

PROPOSAL

Produced for Louisiana Department of Transportation and Development (DOTD)

January 2023



moffatt & nichol

IDIQ CONTRACT FOR BRIDGE LOAD RATING, STATEWIDE

Contract No. 4400025865






DOTD FORM: 24-102

(Revised March 1, 2022)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

1. Contract title as shown in the advertisement	IDIQ CONTRACT FOR BRIDGE LOAD RATING
2. Contract number(s) as shown in the advertisement	CONTRACT NO. 4400025865
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	Moffatt & Nichol
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.0003104
6. Prime consultant mailing address	301 Main Street, Suite 800 Baton Rouge, LA 70801
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	301 Main Street, Suite 800 Baton Rouge, LA 70801
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Herodotos Pentas, PhD, PE – Project Manager (225) 610-1597 hpentas@moffattnichol.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Jonathan Hird, PE – Vice President (225) 610-1930 jhird@moffattnichol.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	



<p>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.</p>	<p>Signature (shall be the same person as #9):  Date: January 11, 2023</p>				
<p>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.</p>	<table border="0"> <tr> <td><u>Firm(s):</u></td> <td><u>Firm(s)' %:</u></td> </tr> <tr> <td>Traffic Commander, LLC</td> <td>2%</td> </tr> </table>	<u>Firm(s):</u>	<u>Firm(s)' %:</u>	Traffic Commander, LLC	2%
<u>Firm(s):</u>	<u>Firm(s)' %:</u>				
Traffic Commander, LLC	2%				



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12. Past Performance Evaluation Discipline Table:

Evaluation Discipline(s)	% of Overall Contract	Prime Moffatt & Nichol	Firm B Huval and Associates, Inc.	Firm C Garver, LLC	Firm D Traffic Commander, LLC (DBE)	Each Discipline must total to 100%
Bridge	70%	45	12	43	0	100%
Data Collection	30%	93	0	0	7	100%
<i>Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.</i>						
Percent of Contract	100%	59.4	8.4	30.1	2.1	100%

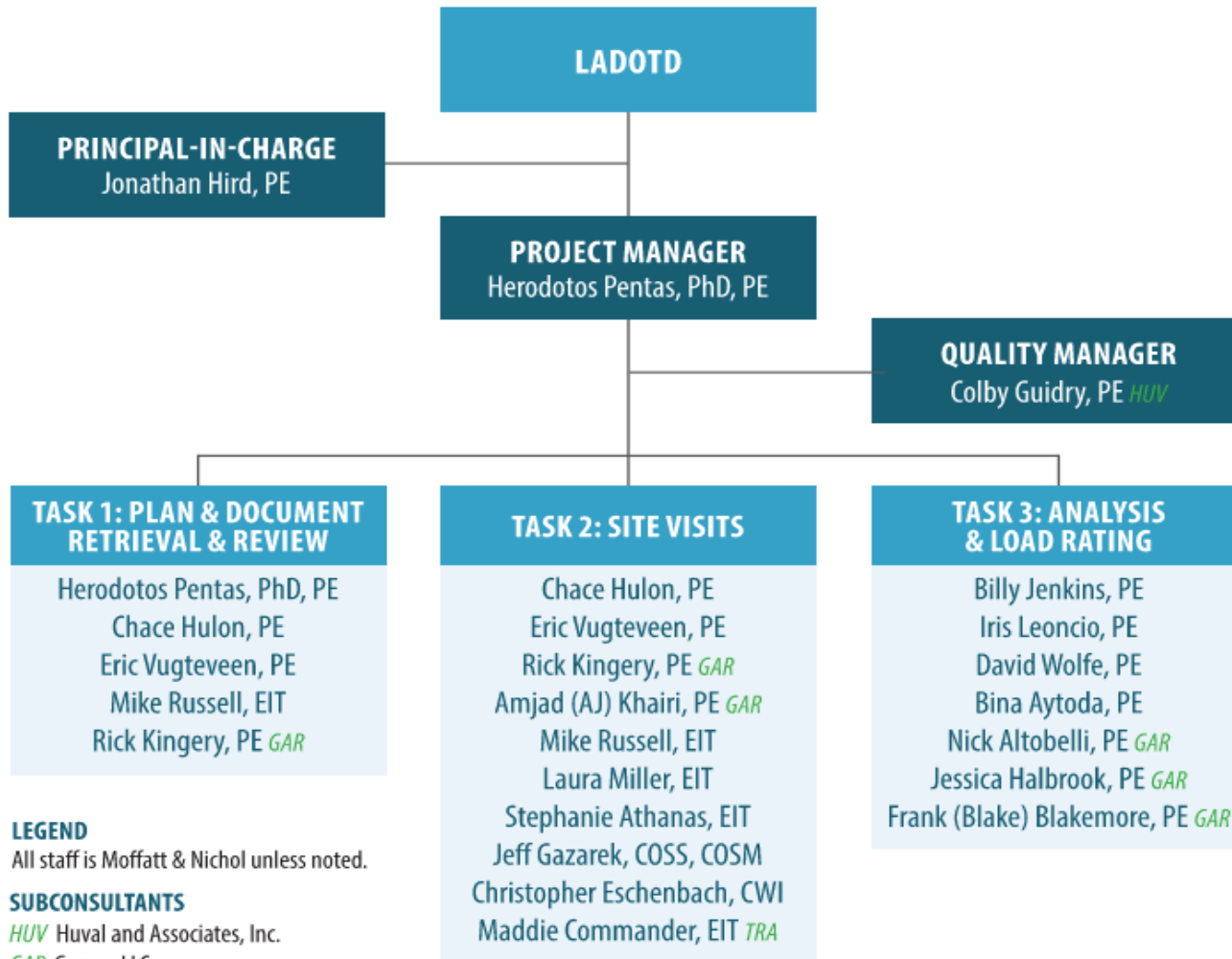


13. Firm Size:

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Moffatt & Nichol	Principal	1	25
	Accountant	1	10
	Administrative	1	15
	CADD Operator	1	75
	Engineer (LA PE)	4	28
	Engineer – Other	3	50
	Inspector – Bridge	6	50
	Engineering Intern	1	30
	Senior Technician	3	14
	Supervisor – Engineer	3	8
Huval and Associates, Inc.	Principal	0	1
	Supervisor Engineer	1	5
	Engineer	3	14
	Engineer Intern	2	6
	Technician	0	2
	CADD Technician	1	3
	CADD Drafter	1	4
	Inspector – Bridge	1	6
Garver, LLC	Inspector – Bridge	1	4
	Engineer	2	2
	Engineer – Other	4	8
Traffic Commander, LLC (DBE)	Other (Traffic Control Services)	4	12



14. Organizational Chart:



LEGEND

All staff is Moffatt & Nichol unless noted.

SUBCONSULTANTS

HUV Huval and Associates, Inc.

GAR Garver, LLC

TRA Traffic Commander, LLC (DBE)



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 Hird, PE	Moffatt & Nichol	PE / 32299	LA	09/30/2024
2	Chace Hulon, PE	Moffatt & Nichol	PE / 39701	LA	09/30/2024
3	Herodotos Pentas, PhD, PE	Moffatt & Nichol	PE / 24660	LA	09/30/2024
4	Iris Leoncio, PE	Moffatt & Nichol	PE / 47438	LA	09/30/2023
	Frank (Blake) Blakemore, PE	Garver, LLC	PE / 37368	LA	03/31/2023
5	Eric Vugteveen, PE	Moffatt & Nichol	PE / 38667	LA	09/30/2024
	Colby Guidry, PE	Huval and Associates, Inc.	PE / 31338	LA	09/30/2024
	Nick Altobelli, PE	Garver, LLC	PE / 45605	LA	09/30/2023

(Add rows as needed)



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Herodotos Pentas, PhD, PE		Years of relevant experience with this employer	1<
Title	Senior Bridge Engineer		Years of relevant experience with other employer(s)	32
Degree(s) / Years / Specialization		PhD / 1990 / Civil Engineering MS / 1985 / Civil Engineering BS / 1984 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 24660 / Louisiana / 09/30/2024 FHWA-NHI-130092 Load and Resistance Factor Rating of Highway Bridges FHWA-NHI-130056 Safety Inspection of In-Service Bridges for Professional Engineers FHWA-NHI-135099 Bridge Inspection Non-Destructive Evaluation Showcase		
Year registered	1992	Discipline	Civil and Structural	
Contract role(s) / brief description of responsibilities		Project Manager / Analysis & Load Rating/ MPR #3		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/07 – 12/07	West Drive & Lock #2 Road Bridges Inspection & Load Analysis, St. Tammany Parish, Louisiana. Project Manager for inspection, load analysis, and rating of timber bridge and concrete bridges by applying AASHTO and LADOTD Standards.			
08/97 – 06/99	LADOTD S.P. No. 737-99-0441 & 737-99-0158, Assessment of Bridge Damage by Watercraft, Divisions 2, 3, & 7, Louisiana. Project Manager for baseline inspections of fender systems/substructures of 134 bridges to determine damages caused by marine vessels. Provided damage assessment, repair plan preparation, cost estimates, repair procedure, & report. Project received national attention due to its effectiveness & execution.			
01/96 – 12/96	LADOTD S.P. No. 700-99-0118, Structural Load Rating, 118 Bridge, Louisiana. Project Manager for load rating of 118 bridges throughout the state. A majority of the bridges were prestressed concrete and steel plate girder design.			
02/96 – 11/96	LADOTD S.P. No. 700-99-0264, Bars Re-Rate, Louisiana. Project Manager for conversion of all existing BARS load rating WSM and LFM files to VIRTIS database and running of converted BARS files to verify VIRTIS rating results for 493 structures. Analyzed with finite element method, three structures for three super-load permit vehicles and recommended distribution factor, influence line, permit load review procedure, and examples for typical complex members (truss span, steel & prestressed girder, steel and reinforced concrete cap beam).			
10/93 – 10/95	LADOTD S.P. No. 700-30-0002, Complex Structures Load Rating, 37 Bridges, Louisiana. Project Manager, led analysis and rating of 37 complex steel and concrete bridges using both working stress and load factor methods. Structure types included simple and multi-span steel curved plate girders, simple and multi-span normal and skewed box girders, and curve box girders.			
03/93 – 12/93	LADOTD S.P. No. 359-02-0012, Clear Lake Bridge Design, Louisiana. Project Engineer for preliminary and final design for LA 1226 bridge over Clear Lake, a five-span continuous unit utilizing AASHTO Type IV precast prestressed concrete girders supported by 30-inch-diameter concrete pile bents.			



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Jonathan Hird, PE		Years of relevant experience with this employer	16
Title	Vice President		Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization		MS / 2001 / Civil and Environmental Engineering BS / 1993 / Environmental Science		
Active registration number / state / expiration date		32299 / Louisiana / 09/30/2024		
Year registered		Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Principal-in-Charge / MPR #1		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
03/20 - present	LADOTD IDIQ for In-Depth Inspection of Complex Bridges, Statewide, Louisiana. Principal-in-Charge for in-depth bridge inspections on complex and movable bridges throughout Louisiana. As a major subconsultant, Moffatt & Nichol is performing complete in-depth structural, mechanical, and electrical inspections. Bridge types include cantilever trusses, cable-stayed bridges, movable swing span bridges, and bascule bridges.			
08/15 – 08/19	LADOTD Statewide Truss Sign Inspection, Louisiana. Principal-in-Charge for the current five-year retainer contract to perform approximately 1,700 overhead sign truss inspections (routine and interim) throughout Louisiana. Ancillary inspections include steel and aluminum welds, high stress moment connections, and fracture critical elements in accordance with FHWA guidelines. Team performed Level III inspections with ultrasonic testing on bolted connections, mag particle testing on steel welded connections, and dye penetrant testing on aluminum-welded connections.			
01/14 – 08/19	LADOTD Underwater Bridge Inspections, Louisiana. Principal-in-Charge for the previous and current five-year retainer contracts to perform underwater bridge inspections statewide, including Level I, II, and III inspections of submerged elements in accordance with state and federal requirements. Assisted with several emergency response requests ranging from extremely urgent (<24-hour response time) to urgent (<1-week response time). Monitored the progress of the invoicing and updated related procedures to streamline processes.			
02/16 – 08/19	LADOTD RSIS Railroad Inventory Upgrade Statewide, Louisiana. Assistant Project Manager, Client Services Manager, and Local Project Liaison for the effort to provide Web-based crossing safety inventory service (RIMS) for LADOTD to perform a comprehensive evaluation of LADOTD RSIS data and FRA inventory data for Louisiana railroads. Program provides suggestions to modify state RSIS data to comply with the latest Federal Railroad Administration (FRA) requirements, implement changes, and incorporate FRA with LADOTD data into a Web-based system.			
11/15 – 08/16	Port of New Orleans Master Plan Development Phase I, New Orleans, Louisiana. Project Manager for the 2016 Phase I of the Master Plan performed a strategic, predictive analysis of the market – looking at global, national, regional, state, and local conditions for industry needs and projections.			



16. Staff Experience:

Firm employed by Moffatt & Nichol			
Name	Chace Hulon, PE	Years of relevant experience with this employer	8
Title	Chief Bridge Inspector	Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		BS / 2005 / Civil Engineering	
Active registration number / state / expiration date		Professional Engineer: 39701 / Louisiana / 09/30/2023 FHWA-NHI-130053 Bridge Inspection Refresher Training FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges FHWA-NHI-130091B Underwater Bridge Repair, Rehabilitation and Countermeasures FHWA-NHI-133113 Work Zone Traffic Control for Maintenance Operations FHWA-NHI-135047 Stream Stability and Scour at Highway Bridges for Bridge Inspectors FHWA-NHI-135086 Stream Stability Factors and Concepts FHWA-NHI-135087 Scour at Highway Bridges: Concepts and Definitions	
Year registered	2009	Discipline	Civil
Contract role(s) / brief description of responsibilities		Plan & Document Retrieval & Review / Site Visits / MPR #2	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).		
11/19 – Present	LADOTD IDIQ for In-Depth Inspection of Complex Bridges, Statewide, Louisiana. Project Manager and Team Leader to perform in-depth bridge inspections on complex, signature, long-span bridges. Performed the inspections of both cable-stayed bridges (Audubon and Luling) with rope access techniques to inspect 208 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of I-10 Horace Wilkinson Bridge 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 and UAS access techniques on columns. The Skydio drone with DroneDeploy and 3D Scan was used to capture an orthomosaic projection of the structure for digital twin models. Hands-on management and implementation of the QC review plan is vital to the continued success of this project.		
01/20 – Present	LADOTD IDIQ for In-Depth Bridge Inspection of Complex Structures, Statewide, Louisiana. Project Manager and Team Leader, perform in-depth bridge inspections on complex, movable, long-span, and precast segmental box girder bridges. Performed structural, mechanical, and electrical inspections of six (6) movable bridges utilizing detailed, nondestructive, and laboratory testing methods with hand sketches. Utilized NDE methods (laser and acoustic) to analyze the rotational movement of an unstable pivot pier. Hands-on management and implementation of the QC review plan is vital to the continued success of this project.		



09/22 – Present	OSARC Statewide Timber and Complex Bridge Inspections, Load Ratings and On-Call Services, Mississippi. Project Manager and Team Leader to perform repair design inspections for load ratings on 8 bridges on first task order and 3 load ratings were performed on AASHTOWare BrR for the second task order.
09/14 – Present	LADOTD IDIQ for Underwater Bridge Inspection, Statewide, Louisiana. Project Director and Team Leader for the third cycle of contracts in which we've performed 1,375 underwater NBIS bridge inspections statewide. In-depth UWI were performed on 75 signature bridges over large waterways with deep foundations and dynamic channel conditions. All diving inspections were augmented with NDE acoustic imaging technology to consistently monitor streambed changes and structural deficiencies over subsequent inspection cycles. Acoustic hydrographic surveying methods were performed using the HydroLite-TM, Kongsberg Mesotech MS 1000, and the Norbit Winghead i77 units deployed from a vessel. QINSy, Qimera, Applanix POSPac, MMS systems, and MatLab were used for accurate and repeatable post processing and evaluations. Assisted LADOTD with several emergency response requests ranging from hours to days, utilizing local team members. Served as Chief Editor of the LADOTD Bridge Inspection Manual released in 2020.



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Eric Vugteveen, PE		Years of relevant experience with this employer	24
Title	Bridge Engineer		Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization		BS / 1990 / Civil Engineering BS / 1990 / Architectural Engineering		
Active registration number / state / expiration date		Professional Engineer: 33711 / Virginia / 04/30/2023 FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130053 Bridge Inspection Refresher Training FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges		
Year registered	1999	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Plan & Document Retrieval & Review / Site Visits / MPR #5		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
12/18 – 10/20	VDOT Term Contract for Safety Inspection of Highway Structures Statewide, Virginia. Project manager for 20 task orders for routine, underwater and emergency safety inspections on a statewide basis. Team leader for 17 bridges in the Richmond District including numerous bridges over interstate highways with complex maintenance of traffic requirements and nighttime inspections. The 20 task orders included 57 structure inspections, including 7 emergency underwater inspections following localized flooding of Swift Creek in Chesterfield County. Performed field inspections including National and State element level quantities and condition states, inspection reports with repair recommendations, developed revised channel sketches, verified Structure Inventory and Appraisal data and reviewed reports developed by team leaders and inspectors.			
03/15 – 03/18	VDOT Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures Statewide, Virginia. Bridge engineer for load rating tasks using AASHTOWare’s Bridge Rating program and STAAD.Pro finite element analysis software, in accordance with LRFR and LFR methodologies. Responsible as a rater or checker for load ratings of over 60 bridges, including superstructure types consisting of cast-in-place and precast concrete arches and frames, RC slabs and tee beams, steel beams with timber and concrete decks, and curved steel plate girders.			
04/15 – 03/16	HDOT General Structural Engineering Services, Oahu, Hawaii. Bridge engineer for load ratings tasks of various bridges on Oahu in accordance with the AASHTO Manual for Bridge Evaluation as amended in the Hawaii Department of Transportation Design Criteria for Bridges and Structures. Load ratings were performed in accordance with LRFR methodology using the BRASS-GIRDER software program.			
03/12 – 03/15	VDOT Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures Statewide, Virginia. Bridge engineer for bridge load ratings tasks using AASHTOWare’s Bridge Rating program (formerly Virtis) in accordance with LRFR and LFR methodologies. Responsible as a rater or checker for load ratings of over 100 bridges, including superstructure types consisting of RC slabs and tee beams, PS beams and voided slabs, steel beams with timber and concrete decks, steel plate girders, and steel floorbeam systems.			



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Mike Russell, EIT		Years of relevant experience with this employer	1
Title	Specialty Access Manager		Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization		BS / 2015 / Civil Engineering, Central Connecticut University		
Active registration number / state / expiration date		Engineer-in-Training: 35255 / Tennessee / NA FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges		
Year registered	2021	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Plan & Document Retrieval & Review / Site Visits		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
08/21 – Present	<p>LADOTD IDIQ for In-Depth Inspection of Complex Bridges, Statewide, 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 files per the quality management plan and reviewed the draft report for consistency and accuracy.</p>			
04/19 – Present	<p>LADOTD IDIQ for Ancillary Sign Inventory and Inspection, Statewide 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.</p>			
01/22 – Present	<p>LADOTD In-Depth Inspections of Complex Bridges, Audubon Bridge, Louisiana. Rope Access supervisor and NBIS Inspector planning for the in-depth NBIS routine and fracture critical inspection of the Audubon Bridge.</p>			



16. Staff Experience:

Firm employed by Moffatt & Nichol			
Name	Laura Miller, EIT	Years of relevant experience with this employer	4
Title	Bridge Inspector	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		MBA / 2017 / Corporate Strategy and Leadership MS / 2017 / Global Management BS / 2012 / Double Major: Human/Regional Geography and Spanish with Environmental Engineering Minor	
Active registration number / state / expiration date		Engineer-in-Training: EI.0034949 / Louisiana / N/A FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges FHWA-NHI-130091 Underwater Bridge Inspection FHWA-NHI-130107A Fundamentals of Bridge Maintenance FHWA-NHI-135086 Stream Stability Factors and Concepts FHWA-NHI-135087 Scour at Highway Bridges: Concepts and Definitions	
Year registered	2021	Discipline	Civil
Contract role(s) / brief description of responsibilities		Site Visits	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).		
08/18 - present	LADOTD IDIQ for Underwater Bridge Inspection, Statewide, Louisiana. Assistant bridge inspector for the current five-year retainer contract to perform underwater bridge inspections throughout Louisiana with acoustic imaging of approximately 400 bridges over large river crossings. Level I, II, and III inspections of submerged elements are performed in accordance with the FHWA BIRM, AASHTO MBE, current NBIS requirements and LADOTD requirements. Input element level data and upload PDF reports via InspectTech database within 30 days of the inspection. (2017-2021)		
08/18 - present	LADOTD IDIQ for Ancillary Sign Inventory and Inspection, Statewide, Louisiana. Assistant project manager and team leader for the current five-year retainer contract to perform approximately 1,400 overhead sign truss inspections and rehabilitation designs throughout Louisiana. Ancillary inspections include steel and aluminum welds, high stress moment connections, and fracture critical elements in accordance with Federal Highway Administration (FHWA) guidelines. Team performed Level III inspections with ultrasonic testing on bolted connections, mag particle testing on steel welded connections, and dye penetrant testing on aluminum-welded connections. Performed quality assurance/quality control reviews on inspections reports.		



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Stephanie Athanas Eschenbach		Years of relevant experience with this employer	4
Title	Civil Engineer EIT		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization			Bachelor of Science / 2019 / Civil Engineering	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
11/19 – Present	<p>Louisiana Department of Transportation & Development (LADOTD) Statewide Inventory and Inspection of Sign Trusses Statewide, Louisiana. Assisted in completing overhead sign truss inspections. Ancillary inspections include steel and aluminum welds, high stress moment connections, and fracture critical elements in accordance with Federal Highway Administration (FHWA) guidelines. Team performed Level I, II, and III inspections on all assessed signs and completed inspections reports for each location. Level III inspection work includes ultrasonic testing on bolted connections, mag particle testing on steel welded connections, and dye penetrant testing on aluminum-welded connections.</p>			
01/22 – Present	<p>Louisiana Department of Transportation & Development (LADOTD) Underwater Bridge Inspections, Statewide, Louisiana. Level I, II, and III inspections of submerged elements were performed in accordance with the FHWA, BIRM, AASHTO MBE, current NBIS requirements and LADOTD engineering and maintenance directives. Inspections completed using diving and underwater imaging. Imaging units used include Kongsberg Mesotech MS 1000 and Norbit Winghead i77. Bridge types included movable swing span bridges, bascule bridges, truss bridges, timber stringer bridges, cable-stayed bridges, single and multi-span bridges. Produced underwater acoustic images from data collected from the imaging units. Assisted with managing report scheduling and report writing.</p>			
07/19 – 08/19	<p>PBF B238 & B239 MOTEMS Audit, Long Beach, California. Assisted in the inspection report for Pier 238 and Pier 239 in the Port of Long Beach. The inspection report consisted of Executive Summary, scope of inspection, facility assessment, inspection results, MOTEMS Audit Report Tables and Checklists, and Summary and Recommendations. The report followed the MOTEMS Inspection Condition Assessment Ratings (ICARs) and assigned follow-up action and remedial action priorities to concrete piles, caps, beams, deck slabs, timber fender piles, timber structural piles, mooring components, fendering components, and bulkhead based on the ICAR. Detailed drawings of defect mark-ups were created by using AutoCAD and Bluebeam to help give a visualization of both piers.</p>			
01/22 – Present	<p>LADOTD In-Depth Inspections of Complex Bridges, Audubon Bridge, Louisiana. NBIS Inspector for the in-depth NBIS routine and fracture critical inspection of the Audubon Bridge.</p>			



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Jeffrey Gazarek, COSS, COSM		Years of relevant experience with this employer	7
Title	Safety & Risk Assessment Lead		Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization		Commercial Diving with Concentration in Subsea Inspection / 2005 / Divers Institute of Technology		
Active registration number / state / expiration date		Certified Occupational Safety Specialist (COSS) Certified Occupational Safety Specialist (COSM) FHWA-NHI-130053 Bridge Inspection Refresher Training FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Site Visits / Safety Manager		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
06/20 – Present	Port of Long Beach (POLB) On-Call Waterfront Facilities Inspection & Assessment Services, Long Beach, CA. Dive inspector and site safety specialist for waterfront facilities at POLB. Responsibilities included above and below water inspection of the concrete pile structure at Pier C Berths C60- C62. Responsibilities for the project included equipment preparations, on-site safety, inspecting all structures above and below the water. The diving operations were conducted off Moffatt & Nichol’s Pier Review vessel and used either surface-supplied diving or scuba diving techniques to ensure safe practices as well as clear and precise notations.			
11/19 – Present	LADOTD IDIQ for In-Depth Bridge Inspection, Statewide, Louisiana. Site safety specialist, sonar specialist and senior dive supervisor for the current five-year retainer contract (2019-2024) to perform in-depth bridge inspections on complex and movable bridges throughout Louisiana. As the primary subconsultant to HTNB, Moffatt & Nichol is performing complete in-depth inspections (fulfilling both routine and fracture critical inspection types) as a quality assurance measure on the District personnel for the Headquarters Bridge Inspection Office. Level I, II, and III inspections of submerged elements in accordance with the FHWA, BIRM, AASHTO MBE and BEIM, current NBIS requirements and the LADOTD Bridge Inspection Manual (BIM) will be required as needed. Bridge types include cantilever trusses, segmental concrete box girders, movable swing span bridges, bascule bridges, cable-stayed bridges and bridges of various configurations with timber elements.			
09/14 – Present	LADOTD IDIQ for Underwater Bridge Inspection, Statewide, Louisiana. Sonar and senior dive supervisor of the current five-year retainer contract to perform underwater bridge inspections throughout Louisiana. Level I, II, and III inspections of submerged elements are performed in accordance with the FHWA BIRM, AASHTO MBE, current NBIS requirements and LADOTD requirements.			



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Christopher (Chip) Eschenbach, CWI		Years of relevant experience with this employer	4
Title	Bridge Inspector		Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization		Associates / 2015 / Welding Technology Certified Welding Inspector (CWI)		
Active registration number / state / expiration date		FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges FHWA-NHI-130053 Bridge Inspection Refresher Training		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Site Visits		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
11/19 – Present	LADOTD IDIQ for In-Depth Bridge Inspection, Statewide, 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. Performed the inspections of both cable-stayed bridges (Audubon and Luling) with rope access techniques to inspect 208 cables between the two bridges, their Gensui Dampers, and anchorages. Performed the inspection of I-10 Horace Wilkinson Bridge 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 and UAS access techniques on columns.			
01/20 – Present	LADOTD IDIQ for In-Depth Bridge Inspection of Complex Structures, Statewide, Louisiana. NBIS Team Member for one of the current five-year retainer contracts as a major subconsultant to Gresham Smith, to perform in-depth bridge inspections on complex, movable, long span, and precast segmental box girder bridges. 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 QA/QC plan is vital to the continued success of this project.			
08/18 – Present	LADOTD IDIQ for Underwater Bridge Inspection, Statewide, UWI District 62, Baton Rouge, Louisiana. 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.			



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09/22 – Present	Mississippi Office of State Aid Road Construction Master Services for Complex Bridge Inspections, Mississippi Statewide. NBIS Bridge Inspector for 8 bridges including a load rating summary review, report drafting, and quality control reviews.
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16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Billy Jenkins, PE		Years of relevant experience with this employer	10
Title	Chief Bridge Engineer/Project Manager		Years of relevant experience with other employer(s)	37
Degree(s) / Years / Specialization		BS / 1975 / Civil Engineering		
Active registration number / state / expiration date		11126 / Virginia / 11/30/2024 FHWA-NHI-130055: Safety Inspection of In-Service Bridges FHWA-NHI-130053: Bridge Inspection Refresher Training		
Year registered	1979	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Analysis & Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
08/17 - present	Annual Bridge Inspection Program, Virginia Beach, Virginia. QA/QC and technical advisor for NBIS inspection of the City’s 100+ structures. Inspections have included routine and underwater inspections of the city’s bridges, culverts, and ancillary structures. Inspection focused on NBIS requirements while also looking at fracture critical components such as welds, pin and hangers, bolted connections and reports for bridges and culverts have included the condition assessment, repair recommendations, site photos and the NBIS Rating of the structure in its current condition.			
03/12 - present	Annual Bridge Inspection Program Contract, Newport News, Virginia. Principal-in-charge and QA/QC lead for NBIS inspection of the City’s 49 structures under a four-year annual service contract. Structures include vehicular bridges, pedestrian bridges, railroad bridges, an underpass, recreational piers, and bulkhead/shoreline structures. In addition to inspection services, Moffatt & Nichol is providing the following services: feasibility and alternative analysis of structures; underwater investigation; load capacity analysis; inspection of overhead/ancillary sign structures; construction documents for rehabilitation of structures; construction documents for replacement of structures; geotechnical and non-destructive material testing; cost estimating and programming; bridge management; construction observation; and regulatory permitting.			
10/07 - present	City of Suffolk Annual Bridge Inspection Program, Suffolk, Virginia. Quality manager and technical expert for the annual inspections of a portion of the City of Suffolk’s 95 bridges, 56 culverts, 88 sign structures, and 146 signalized traffic intersections. Provides technical guidance/input and QC review of project documents including reports from inspection, load rating, overweight vehicle permit review, and repair/rehabilitation design/recommendations. Under the current contract, M&N has provided repairs for five City bridges.			
06/14 - present	City of Norfolk IDIQ for Bridge Inspection and Engineering Services, Norfolk, Virginia. Quality manager and technical expert providing technical and quality control review of all inspection reports and load ratings. Quality manager for major rehabilitation of Granby Street Bridge. Technical lead for development of repair recommendations for the rehabilitation of Robin Hood Road Bridge and multiple rehab packages which focus on specific bridge preservation techniques to extend the service life of the City’s structures.			



02/16 - present	VDOT Safety Inspections of Highway Structures & Bridges, & Support Structures for Traffic Control Devices, Hampton Roads District, Virginia. Quality Manager and Senior Structural Engineer for two consecutive contracts involving NBIS routine topside/underwater and emergency inspections for over 300 structures to date located throughout the Hampton Roads District including 4 signature complex structures. Performs Quality review on every inspection report completed by team to confirm analyses and recommendations meet VDOT's objectives/goals to extend the structure service life as well as provide independent check of field work. This has included Quality review of LARSA 4D load rating of the I-64 Bridges over Hampton River to determine bridge load capacities.
02/94-05/05	Pinners Point Interchange (I-164) Bridge, Portsmouth, Virginia. Project manager and chief bridge engineer for a 3,600-foot bridge over the western branch of Elizabeth River. Bridge designed for horizontally and vertically curved alignment that included seven lanes of traffic and bikeway, with prestressed concrete AASHTO Type V and Type VI modified I-beams, and 66-inch diameter prestressed cylinder piles. The project also included 3,000 feet of mechanically stabilized earth (MSE) retaining walls and soundwalls.
05/89-07/91	Interstate 64 HOV Lane Bridges (10 Bridges), Norfolk and Virginia Beach, Virginia. Project manager and chief bridge engineer for the accelerated design and construction of ten I-64 HOV Lanes Bridges consisting of various simple and continuous span layouts ranging from 30 to 160 feet in length, utilization of prestressed beams, steel rolled beams with and without cover plates, and steel plated girders. The bridges crossed two and three lane roadways. Ten bridges were designed in 18 months.
01/75-10/79	I-664 Interchange Bridges, Hampton, Virginia. Bridge engineer for the design and preparation of construction documents, cost estimates, and field inspections of bridges associated with I-664 widening (Ramps B, C, and D, plus Queen Street Bridge and New Market Creek Bridge). Ramps B and C utilized curved steel plate girders spanning 230 feet while Ramp D utilized reinforced concrete.
12/75-01/85	Movable Bridges in Hampton Roads, Virginia. Bridge engineer for inspection, rating and preparation of numerous maintenance and repair documents for several movable bridges in the Hampton Roads area: Pungo Ferry Bridge (Swing), Virginia Beach; Route 104 over Elizabeth River (Bascule), Chesapeake; Gilmerton Bridge (Bascule), Chesapeake; Jordan Bridge (Lift), Norfolk.
12/99-06/01	I-95 Bridge over Falling Creek and Marina Road, Chesterfield County, Virginia. Project manager for the bridge alternative analysis of this 375-foot-long interstate bridge which carried six lanes (NBL/SBL) of through traffic, as well as an off-ramp north bound and on-ramp southbound. Prepared construction documents for complete replacement of superstructure and selective repairs and modifications to substructure. Required a minimum of two through lanes in each direction during phased/staged construction.
11/99-02/01	7th Street and Chamberlayne Bridges over I-95, Richmond, Virginia. Project manager and bridge engineer for construction documents for superstructure rehabilitation of two bridges. Designed two-to-four through lane bridges over Interstate 95. Extensive traffic control required. Low bridge clearance an issue as well as close VDOT-City coordination by engineer. VDOT required lane closings be completed between 9PM and 6AM for inspection and construction.



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Iris Leoncio, PE, SE		Years of relevant experience with this employer	2
Title	Senior Structural Engineer		Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization		MS / 2003 / Civil and Environmental Engineering BS / 2000 / Civil Engineering		
Active registration number / state / expiration date		47438 / Louisiana / 09/30/2023 FHWA-NHI-130053 Bridge Inspection Refresher Training FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges		
Year registered	2023	Discipline	Civil and Structural Engineer	
Contract role(s) / brief description of responsibilities		Analysis & Load Rating / MPR #4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/20 – present	<p>LADOTD IDIQ for In-Depth Bridge Inspection of Complex Structures, Statewide, Louisiana. Team Leader, perform in-depth bridge inspections on complex, movable, long span, and precast segmental box girder bridges. Performed structural inspections of four (4) movable bridges utilizing detailed, nondestructive, and laboratory testing methods with hand sketches. Utilized NDT methods to analyze deficiencies are complex moveable bridges. Performed engineering review of the QC plan.</p>			
05/16 - present	<p>Limited Services Term Agreement for NBIS Inspection of Highway Structures and Bridges, and Support Structures, Hampton Roads, Virginia.</p> <ul style="list-style-type: none"> • WBL Berkley Bridge (I-264) over the Eastern Branch of Elizabeth River Floorbeam Repairs. Project Manager responsible for the Stage II inspection and repair design of floorbeams in the 178-ft double-leaf bascule span in order to improve the bridge load rating. The as-designed load rating study is performed using AASHTOWare Bridge Rating (BrR). Restrictions by the U.S. Coast Guard and VDOT Hampton Roads District on permissible lane and channel closures, limited work hours at night, and the likelihood of unscheduled bridge openings during construction add complexity to the design. Careful consideration of construction sequencing and the design of temporary falsework and scaffolding. Stage III construction phase services for review and consultation were also provided. • Route 17 over the James River Bridge Beam Strengthening. Project Manager responsible for overseeing repairs to prestressed concrete beams in order to improve the load rating of the 4.4-mile bridge, which consists of 302 approach spans and a vertical lift span for each northbound and southbound direction. Carbon Fiber Reinforced Polymer (CFRP) is used to target 29 beams with significant strand losses. Various anchoring methods to delay failure due to fiber debonding that may preempt the full capacity of the repair system are assessed. Other post-tensioning repair techniques, including GRABB-IT cable splice assemblies, are also evaluated. Avoiding lane closures on Route 17, maximizing the efficient use of available construction funds, and adopting ACI guidelines and recent research publications to manually calculate ratings outside of VDOT’s standard bridge rating software are crucial to the design. 			



- **George P. Coleman Memorial Bridge (Route 17) over York River Bridge Load Rating.** Senior project engineer responsible for the as-inspected load rating study of the truss spans of the 3750-ft bridge, which consists of steel girder approach spans, two fixed truss spans, two suspended truss spans and two swing bridges. A three-dimensional finite element model is created in LARSA 4D to generate load demands on truss members and the deck framing system. Gusset plates are checked using Whitmore sections in accordance with the AASHTO Manual for Bridge Evaluation.



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	David Wolfe, PE		Years of relevant experience with this employer	23
Title	Bridge Engineer		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			BS / 1993 / Structural Engineering	
Active registration number / state / expiration date			Professional Engineer: 49072 / Virginia / 07/31/2023	
Year registered	2011	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Analysis & Load Rating	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
03/15 – 03/18	<p>VDOT Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures Statewide, Virginia. Bridge engineer for load rating tasks using AASHTOWare’s Bridge Rating program and STAAD.Pro finite element analysis software, in accordance with LRFR and LFR methodologies. Responsible as a rater, checker or QA/QC reviewer for load ratings of over 60 bridges, including superstructure types consisting of cast-in-place and precast concrete arches and frames, RC slabs and tee beams, steel beams with timber and concrete decks, and curved steel plate girders. Served as M&N’s Quality Control Engineer for this contract.</p>			
04/15 – 03/16	<p>HDOT General Structural Engineering Services, Oahu, Hawaii. Bridge engineer for load ratings tasks of various bridges on Oahu in accordance with the AASHTO Manual for Bridge Evaluation as amended in the Hawaii Department of Transportation Design Criteria for Bridges and Structures. Load ratings were performed in accordance with LRFR methodology using the BRASS-GIRDER software program.</p>			
03/12 – 03/15	<p>VDOT Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures Statewide, Virginia. Bridge engineer for bridge load ratings tasks using AASHTOWare’s Bridge Rating program (formerly Virtis) in accordance with LRFR and LFR methodologies. Responsible as a rater or checker for load ratings of over 100 bridges, including superstructure types consisting of RC slabs and tee beams, PS beams and voided slabs, steel beams with timber and concrete decks, steel plate girders, and steel floorbeam systems. Served as M&N’s Quality Control Engineer for this contract.</p>			
11/09 – 07/10	<p>VDOT Culpeper District Load Ratings, Culpeper County, Virginia. Bridge engineer for multiple task orders for bridge load ratings for the Culpeper District. Responsible as rater or checker for load ratings of 37 bridges, including steel beam with timber deck bridges (26 bridges), steel beam with concrete deck (3 bridges), pin connected steel truss (3 bridges), prestressed and reinforced concrete slabs (2 bridges), RC through-girder (1 bridge), and timber beams and stress laminated timber (2 bridges)</p>			



16. Staff Experience:

Firm employed by Moffatt & Nichol				
Name	Bina Aytoda, PE		Years of relevant experience with this employer	13
Title			Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization		MS / 2012 / Civil Engineering BS / 1991 / Civil Engineering		
Active registration number / state / expiration date		51527 / Virginia / 12/31/2023		
Year registered	2016	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Analysis & Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/09-11/18	<p>Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures - Region III and Statewide Virginia. Structural engineer who load rated bridges using AASHTOWare BrR. Created as-built and existing condition models. Created Load Rating Summary Form and Load Rating Report for submittal to VDOT. Provided recommendations if posting is required.</p>			
03/12 - present	<p>Bridge Load Rating Analysis, Newport News, Virginia. Structural engineer who load rated 20 bridges using AASHTOWare BrR. Created as-built and existing condition models. Created Load Rating Summary Form and Load Rating Report for submittal to City. Provided recommendations if posting is required.</p> <ul style="list-style-type: none"> • Route 60 Warwick Boulevard over Lake Maury Bridge Replacement. Structural engineer for final design, construction document preparation, cost estimate, load rating to replace this 80-year-old bridge. Final design modified the original design to lengthen bridge to minimize demolition, widen it to accommodate a multi-purpose trail, and to update phasing to streamline construction. Between planning and final design, was structural engineer for evaluation of one of the value engineering alternatives and prepared report, presentation with sketches, cost estimate and recommendations. 			
08/17 - present	<p>NBIS Bridge Inspections, Virginia Beach, Virginia. Structural engineer who load rated the existing bridges using AASHTOWare BrR. Created as-built and existing condition models. Created Load Rating Summary Form and Load Rating Report for submittal to the City. Provided recommendations if posting if required.</p>			
03/14 – 02/17	<p>Sandbridge Road Replacement, Virginia Beach, Virginia. Structural engineer who provided basis of design for the bridge replacement per VDOT guidelines, which governs the geometrics, superstructure, substructure, and approach slabs for the proposed bridge. Part of the team for Alternative Bridge Alignment Study; studied various bridge alignments and their effects to the environment and approach roads. Developed sketches showing different alignment alternatives with respect to the existing bridge. Prepared cost estimates for all of the alignments in the study. Prepared a report of the study findings and final bridge alignment recommendation. Performed site visits and meetings with local and government agencies.</p>			



16. Staff Experience:

Firm employed by Huval and Associates, Inc.				
Name	Colby J. Guidry, PE		Years of experience with this firm/employer	15
Title	Vice President and Lead Engineer		Years of experience with other firm(s)/employer(s)	7
Degree(s) / Years / Specialization		BS / 2000 / Civil Engineering		
Active registration number / state / expiration date		31338 / Louisiana / 09/30/2024 FHWA-NHI-130053 Bridge Inspection Refresher Training FHWA-NHI-130055 Safety Inspection of In-Service Bridges FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges FHWA-NHI-130092 Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures		
Year registered	2004	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		QA-QC / Bridge Design, Inspection, and Ratings / MPR #5		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
<p>Mr. Guidry came to Huval & Associates with 7 years’ experience with the Federal Highway Administration (FHWA). His FHWA experience included all aspects of transportation related projects, where he was actively involved with environmental review, design, construction, and maintenance of bridges and roadways throughout Louisiana. Since joining HUVAL, he has been involved in bridge and structural design, plan preparation, bridge inspections, and construction support services. Completed the two-week FHWA approved comprehensive bridge training course for bridge inspectors, certified as a Bridge Inspection Team Leader, completed the NHI LRFR for Superstructures Course, the Work Zone Traffic Control Technician and Supervisor Courses, ATSSA Flagger Training, the NHI Design & Operation of Work Zone Traffic Control, Roadside Design Course, NHI Highway Hydraulics Course, NHI Urban Drainage Design Course, as well as many construction and environmental related courses. Very familiar with the LADOTD Bridge Design Manuals, 2002 AASHTO Bridge Specs, and the current AASHTO LRFD Bridge Specs</p>				
01/07-Present	<p>St. Martin Parish Bridge Program - From 2007 to present, Mr. Guidry has been involved in the Inspection and Rating of Bridges for the Parish of St. Martin. This work also included the design of Bridge Repair Projects, in particular the repair of Timber Piling on Precast Bridges. Bridges included one Pontoon Bridge, one Swing Span Bridge and numerous Timber and Precast Concrete Bridges.</p>			
01/17-Present	<p>St. Landry Parish Bridge Inspection - From 2017 to present, Mr. Guidry has been involved in the Inspection and Rating of Bridges for the Parish of St. Landry. This work also included the design of Bridge Repair Projects, in particular the repair of Timber Piling on Precast Bridges. Bridges included several Steel Railcar, Timber and Precast Concrete Bridges, as well as precast and cast in place box culverts.</p>			
12/20 – 06/21	<p>Ascension Parish 26 Bridge Ratings – Inspected, gathered documentation, rated, provided repair plans, as well as assisted in construction rehab reviews for 26 Ascension Parish bridges. Complex analysis rating analysis allowed the bridges to remain open while repairs were planned.</p>			



4/18 – Present	Retainer for Engineering Services for Bridge Preservation - Statewide, Contract No. 4400011225 - Supervisor Engineer of Retainer Contract. Responsible for project management, coordination, project setup, QA/QC, and bridge rehab design for the \$4M retainer.
09/12 – 12/17	Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, Contract No. 4400002537 - Supervising Engineer of Retainer Contract. Responsible for coordination, inspections, project setup, QA/QC, bridge rehab design for the \$6M retainer contract.
05/11 – 08/15	Retainer for Engineering Services for Bridge Preventive Maintenance (BRPM) - Statewide, Contract No. 440001543 -Lead Engineer of Retainer Contract. Led the Inspection and Design for 8 different Task Orders covering Preventive Maintenance Repairs for over 100 Bridges statewide in short timeframes.
08/09– 06/15	Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, S.P. 700-99-0488 - Lead Engineer of Retainer Contract. Responsible for coordination, inspection team leader, project setup, bridge design, and QA/QC of Task Orders totaling approximately \$8.75M over a 5-year period. Contract utilized multiple Subconsultants on all aspects of bridge design and inspection.
03/09 – 11/12	I-49 Bridges (Various Segments), Under Retainer No. 4400000670 – Lead Engineer for LRFR load ratings for 18 bridges, design and final plans of over 10 bridge structures and 1 box culvert structure. Bridge types included steel girder, prestressed concrete, and slab spans. Managed several sub-consultants producing numerous bridge plans.
01/19- Present	Herman Dupuis Swing Span Bridge (Movable) – St. Martin Parish – Project Manager for the design and plan development of a new swing span bridge over alligator bayou which will replace the Butte LaRose Pontoon bridge. Design elements include all aspects of the bridge including environmental clearance, surveying, structural design, mechanical design, electrical design, hydraulic design, roadway design, and all other design elements.
10//14 – 12/14	Bayou Mercier Bridge Rehabilitation, St. Martin Parish – Project Engineer for the construction project which consisted of repairing piles, cap replacements, wingwall construction, and other miscellaneous works.
10/14-03/15	St. Martin Parish Phase II Bridge Repairs, St. Martin Parish – Project Engineer for the complete reconstruction of three concrete bridges. Construction consisted of new piles, concrete panel removal, new caps, new bulkheads, new wingwalls, new roadway approach work, new guardrail.
10/14-05/15	St. Martin Parish Phase III Bridge Repairs, St. Martin Parish – Project Engineer for the complete reconstruction of three concrete bridges. Construction consisted of new piles, concrete panel removal, new caps, new bulkheads, new wingwalls, new roadway approach work, new guardrail.
12/15-03/16	Rusty Rd. Bridge Replacement, St. Martin Parish – Assistant Project Engineer for the bridge replacement project on Rusty Rd. in St. Martin Parish. New bridge consisting of new concrete girders, new concrete caps, new concrete piles, new wingwalls, new backwalls, new approach slabs, new approach roadway, new asphalt, etc.
12/17 – ongoing	Desselles Crossing Bridge Rehabilitation, Avoyelles Parish – Project Engineer for the bridge rehabilitation project, which consists of 30 pile splices, new stringers, cap repairs, new backwalls, approach work.
11/17-07/18	Surrey St. Bridge Repairs, Lafayette Parish – Assistant Project Engineer for the repair of the Surrey St. Bridge in Lafayette. Project consisted of bearing repair and replacement, concrete riser construction, deck overlay, joint repairs, painting of steel girders with full enclosure, and miscellaneous work.



16. Staff Experience:

Firm employed by Garver & Associates, LLC				
Name	Frank (Blake) Blakemore, PE, DBIA		Years of relevant experience with this employer	10
Title	Senior Project Manager		Years of relevant experience with other employer(s)	29
Degree(s) / Years / Specialization		MS / 1993 / Civil Engineering, Ocean Engineering, BC / 1991 / Maritime Systems Engineering		
Active registration number / state / expiration date		0037368 / Louisiana / 3/31/2023 Designated Design-Build Professional, D-3220 NCEES Certificate		
Year registered	1998	Discipline	Structural Engineering	
Contract role(s) / brief description of responsibilities		Analysis & Load Rating / MPR #4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
1998-Current	Frank (Blake) Blakemore, PE, DBIA is a senior project manager and bridge team leader on Garver’s Transportation Team with 29 years of experience. His design experience encompasses cable-stay, deck arch, tied arch, true arch, post-tensioned segmental box, curved steel box and plate girders, post-tensioned spliced, haunch girders, and prestressed beam bridge types. He is experienced in project management and providing innovative technical solutions.			
06/20-09/22	KDOT 7th Street Bridge Inspections, Repairs, and Load Rating, Wyandotte and Johnson Counties, Kansas. Blake was the project manager in charge of the bridge inspection, load rating, cost estimating, and repair phases of this contract. Several load rating iterations were made on specific members and gusset plates to achieve a no post following repairs.			



16. Staff Experience:

Firm employed by Garver & Associates, LLC				
Name	Nick Altobelli, PE		Years of relevant experience with this employer	9
Title	Senior Project Manager		Years of relevant experience with other employer(s)	34
Degree(s) / Years / Specialization		BS / 1989 / Civil Engineering		
Active registration number / state / expiration date		45605 / Louisiana / 9/30/2023		
Year registered	1994, 2015, 2021	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Analysis & Load Rating / MPR #5		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
1994-Current	<p>Nick Altobelli is a senior project manager and bridge team leader with 33 years of experience. His previous experience includes serving with MDOT for 25 years, including most recently as the director of structures/state bridge engineer. While at MDOT, his management responsibilities included overseeing all structural and hydraulic design and contract plan preparation of bridges and other highway appurtenances; managing MDOT’s bridge inspection and rating, bridge replacement, and bridge preventative maintenance programs; coordinating activities with MDOT Law Enforcement in the evaluation of vehicles for oversize and overweight permits; and providing technical assistance to other MDOT divisions and districts for construction, inspection, repair, and maintenance activities of structures. His project experience includes a variety of bridge types, including prestressed concrete, and steel superstructures.</p> <p>He was appointed MDOT’s Chairman of the Design Build Committee and was instrumental in introducing MDOT to the design-build project delivery method. He also was the voting member for Mississippi while serving on the AASHTO Subcommittee on Bridges and Structures where modifications are adopted to the AASHTO LRFD Design Specifications.</p> <p>Since 2014, Nick has served as a Senior project manager and Business Team Leader for Garver working on MDOT bridge design and repair contracts, Mississippi Office of State Aid Road Construction Bridge Inspection and Load Rating contracts, as well as Building Commissioning Master Contracts. With assignments under these contracts, Nick makes sure contract schedules are met, provides checks and quality control, makes sure comments and concerns are addressed immediately, and provides client support and project management. Nick utilizes AASHTOWare BrR for load ratings.</p>			
09/19-06/22	MDOT Office of State Aid Complex Bridge Inspections and Load Ratings Statewide, Mississippi. Senior project manager responsible for peer review of bridge load ratings and overall project execution and delivery. This contract includes providing complex bridge inspections, fracture critical inspections, and load rating services.			
08/17-07/20	MDOT Office of State Aid Timber Inspections and Load Ratings Statewide, Mississippi. Senior project manager responsible for managing the bridge inspection and load rating services. Work included performing condition evaluations, load rating superstructure and substructure, and providing repair recommendations.			



16. Staff Experience:

Firm employed by Garver & Associates, LLC				
Name	Rick Kingery, PE		Years of relevant experience with this employer	5
Title	Project Manager		Years of relevant experience with other employer(s)	27
Degree(s) / Years / Specialization		BS / 1994 / Civil Engineering		
Active registration number / state / expiration date		17890 / Arkansas / 12/21/2024 FHWA-NHI-130055 Safety Inspection Bridges FHWA-NHI-130053 Bridge Inspection Refresher Training FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges		
Year registered	2017	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Plan & Document Retrieval & Review / Site Visits		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
2017-current	Rick Kingery serves as a senior project manager on Garver’s Transportation Team with 27 years of experience, the last 19 years includes performing structural inspections. Rick is an experienced project manager in bridge inspection and providing innovative and proven management solutions. He is a National Bridge Inventory Bridge Inspector, Team Leader, and Program Manager Qualified. He has provided over 10,000 inspections in the last 19 years of state and local bridges and been instrumental in the rehabilitation and repair of hundreds of bridges. He spent 22 years at the Missouri Department of Transportation including 6 years as the District Bridge Engineer in Kansas City and 8 years as the District Bridge Engineer in the Northwest District. While a District Bridge Engineer he was responsible for the bridge inspection program in the district, programming and the district and regional bridge repair crews. His responsibilities include routine, fracture critical, complex, and underwater bridge inspections, as well as bridge rehabilitation. Rick has performed and led the inspections of bridges on the OSARC Inspection and Load Rating contracts including the collection of data for load ratings and sketches.			
09/19-06/22	MDOT Office of State Aid Complex Bridge Inspections and Load Ratings Statewide, Mississippi. Bridge inspection manager and inspection team lead responsible for conducting bridge inspections and generating reports for timber substructure bridges. Responsibilities also include managing bridge inspections and traffic impacts, preparing reports and submittals including critical findings, and tracking the overall project progress.			
08/17-07/20	MDOT Office of State Aid Timber Inspections and Load Ratings Statewide, Mississippi. Bridge inspection manager and inspection team lead responsible for the bridge inspection and report generation of complex and fracture critical bridges. Responsibilities included managing and scheduling the bridge inspections, traffic impacts, preparing reports including critical findings, preparing the Bridge Inspection Plans, including Access equipment and Fracture Critical member drawings, and tracking overall project progress.			
06/20-09/22	KDOT 7th Street Bridge Inspections, Repairs, and Load Rating, Wyandotte and Johnson Counties, Kansas. Structural engineer and bridge inspection team leader responsible for the fracture critical bridge inspection, rehabilitation assessment, and cost estimate for the 880-foot deck truss. In the repair phase responsibilities included assisting with repair details and locations, cost estimate, and the working day study.			



16. Staff Experience:

Firm employed by Garver & Associates, LLC				
Name	A.J. Khairi, PE, MBA		Years of relevant experience with this employer	30
Title	Project Manager		Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization		MS / 1997 / Structural Engineering MBA / 1990 / Marketing and Finance BS / 1988 / Civil Engineering		
Active registration number / state / expiration date		9086 / Arkansas / 12/31/2024 FHWA-NHI-130055 Safety Inspection of In-Service Bridges		
Year registered	1997	Discipline	Structural Engineering	
Contract role(s) / brief description of responsibilities		Site Visits		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
1997-Current	AJ Khairi is a bridge team leader and senior project manager on Garver’s Transportation Team with 30 years of experience. AJ manages and provides QA/QC for bridge inspections, underwater bridge inspections, load ratings and bridge repair projects in Arkansas, Mississippi, Tennessee, Texas, Alabama, Missouri, and Oklahoma. AJ utilizes AASHTOWare BrR. His responsibilities include evaluating and reviewing structural conditions of deteriorated bridges, structural design calculations, seismic design and modeling, detailing, bridge inspections and rehabilitation, scour analysis, load rating, and underwater inspection. In the past 30 years, AJ has inspected and provided bridge repair plans, seismic retrofit plans, and traffic control plans for more than 300 bridges. AJ has performed on-site bridge evaluation for scour and structural conditions, bridge hydraulic modeling, scour analysis, design and detailing of scour countermeasures, and bridge foundation structural analysis and evaluation for over 1,000 bridges in Tennessee and Mississippi. In addition, AJ served as a program leader for underwater inspection of approximately 600 bridges in Arkansas, Tennessee, and Mississippi, as well as more than 1,100 bridges for the Texas Department of Transportation. In addition, AJ served as Garver’s Program Manager for inspecting approximately 2000 bridges in Texas, Tennessee, and Mississippi.			
09/19-06/22	MDOT Office of State Aid Complex Bridge Inspections and Load Ratings Statewide, Mississippi. Program manager responsible for leading a team to inspect 200 bridges in Mississippi. These inspections included NBIS routine and fracture critical inspections. AJ also served as Structural team leader for load rating (ASD, LFD, LRFR) the superstructure and substructure bridge elements all inspected bridges.			
08/17-07/20	MDOT Office of State Aid Timber Inspections and Load Ratings Statewide, Mississippi. Program manager responsible for inspecting 800 bridges for multiple counties in Mississippi. Work also includes performing component and element level condition evaluations, load rating superstructure and substructure, and providing repair details and recommendations.			



16. Staff Experience:

Firm employed by Garver & Associates, LLC				
Name	Jessica Halbrook, PE		Years of relevant experience with this employer	9
Title	Project Manager		Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		BS / 2007 / Civil Engineering		
Active registration number / state / expiration date		18030 / Arkansas / 12/31/2024		
Year registered	2011	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Analysis & Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
2011-Current	<p>Jessica Halbrook is the Central Arkansas Bridge Rehab and Load Rating leader at Garver. She manages and provides QA/QC for bridge repair and load rating projects in Tennessee. Her responsibilities include inspecting in-service bridges, reviewing bridge inspection reports, designing, and detailing bridge superstructure and substructure elements, developing creative solutions for bridge rehabilitation, and load rating various types of bridges. For the full extent of Jessica’s career, she has been involved in designing bridge repair solutions. She has been involved in providing bridge repair plans for over 100 bridges in Tennessee, Mississippi, and Kansas. Jessica has extensive technical knowledge of structural steel beam design, highway bridge design, reinforced concrete design, and prestressed concrete beam design. Her project experience includes designing according to AASHTO Standard specifications and AASHTO LRFD bridge design specifications. She is proficient in bridge design software such as CONSPAN, LPile, RC Pier, MDX, and Consys as well as bridge evaluation software such as AASHTOWare BrR. She has experience with bridge projects for Arkansas, Mississippi, Missouri, and Tennessee DOTs. Jessica has led load rating for superstructure and substructure elements for structures in Arkansas, Tennessee, Mississippi, Texas, and Kansas.</p>			
09/19-06/22	<p>MDOT Office of State Aid Complex Bridge Inspections and Load Ratings Statewide, Mississippi. Structural engineer responsible for evaluating inspection information to load rate superstructure and substructure elements for on and off system structures. Superstructure types include timber stringer and deck, precast concrete Choctaw beams, prestressed concrete beam with concrete deck, rolled steel beams with concrete deck, continuous steel plate girder bridges, concrete culverts, and concrete slab (traditional and Illinois Bulletin slab) bridges. Non-traditional structures were also required for load ratings, including widened structures with multiple types of beams and railroad flatcar bridges. Load Ratings required an additional rating for the substructures. Structures included substructures such as timber piling with concrete and timber caps, concrete column bents, steel pile bents, and various repaired conditions. Load ratings included using commercial software AASHTOWare BrR for superstructure evaluation. The load rating method for many of these structures is LFR or ASD and therefore an evaluation of the bridge element condition is considered in the model.</p>			



08/17-07/20	MDOT Office of State Aid Timber Inspections and Load Ratings Statewide, Mississippi. Structural engineer responsible for reviewing existing inspection reports from district engineers or other consultants and performing structural rating of superstructure elements for design vehicle, MS legal loads, and emergency vehicles. Load ratings were performed with AASHTOWARE BrR, with a few exceptions being load rated in spreadsheets developed in house for specific bridge types. Load ratings performed were for bridge types including rolled steel beam, timber stringer, concrete pipe culvert, steel pipe culvert, cast-in-place concrete beam, Choctaw precast concrete beam, Contech Bebo arch, concrete box culvert, railroad flat cars, continuous steel plate girders, PS Concrete beam, temporary modular grid deck bridge and PT Choctaw beam.
06/20-09/22	KDOT 7th Street Bridge Inspections, Repairs, and Load Rating, Wyandotte and Johnson Counties, Kansas. Structural engineer responsible for load rating fracture critical deck truss structure after inspection was completed by Garver inspection team. Load rating included truss elements and gusset plates utilizing AASHTOWARE BrR. The deterioration of the structure was considered to determine repairs required to keep the bridge open and unposted. Bridge model was used to model repaired condition as well as current field condition of the structure to maximize the effects of the repairs on the structure and achieve the DOT's desired rating for the structure. Also responsible for reviewing structural repair details for improving the gusset plate capacities and additional repairs determined necessary in the field during inspection.



16. Staff Experience:

Firm employed by Traffic Commander, LLC				
Name	Madeline Commander, EIT		Years of relevant experience with this employer	4
Title	Managing Member		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		BS / 2007 / Civil Engineering		
Active registration number / state / expiration date		EI.0032164 / Louisiana / N/A		
Year registered	2011	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Site Visits / Traffic Control		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/19 - Present	Estimate project costs and coordinate resources needed to provide any and all traffic control services such as advanced warning signage per LADOTD and MUTCD standards, job specific detour signage, lane closures, flagging operations, message boards, arrow boards, and TMAs.			
08/17-12/18	Estimate project costs and coordinate resources needed to provide any and all traffic control services, permanent ground-mounted and overhead signage, and guardrail. Many long-term guardrail projects have T&M repairs throughout as the rails get hit prior to project completion. We had to mobilize to the site quickly to make the repair to keep the roadway users safe.			



17. Firm Experience:

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge
Project name	Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures - Region III and Statewide		Firm responsibility (prime or sub?)	Sub
Project number		Owner's name	Virginia Department of Transportation	
Project location	Virginia	Owner's Project Manager	Tony Barati, PE	
Owner's address, phone, email	1401 E Broad Street, Richmond, VA 23219, (804) 786-5117, Tony.Barati@VDOT.Virginia.gov			
Services commenced by this firm (mm/yy)	01/09	Total consultant contract cost (\$1,000's)	\$18,000	
Services completed by this firm (mm/yy)	11/18	Cost of consultant services provided by this firm (\$1,000's)	\$3,061	

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

Moffatt & Nichol, as a subconsultant under three consecutive contracts, performed load ratings of various types of existing highway structures on a regional and statewide basis for the Virginia Department of Transportation (VDOT). To ensure the highest quality for the load ratings, the team developed QA/QC plans specifically for these contracts. The load ratings were performed in accordance with Departmental policies and procedures and the AASHTO Manual for Bridge Evaluation. Results were reported on the Department's standard load rating summary form along with documentation of the load rater's assumptions. Load ratings were of the superstructure using AASHTOWare BrR (formerly Virtis) software in accordance with LRFR and LFR methodologies. Curved steel plate girder superstructures were load rated using Descus-I software. Cast-in-place and precast three-sided frames and arches have been load rated using STAAD.Pro and LARSA 4D finite element software and spreadsheet calculations. The geometric and structure data was primarily taken from as-built plans and bridge inspection reports, with data sometimes obtained from District bridge files, site visits and obsolete bridge standards.

Over the course of these contracts, Moffatt & Nichol was tasked with load rating 653 bridge structures, including:

- 131 structures with rolled steel beams and concrete deck
- 86 structures with rolled steel beams and timber deck
- 1 structure with rolled steel beams and corrugated metal deck
- 98 structures with steel plate girders and concrete deck
- 18 structures with curved plate girders and concrete deck
- 54 structures with prestressed concrete beams and concrete deck
- 9 structures with prestressed concrete box beams with concrete decks and asphalt toppings
- 54 structures with precast (Con/span, Bebo and Omega) and cast-in-place concrete frames and arches (including Luten arches)
- 22 structures with prestressed voided slabs
- 48 structures with reinforced concrete tee beams
- 102 structures with reinforced concrete slab spans
- 24 structures with reinforced concrete voided slab spans
- 1 structure with reinforced concrete through-girders
- 5 structures with glued laminated timber (glulam) slab spans

Team Members Involved: David Wolfe, Eric Vugteveen



17. Firm Experience:

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge
Project name	HDOT General Structural Engineering Services		Firm responsibility (prime or sub?)	Prime
Project number		Owner's name	Hawaii Department of Transportation	
Project location	Hawaii	Owner's Project Manager	Dean Takiguchi	
Owner's address, phone, email	601 Kamokila Boulevard, Room 611, Kapolei, HI 96707 (808) 692-7614, dean.takiguchi@hawaii.gov			
Services commenced by this firm (mm/yy)	05/18	Total consultant contract cost (\$1,000's)	\$2,780	
Services completed by this firm (mm/yy)	05/21	Cost of consultant services provided by this firm (\$1,000's)	\$2,780	

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

Moffatt & Nichol was retained by the Hawaii Department of Transportation (HDOT) to conduct load ratings on the states' inventory of concrete bridges/viaducts located in Oahu, Hawaii. The work was divided into three Project Assignment Orders (PAO's) according to structure type; segmental concrete box girder viaducts, post-tensioned concrete box girder bridges, and cast-in-place reinforced concrete box girder bridges. M&N was responsible for load rating a subset of the bridge inventory, generally working on the more complex bridges that fell outside of the capabilities of HDOT's typical load rating software, BRASS.

As the prime consultant to HDOT, M&N led the project and provided Load and Resistance Factor Rating (LRFR) and Load Factor Rating (LFR) reports for each bridge. The load ratings were performed in accordance with the 2nd Edition of the AASHTO Manual for Bridge Evaluation (MBE) with HDOT's "Draft Modifications to the 'Design Criteria for Bridges and Structures Dated August 8, 2014'." Vehicles that were included in the load rating were the AASHTO design HL-93 or HS-20, AASHTO MBE legal vehicles, and HDOT criteria specific emergency and special permit vehicles.

The load rating reports were compiled in the format requested by the client, using standard HDOT tables, and included descriptions of the analytical models and the detailed load rating calculations. Each bridge was rated for its current condition based on the most recent inspection reports. LRFR reports were also provided for the two other condition factors to provide HDOT with rating information if the current condition of the bridge were to deteriorate or be repaired as conditions dictate.

- **PAO-1: Load Rating of Eight Segmental Concrete Bridges:** Moffatt & Nichol was tasked with performing load ratings for eight segmental concrete bridges. Finite element modeling using LARSA 4D was performed to account for time dependent effects of stresses associated with the various stages of construction of the bridges.
- **PAO-2: Load Rating of 13 Post-Tensioned Concrete Box Girders:** Moffatt & Nichol was tasked to perform load ratings of 13 post-tensioned concrete box girder bridges to include FAST Act EVs. Finite element modeling using CSI Bridge was performed to more accurately model load sharing across the girders.
- **PAO-3: Load Rating of 11 Multi-Cell Concrete Box Girders:** Moffatt & Nichol was tasked with performing load ratings of 11 multi-cell concrete box girder bridges with complex geometries. Load ratings were performed with a combination of BRASS Girder and finite element modeling using CSI Bridge to account for complex geometries that could not be accommodated in BRASS.

Team Members Involved: David Wolfe, Eric Vugteveen



17. Firm Experience:

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge
Project name	IDIQ for In-Depth Inspection of Complex Bridges, Statewide		Firm responsibility (prime or sub?)	Sub
Project number	4400009104	Owner's name	Louisiana Department of Transportation and Development	
Project location	Louisiana	Owner's Project Manager	Stephanie Doolittle	
Owner's address, phone, email	1212 East Highway Drive, Baton Rouge, LA 70802, (225) 379-1329, Stephanie.Doolittle@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)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$800	

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating
- Work Zone Safety

Moffatt & Nichol is performing in-depth bridge inspections on complex and movable bridges throughout Louisiana. As a major subconsultant, Moffatt & Nichol is performing complete in-depth structural, mechanical, and electrical inspections. Bridge types include cantilever trusses, cable-stayed bridges, movable swing span bridges, and bascule bridges.

Moffatt & Nichol has been tasked with performing 28 off-system bridge inspections in District 62. Critical findings were issued, post-repair inspections were performed and evaluated, and previous load ratings were assessed. Field data was collected for updating the load ratings.

Moffatt & Nichol performed two in-depth inspections of the Audubon Bridge, specifically to inspect 136 main cables. Professional rope access techniques were used to safely access each cable and anchorage within arm's reach.

Moffatt & Nichol performed two in-depth, routine, and fracture critical inspections of the Horace Wilkinson Bridge, specifically to inspect the main truss spans above the guardrail. Professional rope access techniques were used to safely access each non-redundant steel tension member. This was the first inspection to be completed without requiring a lane closure.

Moffatt & Nichol performed the in-depth, routine, and fracture critical inspections of the Greater New Orleans Bridges and the Green Bridge, specifically to inspect the main truss spans. Professional rope access techniques were used to safely access each non-redundant steel tension member.

Moffatt & Nichol performed the in-depth inspection of the Luling Bridge, specifically to inspect all bladders at the upper Gensui Dampers and at the lower friction dampers at 72 cables.

Team Members Involved: Chace Hulon, Jeffrey Gazarek, Eric Vugteveen, Iris Leoncio, Christopher Eschenbach, Herodotos Pentas, Jonathan Hird



17. Firm Experience:

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge
Project name	New Design Plans and Inspection of Highway Bridges Limited Services Contracts, Region II, Virginia		Firm responsibility (prime or sub?)	Prime
Project number		Owner's name	Virginia Department of Transportation	
Project location	Culpeper, Richmond, Fredericksburg, Hampton Roads and Northern Virginia		Owner's Project Manager	Jeffrey K. Li, PE
Owner's address, phone, email	1401 E Broad St, Richmond, VA 23219, (804) 371-2778, jiuwang.li@vdot.virginia.gov			
Services commenced by this firm (mm/yy)	11/02	Total consultant contract cost (\$1,000's)	\$5,888	
Services completed by this firm (mm/yy)	06/13	Cost of consultant services provided by this firm (\$1,000's)	\$4,193	

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Load rating reviews

Under three consecutive contracts, Moffatt & Nichol provided professional engineering services for new design plans and inspections on highway structures and bridges on projects in Region II which includes Culpeper, Richmond, Fredericksburg, Hampton Roads and Northern Virginia Districts. The services also included load ratings, new bridge design, construction support services, surveying, geotechnical investigations, hydraulic studies and analyses, and roadway design associated with the replacement bridges and maintenance of traffic requirements.

The bridge load ratings were performed using AASHTO BARS, AASHTOWare Virtis, DESCUS, MDX, STAAD.Pro, and/or hand calculation with the aid of spreadsheets in accordance with the requirements of the AASHTO Manual for Condition Evaluation of Bridges (2008), VDOT Structure and Bridge Division Instructional and Information Memorandum Number S&B-27.6 dated January 7, 2008 and new VDOT policies regarding Load and Resistance Factor Rating (LRFR) bridge load ratings.

Over the course of three contracts, a total of 181 bridge structures were load rated, including:

- 94 bridge structures in the Northern Virginia District consisting of steel, concrete, and/or timber and ranging in complexity from short, simple spans to longer, multiple-span bridges. Bridge types included steel rolled beam and plate girders, concrete arches and prestressed, post-tensioned concrete bridges;
- 6 bridge structures in the Fredericksburg District, including 5 precast concrete Con/span arches and 1 precast concrete Bebo arch;
- 13 bridge structures in the Hampton Roads District with challenging geometry and complicated structural elements including multi-span curved steel and concrete girder bridges with integral pier caps as well as cast-in-place concrete arches; and
- 68 bridge structures in the Culpeper District, encompassing steel beam with timber deck spans with severe deterioration and web holes, steel trusses, slab spans, concrete and steel through girder spans, timber beam, glulam sections, curved plate girders, and PS slabs.

Team Members Involved: David Wolfe, Eric Vugteveen, Iris Leoncio



17. Firm Experience:

Firm name	Moffatt & Nichol		Past Performance Evaluation Discipline(s)*	Bridge
Project name	Limited Services Term Agreement for NBIS Inspection of Highway Structures and Bridges, and Support Structures, Hampton Roads, Virginia		Firm responsibility (prime or sub?)	Prime
Project number		Owner's name	Virginia Department of Transportation	
Project location	Hampton Roads, Virginia		Owner's Project Manager	Christopher Roberts, PE
Owner's address, phone, email	7511 Burbage Dr, Suffolk, VA 23435, (757) 925-2243, Christopher.Roberts@VDOT.Virginia.gov			
Services commenced by this firm (mm/yy)	05/16	Total consultant contract cost (\$1,000's)		\$8,286
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$4,430

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

Since 2016, under two consecutive limited services term contacts, Moffatt & Nichol has provided NBIS safety inspection services for bridges, highway structures, and traffic devices to the VDOT Hampton Roads District. Hampton Roads District has over 1,400 structures in their inventory. Moffatt & Nichol documented deficiencies in an NBIS Inspection Reports which noted structural conditions, NBIS rating conditions, and prioritized repair recommendations. Reports included photographs, soundings, and element level data collection for the National Highway Structures.

Load rating analysis utilizing AASHTOWare Br/R 6.7.0 and/or LARSA 4D software as applicable. Rated structures include:

- **I-64 EBL over the East Branch of Hampton River & Boxwood Street** – Seven Steel Two Girder-Floorbeam-Stringer Spans. Load Rating completed using LARSA 4D.
- **James River Bridge (Route 17 Bridge over James River)** – Structure has been grouped up into 12 variations of concrete beam approach span configurations and 1 truss lift span. All span types will be completed utilizing AASHTO Br/R 6.7.0.
- **George P. Coleman Memorial Bridge** – Structure has been grouped into 3 variations of concrete beam/steel girder approach span configurations, two, 2-span continues with cantilever truss approach spans and two truss swing spans. Concrete beam/steel girder approach spans will be completed utilizing AASHTO Br/R 6.7.0; the steel truss spans, and swing spans will be completed utilizing LARSA 4D.
- **Berkley Bridge (Route 264 WBL over E Branch Elizabeth River Bridge)** – All twenty spans including Bascule spans consist of girder, floorbeam and stringer floor system superstructure. Br/R does not have an option to analyze this framing system superstructure in LRFR. Hence, all the elements analyzed by LFR method using AASHTOWare Br/R. Stringer to floorbeam connections, girder to floorbeam connections were not load rated. The steel grid floor/ grating in the bascule span were not load rated.
- **Berkely Bridge (Route 264 EBL over E Branch Elizabeth River Bridge)** – Bascule span consist of girder, floorbeam and stinger floor system superstructure. Br/R does not have an option to analyze floor system superstructure in LRFR. Hence, all the elements analyzed by LFR method. Prestressed concrete beams spans (6) and steel girder spans (3) will be analyzed using LRFR method. For Bascule span, stringer to floorbeam connections, girder to floorbeam connections were not load rated. The steel grid floor/ grating in the bascule span were not load rated.

Team Members Involved: Billy Jenkins, Iris Leoncio, David Wolfe



17. Firm Experience:

Firm name	Huval & Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project name	Retainer Contract for Bridge Preventative Maintenance (Design, Ratings, Rehab)		Firm responsibility (prime or sub?)	Prime
Project number	400000670	Owner's name	LADOTD	
Project location	Louisiana Statewide		Owner's Project Manager	Zhengzheng "Jenny" Fu, PE
Owner's address, phone, email	1201 Capitol Access Rd., Baton Rouge, LA 70804-9245, (225)379-1321, zhengzheng.fu@la.gov			
Services commenced by this firm (mm/yy)	08/09	Total consultant contract cost (\$1,000's)		\$8,750
Services completed by this firm (mm/yy)	01/18	Cost of consultant services provided by this firm (\$1,000's)		\$4,676

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

As the prime firm, HUVAL is responsible for Inspection, Preliminary and Final Plans, Surveying Services, Non-Destructive Load Testing and Analysis and Load Rating of Bridges, using LRFD and LRFR design. Completed and On-going Task Orders include:

- **LA 70 Sunshine Bridge Painting and Repair, T.O. H.004890.5 / Legacy No. 701-65-1566:** Inspection and Scoping for the Repair and Painting of the Sunshine Bridge Approaches.
- **LA 70 Sunshine Bridge – Phase II, T.O. H.009104:** In-depth inspection and rating report, Preliminary and Final Plans for the rehabilitation of the Sunshine Bridge Main Truss Span over the Mississippi River.
- **Segment I Ratings and LA 538 Construction Support, T.O. 701-65-9999:** Inspection and LRFR as-designed load ratings for five bridge/tunnel sites. Construction Support and Shop Drawing Review for the LA 538 bridge over I-49.
- **Jackson Street Bridge over Red River T.O. H.000579.5 / Legacy No. 701-65-1453:** In-Depth Inspection and Report, Preliminary and Final Plans for the rehabilitation of the Jackson Street Bridge over Red River. Jackson Street Bridge is a Lift Span Bridge.
- **I-49 North (LA 530 – LA 170) Segment F Ratings and Construction Support, T.O. H.003499.6:** Bridge LRFR load ratings and Construction Engineering Support Services for two bridge sites.
- **US 90B / I-910 MacArthur Drive Interchange Completion, T.O. H.002550:** Peer Review for the girder design of the on and off ramps associated with US 90 / I-910.

Team Members Involved: Colby Guidry



17. Firm Experience:

Firm name	Huval & Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project name	Retainer Contract for Bridge Preservation Statewide		Firm responsibility (prime or sub?)	Prime
Project number	4400002537	Owner's name	LADOTD	
Project location	Louisiana Statewide		Owner's Project Manager	Kurt Brauner, PE
Owner's address, phone, email	1201 Capitol Access Rd., Baton Rouge, LA 70804-9245, (225) 379-1933, Kurt.Brauner@la.gov			
Services commenced by this firm (mm/yy)	08/12	Total consultant contract cost (\$1,000's)	\$6,000	
Services completed by this firm (mm/yy)	07/17	Cost of consultant services provided by this firm (\$1,000's)	\$4,800	

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

As the prime firm, HUVAL is responsible for Preliminary and Final Plans, Surveying Services, Bridge/Structural Inspection and Evaluation, Design Peer Review, Load Rating of Bridges, and Construction Services. Projects performed using LRFD and LRFR design. Completed and On-going Task Orders include:

Bayou Tigre Rack and Pinion Dispute, T.O. H.002751.6: Independent Review of LADOTD's design, contract plans, specifications, construction-related services, field measurements of rack and gear installation, and related documents, as well as reviewing the contractor's fabrication and installation of the bridge machinery. Following

review, a non-biased position statement regarding the dispute between LADOTD and contractor was issued.

LA 182 & LA 58 Movable Bridge Rehab, T. O. H.010006.5: Preliminary Plans for two movable bridges in Lafourche and Terrebonne Parishes including rehabilitation necessary for bridges to remain in service for 30-40 additional years. Includes structural, mechanical, electrical, architectural, and paint system and concrete surface improvement.

Jeanerette End Wedge Repair, T.O. 009467.5: Site Visit and Evaluation, Preliminary Plans and Final Plans for the rehabilitation of this swing span bridge on LA 671 in Iberia Parish. The intent of this Project is to correct any mechanical and electrical deficiencies of the bridge end wedge system, balance wheels, live load shoes, and center pivot bearing.

Bayou Lafourche Bridge, T.O. H.000174: Final Plans, Design Calculations and Structural Monitoring Instrumentation for this slab span bridge structure in Ouachita and Richland Parish. Structural Monitoring Instrumentation is being performed by a Sub-Consultant to Huval. The AccelBridge System was used as the post-tensioning method to achieve the required compression force between the transverse deck panel joints.

KCS Railroad Overpass near Ada, T.O. H.000126: Engineering Construction Services for the KCS Overpass Bridge as well as developing self-curing admixture (SCA) and underwater self-consolidating concrete (UWSCC) for the trial deck and drilled shafts and providing construction support of using these materials for the KCS overpass bridge.

I-10: Ramah – WBR P/L, T.O. H.010318: Final Plans for phased replacement of eight existing 20ft. approach slabs with new 40ft. reinforced concrete approach slabs along I-10 in Iberville Parish.

Team Members Involved: Colby Guidry



17. Firm Experience:

Firm name	Huval & Associates, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project name	Ascension Parish – 26 Bridge Load Ratings		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner’s name	Ascension Parish Government	
Project location	Ascension Parish, Louisiana	Owner’s Project Manager	Joey Tureau, PE	
Owner’s address, phone, email	42077 Church Point Rd., Gonzales, LA 70307, (225) 450-1013, joey.tureau@apgov.us			
Services commenced by this firm (mm/yy)	01/21	Total consultant contract cost (\$1,000’s)		\$88
Services completed by this firm (mm/yy)	04/21	Cost of consultant services provided by this firm (\$1,000’s)		\$88

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

- Relevance to LADOTD:
- Plan & document retrieval & review
 - Site visits
 - Analysis & load rating

Huval & Associates, Inc. (HUVAL) was contracted to provide load rating services for 26 bridges in Ascension Parish. Under this agreement, HUVAL mobilized and provided inspectors and engineers to gather information and data necessary to load rate the bridges. During the load rating process, HUVAL also made recommendations for bridge repairs and modifications which would allow for larger load limits than the current condition allowed. Bridge types inspected and load rated included bridges that are comprised of timber, concrete, steel, concrete decks with timber piles and caps, and other combinations. A few box culverts were also inspected and load rated as part of the project. Repair priorities were also provided so the Parish could program repairs in an efficient manner.

As part of the rating process, HUVAL was creative in the methods used to analyze the bridges in order to allow some bridges to remain open while repair procedures were developed.

Team Members Involved: Colby Guidry



17. Firm Experience:

Firm name	Garver, LLC		Past Performance Evaluation Discipline(s)*	Bridge
Project name	MDOT Office of State Aid Complex Bridge Inspections and Load Ratings		Firm responsibility (prime or sub?)	Prime
Project number		Owner's name	Mississippi Department of Transportation	
Project location	Various Locations, Mississippi		Owner's Project Manager	Harry Lee James, PE
Owner's address, phone, email	412 East Woodrow Wilson Avenue, Jackson, MS 39216, (601) 359-7130, mail@osarc.ms.gov			
Services commenced by this firm (mm/yy)	09/19	Total consultant contract cost (\$1,000's)		\$2,130
Services completed by this firm (mm/yy)	06/22	Cost of consultant services provided by this firm (\$1,000's)		\$2,130

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

Garver provided inspections on 175 complex bridges that included some that are categorized as fracture critical and performed bridge posting load rating services. These services were completed on time and under budget by Garver's licensed engineers and certified bridge inspectors all in accordance with the National Bridge Inspection Standards (NBIS) as well as all other local specifications.

These inspections and load ratings were performed by Garver's senior staff who each have more than 30 years specializing in these services.

The posting load rating services included some of the most complex bridges in Mississippi. Some were constructed of a mixture of miss matched structural elements in various stages on deterioration. In addition to the standard AASHTOWare Bridge Rating software (BrR) Garver engineers routinely created proprietary posting load rating analysis software to determine accurate bridge load posting information for the safety of the traveling public.

Garver has performed this work for the Mississippi office of State Aid Road Construction since its inception under three contracts two of which are complete, and one is still active.

Team Members Involved: Nick Altobelli, Frank (Blake) Blakemore, Rick Kingery, A.J. Khairi, Jessica Halbrook



17. Firm Experience:

Firm name	Garver, LLC		Past Performance Evaluation Discipline(s)*	Bridge
Project name	KDOT 7th Street Bridge Inspections, Repairs, and Load Rating		Firm responsibility (prime or sub?)	Prime
Project number		Owner's name	Kansas Department of Transportation	
Project location	Wyandotte and Johnson Counties, Kansas		Owner's Project Manager	Don Whisler, PE
Owner's address, phone, email	Dwight D. Eisenhower State Office Building, 700 S.W. Harrison Street, Topeka, KS, (785) 296-4435, KDOT#PublicInfo@ks.gov			
Services commenced by this firm (mm/yy)	06/20	Total consultant contract cost (\$1,000's)	\$275	
Services completed by this firm (mm/yy)	09/22	Cost of consultant services provided by this firm (\$1,000's)	\$275	

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

Garver provided a bridge inspection and load rating report for the existing 880-foot deck truss on US 169 northbound (7th Street) bridge and repair design. Upon completion of the inspection and recommendations, Garver evaluated bridge repairs for various service life durations of 5, 10, and 20 years. Repair designs were performed for the locations designated as high priority, with the goal to provide a 5 to 8-year service life until the superstructure can be replaced. Traffic control plans were developed to carry one-lane each direction on the southbound bridge.

Team Members Involved: Rick Kingery, Frank (Blake) Blakemore



17. Firm Experience:

Firm name	Garver, LLC		Past Performance Evaluation Discipline(s)*	Bridge
Project name	MDOT Office of State Aid Timber Inspections and Load Ratings		Firm responsibility (prime or sub?)	Prime
Project number		Owner's name	Mississippi Department of Transportation	
Project location	Statewide, Mississippi		Owner's Project Manager	Harry Lee James, PE
Owner's address, phone, email	412 East Woodrow Wilson Avenue, Jackson, MS 39216, (601) 359-7130, mail@osarc.ms.gov			
Services commenced by this firm (mm/yy)	08/17	Total consultant contract cost (\$1,000's)		\$5,945
Services completed by this firm (mm/yy)	07/20	Cost of consultant services provided by this firm (\$1,000's)		\$5,945

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

Relevance to LADOTD:

- Plan & document retrieval & review
- Site visits
- Analysis & load rating

Garver provided routine inspections and load rating services for more than 800 timber pile bridges. These services were completed on time and under budget by Garver's licensed engineers and certified bridge inspectors all in accordance with the National Bridge Inspection Standards (NBIS) as well as all other local specifications. These inspections and load ratings were performed by Garver's senior staff who each have more than 30 years specializing in these services.

Each inspection required a QC/QA plan, inspection plan and job hazard analysis, channel cross sections, structural element measurements, and provide elevation and foundation plan drawings as most of these structures did not have and existing structural plans. Garver utilized a "resistance drill" which is a nondestructive means of directly measuring the structural load carrying capacity of timber piling. It produces a graph that can be described as an x-ray of the internal portion of the timber piling.

During this work, Garver was called upon to provide repair plans and procedures as well as provide expert trial testimony for a lawsuit between the Governor of Mississippi and the County Board of Supervisors over bridge closings. Garver has performed this work for the Mississippi office of State Aid Road Construction since its inception under five contracts four of which are complete, and one is still active.

Team Members Involved: Frank (Blake) Blakemore, Rick Kingery, A.J. Khairi, Jessica Halbrook



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17. Firm Experience:

Firm name	Traffic Commander, LLC		Past Performance Evaluation Discipline(s)*	Traffic
Project name	LADOTD Inventory and Inspection of Sign Trusses Statewide		Firm responsibility (prime or sub?)	Sub
			Prime	
Project number	4400017089	Owner's name	LADOTD	
Project location	Statewide, Louisiana		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)	08/17	Total consultant contract cost (\$1,000's)	\$5,945	
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$1,615	

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

Relevance to LADOTD:

- Work Zone Safety

Moffatt & Nichol has the sign truss inspection contract statewide. They subcontracted out Truck Mounted Attenuator rental and operation for the safety of their crew and the traveling public, traffic control plans, and lane closure operations. Traffic Commander provides traffic control services as needed with a qualified crew to facilitate their inspection crews while they performed their scope of work.



18. Approach and Methodology:

The Moffatt & Nichol Team has undertaken a comprehensive review of the advertisement for the Indefinite Delivery/Indefinite Quantity (IDIQ) Contract for Bridge Load Rating - Statewide (Contract No. 4400025865), herein referred to as the “Contract”. As such, we have a complete understanding of the Scope of Services described in Attachment A of the advertisement. Our Approach and Methodology for this work, which is explained below, will ensure that our work under individual Task Orders (TOs) is complete, accurate, consistently documented, useful, and in accordance with LADOTD requirements and documents to produce bridge load ratings in accordance with Title 23 of the US Code according to the structure’s current conditions and to ensure that the NBIS Oversight Program *Metrics for the Oversight of the National Bridge Inspection Program* (NBIP) are met for load ratings and load postings of Louisiana’s bridges.

Moffatt & Nichol and our team members have been performing bridge load ratings for LADOTD, various Departments of Transportation (DOTs) municipalities, and other bridge owners for many years under multiple contracts, many of which have been consecutive, which includes extensive use of AASHTOWare Bridge Rating (BrR) software and Load and Resistance Factor Rating (LRFR) methodology. As such, the Moffatt & Nichol Team has a deep understanding of bridge load rating practice and the support to be provided to bridge owners for load posting decisions. The Scope of Work for this Contract consists primarily of performing structural load rating analysis on an as needed basis for structures throughout the State of Louisiana in accordance with AASHTO *Manual for Bridge Evaluation* (MBE), *LADOTD Bridge Design and Evaluation Manual* (BDEM), and applicable EDSM’s of the LADOTD’s Engineering Directives & Standards Manual (EDSM). Per LADOTD BDEM Part II Volume 5 - Bridge Evaluation/Rating, load rating analyses will use the Load and Resistance Factor Rating (LRFR) method as set forth in the latest AASHTO MBE, with the only exception granted being for timber that may be rated by LRFR or Allowable Stress Rating (ASR). While BrR will be used to the largest extent possible, structures that cannot be rated using BrR may be included under this Contract and our approach to this work is discussed below. An influence line/surface submittal is required for any structure element not rated using BrR.

QUALITY ASSURANCE/QUALITY CONTROL

For this Contract, the Moffatt & Nichol Team will develop a Quality Assurance/Quality Control (QA/QC) plan that meets or exceeds the LADOTD Policy for Quality Control and Quality Assurance in BDEM Part I, Chapter 3, as well as the steps and measures in BDEM Part II Volume 5 to be followed for QA/QC of load rating/posting calculations, documentation, and reports. The QA/QC Plan will be submitted to the DOTD PM within 10 business days of award notification. As a company, Moffatt & Nichol’s Quality Management System conforms to the requirements of the international QMS standard ISO 9001:2015. Prior to submission to the DOTD, all documentation will be reviewed for completeness and accuracy and will be revised when necessary. QA/QC checklists and certification that the deliverables meet the DOTD’s quality standards will be transmitted with load rating deliverables. As a sub-consultant for Moffatt & Nichol, HUVAL will manage the QA/QC elements for this contract. HUVAL has 34 years of local load rating experience and knowledge. HUVAL, as a trusted provider to the LA DOTD, has continuously held various bridge retainer contracts with the state since 2001. HUVAL routinely performs a QA/QC role for other consulting firms on various projects throughout the country, including QA/QC for underwater inspection retainer contracts for the Department, structural design for contractors nationwide, and bridge design on various bridge projects. With this experience and working in conjunction with the other members of the Moffatt & Nichol Team, HUVAL is in a position to provide all services required for this contract with the utmost reliability and excellence.

DATA COLLECTION

Before load rating a structure, the current condition, geometric data, and loading data must be collected. Typically, the DOTD will provide access to bridge inspection reports (current bridge and previous as needed), the available bridge plans (As-Builts and/or As-Designed),



repair/rehabilitation/retrofit details that may have been performed, and any field sketches or field load testing data. When the bridge plans are incomplete or cannot be located, the Moffatt & Nichol Team will perform a search to collect useful information such as standard plans that are relevant guided by year built and observable details, any available sketches/drawings of as-built geometry or repair work, any existing rating documents, the Engineer of Record / firm that designed the structure, and the entity that constructed the structure. The sources to be searched are the LADOTD headquarters (General Files, AssetWise Bridge Record Database, FileNet Manager System, Inspection Documents Files server, Section 51-Bridge Maintenance, and Section 25 - Bridge Design), LADOTD District offices, Local Parish governments, engineers/firms/fabricators whose names have been discovered from other sources (previous rating engineer, design engineer, etc.), and the entity who constructed the structure if it is different from the current owner. When some minor data remains incomplete for the structure, Moffatt & Nichol will propose and collaborate as necessary with the DOTD PM (or delegate) to make suitable assumptions about the geometric and structural details and materials. Year built is routinely used to assume material strength for unknown concrete, reinforcing steel, and structural steel in accordance with AASHTO MBE.

A field investigation (not NBIS Bridge Inspection) may be necessary to gather sufficient geometric and structural details to produce an accurate model and analysis of the structure. In such cases where field investigation is justified, the Moffatt & Nichol Team members will perform the field investigation. Depending on the anticipated conditions in the field, the Moffatt & Nichol Team includes LADOTD experienced engineer inspectors knowledgeable in all aspects of bridge access and access equipment as well as traffic control services available from team member Traffic Commander (certified as DBE for NAICS code 713- Temporary Traffic Control and is listed as such on LADOTD's DBE Directory). In special instances, it may be beneficial to obtain field load testing services to (a) confirm the precise nature of the load distribution to the members in order to supplement a refined method of analysis with realistic results, or (b) determine a load rating based on field testing as provided for in Section 8 of AASHTO MBE for structures with a lack of existing as-built information, such as unknown steel reinforcing details. It is our understanding that in cases where site traffic data is unavailable from the bridge file, the LADOTD Transportation Planning and Safety Section should be contacted for current Average Daily Truck Traffic (ADTT) information for the route carried by the bridge. Alternatively, ADTT may be estimated from Average Daily Traffic (ADT) data for the site. The ADTT is used to determine the live load factors for Strength Limit States using the LRFR method for the Legal and Permit load vehicles.

When the DOTD assigns a structure or group of structures to be load rated, the data will be screened by the Moffatt & Nichol Team first to determine whether sufficient data is readily available and second to determine the anticipated complexity of the analysis to identify the appropriate effort and software. Structures will be allocated to the Team members based on their current experience and expertise in order to efficiently provide the necessary load rating. Where feasible, the intent will be to have each Team member broaden its capabilities throughout the duration of the Contract. DBE participation will be tracked to meet the Team's commitment, which will meet or exceed the DOTD goal of 2% for this Contract. Once a TO is executed, progress will be reported to the DOTD on a monthly basis. It is understood that at times the load rating requirements could be adjusted to respond to changes initiated by the DOTD, AASHTO Code requirements, software versions, FHWA, etc. The Moffatt & Nichol Team will endeavor to promptly incorporate these adjustments, even when they occur while a TO is already in progress.

ANALYSIS & LOAD RATING

The load rating modelling and analysis of each bridge will be for a system structural model and will determine the dead load and live load effects in the members. Secondary and temperature effects will be considered for structures sensitive to such effects. The resulting rating factors (RFs) of the controlling members for the live loads analyzed are used to populate the Bridge Load Rating Summary Sheet and to determine the safe load capacity of the bridge. Attachment A of the advertisement specifies that the live load analysis will be for Design Live Load (AASHTO HL-93) and Legal



Loads (LADOTD State Legal Loads, multi-axle Specialized Hauling Vehicles (SHVs), and Fast Act emergency vehicles (EVs)). Permit Loads and the Louisiana Design Vehicle Live Load 2011 (LADV-11) are not specified for the load ratings for this Contract, however, the Moffatt & Nichol Team will confirm this for the structures in each TO assigned.

Substructures are not rated in BrR and per AASHTO MBE need not be routinely load rated but should be checked in situations where the bridge owner has reason to believe that their capacity may govern the load capacity of the entire bridge. LADOTD BDEM Part II Volume 5 identifies the following substructure elements/types for load rating of existing bridges, which will be rated using appropriate modelling and capacity calculations: Timber and metal pier elements; Hammerhead concrete bent caps; Steel framed cap-column bents; Straddle bents; and Pile bent elements (all pile caps, all timber piles, all piles of scour critical bridges, and piles with other critical conditions).

We understand that assignments may include updating existing bridge BrR and related rating files provided by DOTD, if applicable. These files will be reviewed and updated with current structure conditions and if the provided rating files present problems, the Moffatt & Nichol Team will troubleshoot those problem files and make necessary corrections/changes.

For complex bridges, finite element analysis software (from LADOTD Bridge Section pre-approved software list) may be used to load rate structures, and this category may be divided into the use of general-purpose modeling and bridge specific modules. Moffatt & Nichol has performed load ratings that include the use of LARSA, CSiBridge, and RM Bridge. In such cases, our bridge load rating engineers are responsible for generating a model to obtain the member dead load and live load demands and perform spreadsheet calculations to obtain the member capacities. Capacities are used to calculate rating factors for moment, shear and axial loading and, ultimately, identify the critical members and locations. Beyond our strong modelling experience, we possess the necessary understanding of AASHTO MBE to properly factor the demands and capacities. Additionally, our effective use of spreadsheets allows us to calculate the rating factors using concurrent loading to accurately assess a member's capacity, identify critical members, and clearly convey the results for each load rating vehicle.

For non-redundant steel truss bridges, Moffatt & Nichol Team will rate gusset plates and connection elements based on recent experience utilizing dead and live load demands from finite element models with the capacities and rating factors calculated by MathCAD or spreadsheets.

Once a load rating is generated based upon the current structure condition and deterioration using the appropriate software platform and is reviewed in accordance with the QA/QC Plan, the load rating will be signed by one of the individuals (rater/checker/reviewer) engaged in the QA/QC process for the structure's rating that is a professional civil engineer registered in the state of Louisiana. However, higher level refined analysis may be proposed when BrR rating results in load posting finding. Refinement may consist of routine computations adjusted for actual material properties as determined from field sampling and tests of the materials or may be the use of refined methods of analysis such as 2-D grillage or 3-D finite element models. If load posting is required, the Moffatt & Nichol Team will provide schematic recommendations to improve/eliminate the load posting.

DELIVERABLES

The Final Rating Report package will be submitted to the DOTD Project Manager in electronic file format consisting of the following for each bridge (file naming convention will be established in accordance with the DOTD's guidance and practices):

- All the retrieved information used for the load rating (.pdf file format).
- A rating report for each bridge that will include documentation of the current condition of all deteriorated or rehabilitated structural members as well as any pictures and any assumptions influencing the rating.



- Bridge models created and all calculations in electronic file format (e.g. AASHTO BrR in xml format, MathCAD, spreadsheets, hand calculations). Electronic calculations files will be in editable form.

All electronic file submittals will be delivered by hand or overnight delivery in the form of removable storage, such as CD or USB flash drive, unless delivered by large file transfer or ProjectWise. Email submittals are strictly prohibited for bridge load rating reports and inspection reports.

WORKFLOW/SCHEDULE

Moffatt & Nichol will provide the DOTD with a Project Manager in Dr. Pentas; a prominent structural engineer that will maintain his focus and dedication to the success of this contract. The following is the anticipated workflow schedule for a typical Task Order (TO):

- 1A: Preliminary screening of assigned structures for completeness of information, anticipated complexity of analysis, appropriate load rating software, and whether a posting finding is expected. Assign the work and propose Scope and Fee appropriately.
- 1B: Determine whether any of the assigned structures are time sensitive for the DOTD and should be given priority.
- 2A: Develop a schedule for the structures to be load rated that aims for steady progress and ensures on time delivery of the load ratings.
- 2B: Begin in-person data collection at LADOTD, local governments, etc. for structures with incomplete information.
- 2C: Schedule site visits for structures that are anticipated to require field data. Site visits include:
 - Review of previous inspection report, identification of safe staging area at the bridge site for all parties, planned access of all equipment and inspection teams, thorough documentation of the structure field conditions, accurate documentation of geometry, may utilize precision tools (including calipers, D-Meters, dye penetrant and mag particle kits, tapes and levels) and cleaning tools to properly determine the extent of any damage at any given location, and nondestructive testing tools and technology may be used for thorough and accurate documentation to be effectively delivered.
- 2D: Begin load ratings for structures with sufficient information.
- Reassess status and available resources throughout the duration of the task to maintain or accelerate progress as necessary.
- Raters are responsible for the load rating hand calculations, documenting assumptions, generating the load rating report, generating models, running analyses, producing load rating results, and populating the load rating summary. Checkers will begin their work as early as the hand calculation step and no later than after the model input step depending on the complexity of the structure.
- Moffatt & Nichol Team project managers and load rating reviewers will ensure adherence to the QA/QC Plan.
- Load rating deliverables and ongoing progress tracking will be submitted to the DOTD PM monthly.
- Structures with posting findings will be promptly communicated to the DOTD, recommendations will be provided, and potential for a refined analyses may be discussed.



19. Workload:

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining Unpaid Balance**
Moffatt & Nichol	Bridge	H.009730.5	In-Depth Inspection of Complex Bridges, Task Order 5	\$121,578
	Bridge	H.009730.5	IDIQ Contract for Underwater Bridge Inspection, Statewide, Task Order 2	\$2,092,447
	Bridge	H.011331.5	Inventory and Inspection of Sign Trusses, Task Order 2	\$1,059,684
	Data Collection	H.971294.1	LADOTD RIMS	\$40,437
Huval and Associates, Inc.	Bridge	S.P. H. 011235	I-49 South @ Verot School Road Lafayette Parish – Design Phase Supp. #1&2	N/A
	Bridge	S.P. H.004774.5	Kansas Lane-Garrett Road Connector – Supp #1	\$77,657
	Bridge	S.P. H.009497.6	LA 106: Bayou Bouef - Construction Services	\$18,549
	Bridge	S.P. H.011808.5	LA 10: Company Canal – Construction Services	\$27,355
	Bridge	S.P. H.010000.6-2	US 171 Over Calcasieu River – Construction Services	\$39,875
	Bridge	S.P. H.011485.6	LA 336-1 Bayou Teche Bridge @ Breaux Bridge Construction Services	\$88,726
	Bridge	S.P. H. 012650.6	Bridge Repair District 62 - Construction Services	\$25,337
	Bridge	S.P. H.012451.6	Dist. 04 Bridge Repairs - Construction Services	\$20,456
	Bridge	S.P. H.010006.5	LA 58 Petit Caillou Bridge Rehabilitation	\$1,481
	Bridge	S.P. H.002868.5	Ambassador/BNSF Frontage Road Bridges	\$3,812
	Bridge	S.P. H.003370	I-220/I-20 Interchange IMP & BAFB Access	\$28,168
	Bridge	S.P. H.004791	LA 23: Belle Chasse Bridge and Tunnel (HBI)	\$1,267,978
	Bridge	S.P. H.001352.5	Comite Diversion Bridge at LA 67 – Construction Services	\$182,047
	Bridge	S.P. H.002273.5	Comite Diversion Bridge at LA 19 & LA 19 Railroad – Const. Services	N/A
	Bridge	S.P. H.004100	I-10 CMAR – Segment 1 Design	\$2,416,686
	Bridge	S.P. H.014560.5	LA 94: Vermillion River Bridge Replacement	\$51,705
	Bridge	S.P. H.014747	Southern University Ravine Project	\$230,640
	Bridge	S.P.H.014052-2	LA 151: I-20 Overpass Deck Replacement	\$35,824
	Bridge	S.P.H.012545.5	LA454: Wiggins Bayou Bridge	\$199,025
Bridge	S.P.H.014646.5	I-20: US 165 East of Garret Road	\$277,003	
Bridge	S.P.H.014052.5	LA 151: Construction Services	\$42,456	
Garver, LLC	N/A	N/A	N/A	N/A
Traffic Commander, LLC	Bridge	H.011331.5	Inventory and Inspection of Sign Trusses, Task Order 2	\$60,684



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



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20. Certifications/Licenses:

Key Personnel	Certifications
Christopher (Chip) Eschenbach Moffatt & Nichol	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2018
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2022
	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2023
Jeffrey Gazarek, COSS, COSM Moffatt & Nichol	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2020
	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2016
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2019
Chace Hulon, PE Moffatt & Nichol	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2019
	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2005
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2019
	FHWA-NHI-130091B Underwater Bridge Repair, Rehabilitation and Countermeasures / 2018
	ATTSSA Traffic Control Supervisor / 2021
	FHWA-NHI-135047 Stream Stability and Scour at Highway Bridges for Bridge Inspectors / 2018
	FHWA-NHI-135086 Stream Stability Factors and Concepts / 2018
FHWA-NHI-135087 Scour at Highway Bridges: Concepts and Definitions / 2018	
Billy Jenkins, PE Moffatt & Nichol	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2013
	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2016
Iris Leoncio, PE Moffatt & Nichol	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2021
	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2010
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2016
Laura Miller, EIT Moffatt & Nichol	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2022
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2019
	FHWA-NHI-130091 Underwater Bridge Inspection / 2018
	FHWA-NHI-130107A Fundamentals of Bridge Maintenance WBT / 2018
	FHWA-NHI-135086 Stream Stability Factors and Concepts / 2018
Herodotos Pentas, PhD, PE	FHWA-NHI-135087 Scour at Highway Bridges: Concepts and Definitions / 2018
	FHWA-NHI-130056 Safety Inspection of In-Service Bridges for Professional Engineers / 2022



Key Personnel	Certifications
Moffatt & Nichol	FHWA-NHI-130092 Load and Resistance Factor Rating of Highway Bridges / 2022
	FHWA-NHI-135099 Bridge Inspection Non-Destructive Evaluation Showcase (BINS) / 2010
Mike Russell Moffatt & Nichol	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2021
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2022
Eric Vugteveen, PE Moffatt & Nichol	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2005
	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2017
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2015
Colby Guidry, PE Huval and Associates, Inc.	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2020
	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 2007
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2009
	FHWA-NHI-130092 Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures / 2009
Nick Kingery, PE Garver, LLC	FHWA-NHI-130053 Bridge Inspection Refresher Training / 2010
	FHWA-NHI-130055 Safety Inspection of In-Service Bridges / 1998
	FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges / 2010
	FHWA-NHI-130091 Underwater Bridge Inspection / 2016



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

Debra A. Hart

Local Coordinator

Jim Fisher PE

Instructor

Valerie Briggs

**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

CHRISTOPHER A. ESCHENBACH

has Successfully Completed

FHWA – NHI – 130078

***FRACTURE CRITICAL INSPECTION TECHNIQUES FOR STEEL
BRIDGES***

hosted by

ILLINOIS DEPARTMENT OF TRANSPORTATION

Date: **DECEMBER 6-9, 2022**

Hours of Instruction: **25 Hours**

Location: **SCHAUMBURG, ILLINOIS**

Instructor

Instructor

Local Coordinator

Thomas Harman

Thomas Harman, 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-130087 Inspection and Maintenance of Ancillary
Highway Structures***

hosted by

COLLIERS ENGINEERING & DESIGN

Date: October 28-29, 2021

Hours of Instruction: 12

Location: Miami, FL

Terence M. Boone

Instructor

Cory Joseph Hogan

Local Coordinator

Steven J. Miller

Instructor

Thomas Harman

Thomas Harman, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

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

Cecilia A. Miller

Instructor

Allison H. Landrey

Local Coordinator

[Signature]

Instructor

Thomas Harman

Thomas Harman, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

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*

Guy R. Lang PE

Instructor

Allison H. Landry

Local Coordinator

Dennis R. Bangor, P.E.

Instructor

Valerie Briggs

**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
Federal Highway
Administration

National Highway Institute



Certificate of Training

JEFFREY GAZAREK

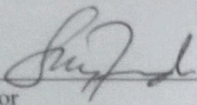
has participated in

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

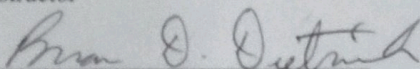
hosted by

LA DOTD/LTRC

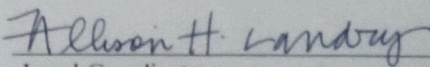
Date: February 26 – March 1, 2019 *Hours of Instruction:* 25
Location: Baton Rouge, LA



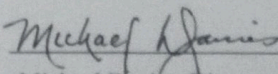
Instructor



Instructor



Local Coordinator



Michael Davies, Director
National Highway Institute



U.S. Department
of Transportation
Federal Highway
Administration

National Highway Institute



Certificate of Training

Chace Hulon, PE

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

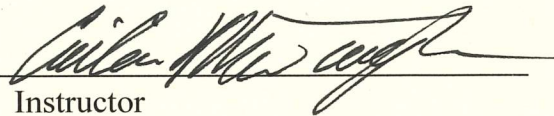
hosted by

Boston Society of Civil Engineers Section/ASCE

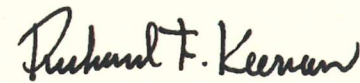
Date: *October 1-3, 2019*

Hours of Instruction: 18

Location: *Boston, MA*



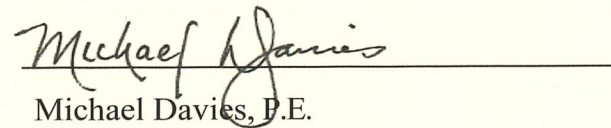
Instructor



Local Coordinator



Instructor



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



U.S. Department
Of Transportation
Federal Highway
Administration



NATIONAL HIGHWAY INSTITUTE

Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

Chace Hulon

has participated in

Safety Inspection of In Service Bridges
NHI Course 130055A

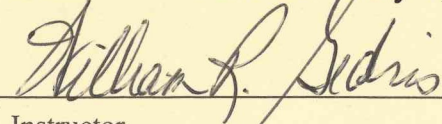
hosted by

Iowa State University

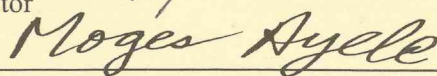
Location: Des Moines, IA

Hours of instruction: 80

Date: June 20 – July 1, 2005

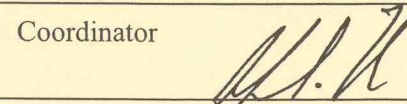


Instructor



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

CHACE HULON

has participated in

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

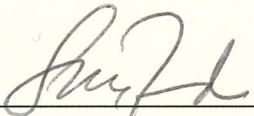
hosted by

LA DOTD/LTRC

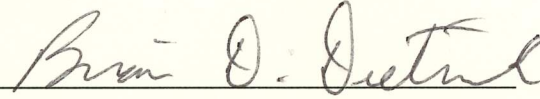
Date: February 26 – March 1, 2019

Hours of Instruction: 25

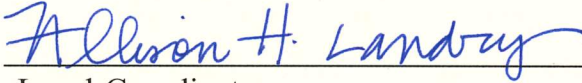
Location: Baton Rouge, LA



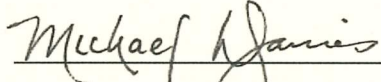
Instructor



Instructor



Local Coordinator



Michael Davies, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

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

Hours of Instruction: 14

Location: Fort Worth, TX

Instructor

Local Coordinator

**Valerie Briggs, Director
National Highway Institute**

Instructor



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Chace M Hulon

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

9/10/2021 to 9/10/2025
Training Valid Through

Baton Rouge, LA
Location

A handwritten signature in black ink, appearing to read "Lange Smith".

Director of Training

A handwritten signature in black ink, appearing to read "Alex Teichner".

President, CEO

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



American Traffic Safety Services Association ATSSA.com



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

CHACE HULON

has participated in

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


hosted by

LA DOTD/LTRC

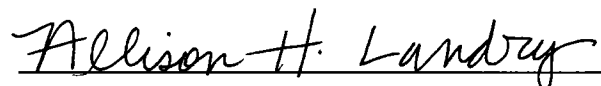
Date: *October 22, 2018*

Hours of Instruction: *6*

Location: *Baton Rouge, LA*

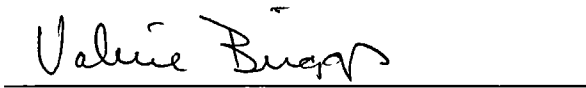


Instructor



Local Coordinator

Instructor



**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute

Certificate of Training



Chace Hulon

has participated in

NHI Course No. FHWA-NHI-135086

Stream Stability Factors and Concepts (Prerequisite) WEB-BASED

hosted by

National Highway Institute

Location: *Web-Based Course*

Hours of Instruction: *1 hours*

Date: *10/21/2018*

Valerie Briggs, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute

Certificate of Training

Chace Hulon



NATIONAL HIGHWAY INSTITUTE

Training Solutions for Transportation Excellence

has participated in

NHI Course No. FHWA-NHI-135087

**Scour at Highway Bridges: Concepts and Definitions (Prerequisite) WEB-
BASED**

hosted by

National Highway Institute

Location: *Web-Based Course*

Hours of Instruction: *1 hours*

Date: *10/20/2018*

Valerie Briggs, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Billy R. Jenkins

has participated in

FHWA-NHI 130053 Bridge Inspection Refresher Training

hosted by

HDR Engineering, Inc.

Date: August 16-18, 2016

Hours of Instruction: 18

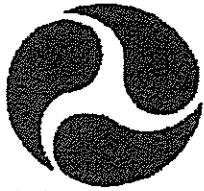
Location: Raleigh, NC

Instructor

Local Coordinator

Instructor

**Valerie Briggs, Director
National Highway Institute**



U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Billy R. Jenkins, PE

has participated in

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

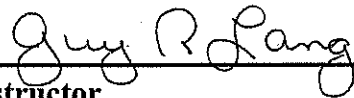
hosted by

Gannett Fleming, Inc.

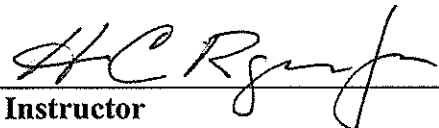
Date: October 14-25, 2013

Location: Baltimore, MD

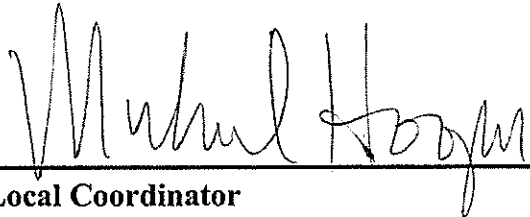
Hours of Instruction: 67 Hours




Instructor



Instructor



Local Coordinator



Richard Barnaby, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Iris Leoncio

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Collins Engineers, Inc.

Date: **March 16-18, 2021**

Hours of Instruction: **18**

Location: **Virtual Delivery, IL**

Digitally signed by Catein A.
MacDougall, P.E.
Date: 2021.03.26 17:22:52 -0400

Instructor

Finn K. Hubbard
2021.03.22 08:25:03
-05'00'

Instructor

Drew Garceau

Local Coordinator

**Thomas Harman, Director
National Highway Institute**



U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training

Iris Leoncio

has participated in

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

hosted by

AECOM Technical Services, Inc.

Date: August 20, 2010

Location: Baltimore, MD

Hours of Instruction: 80
CEU's: 60

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

IRIS LEONCIO

has participated in

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

hosted by

ACEC/MW

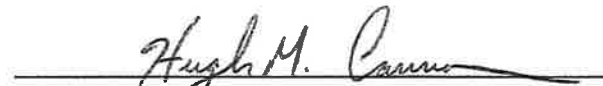
Date: *March 1-4-2016* ^{CF}

Hours of Instruction: 25

Location: *Laurel, MD*



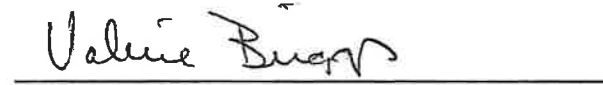
Instructor



Local Coordinator



Instructor



**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Laura Miller

has Successfully Completed

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

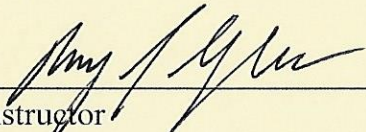
hosted by

SDR Engineering Consultants

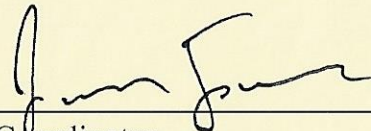
Date: January 10-21, 2022

Hours of Instruction: 67


Location: Tallahassee, FL



Instructor



Local Coordinator



Instructor

Thomas Harman

Thomas Harman, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

LAURA MILLER

has participated in

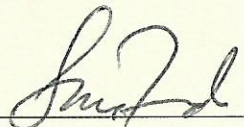
***FHWA-NHI-130078 Fracture Critical Inspection
Techniques for Steel Bridges***

hosted by

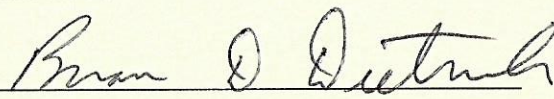
LA DOTD/LTRC

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

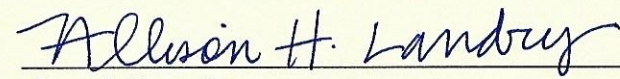
Location: Baton Rouge, LA



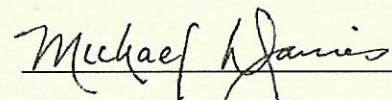
Instructor



Instructor



Local Coordinator



Michael Davies, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Laura Miller

has participated in

FHWA-NHI-130091 Underwater Bridge Inspection

hosted by

Terracon Consultants, Inc.

Date: June 05-08, 2018

Hours of Instruction: 24

Location: Rocky Hill, CT

Instructor

Local Coordinator

Instructor

**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute

Certificate of Training



Laura Miller

has participated in

NHI Course No. FHWA-NHI-130107A

Fundamentals of Bridge Maintenance WBT

hosted by

National Highway Institute

Location: *Web-Based Course*

Hours of Instruction: *7 hours*

Date: *4/20/2018*

Valerie Briggs, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute

Certificate of Training



Laura Miller

has participated in

NHI Course No. FHWA-NHI-135086

Stream Stability Factors and Concepts (Prerequisite) WEB-BASED

hosted by

National Highway Institute

Location: *Web-Based Course*

Hours of Instruction: *1 hours*

Date: *10/18/2018*

Valerie Briggs, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute

Certificate of Training



NATIONAL HIGHWAY INSTITUTE

Training Solutions for Transportation Excellence

Laura Miller

has participated in

NHI Course No. FHWA-NHI-135087

**Scour at Highway Bridges: Concepts and Definitions (Prerequisite) WEB-
BASED**

hosted by

National Highway Institute

Location: *Web-Based Course*

Hours of Instruction: *1 hours*

Date: *10/18/2018*

Valerie Briggs, Director
National Highway Institute



U.S. Department
of Transportation
Federal Highway
Administration

National Highway Institute



Certificate of Training

Herodotos Pentas

has Successfully Completed

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


hosted by

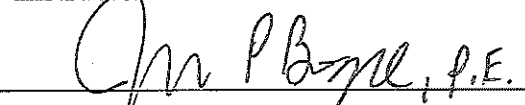
Office of State Aid Road Construction

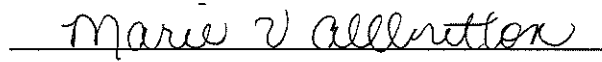
Date: August 22-26, 2022

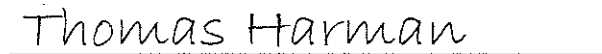
Hours of Instruction: 34

Location: Ridgeland, MS


Instructor


Instructor


Local Coordinator


Thomas Harman, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

HERODOTOS PENTAS

has participated in

***FHWA-NHI-130092 Load and Resistance Factor
Rating of Highway Bridges***

hosted by

LA DOTD/LTRC

Date: October 18-21, 2022

Hours of Instruction: 24

Location: Baton Rouge, LA

Thomas Seod

Instructor

William Edberg

Instructor

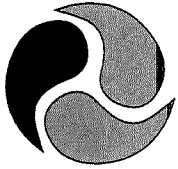
Allison H. Landry

Local Coordinator

Thomas Harman

Thomas Harman, Director

National Highway Institute



U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training

Herodotos Pentas

has participated in

**NHI Course No. 130099 - Bridge Inspection
Non-Destructive Evaluation Showcase (BINS)**

hosted by

LA DOTD/LTRC

***Hours of Instruction:* 6**

***Date:* December 7, 2010**

***Location:* Baton Rouge, LA**

Instructor

Instructor

Local Coordinator

**Richard Barnaby, Director
National Highway Institute**



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence



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

Hours of Instruction: 67

Location: Honolulu, HI

Instructor

Instructor

Local Coordinator

Thomas Harman

Thomas Harman, 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-130078 Fracture Critical Inspection Techniques
for Steel Bridges***

hosted by

Arkansas Department of Transportation

Date: June 21 – 24, 2022

Hours of Instruction: 25

Location: Little Rock, AR

Instructor

Instructor

Local Coordinator

Thomas Harman

Thomas Harman, Director
National Highway Institute



U.S. Department
Of Transportation
Federal Highway
Administration



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

Eric Vugteveen

has participated in

Safety Inspection of In-Service Bridges

hosted by

Norfolk Public Works-Design

Location: Norfolk, VA

Hours of instruction: 80

Date: July 11-22, 2005

John Wackerly

Instructor
Moges Ayele

Director, National Highway Institute
Federal Highway Administration

Jerry Halstead

Coordinator
J.P.K.

Director, Office of Professional and Corporate Development
Federal Highway Administration



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Eric Vugteveen

has participated in

FHWA-NHI 130053 Bridge Inspection Refresher Training

hosted by

Whitman, Requardt & Associates, LLP and Moffatt & Nichol

Date: December 4 – 6, 2017

Hours of Instruction: 18

Location: Richmond, VA

Instructor

Local Coordinator

Instructor

**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Eric P. Vugteveen

has participated in

FHWA-NHI-130078 Fracture Critical Inspection of Steel Bridges

hosted by

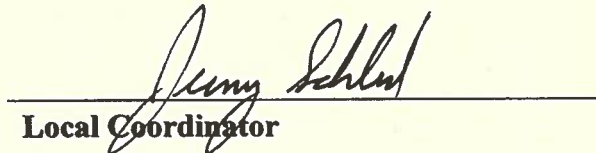
Whitman, Requardt & Associates, LLP

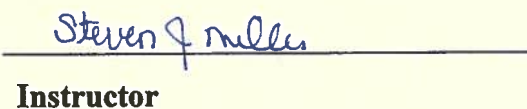
Date: *May 26-29, 2015*

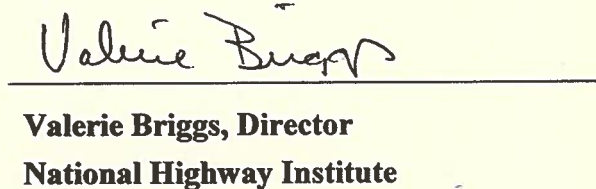
Hours of Instruction: 25

Location: *Richmond, VA*


Instructor


Local Coordinator


Instructor


**Valerie Briggs, Director
National Highway Institute**



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute
Certificate of Training
COLBY GUIDRY



has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

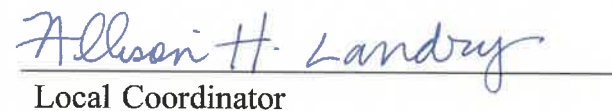
Date: January 21-23, 2020

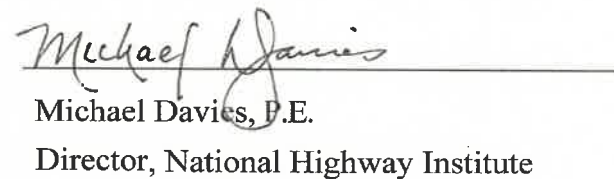
Hours of Instruction: 18

Location: Baton Rouge, LA


Instructor


Instructor


Local Coordinator


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



U.S. Department
Of Transportation
Federal Highway
Administration



NATIONAL HIGHWAY INSTITUTE
Training Solutions For Transportation Excellence

National Highway Institute *Certificate of Training*

Colby Guidry

has participated in

Safety Inspection In-Service Bridges

hosted by

ALABAMA DEPARTMENT OF TRANSPORTATION

Location: Mobile, Alabama

Hours of instruction: 72

Date: May 14 - 25, 2007

Instructor

Director, National Highway Institute
Federal Highway Administration

Coordinator

Director, Office of Professional Development
Federal Highway Administration



U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training



NATIONAL HIGHWAY INSTITUTE
Training Solutions For Transportation Excellence

Colby Guidry

has participated in

Fracture Critical Inspection Techniques for Steel Bridges

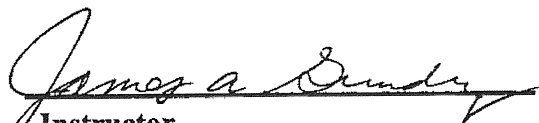
hosted by

LA DOTD/LTRC

Date: April 27-30, 2009

Hours of Instruction: 21

Location: Baton Rouge, LA

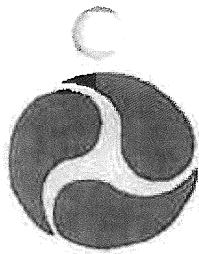

Instructor


Local Coordinator


Instructor



Richard Barnaby, Director
National Highway Institute



U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Colby Guidry

has participated in

Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures

hosted by

LA DOTD/LTRC


Date: December 7-10, 2009

Location: Baton Rouge, LA

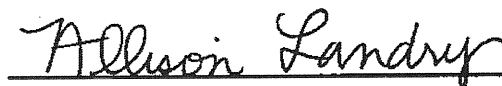
Hours of Instruction: 24



Instructor



Instructor



Local Coordinator



Richard Barnaby, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Richard Kingery

has Successfully Completed

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by


Iowa LTAP

Date: February 08-10, 2022
Location: Ames, IA


Hours of Instruction: 18



Instructor



Local Coordinator



Instructor

Thomas Harman

Thomas Harman, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute
Certificate of Training
Richard S. Kingery

has satisfactorily completed training in
Safety Inspection of In-Service Bridges

conducted by
Michael Baker, Jr., Inc.

Location: Jefferson City, Missouri

Hours of instruction: 60

Date: November 30, 1998 - December 11, 1998

Continuing Education Units: 6.0

Instructor



Director
National Highway Institute

Coordinator



Federal Highway Administrator



U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training



NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Rick Kingery

has participated in

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Missouri Department of Transportation

Date: *March 2-5, 2010*

Location: *Jefferson City, MO*

Hours of Instruction: *24*

John Wackerly

Instructor

James A. Gentry

Instructor

Patricia Martens

Local Coordinator

Richard Barnaby

Richard Barnaby, Director
National Highway Institute



U.S. Department
of Transportation
**Federal Highway
Administration**

National Highway Institute



Certificate of Training

Rick Kingery

has participated in

FHWA-NHI 130091 Underwater Bridge Inspection

hosted by

Missouri Department of Transportation

Date: *October 18-21, 2016*

Hours of Instruction: *24*

Location: *Jefferson City, MO*

Terence M. Beane

Instructor

David Koenig

Local Coordinator

Brian Dilworth

Instructor

BRIAN DILWORTH

Valerie Briggs

**Valerie Briggs, Director
National Highway Institute**



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

To be submitted within 10 business days of the award notification to the consultant.



22. Sub-consultant information:

Firm Name (as registered with Louisiana’s Secretary of State)	Address	Point of Contact and email address	Phone Number
Huval and Associates, Inc.	727 West Pont Des Mouton Rd., Lafayette, Louisiana 70507	Colby Guidry, PE cguidry@huvalassoc.com	(337) 234-3798
Garver, LLC	3900 N. Causeway Blvd. Ste. 1200, Metairie, LA, 70002	Richard Kingery RSKingery@GarverUSA.com	(512) 485-0020
Traffic Commander, LLC	3206 N. Turnbull Drive Metairie, Louisiana 70002-5732	Madeline Commander maddie@trafficcommander.com	(504) 416-9446



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23. Location:

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Contact:

Dr. Herodotos Pentas, PE

Moffatt & Nichol

301 Main Street, Suite 800

Baton Rouge, LA 70801

Tel: (225) 610-1597

Email: hpentas@moffattnichol.com