities			NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified Diver		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/17 – ongoing	**LADOTD IDIQ for NBIS Underwater Bridge Inspection Retainer Contract, Statewide.** NBIS Team Leader for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions. Responsible for leading underwater inspection teams to complete field work, inspection reports, and quality control reviews.
11/19 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana**. NBIS Team Leader for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of the Luling cable-stayed bridge in New Orleans with rope access techniques to inspect a total of 72 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques.
04/16 – ongoing	**LADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana.** Team Leader for both five-year retainer contracts to perform approximately 40% 1700 sign truss inspections throughout Louisiana. Utilized the fall protection and rope access techniques with rescue plan development. Performed non-destructive testing on all anchor rods at all cantilever structures, base plates with excessive standoff distances, and where deficiencies or impacts were observed at steel and aluminum welds. Hands-on inspection work was performed overhead by bucket truck and climbing on active highways. Aluminum and steel sign truss members were inspected for inventory and for structural defects in accordance with FHWA guidelines. Drafted and reviewed inspection reports per the quality management plan. Monitored the TTC lane closures and reviewed the TTC plans for over 10 lane closures throughout the state.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Matthew Balzarini, PE		Years of relevant experience with this employer	4	
Title	NBIS Team Leader and Diver		Years of relevant experience with other employer(s)	5	
Degree(s) / Years / Specialization			BS / 2011 / Civil Engineering, University of New Orleans		
Active registration number / state / expiration date			Professional Engineer: 118893 / AK / Exp. 12/31/23		
Year registered	2017	Discipline	Civil		
Contract role(s) / brief description of responsibilities			NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified Diver		

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).
11/19 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** NBIS Team Leader Member for one of the current five-year retainer contracts as a major subconsultant to HNTB, contracted to perform in-depth bridge inspections on complex, signature, long-span bridges throughout Louisiana. Performed the inspections of both cable-stayed bridges in Louisiana (Audubon and Luling) with rope access techniques to inspect a total of 208 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of the I-10 Horace Wilkinson Bridge completely utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of the GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of the Green Bridge, a steel tied arch in New Orleans utilizing rope access techniques. Performed the inspection of the I-10 Bridge over the Calcasieu River in Lake Charles utilizing rope access on FCM's and UAS access techniques on columns.
06/18 – ongoing	**LADOTD IDIQ for NBIS Underwater Bridge Inspection Retainer Contract, Statewide.** NBIS Team Leader and Team Member for the current five-year retainer contract to perform Levels I, II, and III underwater bridge inspections in accordance with NBIS and AASHTO Manual for Bridge Element Inspection. Site conditions included salt and fresh waters, with varying levels of current, having low to no visibility. UAI techniques were utilized to locate structural deficiencies and identify bottom conditions. Responsible for leading underwater inspection teams to complete field work, inspection reports, and quality control reviews.
07/18 – ongoing	**LADOTD IDIQ for Statewide Ancillary Sign Inventory and Inspection, Louisiana.** Team Leader for both five-year retainer contracts to perform approximately 10% 1700 sign truss inspections throughout Louisiana. Utilized the fall protection and rope access techniques with rescue plan development. Performed non-destructive testing on all anchor rods at all cantilever structures, base plates with excessive standoff distances, and where deficiencies or impacts were observed at steel and aluminum welds. Drafted and reviewed inspection reports per the quality management plan. Monitored the TTC lane closures and reviewed the TTC plans for over 10 lane closures throughout the state.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Margaret Ray, PE		Years of relevant experience with this employer	5	
Title	NBIS Team Leader		Years of relevant experience with other employer(s)	5	
Degree(s) / Years / Specialization			BS / 2016 / Civil Engineering / North Carolina State		
Active registration number / state / expiration date			**Professional Engineer:** 051540/ North Carolina/ 12-31-22		
Year registered	2020	Discipline	Civil		
Contract role(s) / brief description of responsibilities			NBIS Team Leader		

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).
11/21 – ongoing	**LADOTD IDIQ for Statewide In-Depth Bridge Inspection, Louisiana.** Team Member for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, contracted to perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges throughout Louisiana. Performed the structural inspection of one movable swing span bridge utilizing nondestructive testing methods with hand sketches. Assisted with planning and logistics. Responsible for drafting the in-depth inspection report that included the mechanical and electrical inspections.
08/17 – ongoing	**Bridge Inspection Limited Services Contract No. 7000016518, NCDOT Statewide, North Carolina.** Responsible for the inspection and load rating of state and municipal bridges in various locations of North Carolina. Ms. Ray also provides project management support and coordinates traffic control and equipment needs for multiple inspection teams. Served as an inspection team member who conducted safety inspections of assigned bridges and prepared written reports of the conditions of the structures. Recorded structure ratings and degrees of deterioration in the WIGINS bridge inspection database. Created and updated bridge and culvert location maps to ensure accuracy. Performed in-depth inspections using non-destructive testing methods, under bridge inspection equipment and climbing gear.
3/21 – 7/21	**Route 301 Infrastructure Assessment and Cost Estimate, Caroline and King George Counties, VA.** Structural engineer responsible for compilation and summarization of structural and environmental assessment findings, recommendations, and element condition states for 13 bridges and 9 culverts. Analyzed assessment findings of bridge decks to determine repair recommendations for the bridges using Virginia Department of Transportation Chapter 32 guidance. Created cost estimates for all culvert repair and replacement recommendations.
10/18-08/19	**Freight & Logistics On-Call Railroad Contract, Statewide, TN.** Bridge inspector involved with assessment of the short line railroads across the state by hi-railing along the track to assess 518 bridges and provide a high-level cost estimate to bring the structures to an appropriate state of good repair. Responsible for the final construction inspection and report on the Caney Fork and Western bridge replacement near Morrison, Tennessee.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol					
Name	Martin Anderson, PE			Years of relevant experience with this employer	2
Title	NBIS Team Leader and Diver			Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization			BS / 2016 / Civil Engineering / North Carolina State		
Active registration number / state / expiration date			Professional Engineer: C92553/ California / 09/30/2023		
Year registered	2020	Discipline	Civil		
Contract role(s) / brief description of responsibilities			NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified Diver		

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).
05/20 – 07/20	**LaDOTD IDIQ for Statewide Underwater Bridge Inspection Contract, LA.** NBIS Team Leader and diver on the current five-year retainer contract to perform underwater bridge inspections throughout Louisiana, including 100 percent visual inspections of submerged elements in accordance with National Bridge Inspection Standards (NBIS) requirements. Involved with the production and review of reports.
02/21 – 05/21	**LADOTD IDIQ for Statewide Inventory and Inspection of Sign Trusses, LA**. NBIS Team Leader for the current five-year retainer contract to perform approximately 5% of the 1700 overhead sign truss inspections throughout Louisiana. Ancillary inspections include steel and aluminum welds, high stress moment connections, and fatigue prone details in accordance with FHWA guidelines. Performed Level III inspections with ultrasonic flaw testing on anchor bolt connections, mag particle testing on steel welded connections, and dye penetrant testing on aluminum-welded connections. Performs quality assurance/quality control reviews on inspections reports.
09/21 – ongoing	**USACE IDIQ for Worldwide Bridge and Waterfront Facility Inspections, Vicksburg District. Assistant** Manager and NBIS Team Leader for the five-year retainer contract to perform all types of NBIS bridge inspections at installations throughout the world. Responsible for the filing and organization of bridge inspection data and the draft input of 25 bridges inspected at the Letterkenny Army Depot in PA. Managed the QC review schedule and addressed comments for final submittal.
09/17 – 05/18	**Virginia Department of Transportation – Statewide Bridge Condition Inspections, Various Locations, VA.** Team member responsible for performing NBIS routine and underwater inspections for various bridges throughout Virginia. Structure types included steel multi-girder bridges carrying interstates and high-volume roadways over railways and waterways. Underwater inspections included pile foundations and culverts. Teams conduct routine and in-depth NBIS inspections, evaluating the deck, approaches, substructure, and waterways.
01/17 – 05/18	**Maryland State Highway Administration – Statewide Bridge Condition Inspections, Various Locations, MD.** Team member responsible for performing NBIS inspection for various state and county owned bridges throughout Maryland.

16. **Staff Experience:**

Firm employed by Moffatt & Nichol			
Name	Kimberly Gravatt	Years of relevant experience with this employer	2
Title	NBIS Team Leader and Diver	Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization		BS / 2008 / Civil Engineering / University of Delaware	
Active registration number / state / expiration date		Professional Engineer: 44084 / Maryland / 06-13-23	
Year registered	Discipline	Civil	
Contract role(s) / brief description of responsibilities		NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified Diver	

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).
08/20 - ongoing	**LADOTD Statewide Inventory and Inspection of Sign Trusses, LA.** Team member for the current five-year retainer contract to perform approximately 1,550 overhead sign truss inspections throughout Louisiana. Ancillary inspections include steel and aluminum welds, high stress moment connections, and fracture critical elements in accordance with FHWA guidelines. Performed Level III inspections with ultrasonic flaw testing on anchor bolt connections, mag particle testing on steel welded connections, and dye penetrant testing on aluminum-welded connections. Performs quality assurance/quality control reviews on inspections reports.
09/19 – 12/20	**NCDOT Bridge Inspection Limited Services Contract, Statewide, North Carolina.** Inspection team leader for NBIS safety inspections for bridges and culverts by means of a variety of access methods, including aerial platforms, bucket trucks, and pontoon boats with scaffolding for the North Carolina Department of Transportation (NCDOT). Reports for bridges and culverts included condition assessment, repair recommendations, site photos, and NBIS rating of the structure in its current condition. Leading the hands-on inspection team on-site, as well as submitting repair recommendations.
08/20 - 09/20	**VDOT Term Contract for Underwater Safety Bridge Inspection Services, Statewide, Virginia.** Diver and/or dive tender for underwater bridge inspection dive team NBIS inspection of VDOT bridges located in Madison and Mecklenburg Counties. Also responsible for underwater inspection report preparation for these structures.
03/17 – 12/18	**MDOT SHA Bridge Inspection Services, Statewide, Maryland.** Team leader who performed hands-on inspections of various highway bridges, including fracture critical steel truss bridges. The reports included inspection findings, condition ratings, photographs, and prioritized maintenance and repair recommendations.
09/21 – ongoing	**USACE IDIQ for Worldwide Bridge and Waterfront Facility Inspections, Vicksburg District.** NBIS Team Leader for the five-year retainer contract to perform all types of NBIS bridge inspections at installations throughout the world. Responsible for the inspection of 25 bridges located on the Letterkenny Army Depot Installation in PA. Responsible for the team reviews and engineering reviews of 38 bridge reports.

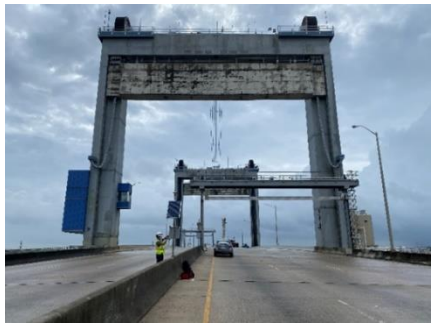
16. **Staff Experience:**

Firm employed by Moffatt & Nichol				
Name	Clint Harr, EIT		Years of relevant experience with this employer	2
Title	NBIS Team Leader and Diver		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS / 2018 / Civil Engineering / University of Delaware	
Active registration number / state / expiration date			Engineer-in-Training: #5659/ Delaware	
Year registered		Discipline	Civil	
Contract role(s) / brief description of responsibilities			NBIS Team Leader / SPRAT Rope Access Technician / ADCI-certified Diver	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/21 – ongoing	**USACE IDIQ for Worldwide Bridge and Waterfront Facility Inspections, Vicksburg District** – NBIS Team Member for the five-year retainer contract to perform all types of NBIS bridge inspections at installations throughout the world. Responsible for the inspection of 25 bridges located on the Letterkenny Army Depot Installation in PA. Responsible for the draft inputs and edits from quality control reviews.
05/21 – 06/21	**City of Richmond NBIS - Rte 60 over Rte 161 Bridge** - Bridge Inspection Team Member for the NBIS bridge inspection of Route 60 (Midlothian Turnpike) over Route 161 (Belt Boulevard) in the City of Richmond. The bridge is a four span simply supported reinforced concrete tee beam bridge with a total length of 142'.
08/20 – 08/ 20	**VDOT Statewide NBIS Inspections** – Bridge Inspection Team Member for the inspection of six VDOT bridges in the Richmond District. Services included three underwater inspections: a four barrel reinforced concrete box culvert in Chesterfield County carrying Route 722 (Halloway Road) over Old Town Creek; a steel beam timber deck bridge with low freeboard in Hanover County carrying Route 712 (Robert Terrell Road) over Newfound River; and a four-barrel reinforced concrete 84" pipe culvert in Powhatan County carrying Route 60 (Anderson Highway) over Branch. The three bridge inspections over Interstate I-95 included: a four span simple steel rolled beam bridge in Henrico County carrying Route 7552 (Dumbarton Road) over I-95; two four span simple steel girder bridges in the City of Richmond carrying Interstate highways or interstate highway ramps; and Interstate 64 over Interstate 95 and a Ramp to I-64 over I-95
08/20 - 09/20	**VDOT Term Contract for Underwater Safety Bridge Inspection Services, Statewide, Virginia.** Diver and/or dive tender for underwater bridge inspection dive team NBIS inspection of VDOT bridges located in Madison and Mecklenburg Counties. Also responsible for underwater inspection report preparation for these structures.

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*		Bridge
Project name	Danziger Lift Bridge Repair			Firm responsibility (prime or sub?)	Prime
Project number	Contract 4400009424, H.000303	Owner's name	Louisiana Department of Transportation and Development		
Project location	New Orleans, LA		Owner's Project Manager	ZhengZheng (Jenny) Fu	
Owner's address, phone, email	1201 Capitol Access Rd., 6th floor, Baton Rouge, LA 70802; (225) 379-1321; ZhengZheng.Fu@LA.GOV				
Services commenced by this firm mm/yy)	07/19	Total consultant contract cost ($1,000's)			$1,386
Services completed by this firm mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)			$1,386



The Danziger Lift Bridge is an electro-mechanical, tower drive vertical lift bridge that opened to vehicular traffic in 1984. The bridge was reportedly experiencing operational issues, which included the movable span no longer fitting into the available space between the towers as well as one corner of the bridge not seating properly. WJE was tasked with performing an inspection of relevant portions of the main span contributing to the reported operational issues, an in-depth inspection of the lift bridge machinery and electrical systems, and development of repairs to restore the long-term functionality and reliability of the bridge. WJE installed instrumentation and monitoring equipment during the field investigation to evaluate the bridge's operations over an extended period. Based on the findings from our investigation, WJE prepared emergency repair plans and specifications to address immediate operational issues with the bridge. Significant findings and the associated remedies included.

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

Members involved: J. McGormley (Project Manager), R. Firman (Project Engineer), S. Lauer (Project Engineer), P. Marra (Project Engineer), W. Rosenblatt (Project Engineer), C. Schroeder (Project Engineer), J. Williams (Project Mechanical Engineer), Y. Zheng (Project Electrical Engineer).

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	I-255 Jefferson Barracks Bridge over the Mississippi River Inspection, NDE, Emergency Repairs, Rehabilitation Design		Firm responsibility (prime or sub?)	Prime	
Project number	2019-03-48648; 2019-07-50872; and 2021-02-61244	Owner's name	Missouri Department of Transportation (MoDOT		
Project location	Mehlville, MO		Owner's Project Manager	Michele Atkinson	
Owner's address, phone, email	MoDOT Bridge Division, 105 W. Capitol Ave., Jefferson City, MO 65102, (573) 522-2371, Michele.Atkinson@modot.mo.gov				
Services commenced by this firm (mm/yy)	04/19	Total consultant contract cost ($1,000's)		$1,540	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)		$1,247	

WJE was retained to perform a biennial routine, in-depth, and fracture critical inspection of the structures. WJE inspectors identified a crack-like indication during visual inspection of the south arch at the radial fillet weld connecting the fracture critical tie girder web to the arch bottom flange. Nondestructive evaluation (NDE) using magnetic particle test methods (MT) subsequently revealed a 6-foot long crack in the weld. As a result of this critical finding, the bridge was closed to traffic until additional inspection and emergency repairs could be implemented.

The bridge deck assessment included visual and nondestructive testing such as sounding and ground penetrating radar, concrete core removal, and laboratory analysis for chloride concentration evaluation. In-depth inspections focused on the bridge deck and weathering steel performance. The weathering steel assessment included X-Ray fluorescence testing to verify the alloy composition, and a coating condition assessment to provide general rehabilitation recommendations. After the bridge was closed to traffic, inspection activities shifted to emergency visual and NDE of the welded connections of the fracture critical tie girder. Conventional UT and phased array UT testing at selected crack locations was used to determine crack depth. After WJE's metallographic examination MoDOT was able to reopen the bridge during emergency weld repairs. The fillet weld repairs included procedures to limit hydrogen assisted cracking such as weld preheat and post-heat, selection of welding consumables, and storage and handling of welding consumables. Nondestructive testing was used to aid the detection of weld discontinuities. The work to repair over 200 feet of fillet welds was completed within a month with the bridge opened to full traffic.

Recently completed conceptual, preliminary, and final rehabilitation design of the bridges and roadway. Construction is ongoing.

Member involved: J. McGormley (Project Manager), A. Bishop (Inspection), D. Crampton (Inspection), R. Gessel (NDE), S. Lauer (Inspection), Patrick Marra (Inspection), C. Schroeder (Inspection and NDE).

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Sherman Minton Bridge, Inspection, Condition Assessment, and Repair		Firm responsibility (prime or sub?)	Prime	
Project number	PO 17815059; 17820759	Owner's name	Indiana Department of Transportation		
Project location	New Albany, IN		Owner's Project Manager	Bill Dittrich	
Owner's address, phone, email	100 North Senate Ave., Indianapolis, IN 46204; (317) 234-6220; bdittrich@indot.in.gov				
Services commenced by this firm (mm/yy)	04/17	Total consultant contract cost ($1,000's)		$1,616	
Services completed by this firm (mm/yy)	04/18	Cost of consultant services provided by this firm ($1,000's)		$1,525	

WJE was retained to perform an In-Depth, Routine, and Fracture Critical Inspection of the main river crossing bridge and Indiana approaches, and a condition assessment of the bridge deck for all five structures. An overall structural assessment report was required to determine appropriate repairs to extend the service life of the structure. The steel double deck/through truss spans are each approximately 150 feet long. The two double deck steel-tied arch truss spans are each 800 feet long. The total length of this river crossing bridge is 2,053 feet.

As part of the inspection work, WJE completed visual inspection and various tests, including ultrasonic thickness gaging, magnetic particle inspection, cable vibration monitoring, concrete core removal, corrosion potential testing, petrographic examinations of concrete cores, chloride content testing, and chain dragging of deck concrete. In addition, strain gages and displacement transducers were installed to investigate a steel stringer cracking problem and to estimate the effective stress range at representative welded gusset plate details. The inspections were performed in a manner to minimize traffic interruptions; aerial lifts, an underbridge inspection vehicle, and technical rope access were used. The existing conditions were reported, and recommendations were developed with repair alternatives (categorized with regard to future risk) and cost estimates. The estimated remaining service life and repair alternative recommendations were given.

Under a separate contract, WJE engineers prepared design drawings, specifications, and supporting calculations for floor beam and stringer retrofits. As-built drawings were prepared for the retrofit of two floor beams and fifty-eight stringers, utilizing 12,000 pounds of structural steel and 6,000 high strength bolts.

Members involved: B. Santosuosso (Project Manager), R. Gessel (NDE), S. Lauer (Project Engineer), P. Marra (Project Engineer).

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	East Roundbunch Road over Cow Bayou		Firm responsibility (prime or sub?)	Prime	
Project number		Owner's name	Texas Department of Transportation – Bridge Division		
Project location	Orange County, TX		Owner's Project Manager	Courtney Holle, PE	
Owner's address, phone, email	Austin, TX, (512) 416-2717, Courtney.Holle@txdot.gov				
Services commenced by this firm (mm/yy)	06/14	Total consultant contract cost ($1,000's)		$3,409	
Services completed by this firm (mm/yy)	16/16	Cost of consultant services provided by this firm ($1,000's)		$1,048	

WJE provided the mechanical and electrical engineering for the replacement of all machinery on this center bearing swing span bridge. WJE was responsible for the structural engineering and overall project. Moveable bridge services included a scoping inspection, bridge design report, preparation of plans, specifications and cost estimates for all machinery, as well as provision of construction services. The intent of the project was to rehabilitate this historic design structure to provide long term reliable service. Essential design objectives were to replace the deteriorated and outmoded machinery systems with current state of the art systems that would require less maintenance and be more reliable and efficient than the existing drive which had experienced failures and was in a state of advanced wear. The mechanical design provided complete details for new span drive machinery and support machinery in accordance with the current AASHTO requirements. The span drive machinery was comprised of components with a proven history of utilization on movable bridges and was powered by an electric motor. The support machinery included a new bronze plain center bearing, balance wheels, and a wedge at each corner driven by an electro-mechanical drive train. The design also included center pier live load support rollers. The machinery and structure were protected from risks due to over-travel with energy absorbing end of travel bumpers at the full open and the full closed positions. Elastomeric bumpers were provided as a simple low-cost solution with minimal maintenance requirements. The electrical design included the provision of new drives, controls, and field devices for the span drive machinery and the end wedge machinery. Electrical design details also included design and integration of new traffic control features, bridge and maintenance lighting, and a CCTV system

Members involved: G. Rees (Electrical Engineering), P. Bandlow (Mechanical Engineering), J. Williams (Mechanical Engineering), Y. F. Zheng (Electrical Engineering), B. Santosuosso (Structural Peer Review).

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Bayou Ramos Bridge at US 90, PCC Beam Cracking		Firm responsibility (prime or sub?)		Prime/Sub
Project number	Contract No. 4400009424 TO3/ 4400017263	Owner's name	Louisiana Department of Transportation and Development		
Project location	Morgan City in St. Mary Parish, LA		Owner's Project Manager	Dana Feng	
Owner's address, phone, email	1201 Capitol Access Rd., Baton Rouge, LA 70802; (225) 379-1060; Dana.Feng@LA.GOV				
Services commenced by this firm (mm/yy)	2/19	Total consultant contract cost ($1,000's)		$38 (initial analysis); $306 (Retrofit development)	
Services completed by this firm (mm/yy)	8/19, Ongoing	Cost of consultant services provided by this firm ($1,000's)		$38 (data analysis); $306 ongoing (remediation plan)	

WJE was retained to evaluate the cause of cracking in numerous precast, prestressed concrete (PPC) girders as well as to develop repair strategies to address the long-term performance of the structure. The twin, 122-span structures extend 8,500 feet carrying two lanes of eastbound and westbound US 90 over Bayou Ramos. After approximately 18 years of service, cracks were discovered at girder ends adjacent to continuity diaphragms, and subsequent inspections over the next few years by others identified additional cracks. Once detected, the crack width increased between inspections. Many of the cracks were retrofitted with carbon fiber reinforced polymer (CFRP) bidirectional sheets, but cracking continued at un-retrofitted ends and at the face of the diaphragm.

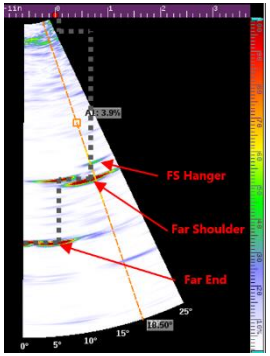
WJE engineers reviewed available instrumentation and inspection data collected by others to evaluate the cause of cracking. The review of the girder strain data showed distinct differences in girder behavior when comparing girder ends in the same span and when comparing behavior between years. The evaluation of the bridge file and instrumentation data revealed the observed cracking in the PPC girders to be associated with stress concentrations at the continuity bar terminations due to the terminations being in a tension zone as a result of creep and thermal gradient effects. It was noted that shear capacity of the girders ends was affected, but the cracking had not affected the flexural behavior of the girders under live load. Furthermore, the instrumentation and field testing results showed that the prior CFRP retrofits restored the shear capacity. WJE engineers recommended using strain instrumentation to monitor long-term behavior of the CFRP repairs for evidence of debonding. They also suggested a possible alternative retrofit approach that would use external post-tensioning across the fixed piers.

Based on WJE's data analysis, a current, ongoing project has begun to complete additional detailed finite element method (FEM) cracking analyses and to develop and test potential remediation methods to address the cracking.

Members involved J. McGormley (Project Manager), C. Larosche (Project Advisor), P. Marra (Project Engineer).

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	N.D Visual and PAUT Inspection and Repairs of Bridge Pin and Link Assemblies		Firm responsibility (prime or sub?)	Prime	
Project number	Contract Nos. 19201091, 61201311	Owner's name	North Dakota Department of Transportation		
Project location	Various Locations, ND		Owner's Project Manager	Steve Cunningham	
Owner's address, phone, email	600 East Boulevard Ave., Bismarck, ND 58505, (701) 328-4407, scunning@nd.gov				
Services commenced by this firm (mm/yy)	08/20	Total consultant contract cost ($1,000's)	$390		
Services completed by this firm (mm/yy)	01/21	Cost of consultant services provided by this firm ($1,000's)	$331		



WJE was retained by NDDOT to perform a visual inspection and phased array ultrasonic testing (PAUT) on the pinned connections of seventeen bridges across the state. This project included condition assessment of a total of 344 bridge pins in pinned hinge or pin and hanger connections. The WJE team used ultrasonic scans to inspect the connecting pins, while arm's length examinations were used for evaluation of components in the vicinity of the pin connections. Each of the bridges has twelve to thirty-six pins with pin lengths from 5.2 to 10.3 inches and pin diameters from 3 to 5 inches.

The WJE team completed visual inspection and phased array ultrasonic tests (PAUT) of the pins and connecting members. The team included an engineer who has specialized in PAUT and an ANST Level III UT Inspector. Components in the vicinity of the pin connections were examined visually at arm's length, and connecting pins were subjected to ultrasonic testing using axially oriented scans. Access to the pinned connections was gained through a truck mounted under-bridge inspection apparatus. The testing included PAUT scans using an angular range of 0°-25° from both ends of the pin.

Cracks were discovered at five pinned hinge connections on a pair of the bridges (Eagle's Nest bridges). WJE was retained to inspect and repair those connections. The cracks ranged from 1-1/2 to 14-1/4 inches in length. The hinge crack repairs involved crack removal and field welded repairs per a repair strategy approved by NDDOT. During removal of a fillet weld crack by grinding, WJE engineers discovered that a portion of the crack extended into the hinge plate. This crack was removed by drilling a hole before installing 1/4 inch fillet welds. Section loss on the interior surface of the hinge plate typically resulted in 1/4 inch remaining thickness along the fillet weld toe at the repair locations. Recommendations were made to perform a load rating considering the remaining section in the hinge plates.

Members involved: C. Schroeder (Project Manager), R. Gessel, P. Marra, B. Santosuosso.

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17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	I-10/310 Fire Damage Assessment		Firm responsibility (prime or sub?)	Sub	
Project number		Owner's name	Louisiana Department of Transportation and Development.		
Project location	Kenner, Louisiana		Owner's Project Manager	Chris Guidry	
Owner's address, phone, email	Suite 605G, Baton Rouge, LA; (225) 379-1328; Chris.Guidry@LA.GOV				
Services commenced by this firm (mm/yy)	09/21	Total consultant contract cost ($1,000's)		Unknown	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)		$37	

In September 2021, a semi-truck loaded with flammable oils caught fire and stopped in the center gore at the interchange between I-10 eastbound and I-310 southbound along the Bonnet Carré Spillway Bridge near Kenner, Louisiana. The fire caused the release of the oils, which flowed over the bridge deck and through the deck drains onto the waterway below the bridge. The ensuing fire damaged both the top sides and undersides of three spans of the concrete structure. The left lane of I-10 eastbound was subsequently closed to traffic. WJE was retained to inspect the damage, assess the load carrying capacity of the damaged spans, and develop conceptual repair recommendations.

WJE engineers visited the damaged bridge spans twice to assess their condition. On the first visit a preliminary assessment was carried out from a LADOTD underbridge inspection truck (UBIT). Hammer sounding information and photo documentation were collected as were several concrete samples removed from delaminated portions of the girders, deck, and bents. Some of those samples were returned to WJE's Northbrook, Illinois laboratories for evaluation. A second, in-depth assessment was performed later, after the bridge underside had been washed. The second inspection consisted of a visual assessment and conventional hammer sounding of the concrete girders, deck, and bent caps from the underside of the structure. The purpose of the sounding inspection was to locate and quantify the extent of delaminated concrete. Access to the bridge underside was gained using an approximately 30-foot by 60-foot barge secured between Bents 679E and 680E, three small motorboats, and two pontoon platforms. All beams between the affected bents were sounded as were portions of the girders in the two flanking spans.

Several samples collected from the delaminated areas of the structure were subsequently evaluated at WJE's Northbrook, Illinois laboratories. The concrete samples were visually and petrographically examined under a stereomicroscope for evidence of distress. Based on this preliminary examination, some portions were saw-cut, lapped, and polished to assist in further documenting distress. Load ratings were analyzed for the affected spans. Based on the various findings, repair recommendations were made.

Members involved: J. McGormley (Project Manager), A. Bishop, D. Crampton, S. Lauer, A. Werntz.

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	IH-345 Critical Analysis		Firm responsibility (prime or sub?)	Sub	
Project number	TxDOT-18-4XXP5019	Owner's name	Texas Department of Transportation		
Project location	Dallas, TX		Owner's Project Manager	Grace Lo	
Owner's address, phone, email	4777 E. Highway 80, Mesquite, Texas 75150, (214) 320-6627, Grace.Lo@txdot.gov				
Services commenced by this firm (mm/yy)	4/14	Total consultant contract cost ($1,000's)		$1,827	
Services completed by this firm (mm/yy)	5/15	Cost of consultant services provided by this firm ($1,000's)		$1,827	

To assist TxDOT with long-term rehabilitation decisions, WJE was retained as a subconsultant to perform a fracture critical inspection of the steel girders, visual examination of substructure elements, and a visual and exploratory study of the PT deck on the 1.6-mile steel structure. Its 65 units typically consist of two welded plate girder in 2 to 4 continuous span units. WJE utilized various access methods during the 6-week condition assessment including underbridge inspection vehicles, aerial lifts, and technical rope access techniques. Field teams ranged from 4 to 12 people throughout the project.

WJE engineers provided visual and magnetic particle inspections as well as instrumentation and field testing to determine fracture critical connection performance. The instrumentation and field testing results were applied to calibrate finite element method models for the purpose of identifying fatigue-sensitive connections and to aid in the development and evaluation of retrofit concepts. The instrumentation was installed at selected girder cross-sections, including curved steel girder locations, in an effort to capture girder behavior with controlled truck loading. Additionally, girder stress ranges under normal traffic loading were collected to calculate the effective stress range in each girder for fatigue life estimation.

Using WJE's interactive web-based software, WJE engineers reported their findings quickly and accurately, at times uploading up to 1,500 pictures a day. Exploratory deck openings, located using GPR, were made to inspect the condition of representative straight and draped PT tendons and anchorage points. In-plane fatigue data were collected using an NI Wireless System to avoid running long lead wires. Connection instrumentation utilized the Campbell CR9000X. Strains and displacements were measured under typical traffic and during load tests completed using rolling traffic closures. WJE engineers also provided finite element method guidance and quality assurance reviews as well as retrofit development during the work.

Members involved: J. McGormley (Project Manager), C. Larosche (Project Advisor), R. Gessel (Nondestructive Testing), S. Lauer (Project Engineer), B. Santosuosso (Project Engineer).

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	I-20/55 Pearl River Bridge		Firm responsibility (prime or sub?)	Prime	
Project number	104877 301000	Owner's name	Mississippi Department of Transportation		
Project location	Jackson, MS		Owner's Project Manager	Justin Walker	
Owner's address, phone, email	401 N West St, Jackson, MS 39201, (601) 359-7200, jmwalker@mdot.ms.gov				
Services commenced by this firm (mm/yy)	11/14	Total consultant contract cost ($1,000's)		$2,681	
Services completed by this firm (mm/yy)	12/15	Cost of consultant services provided by this firm ($1,000's)		$2,639	

Constructed in 1965, the twin I-20/I-55 structures consist of precast prestressed concrete girder approach spans and a 3-span continuous welded plate girder river crossing with a maximum span length of 130 ft. The structures were originally constructed with 7 girder lines, and in 1992 3 additional girder lines were added to the eastbound structure. WJE was retained by MDOT to develop and install fatigue retrofits to address distortion-induced cracking. The work was to occur without impact to the busy I-20/I-55 roadway above. Included within the scope of services was an in-depth inspection of the steel superstructure elements of the river crossing spans.

Access for the inspection utilized a temporary suspended platform under each structure. An underbridge inspection vehicle was used to inspect the exterior girders on the eastbound structure that were not accessible via the platform. Prior to the inspection, each of the diaphragm connections to the girders was blast-cleaned and had a primer coat applied. Three, two-person inspection teams carried out the hands-on inspection. The inspection focused on the girder diaphragm connections and their attaching welds. Areas of section loss or other conditions were also noted. Each connection of interest was examined with the aid of a bright light. Crack-like indications were verified using die grinders equipped with carbide burrs, when appropriate. Magnetic particle test methods were used to locate cracks including their tips. Each connection was photographed and the inspection data entered into an electronic database using WJE's Plannotate software.

WJE developed plans and specifications to address the distortion-induced cracking issues at locations with crack extension into the girder web by installing a large hole retrofit to capture any horizontal cracks at the girder top flange-to-web weld and crown-type cracks originating from the vertical connection plate top stitch weld. Where the crack was limited to the vertical stitch welds, the proposed repair was to grind out affected stitch welds and install a new fillet weld consistent with the contract drawings for this project. Where the crack extended through the vertical connection plate at the stitch weld, it was recommended to cut back that portion of the connection plate and weld and install the new fillet weld, terminating it at the cut-back. Plans and specifications were also developed to repair corrosion section loss conditions noted during the inspection of the end diaphragm connections. The WJE-lead team performed all retrofit work and addressed the fatigue-related issues for these structures.

Members involved: J. McGormley (Project Manager), D. Crampton, R. Gessel, S. Lauer, B. Santosuosso, J. Simonen.

17. Firm Experience:

Firm name	Wiss, Janney, Elstner Associates, Inc.	Past Performance Evaluation Discipline(s)*		Bridge	
Project name	I-74 Bridges over the Mississippi River, Inspection and Retrofits		Firm responsibility (prime or sub?)		Prime
Project number	Maintenance Nos. 8205.0R074 and 8205.0L074	Owner's name	Iowa Department of Transportation		
Project location	Bettendorf, IA	Owner's Project Manager	Michael Todsen		
Owner's address, phone, email	Office of Bridges and Structures, 800 Lincoln Way, Ames, IA; (515) 233-7726; Michael. Todsen@dot.iowa.gov				
Services commenced by this firm (mm/yy)	04/19	Total consultant contract cost ($1,000's)		$69	
Services completed by this firm (mm/yy)	05/20	Cost of consultant services provided by this firm ($1,000's)		$66	

The Iowa Illinois Memorial Bridge formerly carried I-74 over the Mississippi River connecting Bettendorf, Iowa, to Moline, Illinois. The crossing consisted of a pair of nearly identical bridges. Construction of westbound structure was completed in 1936 and the eastbound structure in 1960. The bridges consisted of three suspension spans (370 ft., 740 ft., and 370 ft.) over the navigation channel, three spans of deck truss superstructure (162 ft. each), and six continuous truss spans (222 ft.to 223 ft. each). WJE was retained to perform a limited inspection of the bridges, including arm's-length inspection of truss lower chord members as well as primary suspension cables, various floor beams, and stringer ends at relief joints. WJE also retrofits. Previously WJE has performed routine, in-depth, and fracture critical inspections of these bridges (not detailed below).

WJE's limited inspection included examination of suspension cables, suspension towers, suspension cable anchorages, stiffening trusses, floor beams and stringer ends at deck joints, and deck trusses. Cracks and through-thickness corrosion at the intersection of the web and bottom flange were noted at the ends of two stringers, and it was recommended that these two locations be retrofitted, as the bridge was expected to remain in service for another few years. Access to the elements for inspection was gained using climbing and industrial rope access techniques. These access methods facilitated inspection of the bridges without lane closures on I-74 and with no disruption of traffic.

In April 2019, a large barge mounted crane being transported from the new replacement bridge construction alignment downstream impacted the existing I-74 span. About 10 gouged areas that resulted were retrofitted by the WJE team by grinding and polishing the steel truss members to remove all gouges and notches. All ground areas were subjected to magnetic particle testing (MT) to verify no remaining defects. In May 2020, the two cracked and heavily corroded stringer end support conditions were retrofitted by installation of a modified C15x50 segment mechanically fastened using 20 high-strength A325 bolts. WJE designed and installed the retrofits.

Members involved: W. Rosenblatt (Rope Access Inspection), A. Werntz (Rope Access Inspection).

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	IDIQ Contract for In-Depth Bridge Inspection Statewide, LA		Firm responsibility (prime or sub?)	Sub	
Project number	H.009730.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	Statewide, LA		Owner's Project Manager	Stephanie Doolittle, P.E.	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, (225) 379-1329, stephanie.doolitle@la.gov				
Services commenced by this firm (mm/yy)	08/19	Total consultant contract cost ($1,000's)		unknown	
Services completed by this firm (mm/yy)	06/21	Cost of consultant services provided by this firm ($1,000's)		$17.7	

As part of an In-Depth Bridge Inspection retainer contract, Forte and Tablada inspected the approaches of the LA 1 bridge over the Atchafalaya River in Simmesport, LA. The approaches are composed of 11 rolled steel girder spans and 14 steel plate girder spans. This bridge also contains a suspended span over the levee on each side of the Atchafalaya River. All approach spans are supported by concrete column bents.

The inspection was performed from the ground, as well as from an underbridge inspection truck. Element Type, Quantities, and Condition States were obtained, documented, and compared to previous Inspection Reports. Special attention was paid to the condition of the rocker bearings and the pin and hanger assemblies of the suspended spans.

Members involved: R.J. Coco, Jr. (Principal- In-Charge), J. Easley (Project Manager).

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Sunshine Bridge Emergency Repair			Firm responsibility (prime or sub?)	Sub
Project number	4400010587	Owner's name	Louisiana Department of Transportation and Development		
Project location	St. James Parish, LA		Owner's Project Manager	Stanley Ard	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1292, Stanley.Ard@la.gov				
Services commenced by this firm (mm/yy)	10/18	Total consultant contract cost ($1,000's)			$618
Services completed by this firm (mm/yy)	12/18	Cost of consultant services provided by this firm ($1,000's)			$618

Forte and Tablada provided topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord. The severity of the structural damage forced the closure of the bridge resulting in disruption and re-routing of a large volume of industrial and general population motorists. Due to the elimination of this major corridor for commerce and its consequences, an expeditious and time efficient rehabilitation was paramount. Forte and Tablada worked with a design team to formulate a practical solution for obtaining advanced measurements that were unachievable with traditional measuring practices which were required for the structural analysis and repair design for the bridge. Forte and Tablada surmounted the challenges of the repair effort through the use of LIDAR techniques employing innovative applications to provide the necessary data for the bridge repair analysis and inventive construction of an apparatus needed to apply these techniques.

Members involved: R.J. Coco, Jr. (Principal-in-Charge), B. Campbell (Senior Technician).

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	US 90 / I-310 Interchange		Firm responsibility (prime or sub?)	Prime	
Project number	S.P. No. H. 010753.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	Statewide, LA		Owner's Project Manager	Stanley Ard.	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1292, Stanley.Ard@la.gov				
Services commenced by this firm (mm/yy)	01/17	Total consultant contract cost ($1,000's)		$495.5	
Services completed by this firm (mm/yy)	01/18	Cost of consultant services provided by this firm ($1,000's)		$484.7	

Forte and Tablada, Inc. is responsible for topographic surveying and 3-D laser scanning at the intersection of US-90 and I-310 in St. Charles Parish. This project will allow for improvements for safety and efficiency. The complete topographic survey includes all utilities with depths and all drainage required along with finish floor elevations of all buildings that fall within the survey limits.

The challenging aspect of this project was surveying the substructures for the length of the bridges. A traditional topographic survey of the bridge substructures would require manlifts and additional manhours to collect the required information. Forte and Tablada utilized remote sensing through the use of LiDAR to obtain a "digital twin" or an accurate, to scale, computer model of the bridges for analysis and delivery. Utilizing LiDAR improved safety and decreased costs..

Members involved: R.J. Coco, Jr. (Principal-in-Charge).

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Retainer Contract for Off-System Complex Bridge Load Rating – TO1		Firm responsibility (prime or sub?)	Prime	
Project number	S.P. No. H.009859.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	Statewide, LA		Owner's Project Manager	Dana Feng, P.E.	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1200, Dana.Feng@LA.gov				
Services commenced by this firm (mm/yy)	01/18	Total consultant contract cost ($1,000's)		$1,316	
Services completed by this firm (mm/yy)	02/19	Cost of consultant services provided by this firm ($1,000's)		$1,316	

As part of a Load Rating retainer contract with LADOTD, Forte and Tablada was tasked with inspecting and load rating 12 complex off-system complex bridges statewide. The type of bridges included nine (9) movable bridges (including vertical lift and swing-spans), a steel truss bridge, and two (2) ferry access bridges that were composed of steel truss, movable, and pontoon spans. Where existing plans were not available, 3-D laser scanning was utilized to capture complicated geometry and to assist in the load rating and in the development of bridge load rating plans. The inspection also included the use of an ultrasonic thickness gage to verify member thickness, as well as detailed measurements to determine connection details. The scope of work also included the submittal of an Inspection Report and a Load Rating Report in accordance with the requirements of the LADOTD Bridge Design and Evaluation Manual (BDEM).

Members involved: R.J. Coco, Jr. (Principal-in-Charge), J. Easley (Project Manager), L. Yantis.

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Amite River Basin Model- Hydrographic Survey		Firm responsibility (prime or sub?)	Sub	
Project number	440000829	Owner's name	Louisiana Department of Transportation and Development		
Project location	440000829		Owner's Project Manager	Edward Knight, P.E.	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, (225) 379-3007				
Services commenced by this firm (mm/yy)	06/17	Total consultant contract cost ($1,000's)		$349	
Services completed by this firm (mm/yy)	02/19	Cost of consultant services provided by this firm ($1,000's)		$349	

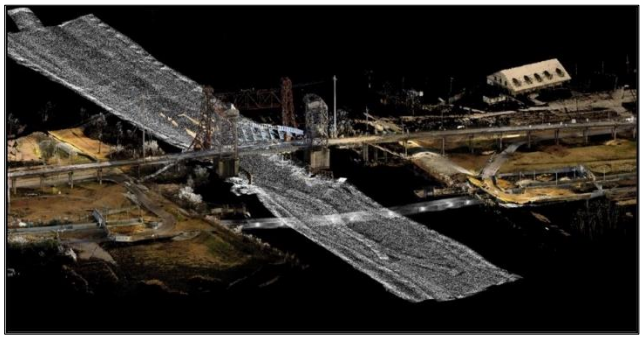
Forte and Tablada, Inc. worked with LA DOTD and Dewberry to provide hydrographic surveying of the Amite River and Comite River. Task orders included typical cross-sections of these rivers, as well as detailed 3-D bathymetric data collected with sonar equipment. Forte and Tablada also provided ground control for LIDAR of the Amite River Basin. Notably, Forte and Tablada provided a high-resolution survey of the Amite River Diversion Weir utilizing a variety of techniques including multi-beam sonar and traditional survey methods.

The largest challenge for this project was the varying water depths of the Amite and Comite River, which prevented the use of a single type of data collection system. Forte and Tablada was able to overcome this challenge through the multiple types of data collection systems within its inventory. A wide swath multi-beam sonar unit was used to collect data remotely into shallow water areas, single-beam sonar equipment was used in to confirm the results of the multi-beam areas as well as collect bathymetry data in water less than 2 feet deep. LiDAR laser scanners were used on bridge structures to give a seamless representation of the underwater conditions as well as above water conditions for a precise bridge opening area. The image above depicts the seamless merging of these two data sets collected utilizing two different types of data collection systems.

Members involved: R.J. Coco, Jr. (Principal in Charge), B. Campbell (Adv. Measurements).

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Belle Chasse Bridge and Tunnel Replacement		Firm responsibility (prime or sub?)	Sub	
Project number	S.P. No. H.004791.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	Plaquemines Parish, LA		Owner's Project Manager	Stanley Ard	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1292, Stanley.Ard@la.gov				
Services commenced by this firm (mm/yy)	05/17	Total consultant contract cost ($1,000's)		$401.7	
Services completed by this firm (mm/yy)	10/18	Cost of consultant services provided by this firm ($1,000's)		$249.6	



Forte and Tablada provided comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.

The primary challenge for this project was to complete the topographic survey, while not shutting down travel on the bridge nor tunnel. In order to perform a traditional topographic survey, the feature being measured must be in physical reach of the equipment operator. Forte and Tablada was able to overcome this challenge through the use of remote sensing technology. Remote sense was used in the form of LiDAR for the bridge and overpass, and multi-beam sonar for the water bottom and top of tunnel. A robot was fabricated by Forte and Tablada staff to ride the bridge rail with the LiDAR scanner in order to avoid lane closures and improve the safety of equipment operators.

Members involved: R.J. Coco, Jr. (Principal-in-Charge), B. Campbell.

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Retainer Contract for Complex Bridge Rating Statewide, LA		Firm responsibility (prime or sub?)	Sub	
Project number	H.009859.5	Owner's name	TRC Solutions for Louisiana Department of Transportation and Development		
Project location	Statewide, LA		Owner's Project Manager	Durk Krone, P.E., (TRC)	
Owner's address, phone, email	8550 United Plaza Boulevard, Suite 502, Baton Rouge, LA 70809, 225-216-7483, DKrone@trccompanies.com				
Services commenced by this firm (mm/yy)	05/16	Total consultant contract cost ($1,000's)	Unknown		
Services completed by this firm (mm/yy)	10/19	Cost of consultant services provided by this firm ($1,000's)	$130		

As part of this retainer contract, Forte and Tablada, Inc. load rated the US 90 West Middle River Bridge near the Louisiana/Mississippi border. This bridge was constructed in 1933 and includes conventionally-reinforced concrete approach spans, as well as a three polygonal Warren pony through-truss spans. The scope of work included:

1. Performed a detailed inspection of the steel through-trusses, as well as the approach spans superstructure and pile bents. Inspection included detailed measurements of truss members, including gusset plates and rivets, and a determination of section loss for deteriorated members. In addition to gathering this information using an ultrasonic thickness gage, 3-D laser scans were also used to gather this information.
2. Performed a load rating of all approach span components and the steel through-trusses. Load rating was performed in AASHTOWare BrR, LEAP Bridge, STAAD, and miscellaneous in-house spreadsheets and Mathcad documents. Load rating considered existing condition of the members, including any section loss that had occurred.
3. Provided an inspection report summarizing the condition of the bridge, any critical findings, field measurements, photographs, and any other documentation that was gathered.
4. Provided a load rating summary report summarizing any assumptions that were required to complete the load rating, all structural models that were used to perform the load rating, and all spreadsheets that summarized the results of the load rating.

Members involved: R.J. Coco, Jr. (Principal-in-Charge), J. Easley (Project Manager), L. Yantis.

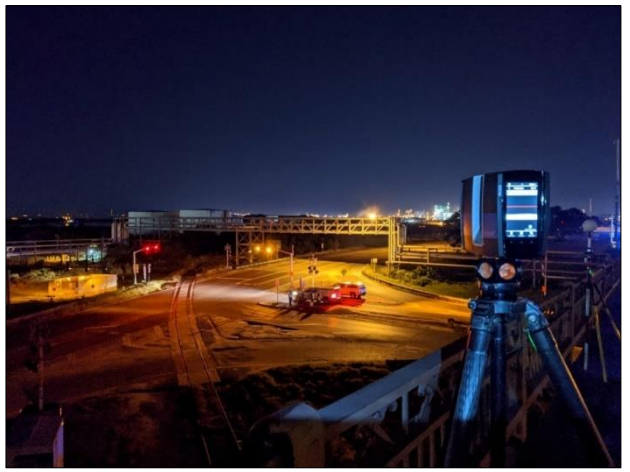
17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Calcasieu River Bridge Investigation		Firm responsibility (prime or sub?)	Prime	
Project number	S.P. No. H.012083.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	St. Tammany Parish, LA		Owner's Project Manager	Stanley Ard	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1292, Stanley.Ard@la.gov				
Services commenced by this firm (mm/yy)		11/19	Total consultant contract cost ($1,000's)		$312.4
Services completed by this firm (mm/yy)		On-going	Cost of consultant services provided by this firm ($1,000's)		$312.4

Forte and Tablada provided laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA. The purpose of this project is to analyze any movement of the substructure and superstructure under varying temperature conditions. Forte and Tablada completed two sets of scans , one in cold weather and the other in hot, to determine if there are any significant changes in the structure.. Terrestrial scans were done underneath the bridge for 10 spans on the East and West side, on top the deck to capture the superstructure, as well as from the water below to capture the sub structure. In addition to the terrestrial scans, mobile Lidar was done for future planning.

Forte and Tablada performed a comparative analysis and report of the cold and hot scans upon completion of the field investigations.

Members involved: R.J. Coco, Jr. (Principal-in-Charge), B. Campbell.



17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Rural Bridge Replacement Initiative			Firm responsibility (prime or sub?)	Sub
Project number	15 S.P. Numbers	Owner's name	Louisiana Department of Transportation and Development		
Project location	47 Structures in Districts 04, 05, 08 and 58		Owner's Project Manager	Valerie Tourres	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA, 225-379-1292, Valerie.Tourres@la.gov				
Services commenced by this firm (mm/yy)		08/20	Total consultant contract cost ($1,000's)		$6,600
Services completed by this firm (mm/yy)		On-going	Cost of consultant services provided by this firm ($1,000's)		$587

Forte Tablada, Inc. was a subconsultant to T Baker Smith to provide the topographic survey for 17 bridges for State Project Numbers H.013954, H.013979, H.013985, H.013992, H.013994, and H.013995. While the project is ongoing in the design phase, Forte and Tablada has completed the topographic survey in accordance with LA DOTD's Location and Survey Manual. The projects are currently in design and the anticipated Final Plans completion date is May 2022.

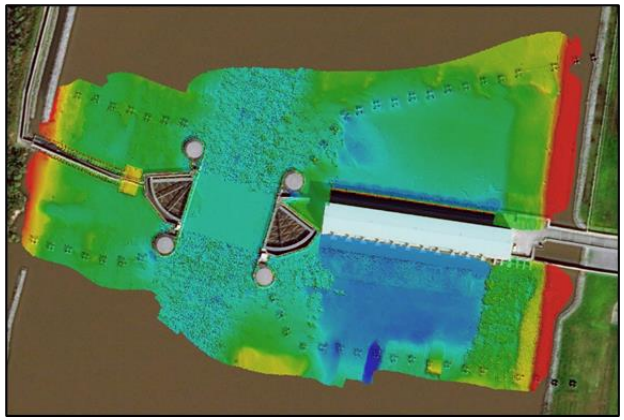
The largest challenges to overcome for this project were the bridge locations and the advanced schedule. Forte and Tablada was able to overcome these challenges with its communications software (Teams) and utilizing multiple field crews and Professional Land Surveyors trained in LA DOTD's Location and Survey field procedures and data collection protocols.

Forte and Tablada is also providing property surveys and right of way mapping as the need arises during the design process.

Members involved: R.J. Coco, Jr. (Principal-in-Charge).

17. **Firm Experience:**

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey	
Project name	Westbank Closure Complex Multi-Beam Hydrographic Survey		Firm responsibility (prime or sub?)	Sub	
Project number		Owner's name	SLFPA-West		
Project location	Belle Chase, LA		Owner's Project Manager	Jesse Noel, P.E.	
Owner's address, phone, email	SLFPA-West, c/o- Jesse Noel, P.E., (504) 371-6847, jnoel@slfpaw.org				
Services commenced by this firm (mm/yy)		09/21	Total consultant contract cost ($1,000's)		unknown
Services completed by this firm (mm/yy)		09/21	Cost of consultant services provided by this firm ($1,000's)		$12.5



During Hurricane Ida, the South Louisiana Flood Protection Authority - West, operated the Westbank Closure Complex near pumping capacity and was interested to know whether or not scour had formed on the outfall and suction side of the pump station. Forte and Tablada mobilized to the site within three days of Hurricane Ida's passing. Utilizing a shallow draft vessel equipped with advanced multi-beam sonar equipment, Forte and Tablada performed a comprehensive survey extended bank-to-bank of the station and beyond the protection fenders for a global depiction of scour. Scour results were presented in a color ramped elevation map, as well as imagery showing the presence of debris on an intake screen.

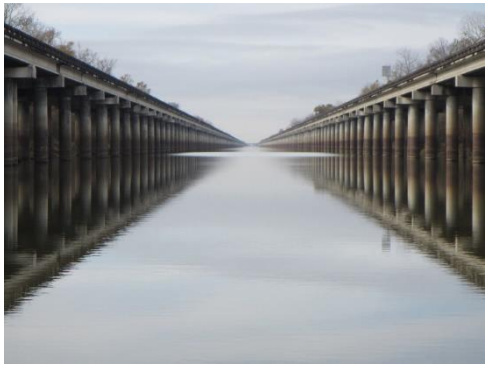
Members involved: R.J. Coco, Jr., JB. Campbell.

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Retainer Contract for Underwater Bridge Inspections, Statewide TO 1-10		Firm responsibility (prime or sub?)	Prime	
Project number	4400003533	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	03/14	Total consultant contract cost ($1,000's)		$3,243	
Services completed by this firm (mm/yy)	12/17	Cost of consultant services provided by this firm ($1,000's)		$2,822	

As part of the previous five-year retainer contract, Moffatt & Nichol has performed 10 task orders related to underwater bridge inspections throughout Louisiana. Teams of ADCI-certified engineer- divers provided Level I, II, & III underwater inspections in accordance with the National Bridge Inspection Standards and LADOTD PONTIS Inspection Manual. 687 bridges have been inspected statewide, including many in District 02. Bridge types inspected consisted of movable swing span bridges, bascule bridges, truss bridges, timber stringer bridges, cable-stayed bridges, single and multi-span girder bridges up to 8 miles in length, constructed of concrete, steel and timber materials. Site conditions included salt, brackish, and fresh waters and riverine conditions with varying levels of current having low to no visibility. Underwater Acoustic Imaging (UAI) was performed in response to emergency investigations following major flood events to inspect scour around the substructure units.

Report submittals included a description of each structure and elements inspected and existing conditions, shoreline conditions, presence of debris in the waterway, with NBIS ratings for Item 60 - Substructure and Item 61 – Channel condition, element level condition states for all elements inspected, and recommendations for repair and maintenance. Three Quality Control reviews were performed for each bridge report by the inspection team and Quality Assurance reviews were performed on 5% of the reports by an independent NBIS team leader.



Members Involved*:* Chace Hulon, PE; Steven Armstrong, EI; Josh Martinez, PE; Jeffrey Gazarek

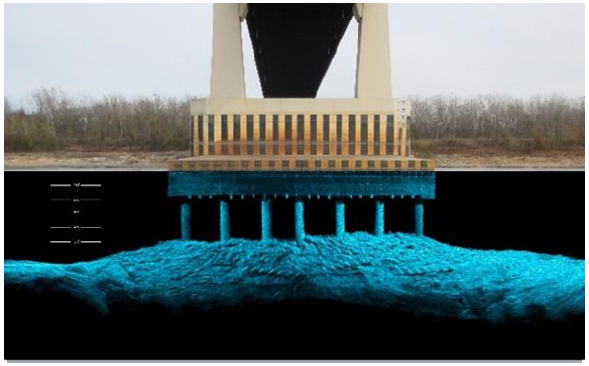
Scope of Work Relevant to the Contract:
NBIS underwater bridge inspection
Work Zone Safety
Emergency Damage Inspections
Bathymetry and Imagery Surveys
Non-destructive testing
Electronic submittals
NBE and BME ratings

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Retainer Contract for Underwater Bridge Inspections, Statewide TO 1-10		Firm responsibility (prime or sub?)	Prime	
Project number	4400009104	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	03/14	Total consultant contract cost ($1,000's)		$3,243	
Services completed by this firm (mm/yy)	12/17	Cost of consultant services provided by this firm ($1,000's)		$2,822	

In June 2017, Moffatt & Nichol (M&N) began a four-year statewide retainer contract with LADOTD to provide Levels I, II, and III NBIS underwater bridge inspections throughout Louisiana. All inspections were completed in accordance with current FHWA, CFR, AASHTO, and LADOTD standards and guidelines. M&N has performed over 215 underwater bridge inspections under this contract and over 900 total. For each inspection, M&N provided a detailed inspection report within 30 days and entered inspection data into LADOTD's asset management tool (AssetWise). As part of M&N's quality control process, each inspection report was reviewed a minimum of three times, with subsequent reviews performed by team members with increasing levels of experience/ qualifications. Task Orders 1-2: M&N performed underwater inspection of 45 bridges over large waterways, including 8 bridges crossing the Mississippi River. These inspections were performed statewide and included bridges in both riverine and coastal environments. Underwater Acoustic Imaging (UAI) was used for each inspection and was especially useful when diving conditions were hazardous. Task Order 4: M&N performed underwater inspection of 35 submerged corrugated metal pipe (CMP) culverts, with a total length of 13,944 linear feet, crossing Interstate 10. The culverts were inspected using remotely operated vehicles (ROV) to identify areas of sediment buildup at each opening and at 50-ft intervals throughout the culvert.

Members Utilized in this Project Submittal: Chace Hulon, PE; Steven Armstrong, EI; Josh Martinez, PE; Jeffrey Gazarek.



Scope of Work Relevant to the Contract:
NBIS underwater bridge inspection
Work Zone Safety
Emergency Damage Inspections
Bathymetry and Imagery Surveys
Non-destructive testing
Electronic submittals
AssetWise w/ NBE and BME ratings

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*		Bridge
Project name	2017 Retainer Contract for Underwater Bridge Inspections, Statewide - Task Orders 3, 6, & 7		Firm responsibility (prime or sub?)		Prime
Project number	4400009104	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	06/17	Total consultant contract cost ($1,000's)		$3,820	
Services completed by this firm (mm/yy)	12/21	Cost of consultant services provided by this firm ($1,000's)		$3,017	

As part of the LADOTD 2017 Retainer Contract for Underwater Bridge Inspections, M&N completed Task Orders 3, 6 and 7 (currently ongoing) All inspections were completed in accordance with current FHWA, CFR, AASHTO, and LADOTD standards and guidelines. Task Orders 3 and 6: M&N performed underwater inspection of 592 bridges crossing small to mid-sized waterways, including six culverts requiring penetration dives. M&N was able to efficiently inspect these bridges using a combination of shore entry and small to mid-sized boats, completing all inspections on or ahead of schedule. Additionally, M&N inspected 12 bridges passing through large swamps that were between 3 and 14 miles long and 4 bridges crossing large waterways (Mississippi River & Wax Lake Outlet). M&N seamlessly integrated Engineering Operations (eO) inspector divers into the inspection teams for these task orders, which increased the project manager's ability to adapt to unforeseen changes and maintain schedule. Many of these bridges crossed waterways inhabited by alligators, which posed a potential threat to the inspectors. To decrease the probability of an incident, M&N implemented the use of a Louisiana Department of Wildlife and Fisheries-approved nuisance alligator trapper. Task Order 7: This is the planned final task order for this retainer contract. Included in this task order will be the underwater inspection of 216 bridges in Districts 02, 03, 07, 08, 61, and 62, over small to midsized waterways.

Members Utilized in this Project Submittal: Chace Hulon, PE; Steven Armstrong, PE; Joshua Martinez, PE; Jeffrey Gazarek

Scope of Work Relevant to the Contract:
NBIS underwater bridge inspection
Work Zone Safety
Emergency Damage Inspections
Bathymetry and Imagery Surveys
Non-destructive testing
Electronic submittals
AssetWise w/ NBE and BME ratings

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	LADOTD In-Depth Bridge Inspection Contract		Firm responsibility (prime or sub?)	Sub	
Project number	H.009730.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	11/19	Total consultant contract cost ($1,000's)	$1,200		
Services completed by this firm (mm/yy)	On-going	Cost of consultant services provided by this firm ($1,000's)	$695		

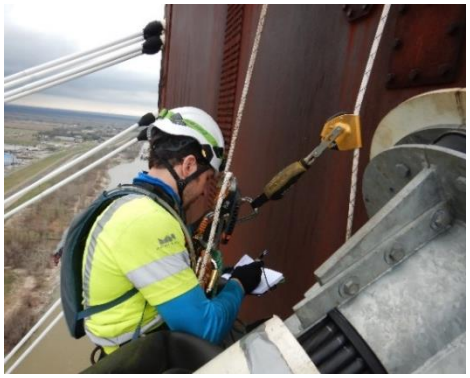
M&N is part of a team responsible for performing bridge inspections of complex structures such as cantilever trusses, prestressed concrete segmental box bridges, and movable bridges for statewide projects covered by an indefinite delivery/indefinite quantity contract under separate task orders. The contract involves providing all services required to perform statewide NBIS in-depth, routine, fracture critical, and underwater inspections of complex structures to include mechanical and electrical inspections by certified engineers. Coating system assessments, nondestructive evaluations, traffic control services, and specialty access services are often utilized on this project. In-depth inspection reports include precision measurements and testing results of all elements and systems, element level data collection and corrections, and recommendations as to prioritized repairs and general maintenance functions. M&N has provided specialty access services to include confined space entry, mobile elevated work platforms, fall protection, rope access, UAS drone access, and underwater diving operations. M&N has also provided mechanical and electrical inspections with NHI-certified engineers on swing span bridges to evaluate hydraulic and electro-mechanical systems on swing bridges according to the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual. M&N is planning the SPRAT rope access operations for the main truss spans of the Vicksburg Bridge to safely eliminate the need for lane closures and avoid traffic disruptions to the public.

Members Involved: Chace Hulon, PE; Steven Armstrong, PE; Jeffrey Gazarek; Christopher Eschenbach.

Scope of Work Relevant to the Contract:
Complex bridge inspection
Movable bridge inspection with M&E
Non-destructive testing
Fatigue prone details
Work Zone Safety
Fall Protection
Electronic Submittals
Bridge IDIQ contract
NBE, BME, and ADE ratings

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	LADOTD In-Depth Bridge Inspection Contract		Firm responsibility (prime or sub?)	Sub	
Project number	H.009730.5	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	01/20	Total consultant contract cost ($1,000's)	$1,060		
Services completed by this firm (mm/yy)	On-going	Cost of consultant services provided by this firm ($1,000's)	$595		



M&N is part of a team responsible for performing bridge inspections of complex structures such as long-span cantilever trusses, cable stayed bridges, and steel through arches for statewide projects covered by an indefinite delivery/indefinite quantity contract under separate task orders.

The contract involves providing all services required to perform statewide NBIS in-depth, routine, fracture critical, and underwater inspections of complex structures. Coating system assessments, nondestructive evaluations, traffic control services, and specialty access services are often utilized on this project. In-depth inspection reports include precision measurements and testing results of all elements and systems, element level data collection and corrections, and recommendations as to prioritized repairs and general maintenance functions. M&N has provided specialty access services to SPRAT rope access (all levels), mobile elevated work platforms, fall protection, UAS drone access, and underwater diving operations. M&N has safely and successfully introduced SPRAT rope access operations to the I-10 Bridge over the Mississippi River (New Bridge in Baton Rouge). The DOTD now prefers to utilize this method to safely eliminate the need for lane closures and avoid traffic disruptions to the public.

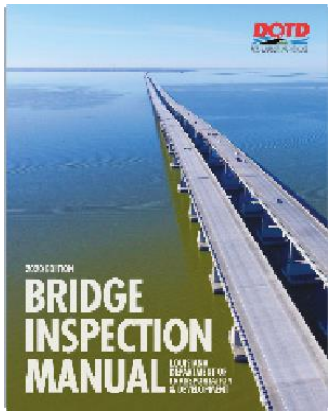
Scope of Work Relevant to the Contract:
Complex bridge inspection
Cable-stayed bridges
Non-destructive testing
Fatigue prone details
Work Zone Safety
Fall Protection
Electronic Submittals
Bridge IDIQ contract
NBE, BME, and ADE ratings

Members Involved: Chace Hulon, PE; Steven Armstrong, PE; Jeffrey Gazarek; Christopher Eschenbach; Joshua Martinez, PE; Charles Balzarini, PE; Matt Balzarini, PE;

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*		Bridge
Project name	2017 Retainer Contract for Underwater Bridge Inspections, Statewide - Task Orders 3, 6, & 7		Firm responsibility (prime or sub?)		Prime
Project number	4400009104	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	06/17	Total consultant contract cost ($1,000's)		$3,820	
Services completed by this firm (mm/yy)	12/21	Cost of consultant services provided by this firm ($1,000's)		$3,017	

Moffatt & Nichol was tasked with the development of the first comprehensive Bridge Inspection Manual (BIM) for the Louisiana Department of Transportation & Development (DOTD) Bridge Program. Chace Hulon, PE, served as the Chief Editor of the DOTD BIM. The BIM is designed to capture all previous policies, directives, memorandums, manuals, and forms into a single, centralized reference manual. The BIM will align the goals of the Bridge Inspection Office Headquarters with all nine DOTD districts. The BIM will also allow for better communication and quality management between the DOTD project managers, their local bridge owners, and their consultants. The BIM was designed to be used electronically as a reference file to be stored on tablets that is accessible to all DOTD bridge inspection team leaders. The BIM includes nine chapters that are intuitively ordered in a systemic fashion with hyperlinks throughout for quick referencing to vital documents. The BIM also allows for documented annual revisions or critical updates following federal policy changes. Moffatt & Nichol was responsible for the following:



- Compiling all reference material within the DOTD
- Designing the outline of the BIM
- Holding routine (weekly) progress meetings with the DOTD project manager, Federal Highway Administra- tion (FHWA) representative, and subject matter experts on the committee
- Providing statewide programmatic guidance with a national perspective
- Ensuring compliance with the FHWA's 23 National Bridge Inspection Program Metrics
- Presenting the BIM at a DOTD statewide conference

Scope of Work Relevant to the Contract:

DOTD Bridge Program experience
NBIS underwater bridge inspection policies
FHWA QA Metrics
AssetWise w/ NBE and BME ratings

Members Involved: Chace Hulon, PE; Steven Armstrong, PE.

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	IDIQ Contract for In-Depth Bridge Inspection		Firm responsibility (prime or sub?)	Sub	
Project number	4400009104	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Stephanie Doolittle, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / jasmine.galjour@la.gov				
Services commenced by this firm (mm/yy)	03/20	Total consultant contract cost ($1,000's)	$5,000		
Services completed by this firm (mm/yy)	On-going	Cost of consultant services provided by this firm ($1,000's)	$600		

As part of the previous five-year retainer contract, Moffatt & Nichol has performed 10 task orders related to underwater bridge inspections throughout Louisiana. Teams of ADCI-certified engineer-divers provided Level I, II, & III underwater inspections in accordance with the National Bridge Inspection Standards and LADOTD PONTIS Inspection Manual. 687 bridges have been inspected statewide, including many in District 02. Bridge types inspected consisted of movable swing span bridges, bascule bridges, truss bridges, timber stringer bridges, cable-stayed bridges, single and multi-span girder bridges up to 8 miles in length, constructed of concrete, steel and timber materials. Site conditions included salt, brackish, and fresh waters and riverine conditions with varying levels of current having low to no visibility. Underwater Acoustic Imaging (UAI) was performed in response to emergency investigations following major flood events to inspect scour around the substructure units. Report submittals included a description of each structure and elements inspected and existing conditions, shoreline conditions, presence of debris in the waterway, with NBIS ratings for Item 60 - Substructure and Item 61 – Channel condition, element level condition states for all elements inspected, and recommendations for repair and maintenance. Three Quality Control reviews were performed for each bridge report by the inspection team and Quality Assurance reviews were performed on 5% of the reports by an independent NBIS team leader.

Members Involved: Chace Hulon, PE; Steven Armstrong, EI; Josh Martinez, PE; Jeffrey Gazarek.

Scope of Work Relevant to the Contract:

NBIS bridge inspection
Orleans District
Non-destructive testing
Electronic Submittals
Work Zone Safety
AssetWise w/ NBE and BME ratings

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	IDIQ Contract for Inventory and Inspection of Sign Trusses Statewide		Firm responsibility (prime or sub?)	Prime	
Project number	4400017089	Owner's name	Louisiana Department of Transportation and Development		
Project location	Baton Rouge, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, Louisiana 70802 / 225.379.1500 / haylye.brown@la.gov				
Services commenced by this firm (mm/yy)	09/20	Total consultant contract cost ($1,000's)		$3,000	
Services completed by this firm (mm/yy)	On-going	Cost of consultant services provided by this firm ($1,000's)		$839	

Scope of Work Relevant to the Contract:

Program Support
Work Zone Safety
Minimal Traffic Impacts
Nondestructive Evaluation
Rope Access and Fall Protection
Repair Recommendations
ASSTA work zone safety and TTC

As part of the current five-year retainer contract, M&N is performing the inventory and inspection of overhead sign structures in accordance with FHWA guidelines. M&N previously lead the development of the LaDOTD Sign Truss Inspection Program and continues to improve the program with the added creation of an interactive GIS database. Over 1,000 overhead sign structures have had their second routine inspection completed thus far, with an additional 200 interim inspections to monitor deficiencies more frequently. In addition, 205 post-event damage inspections were completed in 2020 due to Hurricane Laura and an additional 900 post-event damage inspections are being performed due to Hurricane Ida, including structures along this corridor. Inspections included non-destructive techniques on steel and aluminum welds, high stress moment connections, and other fatigue prone details with deficiencies. Structure configurations consist of bridge and cantilever signs with drilled shafts, pile supported footings, or bridge mounted foundations. The majority of the structures are aluminum box trusses, which have a shorter fatigue life. Ultrasonic flaw detection was used by certified inspectors to examine the anchor rods for fractures or partial fractures. Rope access techniques were utilized to safely access primary elements while eliminating traffic interruptions and conserving costs. M&N lead inspectors are ATSSA certified technicians or supervisors, along with an expert traffic control company to assist with safe temporary lane closures. M&N has humbly maintained a zero-incident safety record throughout the life of this contract. M&N is creating the Inventory & Inspection Manual for Ancillary Structures for the LaDOTD. Tablets were utilized in the field with a custom designed application that allowed for quick and efficient Quality Control reviews from the field. Separate QC reviews were performed for each bridge report by the inspection team and Quality Assurance reviews were performed on 5% of the reports by an independent qualified NBIS team leader. Assurance reviews were performed on 5% of the reports by an independent NBIS team leader.

Members Involved: Chace Hulon, PE; Steven Armstrong, PE; Jeffrey Gazarek; Joshua Martinez, PE .

17. **Firm Experience:**

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge	
Project name	Mississippi Department of Transportation (MDOT) NBIS Underwater Bridge Inspections		Firm responsibility (prime or sub?)	Prime	
Project number		Owner's name	Mississippi Department of Transportation		
Project location	MDOT Districts 1 & 2		Owner's Project Manager	Richard Withers, P.E.	
Owner's address, phone, email	1401 North West Street, Jackson, MS, (601)359-7176, rwithers@mdot.ms.gov				
Services commenced by this firm (mm/yy)	08/14	Total consultant contract cost ($1,000's)		$600	
Services completed by this firm (mm/yy)	12/16	Cost of consultant services provided by this firm ($1,000's)		$469	

Under a three-year retainer contract, M&N performed Levels I, II and III underwater inspections (UWI) of 72 bridges in Districts 1 and 2. Underwater bridge inspections included the use of high-resolution scanning SONAR of selected bridge elements. All inspections were conducted by a team of ADCI-certified engineer-divers in accordance with the FHWA BIRM, AASHTO MBE, NBIS requirements, and MDOT PONTIS Inspection Manual. Several multi-span, continuous and non-continuous bridges consisting of concrete, steel, and timber elements were inspected. Site conditions consisted of riverine conditions with varying levels of current and minimal visibility. Final inspection reports for each structure included a description of each bridge, the elements inspected, an underwater inspection plan, shoreline and waterway conditions, NBIS ratings, AASHTO and PONTIS element- level ratings, recommendations for repair and maintenance, and channel contour drawings. Bridges were reviewed and evaluated for critical structural conditions and a pre-defined critical finding protocol was implemented for necessary remedial action. The M&N dive team responded to an emergency UWI request within 24 hours to perform interim underwater inspections of the I-55 Bridge over Hickahala Creek. High resolution acoustic imaging was utilized to identify structural deficiencies and determine the limits of scour around Piers I, II, and III. Riverine conditions allowed for safe diving conditions at the time of inspection. Engineer-divers performed the UWI in unison with acoustic imaging to accurately evaluate the subsurface conditions of the substructure units and the channel bottom.

Scope of Work Relevant to the Contract:

NBIS underwater bridge inspection
Underwater acoustic imaging
Emergency inspection services
Bathymetry and Imagery Surveys
Non-destructive testing
Electronic submittals
AssetWise w/ NBE and BME ratings

Members Involved: Chace Hulon, PE; Steven Armstrong, PE.

18. Approach and Methodology:

Personnel from WJE and our partner firms routinely conduct bridge inspection and repair projects and are intimately familiar with the challenges associated with managing and executing these types of projects. For this contract, the WJE team offers the LADOTD recognized engineering firms experienced in the inspection, assessment, and retrofit of bridges, and in particular cable-stayed, suspension, truss, and moveable bridges. Our knowledge of structural behavior and materials performance is supported by technical expertise in condition assessment and non-destructive testing. With this experience, our team is uniquely qualified to provide engineering services for the inspection and possible load rating and repair design of structures affected by deterioration or structural deficiencies over the life of a structure as presented in Figure 1. WJE's approach to inspecting complex bridges often includes three key aspects:

1) **An applied understanding of structural, mechanical, electrical, and materials behavior.** WJE personnel have the capabilities through various non-destructive tools and techniques to assess the condition of structures beyond that provided by visual inspection. For example, WJE has American Society of Nondestructive Testing (ASNT) Level II and Level III staff trained in ultrasonic testing and magnetic particle testing methods for use in steel bridge inspections. Moreover, WJE engineers have experience installing fatigue retrofits and have an acute understanding of how structures react to these retrofits over time. Forte & Tablada (F&T) add expertise in surveying and Moffat & Nichol (M&N) bring specialized underwater diving inspection skills and underwater imaging.
2) **Non-conventional inspection access techniques.** The team members collectively have experience inspecting structures using a variety of methods including underbridge inspection vehicles, aerial lifts, barges, suspended scaffolding, and ladders; however, when conventional inspection access techniques are too costly, lane closures unwanted, or the structure too complicated, the team will employ rope access through our difficult access teams (DAT). These DATs provide rappelling, climbing, and other rope access techniques to approach hard-to-reach locations in bridges of all sizes and types. DAT members can perform close-up visual inspections and diagnostic testing that would be impossible or more costly using traditional access methods. All team firms have SPRAT-qualified inspectors. Similarly, WJE's and M&N's certified drone pilots can use various unmanned aerial systems to supplement inspections.
3) **Efficient data collection and interpretation capabilities.** Elemental bridge inspections produce significant field data. To manage this data, WJE has developed an inspection process that ties inspection notes and photos spatially to relevant bridge documents using our WJE Plannotate iPad software. Using this process, field inspection notes and photographs are available in near real-time for review in most internet connected web browsers while also facilitating the quality control and assurance processes by ensuring that significant findings and recommendations are fully supported by field documentation prior to leaving the site. The data collected using Plannotate can be uploaded to the AssetWise bridge inspection software.

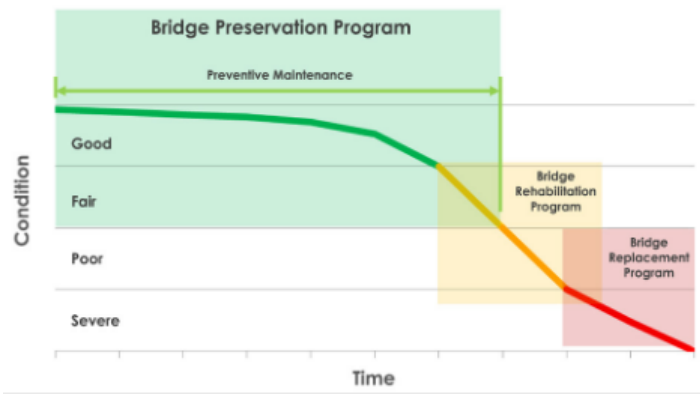


Figure 1 - FHWA Bridge Preservation Curve

Task Order Scope of Work

The following outlines our understanding of the tasks associated with this IDIQ contract and how each would be implemented if requested. Refer to the attached Organizational Chart for information on proposed staffing. Before any specific tasks would be started, the WJE Project Manager would meet with the LADOTD Project Manager or designee to determine items such as the emergency nature of the request and any scheduling constraints, LADOTD resources that may be involved in the task execution, the critical scope of work, the availability of information from the field that resulted in the request, the availability of other important documents, and restrictions associated with potential disruptions to the travelling public or shipping lanes, etc. All work product will receive appropriate QA/QC reviews in accordance with our standard procedures prior to delivery.

Bridge Inspection

For each task order, the following nine tasks could be included depending on the bridge type.

Task 1 – Document Review - The available documentation for the subject bridge including original design drawings, bridge rehabilitation drawings, previous inspection reports, and the Designer's Maintenance and Inspection Manual will be reviewed to better understand the existing conditions. This information will help focus the inspection and help identify missing information that should be collected during field activities.

Task 2 – NBIS Inspection - An inspection of the bridge will be completed in accordance with the requirements of the National Bridge Inspection Standards (NBIS), the AASHTO Manual for Bridge Evaluation (MBE), and the LADOTD Bridge Inspection Manual and completed under the direction of an NBIS-certified Team Leader. A visual inspection of all non-fracture critical elements will be performed. The condition state of these elements will be assigned and any defects identified, documented, and quantified as part of an elemental inspection. Additional information such as member geometry or connection details will be collected for load rating purposes, if required. The condition of the coating will be documented, if necessary, by a certified NACE Bridge Coating Inspector. Inspection data will be collected on WJE's tablet-based Plannotate software, which has the capabilities to share near real-time data with other inspection team members, WJE experts back in the office, our QA/QC engineer, and if needed, the LADOTD.

Task 3 – Fracture Critical Inspection - Prior to the inspection, all fracture critical members and components will be identified if not already identified in previous inspection reports. For truss bridges, these typically include the truss tension members and floor beams in addition to any two-girder approach spans. For cable-supported bridges, the fracture critical elements would include the cables or stays unless they have been designed as redundant. Cable dampers and anchorages will be included. Each of the identified members or components will be inspected at arm's length for indications of section loss, cracking, or distortion. This information will be documented to confirm a change in condition and to supplement load rating calculations. Critical findings will be reported immediately to the LADOTD for resolution. Portions of the structure may require use of industrial rope access climbing methods to gain access to fracture critical elements instead of aerial lifts and underbridge inspection vehicles. The fracture critical inspections will be led by NBIS-approved Team Leaders experienced in climbing inspections and trained in fracture critical inspections.

Task 4 – Hands-on Gusset Plate Inspections - The primary member gusset plates in truss spans will be inspected to obtain geometric, fastener, and deterioration information. Section loss at critical locations will be collected using a combination of large calipers and ultrasonic thickness gages. It is likely that some cleaning of corrosion material on the gusset plates will be necessary to obtain accurate remaining section measurement. Gusset plates are often accessed using climbing techniques or an aerial lift.

Task 5 – Underwater Inspection - If requested, a visual and tactile inspection of all portions of the structure below the waterline will be performed by experienced, certified divers trained in completing NBIS inspections. Their work will be overseen by a NBIS-approved Team Leader. In addition, measurement depths of scour holes, water depths around piers, and the channel profile measurements upstream and downstream of the bridge will be collected. These inspections can be aided by high-resolution underwater acoustic imaging (UAI).

Task 6 – Mechanical/Electrical Inspection - For moveable bridges, mechanical and electrical inspections will be incorporated into the inspections. The scope of these inspections can vary in complexity depending on the condition of the equipment and whether the inspection is being completed to address known operating issues. A movable span is an integrated machine that must be evaluated in total to ensure that it operates reliably in the long term. The mechanical and electrical inspections typically include a visual inspection of the operating machinery, bridge control systems, and associated components. Deficiencies will be identified and recorded, particularly those areas needing immediate corrective action in order to keep the bridge safely in service. The inspection will include cleaning, removing and replacing equipment inspection covers or enclosure panels, as required, to perform the inspections. The inspections will be coordinated with the LADOTD, local officials, and US Coast Guard, if needed.

Task 7 – Bridge Deck Investigation - To provide more informed recommendations and life-cycle cost analyses for bridge repair or replacement, an investigation of the bridge deck can be carried out during a bridge inspection task order. This task would be performed only if the deck condition is such that rehabilitation initially appears as a reasonable option. A visual inspection of the full deck will be performed along with a detailed survey and nondestructive testing of representative spans. This work will include delamination surveys using chain dragging, limited collection of reinforcing steel cover measurements using ground penetrating radar (GPR), GPR for estimating percentage of the deck with concrete distress, and concrete core extraction for NDE validation and laboratory study. The NDE techniques used will depend on the condition and type of any overlay. The laboratory testing will include development of chloride profiles through the thickness of the bridge deck in coastal regions as well as petrographic examination to evaluate the quality and condition of the concrete and any overlay material.

Task 8 – Ultrasonic Testing of Truss Pins, Pin/Link Assemblies, and Welds - Ultrasonic testing (UT) of truss pin and pin/link connections will be done without removing the pins from service. Ultrasonic scans will be used to accurately measure the primary connection components and to evaluate regions within the pins and links that are susceptible to wear from service loads or deterioration. In preparation, scanning surfaces will be cleaned and lightly polished to directly allow uniform ultrasonic wave transmission into the subject components. Pins will be scanned with a longitudinally oriented straight beam transducer to measure pin dimensions and for preliminary evaluation. Additional scans at an appropriate incident angle will also be performed to examine the pin shear planes and bearing region surfaces within the pin barrel section. Pins with center bore holes will also be examined using specialized bore-hole transducers. Link members will be scanned using a 45 degree shear wave transducer to detect cracks originating from pin holes. The team will apply unique knowledge gained from recent projects associated with hydrogen-assisted cracks in T1 steels to satisfy FHWA inspection requirements for bridges with T1 steel welds fabricated without a fracture control plan. UT inspections will be performed by experienced operators meeting a minimum of ASNT Level II qualification.

Task 9 – Inspection Report - Information collected from Tasks 1 through 8 will be complied into a report for each bridge. The report will include photos, measurements, and test results obtained during the field work. The report will describe and discuss the cause(s) of observed deterioration and its effect on the structure's service life. A draft report will be submitted to the LADOTD for review and comment no later than 45 days after the

inspection. All deliverables will be subjected to review consistent with the approved QA/QC plan. A final report will be prepared that incorporates the review comments. The reports will be uploaded into the AssetWise software system.

Additional Services

As needed, the WJE team can complete topographical surveys, provide construction support, perform load ratings and develop repair designs, with the latter two tasks described as follows to address conditions encountered during the inspections:

Load Rating – A load rating of all elements affected by the inspection findings for the structure will be performed using Load Factor and Resistance Rating (LRFR) methods. The load rating effort will include all legal and permit trucks as well as emergency vehicles. For this effort, we will use a combination of BrR and SAP2000 depending on the structure complexity. The load rating will also consider the effects of deterioration documented during the inspection. Design-based evaluation methods are inherently conservative and do not lend themselves to the vast array of deteriorated conditions encountered on older structures. For example, design equations for gusset plates typically represent thickness as a single value when in fact deterioration results in variable degrees of pitting—from none to perforation. As such, design-based strength and stability formulas may be inappropriate to load rate deteriorated members. WJE has led the industry in understanding these issues and brings this experience to the project to affect load ratings and eventual solutions that appropriately account for deterioration while avoiding unnecessary repairs. Therefore, when appropriate and approved by the LADOTD PM, refined analysis methods outlined in the Gusset Plate Evaluation Guide as referenced in the MBE will be employed to accurately reflect member loading and capacities. Load ratings may also be improved by collecting and analyzing material samples.

Repair Development – There is a fundamental difference in the way a rehabilitation project is approached versus a new design project. The approach to rehabilitation is highly constrained by the characteristics of the existing structure (e.g. original design loads, material properties, condition, geometry) and utilizes more rigorous evaluation procedures, when warranted, over the simplified, generalized design-based evaluation procedures associated with new design. Using the inspection and load rating information, repair concepts will be developed that address rating deficiencies, long-term durability, historic features, and changed traffic configurations. Where possible, innovative repair approaches will be implemented to avoid use of costly shoring, falsework, or strongback systems needed to replace or strengthen members or elements.

The inspection tasks and associated deliverables for a task order as part of the IDIQ contract are provided below.

Task	Deliverable	Task	Deliverable
1 Document Review	Understanding of bridge design and previous condition	6 Mechanical/Electrical Inspection	Component conditions and operational issues
2 NBIS Inspection	Elemental ratings and changes in condition	7 Bridge Deck Invest.	Condition and deterioration mechanisms
3 Fracture Critical Inspection	FC member identification and conditions	8 UT Inspection	Location and characterization of defects
4 Gusset Plate Inspections	Field measurements and conditions	9 Report	Summary of findings and recommendations to address issue(s)
5 Underwater Inspection	Scour and substructure conditions	Load Rating/Rehab Design	

19. **Workload:**

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
Wiss, Janney, Elstner Associates, Inc.	Bridge	H.000303.6	Contract 4400009424, Task Order No. H.000303.6, Danziger Bridge Repair	$51,741.00
Wiss, Janney, Elstner Associates, Inc.	Bridge	Contract 4400009424, Task Order 5	Contract 4400009424, Task Order No. 5, Elastomeric Bearing Pad Testing	$83,524.00
Wiss, Janney, Elstner Associates, Inc.	Bridge	H.014280	Contract No. 4400017263, H.014280 Bayou Ramos	$149,431
Forte and Tablada, Inc.	Bridge	H.012485.1	IDIQ Contract 4400010099, Task Order No. 4 Off System Bridge Load Rating, Statewide	$190,738
Forte and Tablada, Inc.	Bridge	H.012485.1	IDIQ Contract 4400010099, Task Order No. 5 Bridge and Culvert Load testing	$276,656
Forte and Tablada, Inc.	Survey	H.014628.5	IDIQ Contract 4400010587, Task Order No. 17 Turn Lanes at Rice Mill	$71,418
Forte and Tablada, Inc.	Survey	H.014219, H.014222, H.014228, H.014231, H.014236, H.013954, H.013979, H.013985, H.013992, H.013994, H.013995, H.013990	Rural Bridge Replacement Initiative	$54,676

Forte and Tablada, Inc.	Survey	H.003931.5	IDIQ Contract 443015237 I-10 Calcasieu River Bridge Replacement	$2,067,730
Forte and Tablada, Inc.	Survey	H.004273.5	DOTD I-49 Connector (Lafayette Regional Airport to I-10/US 167 Interchange)	**$**119,318
Forte and Tablada, Inc	Survey	H.012485.1	IDIQ Contract 4400010099, Task Order No. 3 Metal Culverts Inspection, Statewide	$103,399
Forte and Tablada, Inc	Survey	H.011684	LA 327 Spur: Staring Lane Extension Route LA 327-S	$50,279
Forte and Tablada, Inc	Survey	H012072	LA 60 Drain Bridge	$1,428
Moffatt & Nichol	Bridge	H.009730.5	In-Depth Inspection of Complex Bridges	$291,705
Moffatt & Nichol	Bridge	H.009730.5	In-Depth Inspection of Complex Bridges	$396,988
Moffatt & Nichol	Planning	NA	Future of the Louisiana Waterways Transportation	$135,357
Moffatt & Nichol	Bridge	H.011331.5	LADOTD Inventory and Inspection of Sign Trusses	$420,203
Moffatt & Nichol	Bridge	H.009730.5	LADOTD Underwater Bridge Inspection Statewide	$715,252
Moffatt & Nichol	Environmental	NA	IDIQ Contract for Louisiana Watershed Initiative (LWI) Modeling Contract	$745,498
Moffatt & Nichol	Data Collection	H.971294.1	LADOTD RIMS	$85,791

(Add rows as needed) DO NOT SUM

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

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

June 3, 2021

To Whom It May Concern,

This is to verify that the below listed employees of Wiss, Janney, Elstner Associates, Inc. have successfully completed LADOTD required ATSSA Traffic Control Training.

ATSSA Traffic Control Technician Training – May 11, 2021 – Jonathan McGormley and Patrick Marra

ATSSA Traffic Control Supervisor Training – May 12-13, 2021 – Jonathan McGormley and Patrick Marra

This letter will serve as temporary proof of training until above listed employee receives his official certificate from American Traffic Safety Services Association (ATSSA).

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

Best Regards,

Michael Demouy – LAGC Manager

National Highway Institute

Certificate of Training

Andrew Bishop

has participated in

FHWA-NHI-130055

Safety Inspection of In-Service Bridges

hosted by

Illinois Department of Transportation

Date: October 16 - October 27, 2017 ***Hours of Instruction:*** 67

Location: Schaumburg, IL

Instructor — Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute

National Highway Institute

Certificate of Training

Andrew Bishop

has participated in

FHWA–NHI–130078

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Illinois Department of Transportation

Date: June 14-17, 2016 ***Hours of Instruction:*** 25

Location: Schaumburg, Illinois

Instructor — Amy Young, Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute

National Highway Institute

Certificate of Training

Douglas Crampton

has participated in

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

hosted by

Structural Engineers Association of Illinois

Date: Jan 26-Feb 6, 2009 ***Hours of Instruction:*** 60 Contact Hrs

Location: Chicago, Illinois

Instructor — Local Coordinator

Instructor — Joseph S. Tiesi, Associate Administrator, Office of Professional and Corporate Development

National Highway Institute

Certificate of Training

Douglas Crampton

has participated in

FHWA-NHI-130053

Bridges Inspection Refresher Training

hosted by

Collins Engineers, Inc.

Date: June 19-21, 2018 ***Hours of Instruction:*** 18 Hours

Location: Chicago, IL

Instructor — Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Doug Crampton

has participated in

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

hosted by

Wiss, Janney, Elstner Associates, Inc.

Date: November 5 - 7, 2013

Location: Northbrook, Illinois

Hours of Instruction: 21 Hours

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

Participant Training History
Issued by National Highway Institute

FIRST NAME: ROBERT	LAST NAME: GESSEL	PARTICIPANT ID: 20060241
ADDRESS: 83 S KING STREET SEATTLE, WA		TELEPHONE:

Session ID	Course#	Course Title	Start Date	End Date	Location	CEU
130055	FHWA-NHI-130055	Safety Inspection of In-Service Bridges	3/27/2006	4/7/2006	Madison, WI	6

National Highway Institute

Certificate of Training

Robert Gessel

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Indiana Department of Transportation

Date: December 1-4, 2020

Location: Virtual Delivery, MI

Hours of Instruction: 18

Instructor

Instructor

William Dittrich
Local Coordinator

Thomas Harman, Director
National Highway Institute

National Highway Institute

Certificate of Training

Robert Gessel

has participated in

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

hosted by

Wisconsin Department of Transportation

Date: April 22-25, 2014

Location: Green Bay, WI

Hours of Instruction: 25

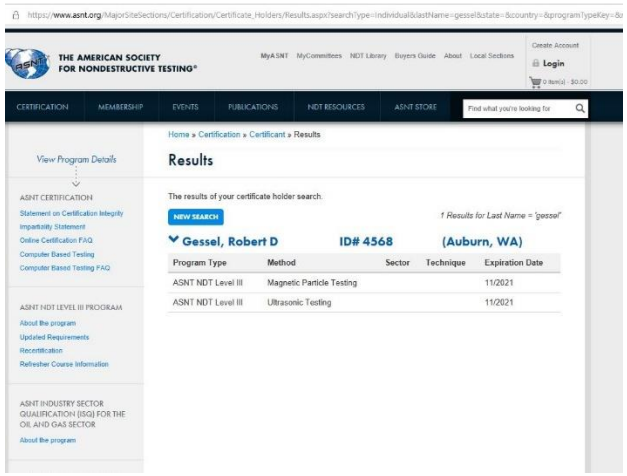
Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**



THE AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING®

Results

The results of your certificate holder search:

NEW SEARCH

1 Results for Last Name = 'gessel'

Gessel, Robert D ID# 4568 (Auburn, WA)

Program Type	Method	Sector	Technique	Expiration Date
ASNT NDT Level III	Magnetic Particle Testing			11/2021
ASNT NDT Level III	Ultrasonic Testing			11/2021

National Highway Institute

Certificate of Training

U.S. Department of Transportation
Federal Highway Administration

Chuck Larosche

has participated in

Bridge Inspection Refresher (NHI-130053)

hosted by

Texas Department of Transportation

Date: *February 9-11, 2016*
Location: *Austin, TX*

Hours of Instruction: *18*

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

National Highway Institute

Certificate of Training

U.S. Department Of Transportation
Federal Highway Administration

Chuck Larosche

has participated in

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

hosted by

Wiss, Janney, Elstner Associates, Inc.

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

Hours of Instruction: *21 Hours*

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

U.S. Department Of Transportation
Federal Highway Administration

Steve Lauer

has participated in

FHWA – NHI - COURSE 130055

Safety Inspection of In-Service Bridges

hosted by

Structural Engineers Assn. of Illinois/SEI – IL Chapter

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

Hours of Instruction: 60

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Steven Lauer

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Indiana Department of Transportation

Date: December 1-4, 2020 *Hours of Instruction:* 18

Location: Virtual Delivery, MI

Instructor

Instructor

William Dittrich
Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

National Highway Institute

Certificate of Training

Steve Lauer

has participated in

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

hosted by

Wiss, Janney, Elstner Associates, Inc.

Date: November 5 - 7, 2013 *Hours of Instruction:* 21 Hours

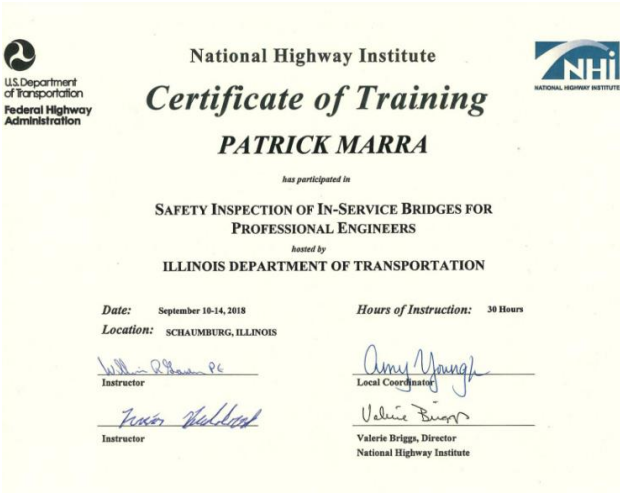
Location: Northbrook, Illinois

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute



National Highway Institute

Certificate of Training

PATRICK MARRA

has participated in

SAFETY INSPECTION OF IN-SERVICE BRIDGES FOR PROFESSIONAL ENGINEERS

hosted by

ILLINOIS DEPARTMENT OF TRANSPORTATION

Date: September 10-14, 2018 *Hours of Instruction:* 30 Hours

Location: SCHAUMBURG, ILLINOIS

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

National Highway Institute

Certificate of Training

Patrick Marra

has participated in

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

hosted by

Ohio Department of Transportation

Date: November 6-9, 2018 *Hours of Instruction:* 25

Location: Columbus, OH

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Jonathan McGormley

has participated in

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

hosted by

Parsons Brinckerhoff | Chicago Transit Authority

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

Hours of Instruction: *60*

Instructor
Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Jonathan C. McGormley

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Boston Society of Civil Engineers Section/ASCE

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

Hours of Instruction: 18

Instructor
Instructor

Local Coordinator

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

National Highway Institute

Certificate of Training

Jonathan McGormley

has participated in

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

hosted by

Wiss, Janney, Elstner Associates, Inc.

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

Hours of Instruction: *21 Hours*

Instructor
Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

BRIAN SANTOSUOSSO

has participated in
NHI Course 130055
Safety Inspection of In-Service Bridges
hosted by
ACEC INDIANA

Location: **Indianapolis, IN**
Date: **June 5-16, 2006**

Hours of Instruction: **72hours**
6 CEU's

Instructor
Director, National Highway Institute
Federal Highway Administration

Coordinator
Associate Administrator, Office of Professional and Corporate Development
Federal Highway Administration

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Brian Santosuosso

has participated in

FHWA-NHI-130053

Bridges Inspection Refresher Training

hosted by

Collins Engineers, Inc.

Date: June 19-21, 2018 ***Hours of Instruction:*** 18 Hours

Location: Chicago, IL

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

National Highway Institute

Certificate of Training

Brian Santosuosso

has participated in

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

hosted by

Wiss, Janney, Elstner Associates, Inc.

Date: November 5 - 7, 2013 ***Hours of Instruction:*** 21 Hours

Location: Northbrook, Illinois

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Curtis J. Schroeder

has participated in

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

hosted by

HQ Installation Management Command

Date: 9-20 July 2012 ***Hours of Instruction:*** 60

Location: Fort Leonard Wood, MO

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Curtis J. Schroeder, PE

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

ASCE SEI-IL

Date: June 04-06, 2019 *Hours of Instruction:* 18

Location: Chicago, IL

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Curtis Schroeder

has participated in

FHWA-NHI 130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Bi-State Development Agency

Date: February 18-21, 2020 Hours of Instruction: 25

Location: St. Louis, MO

Instructor

Instructor

Local Coordinator

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

National Highway Institute

Certificate of Training

Jarkko Simonen

has participated in

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

hosted by

WSP GROUP

Date: January 27- February 7, 2014 Hours of Instruction: 60

Location: Charlotte, NC

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

National Highway Institute

Certificate of Training

Jarkko Simonen

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher

hosted by

Texas Department of Transportation

Date: April 2-4, 2019 Hours of Instruction: 18

Location: Pharr, TX

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

National Highway Institute

Certificate of Training

Jarkko Simonen

has participated in

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

hosted by

WISS, JANNEY, ELSTNER ASSOCIATES, INC.

Date: June 16-19,2008 Hours of Instruction: 21

Location: Northbrook, IL

/s/Eric Mann
Instructor

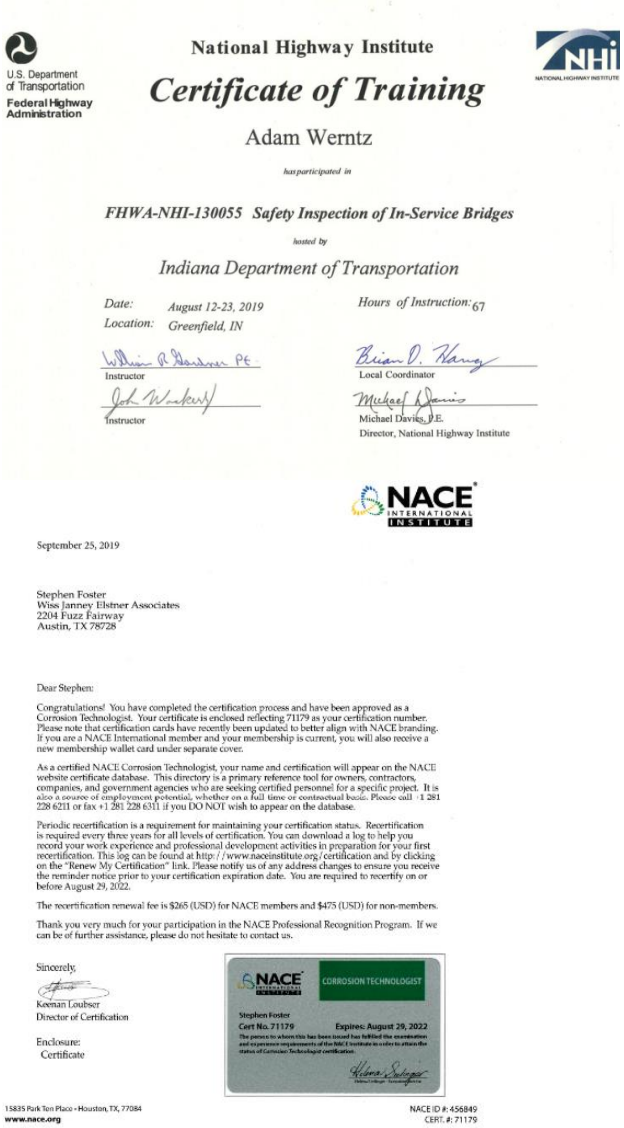
/s/
Instructor

/s/Jonathan McGormley
Local Coordinator

Valerie Briggs, Director
National Highway Institute

Duplicate

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**



U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Adam Werntz

has participated in

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

hosted by

Indiana Department of Transportation

Date: *August 12-23, 2019*
Location: *Greenfield, IN*

Hours of Instruction: 67

William R Henderson PE
Instructor

Brian D. Kenney
Local Coordinator

Instructor

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

NACE INTERNATIONAL INSTITUTE

September 25, 2019

Stephen Foster
Wiss Janney Elstner Associates
2204 Fuzz Fairway
Austin, TX 78728

Dear Stephen:

Congratulations! You have completed the certification process and have been approved as a Corrosion Technologist. Your certificate is enclosed reflecting 71179 as your certification number. Please note that certification cards have recently been updated to better align with NACE branding. If you are a NACE International member and your membership is current, you will also receive a new membership wallet card under separate cover.

As a certified NACE Corrosion Technologist, your name and certification will appear on the NACE website certificate database. This directory is a primary reference tool for owners, contractors, companies, and government agencies who are seeking certified personnel for a specific project. It is also a source of employment potential, whether on a full time or contractual basis. Please call +1 281 228 6211 or fax +1 281 228 6311 if you DO NOT wish to appear on the database.

Periodic recertification is a requirement for maintaining your certification status. Recertification is required every three years for all levels of certification. You can download a log to help you record your work experience and professional development activities in preparation for your first recertification. This log can be found at http://www.naceinstitute.org/certification and by clicking on the "Renew My Certification" link. Please notify us of any address changes to ensure you receive the reminder notice prior to your certification expiration date. You are required to recertify on or before August 29, 2022.

The recertification renewal fee is $265 (USD) for NACE members and $475 (USD) for non-members.

Thank you very much for your participation in the NACE Professional Recognition Program. If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

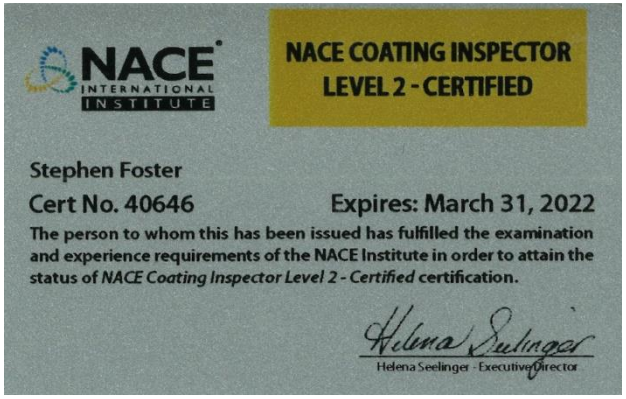
Keenan Loubser
Director of Certification

Enclosure:
Certificate

NACE CORROSION TECHNOLOGIST
Stephen Foster
Cert No. 71179 Expires: August 29, 2022
Helena Seelinger

15835 Park Ten Place • Houston, TX, 77084
www.nace.org

NACE ID #: 456849
CERT. #: 71179



NACE INTERNATIONAL INSTITUTE

NACE COATING INSPECTOR LEVEL 2 - CERTIFIED

Stephen Foster
Cert No. 40646 Expires: March 31, 2022
The person to whom this has been issued has fulfilled the examination and experience requirements of the NACE Institute in order to attain the status of *NACE Coating Inspector Level 2 - Certified* certification.

Helena Seelinger - Executive Director

NACE INTERNATIONAL INSTITUTE

Certificate of Achievement

The NACE International Institute Recognizes

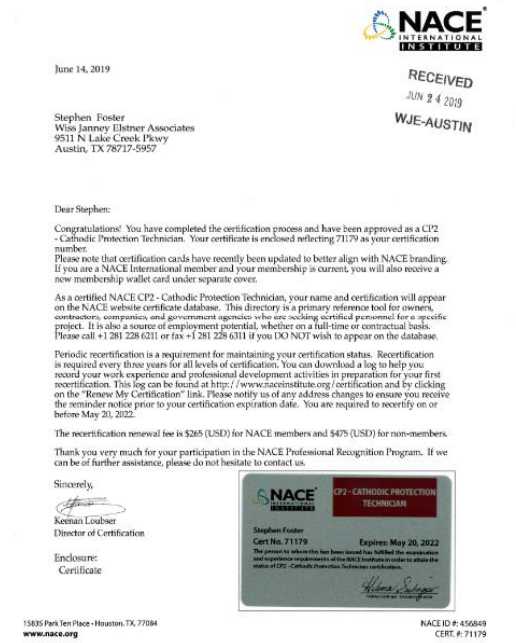
Stephen Foster

As a Certified
Corrosion Technologist
CERTIFICATION NUMBER *71179*

Executive Director
NACE International Institute

Awarded
August 2019

456849



NACE INTERNATIONAL INSTITUTE

June 14, 2019

RECEIVED
JUN 24 2019
WJE-AUSTIN

Stephen Foster
Wiss Janney Elstner Associates
9511 N Lake Creek Pkwy
Austin, TX 78717-5957

Dear Stephen:

Congratulations! You have completed the certification process and have been approved as a CP2 - Cathodic Protection Technician. Your certificate is enclosed reflecting 71179 as your certification number.
Please note that certification cards have recently been updated to better align with NACE branding. If you are a NACE International member and your membership is current, you will also receive a new membership wallet card under separate cover.

As a certified NACE CP2 - Cathodic Protection Technician, your name and certification will appear on the NACE website certificate database. This directory is a primary reference tool for owners, contractors, companies, and government agencies who are seeking certified personnel for a specific project. It is also a source of employment potential, whether on a full-time or contractual basis. Please call +1 281 228 6211 or fax +1 281 228 6311 if you DO NOT wish to appear on the database.

Periodic recertification is a requirement for maintaining your certification status. Recertification is required every three years for all levels of certification. You can download a log to help you record your work experience and professional development activities in preparation for your first recertification. This log can be found at http://www.naceinstitute.org/certification and by clicking on the "Renew My Certification" link. Please notify us of any address changes to ensure you receive the reminder notice prior to your certification expiration date. You are required to recertify on or before May 20, 2022.

The recertification renewal fee is $265 (USD) for NACE members and $475 (USD) for non-members.

Thank you very much for your participation in the NACE Professional Recognition Program. If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

Keenan Loubser
Director of Certification

Enclosure:
Certificate

NACE CP2 - CATHODIC PROTECTION TECHNICIAN
Stephen Foster
Cert No. 71179 Expires: May 20, 2022
The person to whom this has been issued has fulfilled the examination and experience requirements of the NACE Institute in order to attain the status of CP2 - Cathodic Protection Technician certification.

15835 Park Ten Place - Houston, TX, 77084
www.nace.org

NACE ID #: 456849
CERT. #: 71179

NACE INTERNATIONAL INSTITUTE

Certificate of Achievement

The NACE International Institute Recognizes

Stephen Foster

As a Certified

CP2 - Cathodic Protection Technician

CERTIFICATION NUMBER *71179*

Executive Director
NACE International Institute

Awarded
May 2019

456849

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Stephen Foster

has participated in

FHWA-NHI-130078

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Illinois Department of Transportation

Date: January 30-February 2, 2012

Hours of Instruction: 25

Location: Springfield, Illinois

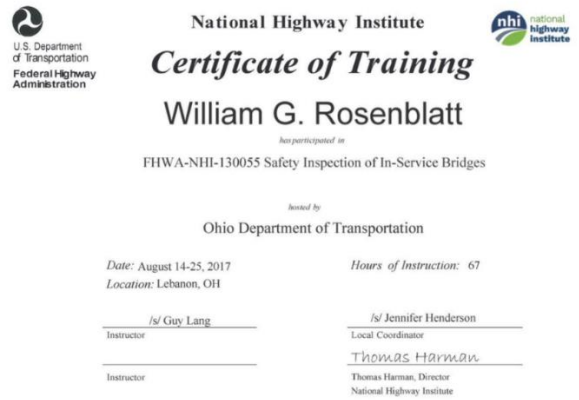
Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**



National Highway Institute

Certificate of Training

William G. Rosenblatt

has participated in

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

hosted by

Ohio Department of Transportation

Date: August 14-25, 2017 *Hours of Instruction:* 67

Location: Lebanon, OH

/s/ Guy Lang — Instructor

/s/ Jennifer Henderson — Local Coordinator

Instructor

Thomas Harman — Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

William Rosenblatt

has participated in

FHWA-NHI-130078

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Illinois Department of Transportation

Date: December 7-10, 2021 *Hours of Instruction:* 25

Location: Springfield, Illinois

Instructor

Local Coordinator

Instructor

Thomas Harman — Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

Robert Firman, PE

has participated in

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

hosted by

Bartlett and West, Inc.

Date: November 01-05, 2021 *Hours of Instruction:* 34

Location: Irving, TX

Instructor

Local Coordinator

Instructor

Thomas Harman — Thomas Harman, Director, National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

nhi national highway institute

Certificate of Training

LEVI YANTIS

has Successfully Completed

FHWA-NHI-130053

Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: January 11-13, 2022 Hours of Instruction: 18

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Thomas Harman

Thomas Harman, Director
National Highway Institute

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

LEVI YANTIS

has participated in

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

hosted by

LA DOTD/LTRC

Date: February 26 – March 1, 2019 Hours of Instruction: 25

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

LEVI YANTIS

has participated in

FHWA-NHI-130055

Safety Inspection of In-Service Bridges

hosted by

LA DOTD/LTRC

Date: December 4-15, 2017 Hours of Instruction: 67

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

NHI NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Training

Levi Yantis

has participated in

NHI Course No. FHWA-NHI-130107C

Maintenance of Movable Bridges

hosted by

National Highway Institute

Location: Web-Based Course Hours of Instruction: 4 hours

Date: 2/15/2020

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

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

nhi national highway institute

Certificate of Training

JOFFREY EASLEY

has Successfully Completed

FHWA-NHI-130053

Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: *January 11-13, 2022* *Hours of Instruction:* 18

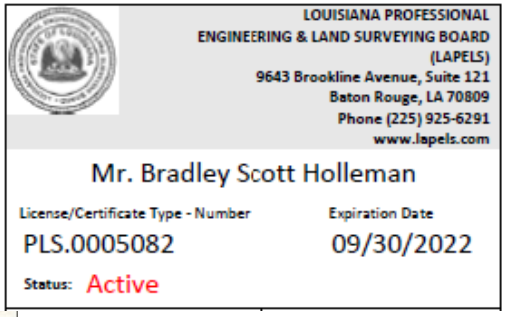
Location: *Baton Rouge, LA*

Instructor

Local Coordinator

Instructor

Thomas Harman, Director
National Highway Institute



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Bradley Scott Holleman

License/Certificate Type - Number: PLS.0005082

Expiration Date: 09/30/2022

Status: Active

ATSSA
SAFER ROADS SAVE LIVES

Dear Certified Flagger:

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

American Traffic Safety Services Association (ATSSA) commends you on your decision to become an ATSSA Certified Flagger. This distinction reflects that you have been trained by the "Leader in Roadway Safety" and also entitles you to be listed on our National Flagger Database. Please review your state requirements for expiration of your flagger card. Also, please inform us of any changes in name or address so we may keep our records up to date.

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

Sincerely,

Director of Training

Laminating the front of your card with Dual Laminate:

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

The American Traffic Safety Services Association

Hereby recognizes that

Joffrey Easley
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

4/13/2019 to 4/13/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Joffrey Easley
has attended
Traffic Control Supervisor-LA State Spe
Training Course

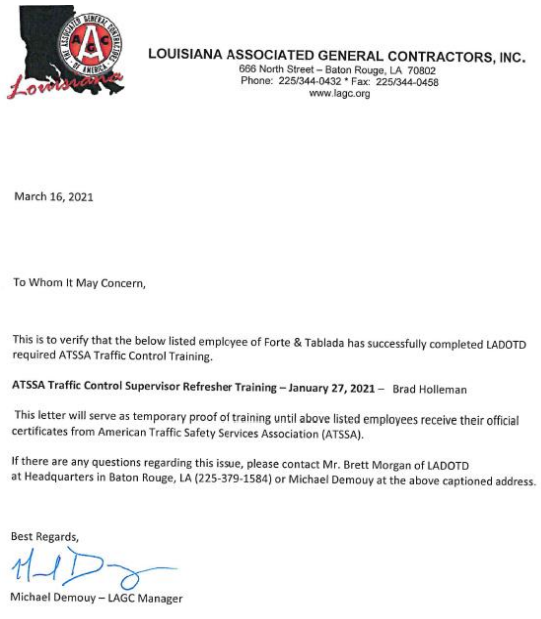
04/30/2015
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO



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

March 16, 2021

To Whom It May Concern,

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

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

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

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

Best Regards,

Michael Demouy – LAGC Manager

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

Association of Diving Contractors International

Cert. # 58774

Expires 12/04/2023

SURFACE-SUPPLIED AIR DIVER

MARTIN J. ANDERSON I.D. 8193

Commercial Diver Certification Card

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Martin Anderson

has participated in

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

hosted by

University of Delaware

Date: January 26 – February 6, 2015
Location: Newark, DE

Hours of Instruction: 67 hours

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

Martin Anderson

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Whitman, Requardt & Associates, LLP

Date: October 6-8, 2020
Location: Virtual Delivery, MD

Hours of Instruction: 18

Digitally signed by Calvin A. MacDougall, P.E.
Date: 2020.10.16 13:49:35 -04'00'

Instructor

Finn K. Hubbard

Instructor

Debra E. Rizzieri

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

Martin Anderson

has participated in

FHWA-NHI-130091: Underwater Bridge Inspection

hosted by

Kansas Department of Transportation

Date: June 15-18, 2015
Location: Topeka, Kansas

Hours of Instruction: 24

Instructor Mark A. Bastick

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Steven Armstrong

has participated in

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

hosted by

Kentucky Transportation Cabinet

Date: March 10-13, 2020
Location: Frankfort, KY

Hours of Instruction: 25

Instructor

Instructor

Local Coordinator

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

FAA Aviation Safety

Certificate of Achievement

This is to certify that

Steven Blake Armstrong

has successfully completed the
FAA Safety Team Aviation Learning Center Online Course

Part 107 Small Uas Recurrent

Course Number ALC-677
Presented by Online Courses
September 9, 2021

Certificate Number 1231957-20210909-00677

Patricia Mathes, Manager, National FAA Safety Team

I UNITED STATES OF AMERICA XI
DEPARTMENT OF TRANSPORTATION ▪ FEDERAL AVIATION ADMINISTRATION
IV NAME
STEVEN BLAKE ARMSTRONG
V ADDRESS 3004 CANAAN PL
MANDEVILLE LA 70448-6300

VI NATIONALITY USA
IVa D.O.B. 13 NOV 1990

SEX	HEIGHT	WEIGHT	HAIR	EYES
M	60	215	BROWN	BROWN

IX HAS BEEN FOUND TO BE PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF
II REMOTE PILOT
III CERTIFICATE NUMBER 4162104
X DATE OF ISSUE 6 AUG 2019
XIV
VIII ACTING ADMINISTRATOR

U S A

Association of Diving Contractors International

Cert. # 62023

Expires 11/18/2025

ADCI

SURFACE-SUPPLIED AIR DIVER

STEVEN ARMSTRONG I.D. 4740

Commercial Diver Certification Card

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Steven Armstrong

has participated in

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

hosted by

Virginia Department of Transportation

Date: March 16-30, 2018
Location: Fredericksburg, Virginia

Hours of Instruction: 67 Hrs

Instructor

Local Coordinator

Jason L Kelly, PE
Instructor

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Steven Armstrong

has participated in

FHWA-NHI-130091 Underwater Bridge Inspection

hosted by

Terracon Consultants, Inc.

Date: December 6-9, 2016
Location: Cincinnati, OH

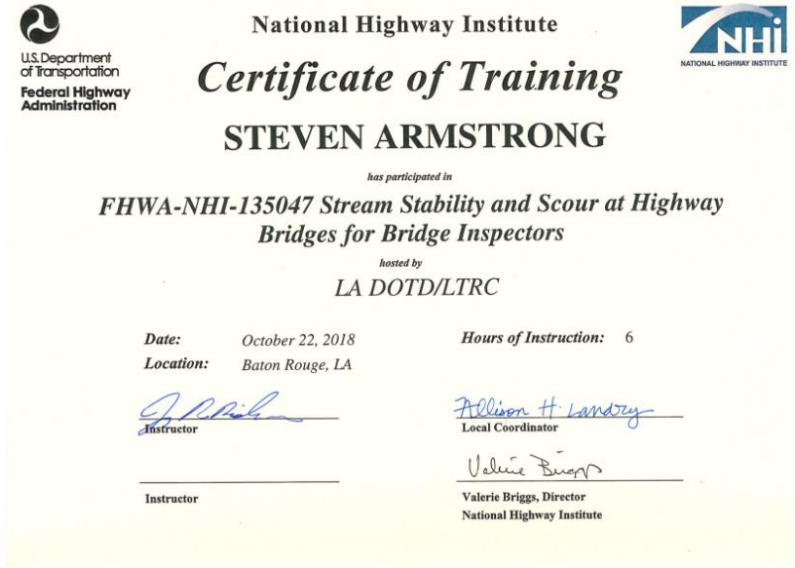
Hours of Instruction: 24

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute



U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

STEVEN ARMSTRONG

has participated in

FHWA-NHI-135047 Stream Stability and Scour at Highway Bridges for Bridge Inspectors

hosted by

LA DOTD/LTRC

Date: October 22, 2018
Location: Baton Rouge, LA

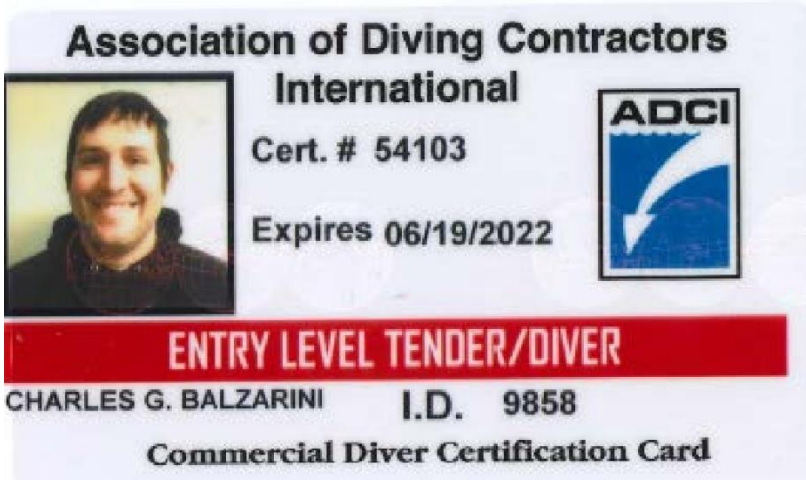
Hours of Instruction: 6

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute



 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Charles Balzarini

has participated in

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

hosted by

Ohio Department of Transportation

Date: *9/26/16 – 10/7/16*
Location: *Columbus, OH*

Hours of Instruction: 67

Guy R Lang PE
Instructor

Raymond L Bruhart
Local Coordinator

Dennis L. Bagshaw PE.
Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

CHARLES BALZARINI

has participated in

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

hosted by

LA DOTD/LTRC

Date: *February 26 – March 1, 2019* *Hours of Instruction:* 25
Location: *Baton Rouge, LA*

Instructor

Allison H. Landry
Local Coordinator

Instructor

Michael Davies
Michael Davies, Director
National Highway Institute

Presented to

Matthew Balzarini

For completion of 72 classroom hours of training in

Bridge Condition Inspection Training - BCIT

Sponsored by
WSDOT Local Programs
Washington State Local Technical Assistance Program and

March 30, 2018
Lacey , Washington

U. S. Department of Transportation
Federal Highway Administration
Debbie Lehmann
Debbie Lehmann
FHWA Division Bridge Engineer

Washington State Department of Transportation
Roman J Peralta
Roman Peralta, P.E., Local Agency Bridge Engineer
WSDOT Local Programs

Association of Diving Contractors International

ADCI

Cert. # 58157

Expires 08/08/2022

ENTRY LEVEL TENDER/DIVER

MATT BALZARINI I.D. 4799

Commercial Diver Certification Card

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Charles Balzarini

has participated in

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

hosted by

Ohio Department of Transportation

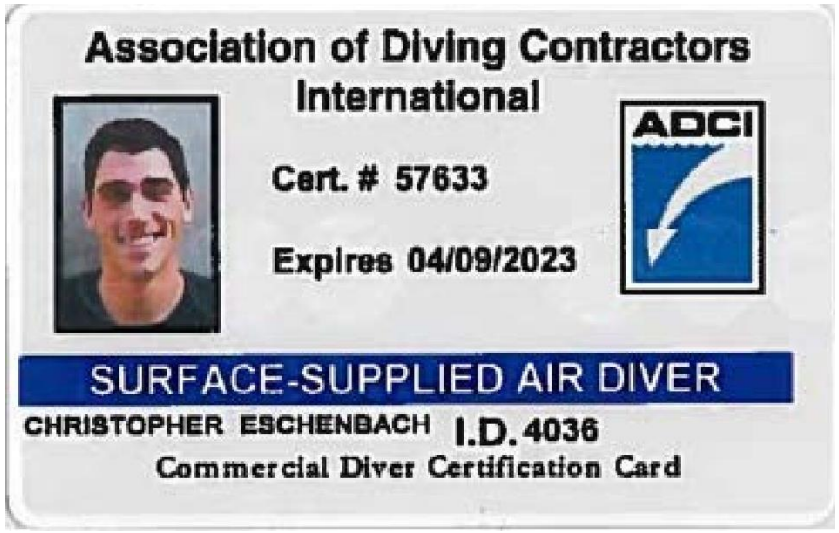
Date: 9/26/16 – 10/7/16
Location: Columbus, OH
Hours of Instruction: 67

Guy R Lang PE
Instructor

Raymond L. Brustart
Local Coordinator

Dennis L. Bugler PE
Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute



Association of Diving Contractors International

Cert. # 57633

Expires 04/09/2023

ADCI

SURFACE-SUPPLIED AIR DIVER

CHRISTOPHER ESCHENBACH I.D. 4036

Commercial Diver Certification Card

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

MATTHEW BALZARINI

has participated in

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

hosted by

LA DOTD/LTRC

Date: February 26 – March 1, 2019 *Hours of Instruction:* 25
Location: Baton Rouge, LA

Instructor

Allison H. Landry
Local Coordinator

Brian D. Eastman
Instructor

Michael Davies
Michael Davies, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Christopher Eschenbach

has participated in

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

hosted by

California Department of Transportation

Date: November 26-December 07, 2018 **Hours of Instruction:** 67
Location: Sacramento, CA

Randall Leonard PE
Instructor

Local Coordinator

Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Jeffrey Gazarek

has participated in

FHWA-NHI 130055 Safety Inspection of In-Service Bridges

hosted by

LA DOTD/LTRC

Date: January 4-15, 2016 *Hours of Instruction:* 67

Location: Baton Rouge, LA

Instructor — Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute

National Highway Institute

Certificate of Training

JEFFREY GAZAREK

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

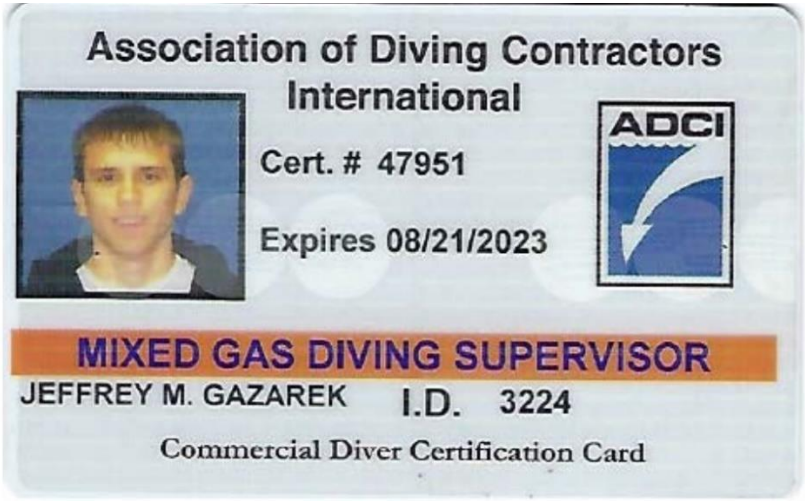
LA DOTD/LTRC

Date: May 12-14, 2020 *Hours of Instruction:* 18

Location: Web-Conference Course

Instructor — Local Coordinator

Instructor — Thomas Harman, Director, National Highway Institute



Association of Diving Contractors International

Cert. # 47951

Expires 08/21/2023

MIXED GAS DIVING SUPERVISOR

JEFFREY M. GAZAREK I.D. 3224

Commercial Diver Certification Card

National Highway Institute

Certificate of Training

Jeffrey Gazarek

has participated in

NHI Course No. FHWA-NHI-130101

Introduction to Safety Inspection of In-Service Bridges - WEB-BASED

hosted by

National Highway Institute

Location: Web-Based Course *Hours of Instruction:* 14 hours

Date: 11/22/2015

Valerie Briggs, Director, National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

Association of Diving Contractors International

Cert. # 59433

Expires 04/05/2024

ADCI

SURFACE-SUPPLIED AIR DIVER

KIMBERLY GRAVATT I.D. 0647

Commercial Diver Certification Card

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Training

Kimberly M. Gravatt

has participated in

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

hosted by

Arora and Associates, P.C.

Date: January 5-16, 2009
Location: Harrisburg, PA

Hours of Instruction: 60

Instructor

Local Coordinator

Instructor

Joseph S. Toole, Associate Administrator
Office of Professional and Corporate Development

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Kimberly M. Gravatt

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Maryland Department of Transportation

Date: June 04-06, 2019
Location: Baltimore, MD

Hours of Instruction: 18

Instructor

Local Coordinator

Instructor

Michael Davies, Director
National Highway Institute

U.S.Department of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Kim Gravatt

has participated in

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

hosted by

Indiana Department of Transportation

Date: Nov. 6-9, 2017
Location: Indianapolis, Indiana

Hours of Instruction: 25

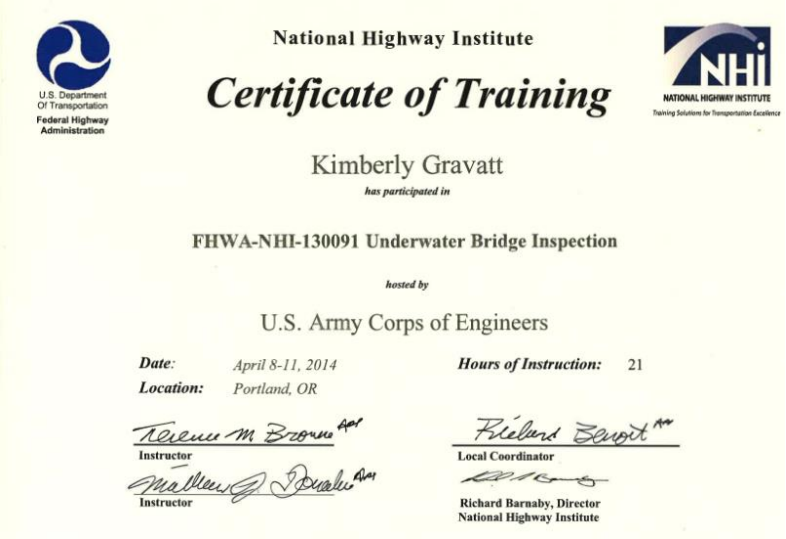
Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**



National Highway Institute

Certificate of Training

Kimberly Gravatt

has participated in

FHWA-NHI-130091 Underwater Bridge Inspection

hosted by

U.S. Army Corps of Engineers

Date: April 8-11, 2014 **Hours of Instruction:** 21

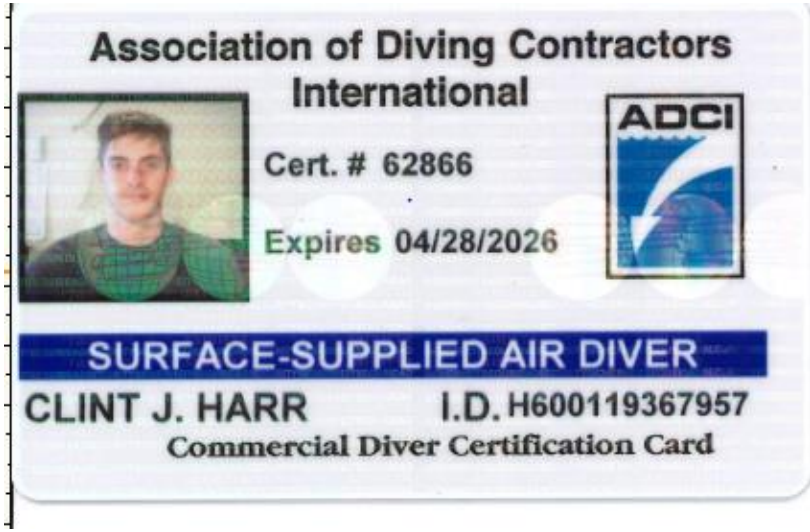
Location: Portland, OR

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute



Association of Diving Contractors International

Cert. # 62866

Expires 04/28/2026

SURFACE-SUPPLIED AIR DIVER

CLINT J. HARR I.D. H600119367957

Commercial Diver Certification Card

National Highway Institute

Certificate of Training

Clint Harr

has participated in

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

hosted by

West Virginia Department of Transportation

Date: July 30-August 10, 2018 **Hours of Instruction:** 67

Location: Charleston, WV

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

National Highway Institute

Certificate of Training

Clint Harr

has participated in

FHWA NHI 130091 Underwater Bridge Inspection

hosted by

Connecticut Department of Transportation

Date: ***June 3 - 6, 2019*** *Hours of Instruction:* ***24***

Location: ***Newington, CT***

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

National Highway Institute

Certificate of Training

Chace Hulon, PE

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Boston Society of Civil Engineers Section/ASCE

Date: *October 1-3, 2019* *Hours of Instruction:* 18

Location: *Boston, MA*

Instructor

Instructor

Local Coordinator

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

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

National Highway Institute

Certificate of Training

Chace Hulon

has participated in

FHWA-NHI-130091B Underwater Bridge Repair, Rehabilitation, and Countermeasures

hosted by

Texas Department of Transportation

Date: *July 17 –18, 2018*

Location: *Fort Worth, TX*

Hours of Instruction: *14*

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

U.S. Department Of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

National Highway Institute

Certificate of Training

Chace Hulon

has participated in

Safety Inspection of In Service Bridges
NHI Course 130055A

hosted by

Iowa State University

Location: Des Moines, IA *Hours of instruction:* 80

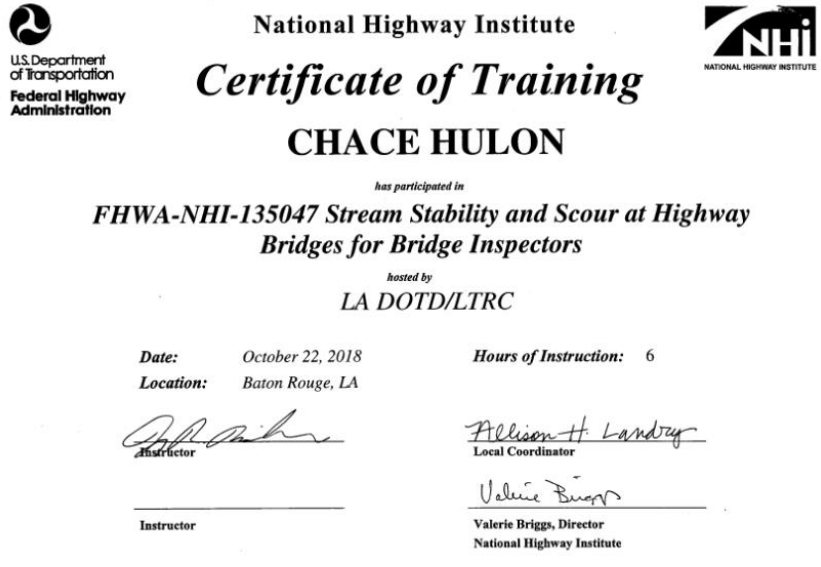
Date: June 20 – July 1, 2005

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

NATIONAL HIGHWAY INSTITUTE

CHACE HULON

has participated in

FHWA-NHI-135047 Stream Stability and Scour at Highway Bridges for Bridge Inspectors

hosted by

LA DOTD/LTRC

Date: *October 22, 2018* ***Hours of Instruction:*** 6

Location: *Baton Rouge, LA*

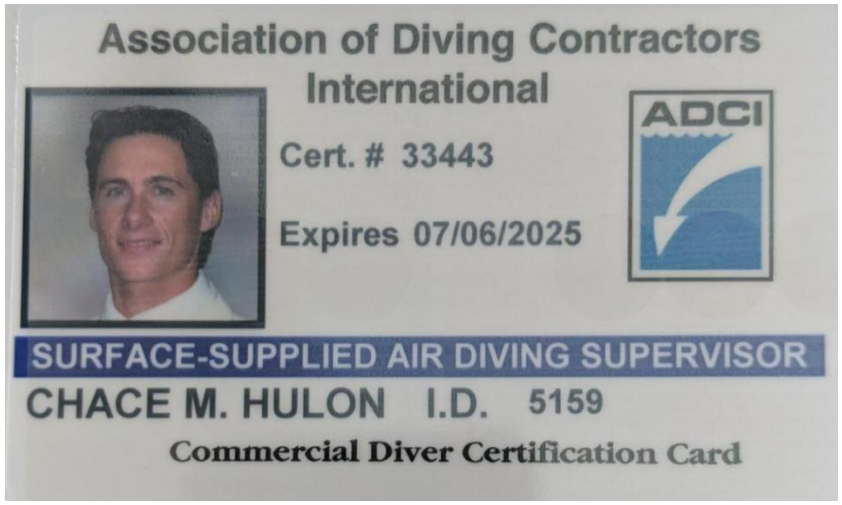
Instructor

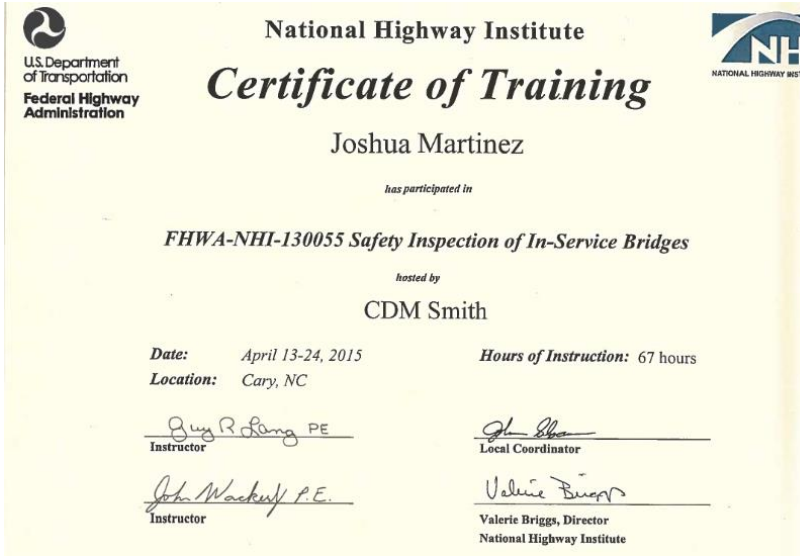
Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**





 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

Association of Diving Contractors International

Cert. # 62022

Expires 11/18/2025

SURFACE-SUPPLIED AIR DIVER

JOSHUA MARTINEZ I.D. 0713

Commercial Diver Certification Card

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

JOSHUA MARTINEZ

has participated in

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

hosted by

LA DOTD/LTRC

Date: *February 26 – March 1, 2019* *Hours of Instruction:* 25
Location: *Baton Rouge, LA*

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Joshua Martinez

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Arizona Department of Transportation

Date: *October 22-24, 2019* *Hours of Instruction:* 18
Location: *Phoenix, AZ*

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

Joshua Martinez

has participated in

NHI Course No. FHWA-NHI-130101

Introduction to Safety Inspection of In-Service Bridges - WEB-BASED

hosted by

National Highway Institute

Location: *Web-Based Course* ***Hours of Instruction:*** *14 hours*
Date: *4/1/2015*

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Mike Russell

has Successfully Completed

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

hosted by

Hawaii Department of Transportation

Date: *December 6-17, 2021*
Location: *Honolulu, HI*

Hours of Instruction: 67

Instructor

Instructor

Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

FAA Aviation Safety

Certificate of Achievement

This is to certify that

Michael Russell

has successfully completed the
FAA Safety Team Aviation Learning Center Online Course

Part 107 Small Uas Recurrent

Course Number ALC-677
Presented by Online Courses
September 28, 2021

Certificate Number 1243396-20210928-00677

Patricia Mathes, Manager, National FAA Safety Team

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Mike Russell

has participated in

FHWA-NHI-130087 Inspection and Maintenance of Ancillary Highway Structures

hosted by

COLLIERS ENGINEERING & DESIGN

Date: *October 28-29, 2021*
Location: *Miami, FL*

Hours of Instruction: 12

Instructor

Instructor

Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

I UNITED STATES OF AMERICA XI
DEPARTMENT OF TRANSPORTATION • FEDERAL AVIATION ADMINISTRATION
IV NAME
MICHAEL PAUL RUSSELL
V ADDRESS 379 BOICEVILLE RD
BROOKTONDALE NY 14817-9569

U

VI NATIONALITY USA
IVa D.O.B. 10 APR 1989
IX HAS BEEN FOUND TO BE PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF

SEX	HEIGHT	WEIGHT	HAIR	EYES
M	72	180	BROWN	BROWN

A

I REMOTE PILOT
III CERTIFICATE NUMBER 3985644
X DATE OF ISSUE 27 MAR 2017

S

XIV
VIII ADMINISTRATOR

 Prime consultant name: **Wiss, Janney, Elstner Associates, Inc.**

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Margaret Ray

has participated in

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

hosted by

WSP

Date: September 17-28, 2018
Location: Mooresville, NC

Hours of Instruction: 67

Dennis R. Baughman, P.E.
Instructor

Local Coordinator

Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Margaret Ray

has participated in

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

hosted by

Office of State Aid Road Construction

Date: January 21-24, 2020
Location: Ridgeland, MS

Hours of Instruction: 25

Instructor

Marie Allbritton
Local Coordinator

Instructor

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

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

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

Please see attached plan.

QA/QC plan deleted by CCS

22. **Sub-consultant information:**

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (as registered with Louisiana's Secretary of State)	**Address**	**Point of Contact and email address**	**Phone Number**
Forte and Tablada, Inc.	9107 Interline Avenue, Baton Rouge, LA 70809	Russell J. "Joey" Coco, Jr., P.E., jcoco@forteandtablada.com	(225) 927-9321
Moffatt & Nichol	301 Main Street, Suite 800 Baton Rouge, LA 70801	Chace Hulon chulon@moffattnichol.com	(225) 610-1932

23. **Location:**

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