IDIQ CONTRACT FOR BRIDGE RATING

STATEWIDE, LOUISIANA

SEPTEMBER 12, 2023

CONTRACT NOS. 4400027650, 4400027651, AND 4400027652

Submitted to:
Louisiana Department of Transportation and Development (DOTD)

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Submitted by:
Forte and Tablada, Inc.

FORTE & TABLADA

SECTIONS 1-11

FORTE & TABLADA

DOTD FORM: 24-102

(Revised January 1, 2023)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

1. Contract title as shown in the advertisement	IDIQ Contract for Bridge Rating Statewide
2. Contract number(s) as shown in the advertisement	Contract Nos. 4400027650, 4400027651, and 4400027652
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	Forte and Tablada, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0000330 – Engineering VF.0000055 - Surveying
6. Prime consultant mailing address	Forte and Tablada, Inc. 9107 Interline Avenue Baton Rouge, LA 70809
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	Forte and Tablada, Inc. 9107 Interline Avenue Baton Rouge, LA 70809
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Russell J."Joey" Coco, Jr. – President/CEO (225) 927-9321 jcoco@forteandtablada.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Russell J."Joey" Coco, Jr. – President/CEO (225) 927-9321 jcoco@forteandtablada.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	Signature above shall be the same person listed in Section 9:  _____ Date: 9/11/2023
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): No DBE Goal Firm(s)' %:

SECTIONS 12-15

FORTE & TABLADA

12. Past Performance Evaluation Discipline Table:

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

Past Performance Evaluation Discipline(s)	% of Overall Contract	FORTE & TABLADA (Prime)	Stantec (Sub)	HNTB (Sub)	moffatt & nichol (Sub)	Each Discipline must total to 100%
Bridge	100%	51%	21%	15%	13%	100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.						
Percent of Contract	100%	51%	21%	15%	13%	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)
FORTE & TABLADA	Administrative	1	3
	CADD Technician	2	8
	Clerical	1	4
	Engineer	5	6
	Engineer Intern	2	10
	Principal	1	3
Stantec	Principal	1	2
	Engineer	4	9
	Engineer Intern	2	8
	Technician	1	2
	Inspector – Bridge	3	10
HNTB	Accountant	0	2
	CADD Technician	2	2
	Clerical	0	2
	Engineer	4	7
	Engineer Intern	2	2
	Engineer Other	0	6
	Principal	0	1
	Senior Technician	0	2
	Supervisor Engineer	1	5
	Supervisor Other	0	4
moffatt & nichol	Administrative	1	150
	CADD-Operator	2	93
	Engineer	4	34
	Engineer – Other	4	405
	Engineer Intern	3	142

14. Organizational Chart:

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

PRINCIPAL IN CHARGE
Russell J. "Joey" Coco, Jr. P.E., MBA
MPR 1,2, and 3

PROJECT MANAGER
Joffrey Easley, P.E., MS
MPR 4 and 5

	TASK 1: PLAN AND DOCUMENT RETRIEVAL AND REVIEW	TASK 2: SITE VISITS	TASK 3: LOAD RATING	TASK 4: TRAINING
FORTE & TABLADA PRIME CONSULTANT	Joffrey Easley, PE, MS (MPR 4,5) Levi Yantis, PE (5) Jennifer Nicaud, PE Hannah DiLeo, EI William Sauerwin, EI	Joffrey Easley, PE, MS (MPR 4,5) Levi Yantis, PE (5) Jennifer Nicaud, PE Hannah DiLeo, EI William Sauerwin, EI	Joffrey Easley, PE, MS (MPR 4,5) Jason Fennell, PE, MS Dexter Grogan, PE Levi Yantis, PE (5) Jennifer Nicaud, PE Hannah DiLeo, EI William Sauerwin, EI	
Stantec	Taylor Perkins, PhD, SE, PE(4) Brian Johnson, PE John Krebs, PE (5) Amir Botros, PhD, PE Kunal Malpani, PE Ryan Nataluk, PE Michael Brodnax, EI Jacob Tisdale, PE	Taylor Perkins, PhD, SE, PE(4) Brian Johnson, PE John Krebs, PE (5) Amir Botros, PhD, PE Kunal Malpani, PE Ryan Nataluk, PE Michael Brodnax, EI Jacob Tisdale, PE	Taylor Perkins, PhD, SE, PE(4) Brian Johnson, PE John Krebs, PE (5) Amir Botros, PhD, PE Kunal Malpani, PE Ryan Nataluk, PE Michael Brodnax, EI Jacob Tisdale, PE	
HNTB	Josh Porter, PE (4,5) Patrick Duffy, PE (5) Marc Hoffman, PE (5) Travis Honore, PE Aravind Tankasala, PhD, PE	Josh Porter, PE (4,5) Patrick Duffy, PE (5) Marc Hoffman, PE (5) Travis Honore, PE Aravind Tankasala, PhD, PE	Josh Porter, PE (4,5) Patrick Duffy, PE (5) Marc Hoffman, PE (5) Travis Honore, PE Aravind Tankasala, PhD, PE	Josh Porter, PE (4,5) Patrick Duffy, PE (5) Marc Hoffman, PE (5) Travis Honore, PE Aravind Tankasala, PhD, PE
moffatt & nichol	Herodotos Pentas, PhD, PE (4,5) Chace Hulon, PE Iris Leoncio, SE, PE (4,5) Eric Vugteveen, PE (5) David Wolfe, PE Isabella Mejdrech, PE	Herodotos Pentas, PhD, PE (4,5) Chace Hulon, PE Iris Leoncio, SE, PE (4,5) Eric Vugteveen, PE (5) David Wolfe, PE Isabella Mejdrech, PE	Herodotos Pentas, PhD, PE (4,5) Chace Hulon, PE Iris Leoncio, SE, PE (4,5) Eric Vugteveen, PE (5) David Wolfe, PE Isabella Mejdrech, PE	

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. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that 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 and discipline meeting MPR / certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	Russell J. "Joey" Coco, Jr. P.E., MBA	F&T	PE 31337 - Civil	LA	9/30/2024
2	Russell J. "Joey" Coco, Jr. P.E., MBA	F&T	PE 31337 - Civil	LA	9/30/2024
3	Russell J. "Joey" Coco, Jr. P.E., MBA	F&T	PE 31337 - Civil	LA	9/30/2024
4	Joffrey E. Easley, PE, MS Taylor Perkins, PhD, SE, PE Joshua Porter, PE Herodotos A. Pentas, PhD., PE Iris Leoncio, SE, PE	F&T Stantec HNTB Moffatt & Nichol Moffatt & Nichol	PE 31542 - Civil PE 47449 – Structural PE 39513 - Civil PE 24660 – Civil PE 47438 - Civil & Structural	LA LA LA LA LA	3/31/2025 9/30/2023 9/30/2025 9/30/2024 9/30/2023
5	Joffrey E. Easley, PE, MS Levi Yantis, PE John Krebs, PE Joshua Porter, PE Marc Hoffmann, PE Patrick Duffy, PE Herodotos A. Pentas, PhD., PE Iris Leoncio, SE, PE Eric Vugteveen, PE	F&T F&T Stantec HNTB HNTB HNTB Moffatt & Nichol Moffatt & Nichol Moffatt & Nichol	PE 31542 - Civil PE 42390- Civil PE 37259 – Civil PE 39513 – Civil PE 44342 - Civil PE 45363 - Civil PE 24660 – Civil PE 47438- Civil & Structural PE 38667 - Civil	LA LA LA LA LA LA LA LA LA	3/31/2025 9/30/2024 9/30/2024 9/30/2025 9/30/2024 9/30/2025 9/30/2024 9/30/2023 9/30/2024

SECTION 16

FORTE & TABLADA

16. Staff Experience:

Firm employed by	FORTE & TABLADA		
Name	**Russell "Joey" Coco, P.E., MBA**	Years of relevant experience with this employer	17
Title	President/CEO	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	BSCE / 2000 / LSU MBA / 2006 / LSU Coastal Engineering Certificate / 2008 / Old Dominion University		
Active registration number / state / expiration date	31337 / LA / 09/30/2024		
Year registered	2004	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	**Principal-in-Charge**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/18-05/22	**LA DOTD Retainer Contract for Off-System Bridge Load Rating, Statewide, LA** – QA/QC review engineer for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 –Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
11/19 - 11/20	**LA DOTD S.P. No. H.012083.5- Calcasieu River Bridge Investigation, Calcasieu Parish, LA** - Principal overseeing laser scanning services for the I-10/Lake Calcasieu bridge in Lake Charles, LA.
08/19-Ongoing	**H.011670-I-10/Loyola Interchange Improvements, Kenner, LA** – Principal-in-Charge overseeing Topographic Survey, Right-of- Way Survey, and Drainage Survey. The project stretches from the levee in Kenner to the Williams Blvd. off ramp, as well as Loyola Avenue and portions of Veterans Blvd.
05/19-09/19	**H.000303.6-Danziger Bridge Rehabilitation, Orleans Parish, LA** - Principal overseeing survey investigation of Danziger Bridge. Included laser scanning and comparison of actual conditions to original plans.
11/18-04/19	**H.011684.5-LA 327 Spur: Staring Lane Extension, East Baton Rouge Parish, LA** – Principal-in-Charge for comprehensive topographic surveying services and developing a drainage map for the Staring Lane Extension project for LA DOTD. Included in this work was a survey performed utilizing traditional methods and terrestrial laser scanning of roadway surfaces.
11/16-10/20	**Livingston Parish Off-System Bridge Load Ratings, Livingston Parish, LA** - QC/QA review engineer for the inspection and load rating of numerous existing slab span bridges and culverts in Livingston Parish In accordance with FHWA Metric 13, which requires a current load rating of all Off-System bridges.
10/18 - 12/18	**LA DOTD 4400010587 - Sunshine Bridge Repair, St. James Parish, LA** - Principal overseeing topographic surveying and terrestrial LIDAR services for the LA DOTD Sunshine Bridge Emergency Repair project following the severe impact of a barge mounted crane with the lowest horizontal bridge chord.
09/17-12/19	**S.P. No. H.011808.5- Palmetto Co. Canal Bridge, St. Landry Parish, LA** - Principal-in-Charge to provide property surveys, title take-offs, and right-of-way map services for the removal and replacement of a timber trestle bridge that spans Bayou Des Glaises, located along La. Hwy. 10 in St. Landry Parish near the town of Palmetto, LA.

16. Staff Experience:

Russell "Joey" Coco, P.E., MBA (CONT.)	
05/17-10/18	**Belle Chasse Bridge and Tunnel Replacement Hydrographic Survey, Plaquemines Parish, LA**- Principal-in-charge for comprehensive topographic surveying services for the Belle Chase Bridge and Tunnel Replacement project for LA DOTD. Included in this work was a survey performed utilizing traditional methods, terrestrial laser scanning of roadway surfaces, and multi-beam 3-D hydrographic surveying.
11/16-10/20	**Livingston Parish Off-System Bridge Load Ratings, Livingston Parish, LA** - QC/QA review engineer for the inspection and load rating of numerous existing slab span bridges and culverts in Livingston Parish In accordance with FHWA Metric 13, which requires a current load rating of all Off-System bridges.
06/16-04/20	**St. Tammany Parish Off-System Bridge Load Ratings, St. Tammany Parish, LA** - QC/QA review engineer for the data collection, inspection, and load rating of numerous slab span, girder, and railcar bridges in St. Tammany Parish.
03/15-07/15	**Bossier Parish Bridge Priority Study, Bossier Parish, LA** – Served as the project manager and engineer for prioritizing the repair and maintenance of twelve bridges owned by Bossier Parish Police Jury.
03/15-02/18	**Holly Drive Bridge Replacement, St. Tammany Parish, LA** – Served as a project principal for an existing timber bridge replacement in St. Tammany Parish.
03/14-03/17	**LA DOTD Load Rating of On-System Bridges, Statewide, LA** - QC/QA review engineer for over 200 slab span and girder bridges across Louisiana. Utilized Virtis load rating software.
11/14-09/19	**Railroad Bridge Replacement, Plaquemines, LA** – Served as a project principal for the replacement of an existing railroad bridge structure in an industrial plant.
12/14-11/15	**Westdale Road Bridge over Bayou Pierre, DeSoto Parish, LA** – Served as a project principal for laser scanning, inspection, load rating, and repair plans for an existing closed bridge.
04/11-10/16	**Iberville Parish Bridge Ratings and Prioritization, Iberville Parish, LA** – Served as a project engineer for continued off-system bridge ratings, repairs, and repair/replacement prioritization recommendations for Iberville Parish.
01/10-12/12	**LA DOTD I-10: Siegen Lane to Highland Road Design Build ITR, East Baton Rouge Parish, LA** – Served as leader of Independent Technical Review of all bridge structures.
01/09-12/10	**LA DOTD I-12: O'Neal Lane to Range Road Design Build ITR, East Baton Rouge Parish, LA** – Served as leader of Independent Technical Review of all bridge structures.
01/09-12/10	**LA DOTD S.P. Nos. 454-01-0047 & 454-02-0025- I-12: O'Neal Lane to Range Road Design Build ITR, East Baton Rouge Parish, LA** – Served as leader of Independent Technical Review of all bridge structures.

16. Staff Experience:

Firm employed by	FORTE & TABLADA		
Name	**Joffrey E. Easley, P.E., M.S.**	Years of relevant experience with this employer	16.5
Title	Supervisor Engineer	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization	BSCE / 2000 / Civil Engineering MSCE / 2003 / Civil Engineering		
Active registration number / state / expiration date	31542 / LA / 03/31/2025		
Year registered	2004	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	**Project Manager**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
09/22-Ongoing	**LA DOTD Retainer Contract for Bridge Load Rating Services, Statewide, LA** – Project Manager, Load Rating Engineer, and Team Leader for a retainer contract to provide load rating services across the state. Task Order 1 is for the load rating of ninety-five (95) on-system slab span bridges that have experienced a condition drop since the last load rating. Includes inspection (when required) and, if a load posting if required, determination of repair/rehabilitation options to improve/remove the load posting.
03/18 - Ongoing	**LA DOTD Retainer Contract for Off-System Bridge Load Rating, Statewide, LA** - Project Manager, Load Rating Engineer, and Team Leader for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Inspection and load rating of 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 – Inspection and load rating of approximately 200 off-system bridges, consisting primarily of slab spans; Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
03/14-03/17	**LA DOTD Load Rating of On-System Bridges, Statewide, LA** – Load rating engineer for over 200 slab span and girder bridges across Louisiana. Utilized Virtis (BrR) load rating software.
05/16 - 10/19	**LA DOTD Retainer Contract for Complex Bridge Rating, Statewide, LA** -Project Manager to perform a load rating for the US 90 West Middle River Bridge near the Louisiana/Mississippi border. A detailed inspection of the steel through-trusses was also provided.
06/16-04/20	**St. Tammany Parish Off-System Bridge Load Ratings, St. Tammany Parish, LA** - Project Manager to collect all available bridge files from all available resources, including LADOTD and Parish records, for numerous slab span, girder, and railcar bridges in St. Tammany Parish and perform inspections and load ratings for the bridges.
11/16 - 10/20	**Livingston Parish Off-System Bridge Load Ratings, Livingston Parish, LA** – Inspection and load rating of numerous existing slab span bridges and culverts so that Livingston Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated.
04/18-09/18	**Tangipahoa Parish Off-System Bridge Load Ratings, Tangipahoa Parish, LA** – Inspection and load rating of 2 railroad flatcar bridges and a slab span bridge to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.
05/20-07/20	**St. James Parish Off-System Bridge Load Rating, St. James Parish, LA** – Inspection and load rating of a slab span bridge to comply with FHWA Metric 13, which requires a load rating of all Off-System bridges.

16. Staff Experience:

Joffrey E. Easley, P.E., M.S. (CONT.)	
08/19 - 02/20	**LA DOTD Retainer for In-Depth Bridge Inspections, Simmesport, LA** -Inspection of the approach spans, consisting of rolled steel and plate girder spans supported by column bents, of the LA 1 bridge over the Atchafalaya River.
04/11-10/16	**Iberville Parish Off-System Bridge Load Ratings and Prioritization, Iberville Parish, LA** – Inspection and load rating of 42 existing off-system bridges so that Iberville Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated. Also developed a repair and replacement report for all bridges.
12/12 - Ongoing	**Cook Road Expansion, Livingston Parish, LA** - Designed and produced plans for new bridges over Gray's Creek to provide additional access to the Juban Crossing shopping center by extending Cook Road off of Pete's Highway. Bridge includes special details to accommodate sidewalks for pedestrian use
10/18 - 05/19	**H.000445.1-1- US 190 over UPRR and Little Teche Bayou, St. Landry Parish, LA** - Project Engineer for this project that developed a scoping document for the replacement or rehabilitation of the EB and WB US 190 bridges over the Union Pacific Railroad (UPRR) near I-49 and over Little Teche Bayou in St. Landy Parish, LA. Based on the findings, a Bridge Evaluation Report outlining the feasibility and preliminary cost estimates for several construction phasing alternatives, as well as a recommended scope of work, was developed.
11/14-08/16	**Westdale Road over Bayou Pierre Repairs, DeSoto Parish, LA** – Inspected, laser scanned, developed plans, and provided construction administration services for the repairs of a timber bridge that had been closed due to its deteriorated condition. Provide a load rating following the completion of the repairs. Repairs allowed the bridge to be re-opened to vehicular traffic.
01/16 - 01/21	**Whittington Road Bridge Replacement, Livingston Parish, LA** - Design engineer for the replacement of an existing timber bridge over Grays Creek with a new concrete slab span bridge through the LADOTD off-system bridge replacement program.
12/13-05/14	**Million Dollar Road Bridge Rating, St. Tammany Parish, LA** – Served as a rating engineer for load rating of a slab span bridge in St. Tammany Parish. Utilized Virtis load rating software.
06/15-06/16	**East Baton Rouge Parish Bridge Replacements, East Baton Rouge Parish, LA** – Provided design services and load rated multiple slab span bridges that incorporated sidewalks. Design services included determination of pile loads, superstructure and substructure design, and independent technical review of completed plans.
05/13 - 12/14	**Musson Lane Bridge Replacement, Iberville Parish, LA**–Performed a detailed structural inspection and load rating of the existing bridge constructed of precast concrete spans and timber caps and piles. Developed plans and specifications for the replacement of the existing bridge with a new precast concrete slab span bridge.

16. Staff Experience:

Firm employed by	FORTE & TABLADA			
Name	**Jason Fennell, P.E., M.S.**		Years of relevant experience with this employer	14.5
Title	Project Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BSCE / 2006 / Civil Engineering MSCE / 2009 / Civil Engineering		
Active registration number / state / expiration date		37237 / LA / 09/30/2024		
Year registered	2012	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		**Bridge Engineer**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/14-03/17	**LA DOTD Load Rating and Posting of On- System Bridges, Statewide, LA** - Served as a rating and review engineer for over 200 slab span and girder bridges across Louisiana.
01/18-05/22	**LA DOTD Retainer Contract for Off-System Bridge Load Rating, Statewide, LA** - Retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 1 – Served as rating and review engineer for 12 complex off-system bridges, including lift spans, swing spans, bascule spans, ferry landings, and truss bridges; Task Order 2 – Served as rating and review engineer for approximately 200 off-system bridges, consisting primarily of slab spans as well as load ratings for 219 culverts statewide; Task Order 4 – Served as rating and review engineer for approximately 300 off- system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
04/11-10/16	**Iberville Parish Off System Bridge Load Ratings and Prioritization, Iberville Parish, LA** – Inspection and load rating of 3 existing slab span bridges so that Iberville Parish would follow FHWA Metric 13, which requires all Off-System bridges to be load rated.
06/16-04/20	**St. Tammany Parish Off-System Bridge Load Rating, St. Tammany Parish, LA** -Project Engineer to collect all available bridge files from all available resources, including LADOTD and Parish records, for 11 bridges in St. Tammany Parish and perform inspections and load ratings for the bridges.
06/12-07/12	**Midway Drive Bridge Rating, East Feliciana Parish, LA** –Served as a rating engineer for load rating of a slab span bridge. Utilized AASHTOWare BrR (formerly Virtis) load rating software.
03/12-07/12	**TV Tower Road Bridge Rating, East Feliciana Parish, LA** – Served as a rating engineer for load rating of a quad beam bridge in East Feliciana Parish. Utilized AASHTOWare BrR (formerly Virtis) load rating software.
05/12-10/12	**Ramah Borrow Pit Bridge Rating, Iberville Parish, LA** – Reviewed the design for a quad-beam bridge and provided load rating utilizing AASHTOWare BrR (formerly Virtis) software.
09/10-06/11	**Interstate 10 Widening, Siegen Lane to Highland Road, Baton Rouge, LA** – Performed independent technical reviews of superstructure and substructure bridge designs along the corridor and analyzed existing structures for construction loading.
03/09-07/10	**Interstate 12 Widening, O'Neal to Range, Baton Rouge, LA** – Performed independent technical reviews of superstructure and substructure bridge designs for overpasses along the corridor.

16. Staff Experience:

Jason Fennell, P.E., M.S. (CONT.)	
02/10-06/11	**Denham Street Bridge at Claiborne Elementary, Baton Rouge, LA** – Designed and prepared plans for a bridge project located adjacent to Claiborne Elementary School. The bridge utilized quad beam prestressed girders.
02/13-11/14	**LRA Bridge Replacements, Livingston Parish, LA** – Designed numerous bridge structures including substructures for ConSpan arch bridges.
01/12-02/12	**Valentine Lake Road Bridge Rating, Rapides Parish, LA** – Served as a rating engineer for load rating of a slab span bridge. Utilized BrR load rating software.
07/12-08/12	**Cooper Lane Bridge, East Feliciana Parish, LA** – Served as a rating engineer for load rating of a slab span bridge. Utilized BrR load rating software.
03/09-10/10	**Lake Pontchartrain and Vicinity South Shore Complex, Jefferson Parish, LA** – Served as a designer for the development of several hundred bridge plans for the widening and extension of the Pontchartrain Causeway Bridge at the south shore.
04/09-11/09	**Centreville Road Bridge Preservation, Centerville, LA** – Served as designer for a slab span bridge bulkhead and approach slab rehabilitation project.

16. Staff Experience:

Firm employed by	FORTE & TABLADA		
Name	**Dexter L. Grogan, III, P.E.**	Years of relevant experience with this employer	9
Title	Engineer	Years of relevant experience with other employer(s)	23
Degree(s) / Years / Specialization	BSCE / 1981 /Civil Engineering		
Active registration number / state / expiration date	23431 / LA / 03/31/2024		
Year registered	1989	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	**Bridge Engineer**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
08/20-Ongoing	**LA DOTD Off-System Bridge Load Rating Retainer, Statewide, LA**- Assisting with Load Rating Reports for slab span bridges and determining factored moment capacity of tee beam bridges.
07/19-Ongoing	**Caplis Sligo Road Bridge over Red Chute Bayou, Bossier Parish, LA** – Roadway and bridge design for replacement of bridge. New concrete bridge, 200' long, 30' clear roadway with (5) – 40' spans with Type LG-25 girders, pile bents with 24" and 16" PPC piles.
10/19-Ongoing	**Johnson Koran Road Bridge over Foxskin Bayou, Bossier Parish, LA** – Roadway and bridge design for replacement of bridge. New concrete bridge, 140' long, 30' clear roadway with (7) – 20' precast concrete slab spans and precast concrete pile bents with 18" PPC piles.
01/17-7/22	**LA DOTD Linton Road over Black Bayou Reservoir, Bossier Parish LA** - Roadway and bridge design for replacement of bridge. New cast-in-place concrete bridge, 220' long, 40' clear roadway with (11) – 20' slab spans and pile bents with 24" PPC piles. Widened 1,030' of roadway embankment across reservoir, with concrete retaining walls each side.
06/16-02/20	**Sligo Road Bridge over Foxskin Bayou, Bossier Parish LA** – Roadway and bridge design for replacement of bridge. New concrete bridge, 180' long, 30' clear roadway with (9) – 20' precast concrete slab spans and precast concrete pile bents with 16" PPC piles.
11/15-05/17	**Bridge Replacement on Blanchard-Furrh Road, Caddo Parish, LA** – Roadway and bridge design for replacement of bridges over Shettleworth Bayou and Piney Bayou. Each bridge is 100' long, 28' clear roadway, with (5)-20' precast concrete slab spans and precast concrete pile bents with 16" PPC piles.
02/15 - 09/15	**Westdale Road Bridge over Bayou Pierre, DeSoto Parish, LA** – Project included the scanning, inspection, and analysis for the rehabilitation of the bridge. The project was governed by the current edition of the LA DOTD Standard Specifications for Roads and Bridges.
06/12 - 02/14	**I-220 Bridge Widening over Russell Road, Caddo Parish, LA** – LA DOTD– Bridge Design for widening of two bridges (eastbound and westbound). Each bridge with steel plate girders, with (2)-89' spans, (1)-142'-6" center span, new column bents with 66" drilled shafts, extended end bents with 36" drilled shafts. Widened/replaced total width of 26'-6" for each bridge, for 53'-6" total clear roadway for each bridge.

16. Staff Experience:

Dexter L. Grogan, III, P.E. (CONT.)	
05/10 - 09/10	**Poole Road Bridge Over Flat River, Bossier Parish, LA** - Roadway and bridge design for replacement of bridge. 262'-6" long, (2)-65'-6" spans with Type III girder, (1)-131-6" center span with Type BT-72 girders, 28' clear roadway, pile bents with 30" and 16" piles.
02/10 - 06/12	**LA DOTD Murphy Street Bridge Over KCS Railroad, Caddo Parish, LA** – Roadway and bridge design for replacement of city street bridge over railroad tracks. One four (4) lane bridge with sidewalks, 257' long with steel beam girders, (2) – 77' spans, (1) –103' center span, 52' clear roadway, pile bents with 24" and 30" PPC piles, "pile bent" with 36" drilled shafts.
12/01 - 10/04	**LA DOTD Industrial Loop Overpass, Inner Loop Expressway (LA 3132), Caddo Parish, LA** – Roadway and bridge design plans for the extension of the Inner Loop. Included two bridges (eastbound and westbound), each 655'-6" long, (8) – 65'-6" spans with Type III girders, (1) – 131'-6" span with Type BT-72 girders, 40' clear roadway, pile bents with 24" PPC piles, column bents each side of 131' 6" span.

16. Staff Experience:

Firm employed by	FORTE & TABLADA		
Name	**Levi E. Yantis, P.E.**	Years of relevant experience with this employer	9.5
Title	Engineer	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization	BSCE / 2013 / Civil Engineering		
Active registration number / state / expiration date	42390 / LA / 09/30/2024		
Year registered	2018	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	**Project Engineer / Bridge Engineer**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/22-Ongoing	**LA DOTD Retainer Contract for Load Rating Services – Task Order 1, Statewide, LA** – Leading and supervising the load ratings of on-system slab span bridges throughout the state of Louisiana. Team leader for bridge inspections to collect additional deterioration measurements of bridge components.
03/18-04/22	**LA DOTD Retainer Contract for Off-System Bridge Load Rating – Task Order 1, Statewide, LA** – Led and assisted in 12 complex moveable bridge inspections and load ratings throughout the state. The bridge types included a single leaf bascule span, a vertical lift truss span, several steel vertical lift spans, multiple pontoon bridges, a steel plate girder swing bridge, a small steel truss/cable swing span, and a non-moveable steel truss. Task Order 2 – Led and supervised the load ratings of 200 off-system slab span bridges throughout the state of Louisiana. To avoid posting bridges lower than necessary, bridge inspections were done for several bridges that had severe deterioration noted in their inspection reports to collect additional deterioration measurements to accurately determine the bridge member's load carrying capacity. Task Order 5 – Load testing and refined load rating analysis of slab span bridges and culverts that previously received low or closed load postings.
02/22-Ongoing	**Ascension Parish Load Ratings, Ascension Parish, LA** – Team leader for the inspection of Ascension Parish owned bridges. Also serving as the lead load rating engineer for the bridges after inspection.
01/22-03/22	**Mall of Louisiana Boulevard Modified Bent Redesign, East Baton Rouge Parish, LA** – Redesigning a bent cap that had a pile misdriven during PDA. Pile load checks and a modified bent load rating were performed also.
03/21-10/21	**TDOT Complex and Standard Bridge Load Ratings, Statewide, TN** - Oversaw a team of load raters performing 35 AASHTOWare BrR load ratings in 4 months and was responsible for the quality control of the model inputs and outputs, troubleshooting bridge models, and assisting in load ratings. The bridge types load rated using AASHTOWare BrR software were prestressed I-beams and box girders, reinforced concrete multi-cell box bridges, reinforced concrete T-beams, continuous steel plate girders, and steel girder-floorbeam-stringer systems.
01/20-10/21	**LA DOTD Retainer for Complex In-Depth Bridge Inspections, Statewide, LA** – Served as Team Leader for the structural, mechanical and electrical in-depth inspections for multiple movable bridges. Bridge types included vertical lift span bridges and steel swing bridges (through girders and through trusses). Also served as the task manager for preparing the in-depth inspection reports. There was also a task order under this contract to perform emergency repairs on an US 71 Bridge in Shreveport, LA. Led the superstructure design for the emergency repairs.

16. Staff Experience:

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

16. Staff Experience:

Firm employed by	FORTE & TABLADA		
Name	**Jennifer Nicaud, P.E.**	Years of relevant experience with this employer	7
Title	Project Engineer	Years of relevant experience with other employer(s)	21
Degree(s) / Years / Specialization	BSCE / 2001 / Civil Engineering		
Active registration number / state / expiration date	33687 / LA / 03/31/2024		
Year registered	2008	Discipline	Civil Engineer
Contract role(s) / brief description of responsibilities	**Project Engineer**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
	Vintage Drive Expansion and Williams Blvd. Intersection, Kenner, LA – Served as project engineer for extension of Vintage Dr. and new intersection at Williams Blvd.
	LA DOTD, Statewide, LA – Served as an engineer for rating 70 bridges' structural integrity for the Department of Transportation and Development using an AASHTO derived software, Virtis.
	Tennessee Valley Authority, Paradise Fossil Fuel Plant, City, LA – Structural engineer for Wet Flue Gas Desulfurization process single, Twin Tower Double Contact Flow Scrubber, Limestone Grinding and Slurry Feed System, New Booster Fans, Limestone Grinding and Slurry Feed System, Stack, and Foundations, Structural Steel, Buildings, and Ductwork
	Shell Refinery, Norco, LA – Structural engineer for the design of shallow and deep foundation systems for petrochemical industry equipment, buildings, and bulk material storage.
	Folgers Coffee Plant, New Orleans, LA – Structural engineer for the design of shallow and deep foundation systems for petrochemical industry equipment, buildings, and bulk material storage.
	Freeport McMoRan, Grasberg Gold and Copper Mine, Papua, Indonesia – Project engineer to design, model, and develop drawings for crusher building expansion and new conveyor systems at a gold and copper mine in Indonesia.
	Georgia Power, Plant Hammond, Rome, GA – Project engineer to design, model, and develop drawings for 200-foot span pipe bridge routed over railroad tracks at coal plant; assist in shop drawing approval and assist third party connection designer.
	Lockheed Martin, New Orleans, LA – Designed steel support structure for asbestos- removing air filter fan system in an aircraft manufacturing facility.
	Lambeth House Retirement Community, New Orleans, LA – Served as project engineer to design and development architectural construction plans for foundations and superstructure for 4 story masonry and concrete frame building.
	Ochsner Health Center, New Orleans, LA - Served as project engineer for an addition to hospital and developed construction and architectural plans.

16. Staff Experience:

Firm employed by	FORTE & TABLADA			
Name	**Hannah DiLeo, E.I.**		Years of relevant experience with this employer	3.75
Title	Engineer Intern II		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BSCE / 2020 / Civil Engineering MSCE / 2023 / Civil Engineering			
Active registration number / state / expiration date	34507 / LA / 09/30/2024			
Year registered	2020	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities	**Engineer Intern II**			

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/22-Ongoing	**LADOTD Retainer Contract for Bridge Load Rating Services, Statewide, LA** – Load Rating Engineer for a retainer contract to provide load rating services across the state. Task Order 1 is for the load rating of ninety-five (95) on-system slab span bridges that have experienced a condition drop since the last load rating. Includes inspection (when required) and, if a load posting if required, determination of repair/rehabilitation options to improve/remove the load posting.
01/20-05/22	**LADOTD Retainer Contract for Off-System Bridge Load Rating, Statewide, LA** – Load Rating Engineer for a retainer contract that includes multiple Task Orders to inspect and load rate off-system bridges and culverts across the state. Task Order 4 – Inspection and load rating of approximately 300 off-system bridges, consisting primarily of slab spans, but also including concrete and steel girder spans.
01/21-05/22	**Livingston Parish Off-System Bridge Prioritization, Livingston Parish, LA** – Engineer Intern for prioritization of 81 off-system bridges across Livingston Parish. Project included the inspection, photo documentation, load rating (as required), and prioritization for repair/replacement. Considerations included load posting, condition, ADT, detour length, and dead-end potential.
09/21-11/22	**DOW Slab Span Bridge Replacement, Plaquemine, LA** – Engineer Intern helped to develop plans for the replacement of a slab span bridge inside the DOW Chemical plant. Required flared precast spans and bents due to site constraints.
01/21-09/21	**LADOTD Retainer Contract for Bridge Preservation, Jefferson Parish, LA** – Engineer Intern helped to develop plans for the rehabilitation of the nearly 6-mile long Westbank Expressway in Jefferson Parish, LA.
05/20-07/20	**St. James Parish Off-System Bridge Load Rating, St. James Parish, LA** – Load Rating Engineer for a slab span bridge in St. James Parish in compliance with FHWA Metric 13.
1/20-01/22	**Cook Road Expansion, Livingston Parish, LA** – Engineer Intern helped to produce plans for two (2) new skewed slab span bridges over Gray's Creek as part of the Cook Road expansion from Pete's Highway to the Juban Crossing development. Bridges include special details to accommodate sidewalks for pedestrian use.
1/21-7/21	**Flannery Road Bridge Replacement, East Baton Rouge Parish, LA** – Engineer Intern developed and designed plans for the 140'-0" long cast-in-place bridge over Lively Bayou. Also worked as Load Rating Engineer for substructure.

16. Staff Experience:

Firm employed by	FORTE & TABLADA		
Name	**William Sauerwin, E.I.**	Years of relevant experience with this employer	1
Title	Engineer Intern	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BSCE / 2022 / LSU		
Active registration number / state / expiration date	35345 / LA / 09/30/2025		
Year registered	2023	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	**Engineer Intern I / Bridge Engineering**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
08/23 – Ongoing	**LA 155 Site II Bridge modifications due to Pile Locations, Red River Parish, LA** – Engineer Intern for the redesign of pile bents, as well as the development of change order sheets, for a new slab span bridge on LA 155 near Coushatta to account for out-of-tolerance PPC piles. Modifications included changes to bent details and pile loads.
07/23 - Ongoing	**Livingston Parish Off-System Bridges Re-Ratings, Livingston Parish, LA** – Assisted in bridge inspections (if needed) to assess bridge conditions and perform load ratings of various slab span bridges across Livingston Parish, LA and if a load posting if required, determination of repair/ rehabilitation options to improve/remove the load posting
05/23 - Ongoing	**St. Tammany Off-System Bridge Rating, St. Tammany Parish, LA** – Load Rating Engineer Intern for a retainer contract to provide load rating services across St. Tammany Parish, LA. 2023 Off-System Bridge Repairs is for the re-rating of five (5) off-system slab span bridges. Includes inspection (when required) and, if a load posting if required, determination of repair/rehabilitation options to improve/remove the load posting.
09/22-Ongoing	**LA DOTD Retainer Contract for Load Rating Services, Statewide, LA** – Load Rating Engineer Intern for a retainer contract to provide load rating services across the state. Task Order 1 is for the load rating of ninety-five (95) on-system slab span bridges that have experienced a condition drop since the last load rating. Includes inspection (when required) and, if a load posting if required, determination of repair/rehabilitation options to improve/remove the load posting.
06/23 - 07/23	**Van Buren Street over Corporation Canal Headwall Design, East Baton Rouge Parish, LA** – Perform design calculations for a concrete culvert headwall and assist in final plans modifications.
04/23 – 07/23	**Lafayette E. Lewis Street Bridge Upgrades, Lafeyette Parish, LA** – Load Rating Engineer Intern for rating of a steel girder span bridge and to assist with determining if repairs were needed.
05/23 – 06/23	**Sandy Creek Pile Repair, East Feliciana Parish, LA** – Assisted Project Engineer with QC for the redesign of pile bents, as well as the development of change order sheets, for a new slab span bridge crossing Sandy Creek to account for out-of-tolerance PPC piles. Modifications included changes to bent details and pile loads.
05/23 - 05/23	**Hurricane Ida Lod Stafford Bridge Replacement, Livingston Parish, LA** – Assisted Project Engineer with QC and design for a concrete slab span bridge located in Livingston Parish, LA. Design work included slab, bent cap and PPC pile. In addition to design work bridge plans were also prepared.
03/23 – 06/23	**St. Claude Bridge Load Rating, Orleans Parish, LA** – Assisted Project Engineer with bridge inspection and load rating for a steel truss bridge in New Orleans, LA. Also included was QC for the load rating calculations.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Amir Botros, PhD, PE**	Years of relevant experience with this employer	3
Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization	PhD | 2015 | Civil Engineering; MS | 2009 | Civil Engineering; BS | 2005 | Civil Engineering		
Active registration number / state / expiration date	PE No. 43701 | LA | 3/31/2024		
Year registered	2019	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	As lead engineer, Amir will supervise the structure engineering team on the load rating tasks under this retainer contract. Additionally, he will perform complex structural analysis/finite element analysis (if necessary), and review load rating reports prepared by structural team members. Amir has been a member of the precast prestressed concrete institute (PCI) for many years and has participated in many of the PCI research projects.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/21 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Load Rating QA/QC. Amir oversees QA/QC load rating analyses for over 200 bridges annually. Inspections performed by Stantec assist with developing load rating models and performing analysis using AASHTOWare BrR, RC Pier, and STAAD. Load ratings are performed in accordance with AASHTO MBE and using the load factor rating (LFR) method to match the original design as requested by the client. Structure types include steel trusses, structural steel plate girders, reinforced concrete girders and slabs, reinforced concrete box culverts, and prestressed concrete girders.
10/21 - 04/22	**MDOT Truss Bridge Inspections and Load Ratings, Statewide, MS** – Lead Structural Engineer. Project included inspecting and load rating four complex steel through truss bridges. Amir's responsibilities included performing quality reviews of load ratings for the four truss bridges. AASHTOWare BrR was used to model and analyze all truss members including main members, floor beams, stringers, and gusset plates. LFR method was used at the request of MDOT and to have the ability to compare with the original designs.
08/22 - 11/22	**ALDOT Load Rating Of 12 Complex Bridges, Statewide, AL** – Lead Structural Engineer. Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation using AASHTOWare BrR. The bridge types comprised of continuous cast-in-place concrete T-beam spans, post-tensioned channel beams, continuous steel plate-girders, and concrete encased steel I-beams. Amir reviewed the as-built drawings /standard plans of the bridges, determined appropriate load rating method, supervised engineers on load rating analysis, and reviewed load rating summary reports.
02/21 - 04/21	**City of Baton Rouge, Load Rating of Mall of Louisiana Bridges, Baton Rouge, LA** – Lead Structural Engineer. Project consisted of rating of three bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised prestressed LG concrete girders and Quad beams. Substructures comprised reinforced concrete caps and prestressed concrete piles. Amir reviewed the as-built plans of the bridges, determined appropriate load rating method, supervised engineers on load rating analysis and reviewed the load rating reports.
02/21 - 07/21	**ALDOT Load Rating of 42 Bridges, Statewide, AL** – Lead Structural Engineer. Load rating of 42 bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised of cast in place simple and continuous concrete T beam spans, Post-tensioned Channel beams and continuous steel plate-girders. Amir reviewed the as-built / standard plans of the bridges, determining the appropriate load rating method, supervising engineers on the load rating analysis and review of load rating reports.

16. Staff Experience:

Amir Botros, PhD, PE(CONT.)	
10/19 - 12/20	**RC Culverts Testing and Rating Of 100 Culverts | LADOTD H.009859.5 , Statewide, LA** – Lead Structural Engineer. Project consisted of developing a load rating methodology for reinforced concrete box culverts that accounts for the actual field conditions, performance history, and advanced modeling techniques. Results were verified through diagnostic testing of a sample of culverts representing the existing LA inventory. Amir's responsibilities included building 3D FE analytical models of the parametric study, designing instrumentation and diagnostic load test procedure, development of load rating guidelines and a technical report that summarizes the proposed load rating guidelines and supervising engineers on load rating 100 representative culverts selected from the existing Louisiana inventory using the proposed guidelines
02/19 - 12/20	**Load Rating of 396 Off System Bridges | LADOTD H.012485.5, Statewide, LA** – Lead Structural Engineer. Load rating of 396 bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate-girders, in addition to RC box and arch culverts. Substructures comprised various components including reinforced concrete caps, timber caps, timber piles and steel H piles. Amir determined the appropriate load rating method, supervised engineers on the load rating analysis and reviewed load rating reports.
11/19 - 01/20	**Evaluation and Load Testing of Five Bridges | LADOTD H.009859.5, Cameron, LA** – Lead Structural Engineer. Five bridges were posted for a load lesser than LA State Legal Loads and/or Special Hauling Vehicles. Based on vast experience with similar bridges, load test coupled with detailed three-dimensional Finite Element Analysis reveal that bridges can carry higher loads than those estimated by design codes. Amir's responsibilities included supervising the crew on performing the load tests, developing Finite Element models, and performing refined analysis for the controlling spans in the five bridges with the aim of removing current load posting.
05/20 - 07/20	**Mermentau Bridge Repairs | LADOTD Order No.10 H.014288.5, Cameron, LA** – Lead Structural Engineer. Mermentau Bridge main span is a swing steel low truss (Pony Truss) with a span length of 204 ft. Bridge is posted to 10-15 tons weight. Amir's responsibilities included development of a 3D finite element model using Midas Civil for the bridge. Configuring and design of the diagnostic testing procedure for the identified deficient members. Revising the rating analysis after consideration of the benefit from the test results. Design of appropriate strengthening systems for the legal deficient members with the objective of removing the posting weight.
11/19 - 12/20	**US-90 Macarthur Interchange Phase II | LADOTD, Jefferson, LA** – Lead Structural Engineer. Elevated section of this freeway extends from Westwood Drive to Crescent City Connection Bridge across the Mississippi River. Tasks included designing two access ramps to/from the service roads to the elevated viaduct. Ramps structures consisted of complex structural elements including precast-prestressed U-shaped girders and LG-girders, inverted-T piers, complex columns, and foundations. Amir's responsibilities included Supervising engineers on the final design of the ramp elements including deck, prestressed LU girders, inverted-T piers and foundation design for the 22 spans off-ramp and the 24 spans on-ramp.
01/19 - 09/19	**27 Complex Off-System Bridges Rating and Evaluation | LADOTD H.009859.5, Statewide, LA** – Lead Structural Engineer. Project consisted of rating of 27 complex bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised prestressed concrete girders, steel plate-girders, truss bridges, truss and plate girder swing spans and steel trapezoidal girders. Amir's responsibilities included reviewing the as-built drawings of the bridges; determining the appropriate load rating method for complex bridges; performing load rating on selected complex bridges and supervising the team on other bridges; developing the load rating reports. Multiple steps of QC were performed to assure accuracy and consistency of the rating analysis.
02/19 - 10/20	**LA 182 Over Atchafalaya River (Berwick Bay) Bridge Rehabilitation | LADOTD H.011487, Lafayette, LA** – Lead Structural Engineer. Amir's responsibilities included supervising engineers on performing the load rating analysis for the complex truss spans and the Gusset plates using Bridge Rating software. Design of the instrumentation and the diagnostic load testing procedure for the reinforced concrete T-beam spans. Design of appropriate strengthening systems for the deficient truss members, gusset plates, bracing members and connections. Design of appropriate strengthening systems for the concrete pile bents, and the column bents using carbon fiber reinforced polymer sheets and supervising the preparation of the rehab plans of the bridge elements.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Michael Brodnax, EI**	Years of relevant experience with this employer	4
Title	Structural Engineer Intern	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS | 2019 | Civil Engineering	
Active registration number / state / expiration date		EI No. 34127 | LA | 3/31/2024	
Year registered	2019	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Michael has been involved in structural designs ranging from deck, prestressed box girder and concrete sub-structure. Michael has performed numerous inspections and load ratings on Mississippi and Alabama Bridg-es. Michael is familiar with several design and analysis software programs including RC-Pier, CONSPAN, and AASHTOWare Bridge Rating. NBIS Certified Team Leader	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
12/20 - 04/22	**Truss Bridge Inspections and Load Ratings | MDOT, Statewide, MS** – Bridge Load Rater. Multiple steel trusses are inspected, and load rated by creating structural models of all primary members and connections. Michael develops structural models of steel trusses including fracture critical members and gusset plate connections using AASHTOware BrR.
07/19 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Bridge Inspector and Load Rater. This project consists of inspections and load ratings on timber, complex, and non-complex structures in accordance with AASHTO and FHWA NBI specifications. Michael inspects and load rates various bridge types ranging from steel trusses, steel rail cars, box culverts, timber stringers, prestressed concrete girders, and steel plate girders. Michael uses AASHTOware BrR, Bentley Concrete, and STAAD models to complete ratings as well as in house rating tools.
07/19 - Ongoing	**I-10/Canal Road Interchange | MDOT, Gulfport, MS** – Bridge Designer. Michael designs prestressed concrete girders, concrete substructures such as hammerhead piers, pile bents, and column bents. Michael load rates each bridge using AASHTOWare BrR software, CONSPAN, MDX steel design software, Microsoft office, bluebeam pdf editor.
08/19 - Ongoing	**I-10 / Loyola Design-Build | LADOTD, New Orleans, LA** – Bridge Designer. Michael designed concrete substructures such as hammerhead piers and pile cap footings. He designs prestressed concrete girders and concrete decks. He designs and develops plans for concrete noise barriers and their concrete foundations using Microsoft office, STAADpro models, Bentley Microstation, CONSPAN, RC Pier, and bluebeam pdf editor. I also reviewed and approved production shop drawings for construction.
05/20 - Ongoing	**SR27 Bridge Replacements | MDOT, Hinds County, MS** – Bridge Designer. This project consists of designing and preparing final bridge plans for a new prestressed concrete girder structure in Hinds County. Michael designs and rates the prestressed concrete girders using CONSPAN software
08/22 - 11/22	**ALDOT Load Rating of 12 Complex Bridges, Statewide, AL** – Bridge Load Rater. Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation using AASHTOWare BrR. The bridge types comprised of continuous cast-in-place concrete T-beams, post-tensioned channel beams, continuous stee plate girders, and concrete encased steel I-beams. Michael performed load ratings using as-built drawings / standard plans and developed load rating summary reports.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Brian Johnson, PE**	Years of relevant experience with this employer	18
Title	Principal, Bridge Division Leader	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	MS | 2000 | Civil Engineering; BS | 1999 | Civil Engineering		
Active registration number / state / expiration date	PE No. 31273 | LA | 9/30/2024		
Year registered	2004	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Brian brings over 23 years of engineering experience specifically related to structural projects and serves as the Structural Section Manager in the Baton Rouge office. His primary expertise lies in analysis, design, rating, inspection, and rehabilitation of bridges. Brian has managed bridge projects with a variety of structure types such as prestressed concrete girders, steel truss vertical lift bridges, long span steel trusses, horizontally curved steel plate girders, concrete box culverts, and retaining walls. He has overseen several NSBI bridge inspection projects and been involved in several hydraulic studies for bridge replacement projects in both Mississippi and Louisiana. NBIS Certified Team Leader		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
01/17 - 10/18	**Load Rating and Posting of 110 On-System Bridges | LADOTD, Statewide, LA** – Project Manager. Brian was responsible for managing load rating activities, scheduling progress meetings, managing the status of each bridge, delivering progress submittals, and coordination with LADOTD. This project involved the load rating and posting of 110 on-system bridges for LADOTD. Bridges were located throughout the state and were load rated in accordance with current LADOTD and AASHTO specifications. AASHTOWare BrR, CSI Bridge, and RC-Pier were used to determine rating factors and posting requirements.
03/13 - 03/17	**Load Rating and Posting of 630+ On-System Bridges | LADOTD, Statewide, LA** – Project Manager. Brian was responsible for managing load rating activities, scheduling progress meetings, managing the status of each bridge, delivering progress submittals, and coordination with LADOTD. A monthly meeting was scheduled with the client to assist with addressing incomplete data needs and modeling approaches for more complicated structures. Over 630 bridges statewide were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR, CSI Bridge, STAAD and RC-Pier to determine rating factors and bridge posting requirements. Structure types included structural steel plate girders and rolled beams, prestressed concrete girders, concrete slab spans, hammerhead and multi-column concrete bents, and steel beam bents.
02/19 - 11/22	**ALDOT Bridge Load Rating | ALDOT, Statewide, AL** – Project Manager. Brian managed three different task orders with ALDOT to perform load ratings on 84 bridges. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, voided concrete slabs, and post-tensioned channel beams. AASHTOWare BrR was used for modeling and analysis. Ratings were in accordance with the AASHTO LFR method and current ALDOT standards. Brian’s responsibilities included performing quality assurance on load rating reports and transmitting deliverables to ALDOT.
10/17 - 01/19	**AASHTOWARE Bridge Load Rating | MDOT, Statewide, MS** – Project Manager. Brian served as the project manager for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with current MBE standards. Brian was responsible for managing project activities, developing rating criteria, scheduling internal and external progress meetings, performing QC/QA, and delivering final reports.

16. Staff Experience:

Brian Johnson, PE CONT.)	
08/10 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Project Manager. Brian manages all field and office work for inspecting and load rating over 200 bridges annually throughout the state. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Brian is responsible for managing project activities, inspection scheduling, and performing QC/QA on field inspections, load ratings, and inspection reports. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches.
10/09 - 06/11	**US 90 Interchange at LA 85 Design-Build | LADOTD, Iberia Parish, LA** – Structural QA/QC. Brian managed QC review on the structural elements for this project to elevate the rural arterial to urban interstate standards. These included a cast-in- place concrete deck and rail, Type III and Type IV pre-stressed girders, multicolumn bents with pile footings, pile supported end bents, and bearing pads. All independent designs were in accordance with AASHTO LRFD Bridge Design Specifications and as-designed / as-built load ratings were in accordance with AASHTO MBE.
12/20 - 04/22	**Truss Bridge Inspections and Load Ratings | MDOT, Statewide, MS** – Project Manager. This project consisted of inspecting and load rating four unique steel through trusses. Brian served as project manager and was responsible for coordinating inspection schedules, overseeing report development, reviewing load rating reports, and communications with MDOT. Detailed, arm's length, inspections were performed on the steel truss spans only. Load ratings were performed in accordance with the AASHTO LFR method and MDOT standards. Results from the analyses were used to determine fracture critical members that could not be determined from traditional structural mechanics. Final inspection reports will be used by MDOT to develop repair / rehabilitation plans
03/14 - 05/15	**LA 511 Jimmie Davis Bridge Rehabilitation | LADOTD H.010662, Bossier, LA** – Project Manager. Total structure length is 2,823 linear ft., including three main steel truss simple spans crossing the Red River; 610 ft. approach spans at each side consisting of steel, two-girder systems with floor beams. Stantec provided design and plans for complete rehabilitation and repainting. Rehabilitation consisted on total deck replacement, over 200 structural repairs to truss span floor system, replacement of the link joint (hangers) of the approach spans, joint rehabilitation and barrier replacement. Load rating analyses were performed for each superstructure type and gusset plates on the as-rehabilitated bridge.
04/11 - 03/15	**I-210 Cove Lane Interchange | LADOTD H.010151, Lake Charles, LA** – Lead Structural Engineer. Brian managed the structural design of a single-span, 130-ft long, prestressed concrete girder bridge along I-210 over Cove Lane and twin concrete slab span bridges over Cline Canal. Bridge approaches consisted of an MSE wall system supported by a cast-in-place load transfer platform using over 8,000 timber and concrete piles. Brian provided construction support by reviewing shop drawings, addressing RFIs, and performing construction engineering. All design was performed in accordance with AASHTO LRFD Bridge Design Specifications.
08/19 - Ongoing	**I-10/Loyola Interchange Design-Build | LADOTD Contract No. H.011670, New Orleans, LA** – Lead Structural Engineer. Brian leads the structural design efforts of two new flyover ramps (concrete slab spans, prestressed concrete girder spans, twin horizontally curved steel tub girder spans, and complex substructure units), one bridge widening (concrete slab spans), noise barriers, precast box culverts, roadway and pier protection barriers, and miscellaneous structural elements. During design Brian orchestrated a series of meetings with the contractor, fabricators, vendors, and suppliers to optimize and streamline the design. In addition, he oversees construction support which includes shop drawing reviews, addressing RFIs, and providing construction engineering services.
07/15 - 10/20	**I-10 Bridge Repairs | LADOTD, St. Martin & Iberville Parishes, LA** – Project Manager. Brian managed the design and plan development efforts of repairs on 19 different bridges along the Atchafalaya Floodway Basin. The project included field verification of structure deficiencies, condition findings summary report, development of a traffic management plan, bridge design, and plan development. Repairs consisted of concrete patching, bearing replacements, girder strengthening, and bridge painting. During construction Brian led construction support efforts which included shop drawing reviews and addressing contractor RFIs.
12/15 - Ongoing	**Nelson Road Extension and Bridge | LADOTD Contract No. H.005967, Lake Charles, LA** – Lead Structural Engineer. Brian managed the bridge and structural design efforts from preliminary to final plans. He performed quality review of bridge design, plans and specifications for this bridge extension to the surrounding roadway network. Project tasks included design of bridge superstructure, substructure including foundations, median barrier design and as-designed load rating. Other design elements include navigational lighting bridge attachments, steel bracket light supports with concrete anchors to the bridge structure. Structural Design was performed in compliance with AASHTO LRFD Specifications. In addition, he led the inspection of an existing sign truss to ensure it could be reused for the current project.

16. Staff Experience:

Firm employed by	Stantec		
Name	**John Krebs, PE**	Years of relevant experience with this employer	11
Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization	MS | 2008 | Civil Engineering; BS | 2007 | Civil Engineering		
Active registration number / state / expiration date	PE No. 37259 | LA | 9/30/2024		
Year registered	2012	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	John has 15 years of engineering of experience providing engineering design and load ratings for bridges and interchanges for LADOTD, MDOT, and KYTC and currently serves as a project manager in the Structural Division at Baton Rouge. His primary expertise lies in the engineering analysis and design of a variety of structure types such as prestressed concrete girders, reinforced concrete substructure elements, and retaining walls. He has been heavily involved in the inspection and load rating of existing bridges in both Louisiana and Mississippi. John has an excellent working knowledge of AASHTO LRFD and the LADOTD Bridge Design Manual. He is proficient in several commercial software packages including AASHTOWare BrR, RC-Pier, CONSPAN, MDX, and STAAD. **NBIS Certified Team Leader**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
07/15 - 06/18	**US 90 Interchange at LA 318 Design-Build | LADOT, St. Mary Parish, LA** – Structural Engineer. This stretch of US 90 has been designated as the future I-49 corridor. The bridges consisted of LG-54 prestressed concrete girder spans with lengths up to 111-ft supported by multi-column concrete bents. John assisted in the proposal development by performing preliminary designs of the major structural elements, and, later, managed the construction support efforts.
04/11 - 03/15	**I-210: Cove Lane Interchange and Improvements Project | LADOTD H.010151, Lake Charles, LA** – Project Engineer. John was responsible for the design and plan development of three bridges and an MSE wall system load transfer platform. The bridge along I-210 consists of a single 130-ft long LG-54 prestressed concrete girder span founded on true abutments (spread footings). The remaining bridges consist of concrete slab spans founded on concrete pile bents. All design was performed in accordance with AASHTO LRFD Bridge Design. Project received the Highways/ Bridges: Award of Merit from the Engineering News Record for Texas and Louisiana in October 2016.
12/15 - Ongoing	**Nelson Road Extension and Bridge | LADOTD Contract No. H.005967, Lake Charles, LA** – Structural Engineer. John worked on the bridge and structural design efforts during preliminary plans. Project tasks included preliminary design of bridge superstructure, substructure including foundations, median barrier design and as-designed load rating. Other design elements include navigational lighting bridge attachments, steel bracket light supports with concrete anchors to the bridge structure. Structural Design was performed in compliance with AASHTO LRFD Specifications. In addition, he completed the vessel study report detailing the expected water-borne vessel traffic and establishing the need for pier protection structures.
03/20 - 10/22	**LA 121: Calcasieu River Bridges | LADOTD Contract No. H. 009498, Hineston, LA** – LADOTD Bridge Task Manager. John was responsible for the independent design and plan review of the three LA 121 bridges. Bridge design items included reinforced concrete deck, LG-36 prestressed concrete girders, steel reinforced elastomeric bearing pads, and reinforced concrete end bent and intermediate bent caps. John also managed plan changes as well as quantity input into the AASHTOWare Project database. In addition to design, John updated the internally-cured concrete special provision for colloidal nano silica. The three bridges consisted of a total of five three-span deck units, and a testing scheme was noted in the plans applying the updated special provision.

16. Staff Experience:

John Krebs, PE (CONT.)	
08/20 - 06/22	**LA Over I-20 | LADOTD Project No. H.001799, Minden, LA** – LADOTD Bridge Design Engineer. John was tasked with the independent design of the LG-36 prestressed, the intermediate multi-column bent, and the drilled shaft loads for both the end bent and the intermediate bent. John also determined the pier protection barrier rail and guard rail layout for the intermediate bent columns in the I-20 median. John was part of the QC effort on the plan details, quantities, and elevations.
10/17 - 01/19	**AASHTOWARE Bridge Load Rating | MDOT, Statewide, MS** – Project Engineer. John served as a project engineer for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with the current MDOT and AASHTO standards. John was responsible for day-to-day support of the load rating engineers and performing QC/QA on finished load ratings.
03/13 - 03/17	**LADOTD Load Rating and Posting of 630+ On-System Bridges | LADOTD, Statewide, LA** – Project Engineer. John served as a project engineer for the load rating of over 630 on-system bridges. The bridges were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR, CSI Bridge, STAAD and RC-Pier to determine rating factors and bridge posting requirements. Structure types included structural steel plate girders and rolled beams, prestressed concrete girders, concrete slab spans, hammerhead and multi- column bents, and steel beam bents. John was responsible for QA/QC of rating analyses and the final rating reports.
08/10 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid and Road Construction, Statewide, MS** – Project Engineer and Inspection Team Leader. John serves as a project engineer and inspection team leader. As an inspection team leader, John is qualified to direct a team in the field to inspect and document bridge deficiencies according to the National Bridge Inventory standards. As a project engineer, John assists in load rating of bridge structures using AASHTOWare BrR and RC-Pier in accordance with the latest Manual for Bridge Evaluation (MBE) as well as QC/QA of bridge load rating calculations and reports. Structure types on this project include steel trusses, steel plate girders, prestressed concrete, concrete boxes, concrete channel beams, masonry arches, steel railroad flat cars, and box culverts.
08/10 - Ongoing	**Mississippi Statewide Timber Bridge Inspections & Load Ratings | Mississippi Office of State Aid and Road Construction, Statewide, MS** – Project Engineer and Inspection Team Leader. John serves as a project engineer and inspection team leader. As an inspection team leader, John is qualified to direct a team in the field to inspect and document bridge deficiencies according to the National Bridge Inventory standards. As a project engineer, John assists in load rating of bridge structures using AASHTOWare BrR and RC-Pier in accordance with the latest Manual for Bridge Evaluation (MBE) as well as QC/QA of bridge load rating calculations and reports. The bridges for this project are located across 10 different Mississippi counties. Superstructure types include concrete channel beams, prestressed concrete girders, timber stringers, and steel girders. These bridges are predominantly supported by timber piles categorizing them as timber structures.
11/22 - Ongoing	**SR 16/SR 149 Floodway Channel Yazoo River | MDOT, Yazoo City, MS** – Project Engineer. John serves as a project engineer for the analysis, design, and plan development for 3 bridges crossing the floodway channel of the Yazoo River. Bridge No. 210.1 consists of 3 - 100-ft prestressed FIB 45 spans supported by reinforced concrete bent caps on steel pipe piles. Bridge 211.1 consists of a skewed, 928-ft, 3-span continuous steel plate I-girder unit supported by reinforced concrete caps on steel pipe piles for end bents and reinforced concrete caps on drilled shafts for intermediate bents. Bridge 211.8 consists of identical components to Bridge 210.1 and is also in a horizontal curve. As the senior project engineer, John is the technical lead, QC/QA for the design elements and plan development, and coordination with MDOT.
02/19 - 04/19	**ALDOT Load Rating of 30 Bridges, Statewide, AL** – Project Engineer. John served as a project engineer for the load rating of 30 bridges in AASHTOWare BrR. The bridges were load rated in accordance with current ALDOT and AASHTO specifications. Bridge types rated were steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and precast prestressed concrete voided slabs. John served as QA/QC for the AASHTOWare ratings and final rating reports.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Kunal Malpani, PE**	Years of relevant experience with this employer	10
Title	Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	MS | 2012 | Civil Engineering; BS | 2010 | Civil Engineering		
Active registration number / state / expiration date	PE No. 43016 | LA | 3/31/2025		
Year registered	2018	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Kunal has 10 years of engineering experience with an emphasis on structural projects. His primary focus has been in the analysis, design, rating, and inspection of a variety of bridge types including prestressed concrete girders, structural steel plate girders, concrete slab spans, multi-column concrete bents, and pile bents. He is proficient in commercial software packages such as AASHTOWare BrDR, RC-Pier, CONSPAN, MDX, and STAAD. In addition to bridge design, Kunal has been involved in the design of highway sign structures and reviewing structural shop drawings. **NBIS Certified Team Leader**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
03/13 - 03/17	**LADOTD Load Rating and Posting of 630+ On-System Bridges, Statewide, LA** – Engineer Intern. Kunal was responsible for performing load ratings and developing summary reports on a variety of structures including prestressed concrete girders, concrete slab spans, structural steel spans, timber and steel pile bents, and concrete hammerhead piers. More than 630 bridges statewide were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR and RC-Pier to determine rating factors and bridge posting requirements.
09/13 - 11/17	**LADOTD Retainer Contract for Bridge Load Rating, Statewide, LA** – Load Rating Engineer. Kunal was responsible for developing LFR rating procedure using AASHTOWare BrR and STAAD for superstructure as per AASHTO MBE. Highlights of the project include rating Long Span Steel Through Trusses, Short span Steel Pony Trusses, and Masonry Arch Bridges.
01/17 - 10/18	**Load Rating and Posting Of 110 On-System Bridges, Statewide, LA** – Structural Engineer. Kunal’s responsibilities included developing the LRFR rating procedure using the AASHTO Bridge Rating Software for superstructure and LEAP RC Pier for substructure as per AASHTO MBE and LADOTD rating guidelines. Project included load rating and posting of various bridge superstructure types including slab spans, prestressed concrete girders, rolled steel girders, and built-up steel plate girders. Bridges are located throughout the state and were load rated in accordance with LADOTD and AASHTO specifications. ASHTOWare BrR, CSI Bridge, and RC-Pier were used to determine rating factors and posting requirements. Highlight of the project was rating an 18,000 ft. long bridge with 268 spans on I-10 over New Orleans City Streets.
10/17 - 01/19	**AASHTOWARE Bridge Load Rating | MDOT, Statewide, MS** – Load Rating Engineer. Project included load rating of 120 bridges in MS. Load ratings were performed in accordance with the AASHTO LRFR or LFR method and current MDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, concrete slabs, and reinforced concrete multi-cell box girders (integral and non-integral). Kunal was responsible for load ratings and performing QC/QA. Highlight of project was modeling the integral concrete box girders which took an extreme (up to 40 hours) to run in the software.
02/19 - 04/19	**ALDOT Load Rating of 30 Bridges, Statewide, AL** – Load Rating Engineer. The project included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with the AASHTO LFR method and current ALDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0. Kunal was responsible for load ratings and performing QC/QA.

16. Staff Experience:

Kunal Malpani, PE (CONT.)	
06/16 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Load Rating Engineer and Inspection Team Leader. Project included inspection and load rating of over 100 off-system bridges in 17 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches. Kunal is responsible for field inspections, load ratings, inspection reports, and QC/QA on load ratings.
08/19 - Ongoing	**Mississippi Statewide Timber Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Load Rating Engineer and Inspection Team Leader. Kunal is responsible for inspecting and load rating 120 bridges with timber elements in 10 different Mississippi Counties. Inspections are at arms-length and in accordance with NBIS. Load ratings are performed using AASHTOWare BrR, RC Pier, and in-house analysis tools for timber and in accordance with ASD and LFR guidelines. Predominately the bridges consist of timber piles; however, a large number are full timber structures.
07/15 - 06/18	**US 90 Interchange at LA 318 Design-Build | LADOTD, St. Mary Parish, LA** – Structural Engineer for the twin bridges. Each bridge consists of LG-54 prestressed concrete girder spans on multi-column concrete bents and concrete wall piers. His responsibilities included performing design, performing the as designed load rating, and reviewing shop drawings.
09/15 - 07/16	**I-20 and Tarbutton Road Interchange | LADOTD, Ruston, LA** – Structural Engineer. Project consists of replacing an existing concrete overpass structure over I-20 near Ruston, LA with a two-span structural steel plate girder structure. Substructure units are supported by drilled shafts to minimize the bridge footprint. Design was performed in accordance with AASHTO LRFD. Kunal assisted with quality control of the superstructure and substructure design and performed the as-designed load rating.
01/16 - 06/20	**SR145 Bridge Replacements, Prentiss County, MS** – Project Engineer. Kunal was responsible for the substructure design, calculating quantities, performing as-designed load ratings, and reviewing construction submittals. Stantec was responsible for designing and detailing the replacement of five structurally deficient bridges along MS SR 145 in Prentiss County. The bridges consist of AASHTO and Bulb-T PSC girder spans supported by steel pipe pile & concrete caps. The project's proximity to potential seismic activity warranted the consideration of seismic forces in the substructure designs.
07/18 - Ongoing	**SR 12 Over Sunflower River, Humphreys, Washington County, MS** – Project Engineer. Kunal was responsible for directing and checking the analysis, design, load rating, and detailing of the 910 ft. 3-span continuous steel plate girder bridge carrying SR 12 over sunflower river. The substructure consisted of multi-column bents supported on drilled shafts.
01/19 - Ongoing	**I-10 Loyola Design-Build | LADOTD Contract No. H.011670, New Orleans, LA** – Structural Design Engineer. Kunal assisted signing engineer in design of flyover ramps, consisting of concrete slab spans, prestressed concrete LG and LU girder spans, and twin horizontally curved steel tub girder spans supported by different substructure types including hammerhead bents, wall bents and pile bents. Kunal is currently looking over the as-built load rating of all the structural components.
01/19 - 03/22	**Nelson Road Extension Bridge | LADOTD Contract No. H.005967, Baton Rouge, LA** – Structural Engineer. Kunal assisted the design engineer with preparation of plans and specifications for this bridge extension to the surrounding roadway network. Design included design of bridge components, including substructure, footing and foundation, load bearing calculations, girders and barrier design. Other design elements include navigational lighting bridge attachments, steel bracket light supports with concrete anchors to the bridge structure.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Ryan Nataluk, PE***	Years of relevant experience with this employer	16
Title	Bridge Inspection Discipline Leader	Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		BS | 1997 | Civil Engineering	
Active registration number / state / expiration date		PE No. 37837 | CO* | 10/31/2023	
Year registered	2003	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Ryan has 25 years of experience in structural inspection and highway per the National Bridge Inspection Standards (NBIS) using the National Bridge Inventory (NBI) and AASHTO Element Level NBE coding systems, as well as per AREMA standards. He has worked for a variety of DOTD's and private clients performing inspections on all types of concrete, steel, and timber bridges with main spans reaching 800 feet. Ryan has performed and managed staff for more than 25,000 routine, fracture critical, in-depth, damage, and initial bridge and overhead sign inspections in 16 states and Canada. He's skilled in load rating of steel, concrete. **NBIS Certified Team Leader; Sprat Level III**	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/12 - 05/16	**Load Rating and Posting of On-System Bridges | WVDOT, Statewide, LA** – Project Manager, Senior Team Leader and SPRAT Climbing Supervisor for the 1,900 foot long fracture critical cantilever through truss: Silver Memorial Bridge under a six-year contract with the WVDOT. Careful maintenance of ropes and hand-held inspection equipment allowed our inspectors to complete the inspection without the use of mechanical equipment, traffic control, or traffic disruptions. The bridge, which carries US 35 across the Ohio River from West Virginia into Ohio, was completed in 1969 as a replacement and monument for an earlier structure, the Silver Bridge. The original Silver Bridge collapsed in a historic tragedy that led the United States Congress to establish NBI and NBIS Standards between 1968 and 1971.
03/14 - 05/15	**LA 511: Jimmie Davis Bridge Rehabilitation | LADOTD H.010662, Bossier, LA** – Lead Inspector. Total structure length is 2,823 linear feet, including three main steel truss simple spans - 354 ft., 402.5 ft., and 354 ft. long respectively - crossing the Red River; 610 ft. approach spans at each side consisting of steel, two-girder systems with floor beams. Stantec provided design and plans for complete rehabilitation and repainting. Rehabilitation consisted on total deck replacement, over 200 structural repairs to truss span floor system, replacement of the link joint (hangers) of the approach spans, joint rehabilitation and barrier replacement.
05/17 - 08/17	**SR 609 Over Old Fort Bayou In-Depth Bridge Inspection | MDOT, Ocean Springs, MS** – Field Team Leader. Ryan was a field team leader for the in-depth inspection of the 1760-ft long bridge that consists of a double leaf steel girder bascule span (176-ft) and 17 prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span.
01/20 - Ongoing	**Bridge Inspection and Load Rating for Local Public Agency and Privately Owned Bridges | North Dakota DOT, ND** – Principal. Ryan is leading all inspections using the National Bridge Elements and North Dakota's own Agency Developed Elements and Bridge Management Elements. The data is captured in Bridge Intelligence's inspectX platform with associated material defects, photographs, critical findings, and alert codes. In addition to maintenance and rehabilitation recommendations, our teams provide streambed profiles and vertical clearance information, owner and railroad coordination, and FAA clearances for unmanned aerial vehicle (UAV) flights. Our work captures critical findings within the system and sends alert code notifications to the bridge owners. Load ratings are completed using AASHTOWare Bridge Rating software or other software for unusual structures.

16. Staff Experience:

Ryan Nataluk, PE* (CONT.)	
05/12 - 10/14	**Coos Bay Bridge Inspection | Oregon International Port of Coos Bay, Coos Bay, OR** – Inspector. Ryan performed a deteriorated rivet count along fracture critical members to determine the number of replacement bolts needed to rehabilitate the members. He used conventional rock climbing and rappelling techniques to access the structure.
04/17 - 08/17	**SR 605 Over the Industrial Waterway In-Depth Bridge Inspection | MDOT, Gulfport, MS** – Field Team Leader. Ryan was a field team leader for the in-depth inspection of the 1390-ft long bridge that consists of a double leaf steel girder bascule span (211- ft) and prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span.
05/16 - 12/16	**US 82 Cable Stay In-Depth NBI Inspection | MDOT, Washington County, MS** – Assistant Project Manager and Field Team Leader. Ryan was the assistant PM and field team leader for the in-depth, fracture critical and element level inspection of the US Route 82 over the Mississippi River. Scope included performing a routine element level inspection using the National Bridge Elements, a fracture critical inspection of the main river span floor systems including edge girders and floor beams, an in-depth hands-on SPRAT access inspection of all 112 stay cables.
08/07 - Ongoing	**On + Off-System Bridge Inspections | Colorado DOT, Statewide, CO**– Project Manager. Ryan leads bridge inspection, load rating, and scour analysis services for approximately 4,900 off-system bridges in 64 counties and over 100 cities across Colorado per the National Bridge Inspection Standards (NBIS). He's responsible for routine, fracture critical, and special damage inspections on bridges and culverts greater than 20 feet in clear span. Performed field inspections in accordance with all CDOT, FWHA, NBIS, SPRAT and OSHA guidelines and requirements. Confined space entry protocol and Non-Destructive Testing methods are commonly used during these field inspections. In 2014, he collected CoRE Element data for structure components via Pontis with transition to new National Bridge Elements (NBE) via AASHTOWare Bridge Management (BrM). Collects inventory and inspects newly constructed bridges performed at the request of CDOT. Load ratings are performed using the AASHTOWare Bridge Rating program and per the CDOT Bridge Rating Manual. All scour analyses are performed per the FHWA's HEC 18: Evaluating Scour at Bridges. Final bridge reports are submitted. In-depth elemental reporting includes recommendations for maintenance, replacement and/or repair, sketches, photographs, and streambed measurements.
09/12 - Ongoing	**Bridge Inspection and Analysis Services | Nevada DOT, Statewide, NV** – Project Manager/Sr. Team Leader. Responsible for routine and fracture critical inspections per NBIS. Through two consecutive four-year contracts, Stantec inspected nearly 1,000 bridges per year, including routine, fracture critical, access required, damage, and tunnel inspections per NBIS and NTIS. Additional services included non-destructive testing using magnetic particle, dye penetrant, ground penetrating radar, infrared, impact echo, and sounding. 30 load ratings were completed on as-needed basis. Approx. 150 require specialized access and/or confined space entry either by UBIV or SPRAT certified rope access. Collected inspection data electronically.
08/13 - 2020	**2ND LT. Theodore R. Woo Memorial Bridge | West Virginia DOT, Charleston to Dunbar, WV** – Sr. Team Leader for first element-level inspection of the 2383' long bridge. Composed of 11 continuous steel multi-girder spans and three spans of continuous steel haunched girders with a floorbeam and stringer floor system. First annual in-depth periodic inspection was included an arm's length inspection of every member on structure. Bridge inspected utilizing rope access methods per the Society of Professional Rope Access Technicians (SPRAT) to avoid lane closures on a heavily traveled interstate. In addition to rope access methods, one innovative inspection technique included using parapet clamps to inspect the fascia girders of the bridge without the need for inspection access vehicles. Lead climbing techniques were also employed to inspect the deck girders and floor system.
01/13 - Ongoing	**NDOT Mike O'Callaghan – Pat Tillman Memorial Bridge | Nevada DOT, Boulder City, NV** – Program Manager. As part of the NDOT statewide inspection contract, Ryan served as the Program Manager and Lead Inspection Engineer, registered in both Arizona and Nevada, for this in-depth inspection project for the newest United States landmark bridge, the Hoover Dam Bypass. Responsibilities included SPRAT Level III oversight of the rope access inspection team, project requirements, planning of materials, schedule, logistics, rescue protocols and client coordination in preparation for Stantec's Rope Access inspection of this 1,866 foot open spandrel arch bridge that spans the Colorado River just downstream of the Hoover Dam. Tasks included detailed planning, daily safety tailgate meetings, scheduling, review of previous inspection reports, coordination of client responsibilities, traffic control, and task-level breakdowns with associated climbing equipment and inspection objectives.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Taylor Perkins, PhD, SE, PE**	Years of relevant experience with this employer	16
Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	PhD | 2017 | Structural Engineering; MS | 2008 | Civil Engineering; BS | 2007 | Civil Engineering		
Active registration number / state / expiration date	PE No. 47449 | LA | 9/30/2023		
Year registered	2023	Discipline	Structural Engineering
Contract role(s) / brief description of responsibilities	Taylor has been involved in the plan preparation, design, load rating, and rehabilitation of complex highway and rail bridges of nearly every type. His experience includes concrete bridges, structural steel bridges, long span bridges, seismic evaluation and retrofit, and various types of foundation systems. Taylor has completed Sprat Level I rope access training and has assisted in a wide range of bridge inspections. **Certified Rope Access Level I**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/15 - Ongoing	**US 60 Over Cumberland River Bridge Replacement (Smithland Design) | Kentucky Transportation Cabinet District 1, Smithland, KY** – Deputy Project Manager and Load Rating Engineer of Record. This $60M project replaces the existing structure, which carries US 60 over the Cumberland River in the town of Smithland, KY. As deputy Project Manager, Taylor has been involved with the project from the planning and environmental phase. During this phase 1, Taylor led the navigation simulation modeling, a span arrangement and structure type selection study, and performed USCG coordination. The replacement structure has a 40-ft roadway width with two 12-ft lanes and 8-ft shoulders. The 1909'-10" long structure consists of a 3-span 368' PPC I-beam south approach unit, a 700'-4" single truss span over the river, and a 6-span 841'-6" PPC I-beam north approach unit. The main navigation truss span is a modified warren through-truss that eliminates vertical members and utilizes rigid frame connections at the top and bottom chord to eliminate the need for sway bracing. The bridge is in a high seismic hazard zone, consequently a response spectrum analysis was performed using a site-specific response spectrum and the structure was designed and detailed to meet AASHTO LRFD criteria for Seismic Zone 3. As Co-Engineer of Record for the main truss span and the supporting piers, Taylor was responsible for all aspects of design and plan production. During the construction phase of the project, Taylor served as document controls manager, working closely with the KYTC Resident Engineer to coordinate construction submittals and address issues that arose. Taylor also served as the load rating engineer of record.
03/16 – 09/18	**Statewide Fracture Critical Inspection Services - Package 2 - Simon Kenton Bridge Load Rating | Kentucky Transportation Cabinet, Statewide, KY** – Load Rating Lead. Taylor was the load rating engineer of record for the Simon Kenton Bridge, a 1990-ft. long suspension bridge over the Ohio River in Maysville, KY. The structure consists of 465-foot side spans and a 1060-foot main span. The load rating includes 3-D finite element modeling of the full structure in CSi Bridge, with nonlinear effects included to account for large displacements and stress-stiffening of the cables. Components included in the load rating are stringers, floorbeams, stiffening trusses, including gussets, hanger cables with connections, main suspension cables, steel tower piers, and suspension cables anchorages. The rating is performed using LRFR methodology, the rating vehicles include HL-93, four state posting vehicles, four specialized hauling vehicles, and FHWA FAST act's emergency vehicles.
03/18 - 12/19	**TBTA Biennial Bridge Inspection - Robert F. Kennedy Bridge Load Rating, New York, NY** – Technical Lead for the load rating of the 200+ ft spans of the Robert F. Kennedy Bridge over the East River and Bronx Kill in NYC. The rated portions include a suspension bridge unit with 1,380-ft main span and 672-ft side spans as well as several through-truss spans. Ratings were performed for both the LRFR and ASR methodologies and incorporated AASHTO specialized hauling vehicles and FHWA FAST act's emergency vehicles. For the suspended spans, a nonlinear finite element model was built in CSi Bridge analyze the large displacements and stress-stiffening effects of the suspension cables. Ratings included stringers, floorbeams, and stiffening trusses, including gussets. Ratings for the Bronx Kill truss spans included stringers, floorbeams, main truss members, and gusset plates. The project also includes ratings for the orthotropic steel decks, which were modeled in 3-D using Ansys.

16. Staff Experience:

Taylor Perkins, PhD, SE, PE (CONT.)	
09/18 - Ongoing	**Statewide Fracture Critical Inspection Services (Package 2) Simon Kenton Bridge Load Rating | Kentucky Transportation Cabinet, Maysville, KY** – Load Rating Lead Engineer/EOR for the Simon Kenton Bridge, a 1990-ft long suspension bridge over the Ohio River. Structure consists of 465-ft side spans and a 1060-ft main span. The load rating includes 3-D finite element modeling of the full structure in CSi Bridge, with nonlinear effects included to account for large displacements and stress-stiffening of the cables. Components included in the load rating are stringers, floorbeams, stiffening trusses, including gussets, hanger cables with connections, main suspension cables, steel tower piers, and suspension cables anchorages. Rating is performed using LRFR methodology, the rating vehicles include HL-93, four state posting vehicles, four specialized hauling vehicles, and FHWA FAST act's emergency vehicles.
11/18 - Ongoing	**I-70 Bridges Upgrade Design & Qam Services (WVDOH) | West Virginia Highways, Wheeling, WV** – Structural Engineer. Project required rehabilitation to bring the inventory rating of the 70-year old bridge up to HL-93 standards. Taylor is responsible for technical oversight of the rehabilitation plan as well as QA/QC of the 3-D finite element Arch analysis model and capacity checks for the in-situ and rehabilitated structural elements of the bridge including, arch rib, tie chord, hangers, and floor system members. Evaluation of the arch included extensive global stability evaluations of arch rib buckling modes.
09/16 - 08/18	**Statewide Bridge Load Rating - Package 1 - Arch Load Ratings | Kentucky Transportation Cabinet, Various Locations, KY** – Load Rating Engineer-of-Record for three arch bridges. Structures include: 535-ft twin tied arches that carry I-24 over the TN River, 186-ft open spandrel steel arch that carries Highland Ave. over I-471 in Campbell Co., and 100-ft concrete infill arches that carry KY 90 over the Cumberland River. The LRFR ratings incorporated all pertinent structural elements and included HL-93, four state posting vehicles, four specialized hauling vehicles, state superload vehicles, and FHWA FAST act's emergency vehicles.
06/09 - 08/15	**US 460 Connector Design-Build | Virginia Department of Transportation, Buchanan County, VA** – Structural Engineer. The 1,728-ft long six-span twin bridges feature two PPC I-beam approach spans and a four-span cast-in-place, post-tensioned segmental concrete box girder unit with box girder depths of 31 feet at the continuous piers. The substructures consist of unique H-column piers, integral with superstructure, with heights up to 230 ft. Taylor performed QC checking of the longitudinal and transverse load ratings of the as-built superstructure.
09/17- 04/21	**KY 676 Load Rating and Testing | Kentucky Transportation Cabinet, Frankfort, KY** – Load Rating Engineer Lead for the twin 3-span post-tensioned segmental box bridge. LRFR ratings, completed under the 2015 Statewide Fracture Critical Bridge Inspection Package 3, were performed for HL-93 load, four state posting vehicles, four specialized hauling vehicles, state superload vehicles, and FHWA FAST act's emergency vehicles. Analysis for the structure included two independent models in CSi Bridge and BD2 to capture the stage construction effects of the balance cantilever erection. After the load ratings, Taylor supported a load testing of the bridge, which was performed by the Kentucky Transportation Center.
02/09 – 08/09	**US 60 Bridge Over the Tennessee River | Kentucky Transportation Cabinet, McCracken and Livingston Counties, KY** – Structural Engineer. The main river unit for the new Ledbetter Bridge is a 3-span parallel chord modified warren through-truss. The design eliminates vertical members and utilizes rigid frame connections at the top and bottom chords to eliminate the need for sway bracing. The truss is 73.5-ft wide and carriers two lanes of traffic and a combined shoulder/bike lane in each direction. The truss is supported on massive two-column piers founded on a combination of H-piles, large diameter pipe piles, and prestressed concrete piles. The bridge is in the New Madrid Region, a well-known high seismic hazard zone. As part of the final design Taylor performed design of the concrete deck, developed portions of the seismic analysis model used in the response spectrum analysis, designed portions of the lead-core isolation bearings, and performed seismic evaluation of the piers and foundations. Taylor also performed QC checking of portions of the final stringer and floor system design as well as checking of the stringer bearing design.
05/12 – 11/16	**Coos Bay Rail Bridge Engineering Support Services | Oregon International Port of Coos Bay, Coos Bay, OR** – Load Rating and Rehabilitation Lead. The Coos Bay Swing Span Bridge is a 2,168'-long steel truss comprised of nine 150' Warren Through Riveted Truss (TRT) spans, two 180' Pratt TRT spans, and one 458' Warren TRT swing span. The structure was constructed in 1915 and has undergone significant deterioration of steel members due to the harsh marine environment. Taylor was responsible for developing the 3-D finite element analysis models, member load rating, and designing rehabilitation/repair for the truss and swing span members, floorbeams, and stringers.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Jacob Tisdale, PE**	Years of relevant experience with this employer	4
Title	Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS | 2018 | Civil Engineering		
Active registration number / state / expiration date	PE No. 47913 | LA | 9/30/23		
Year registered	2023	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Jacob is a structural engineer with over four years of experience. He has been involved in structural designs ranging from deck, prestressed box girder and concrete substructure. He has been involved in the load rating and inspections of numerous State Aid Complex and Timber Bridges. Jacob is familiar with several design and analysis software programs including RC-Pier, CONSPAN, and AASHTOWare Bridge Rating. **NBIS Certified Team Leader**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/18 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Bridge Inspector and Load Rater. Stantec is responsible for inspecting and load rating over 400 bridges in 20 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Jacob is responsible for performing load rating analyses of inspected structures in accordance with current AASHTO requirements. Structures include prestressed concrete girders, structural steel girders, concrete box culverts, and precast prestressed channel beams.
12/18 - Ongoing	**Mississippi Statewide Timber Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Bridge Inspector and Load Rater. Stantec is responsible for inspecting and load rating over 100 bridges in 17 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Jacob is responsible for performing load rating analyses of inspected structures in accordance with current AASHTO requirements. Structures include prestressed concrete girders, structural steel girders, and precast prestressed channel beams with timber substructures.
12/18 - 01/19	**AASHTOWARE Bridge Rating | MDOT, Statewide, MS** – Bridge Load Rater. The project included load rating of 120 bridges in Mississippi. Load ratings were performed in accordance with the AASHTO LRFR or LFR method and current MDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, concrete slabs, and reinforced concrete multi-cell box girders (integral and non-integral). Jacob assisted in performing load ratings and developing summary reports
02/19 - 04/19	**ALDOT Load Rating of 30 Bridges | ALDOT, Statewide, AL** – Bridge Load Rater. Jacob was responsible for performing load ratings and developing summary reports on this contract that included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with AASHTO LFR method and current ALDOT standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0.
08/19 - Ongoing	**I-10 Loyola Design-Build Interchange | LADOTD Contract No. H.011670, New Orleans, LA** – Bridge Designer. Jacob serves as a design engineer on this multimillion-dollar design-build project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans International Airport. The project consists of a DDI, in addition to flyover ramps leading to/from the Airport on the east side of the interchange. The flyover ramps consist of curved twin steel tub girders, prestressed concrete girders and slab spans being supported by a combination of hammerhead bents, wall bents and pile bents. The project is one of the first in the state to implement LU girders. Jacob's responsibilities include the design of slab spans, substructure elements, reviewing shop drawings, and performing as-designed load ratings on structural components.

16. Staff Experience:

Jacob Tisdale, PE (CONT.)	
08/22 - 11/22	**ALDOT Load Rating of 12 Complex Bridges, Statewide, AL** – Bridge Load Rater. Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation using AASHTOWare BrR. The bridge types comprised of continuous cast-in-place concrete T-beam spans, post-tensioned channel beams, continuous steel plate-girders, and concrete encased steel I-beams. Jacob was responsible for performing load ratings and developing summary reports.
02/19 - Ongoing	**LA 12 Bridge Replacements | LADOTD, Calcasieu Parish, LA** – Bridge Load Rater. Jacob is responsible for performing load ratings on the as-design and as-built conditions. This project consists of replacing six structurally deficient bridges along LA State Route 12 in Calcasieu Parish using phase construction. All bridges consist of LA Quad beam girder spans supported on pile bents.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Stephen Torry, PE**	Years of relevant experience with this employer	3
Title	Structural Engineer	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization	MS | 2019 | Civil Engineering; BS | 2018 | Civil Engineering		
Active registration number / state / expiration date	PE No. 47545 | LA | 9/30/2025		
Year registered	2023	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Stephen has previous experience in rating a variety of different bridge structures which include curved steel superstructures, cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate girders, channel beams, timber floor beams, timber stringers, culverts, and reinforced concrete beams. Stephen has experience in rating reinforced concrete caps, timber caps, concrete piles, timber piles, and steel H piles. In addition to load rating, Stephen has experience in field inspection that he has utilized to improve his ability to spot critical failure locations when performing load rating analysis. Stephen has rating experience in AASHTOWare Bridge Rating, LEAP RC-PIER, LEAP CONSPAN, MIDAS Civil, and STAAD. **NBIS Certified Team Leader**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/20 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Bridge Inspector and Load Rater. This project consists of inspections and load ratings on timber, complex, and non-complex structures in accordance with AASHTO and FHWA NBI specifications. Stephen inspects and load rates various bridge types ranging from steel I girders, prestressed concrete beams, and steel rail cars (which have since been converted into small bridge spans) using AASHTOWARE Bridge Rating. Substructure types included reinforced concrete caps using LEAP RC-Pier.
01/22- Ongoing	**I-10 / Loyola Interchange Improvement | LADOTD, Contract No. H.011670, Jefferson Parish, LA** – As a structural P.E. Stephen performed the load rating of the bridge substructure and superstructure in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating. Superstructure spans included prestressed LG and LU girders and the substructure consisted of concrete pile bents as well as concrete hammer head piers.
08/22 - 11/22	**ALDOT Load Rating of 12 Complex Bridges, Statewide, AL** – Bridge Load Rater. Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised of continuous cast-in-place concrete T-beam spans, post-tensioned channel beams, continuous steel plate-girders, and concrete encased steel I-beams. Stephen performed load ratings using as-built drawings / standard plans and developed load rating summary reports.
02/21 - 03/21	**Load Rating Of Mall of Louisiana Bridges, Baton Rouge, LA**– Bridge Load Rater. Stephen performed load rating of three bridges in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating. Superstructure spans included skewed prestressed AASHTO girders that supported a curved deck, as well prestress quad beam spans. Superstructure was rated using AASHTOWARE Bridge Rating. Substructure ratings were of concrete pile bents using LEAP RC-Pier.
08/20 - 09/20	**Nelson Road Extension Bridge | LADOTD Contract No. H.005967, Lake Charles, LA** – Bridge Design and Load Rater. Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating. Superstructure ratings included prestressed LG Girders and slab spans using AASHTOWARE Bridge Rating. Substructure ratings were of concrete pile bents using LEAP RC-Pier.

16. Staff Experience:

Stephen Torry, PE (CONT.)	
05/19 - 10/19	**Load Rating of 396 Off System Bridges | LADOTD Contract No. H.012485.5, Statewide, LA** – Bridge Load Rater. Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Evaluation. Bridge types included cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel I plate girders, and RC box culverts. The substructures comprised various components including reinforced concrete caps, timber caps, timber piles and H piles
05/19 - 10/19	**27 Complex Off-System Bridges Rating and Evaluation | LADOTD Contract No. H.009859.5, Statewide, LA** – Bridge Load Rater. Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Evaluation. Bridge types rated include steel plate-girders and prestressed concrete girders. Bridge superstructures involved complex irregular geometry for their on/off ramps which were not analyzed using AASHTO approximate methods and therefore those bridge/ramp junctions were analyzed using finite element models developed using MIDAS civil software.

16. Staff Experience:

Firm employed by	Stantec		
Name	**Maggie Ye, PE**	Years of relevant experience with this employer	3
Title	Structural Engineer	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization	MS | 2016 | Civil Engineering; BS | 2013 | Civil Engineering		
Active registration number / state / expiration date	PE No. 44061 | LA | 3/31/2024		
Year registered 2019	Discipline: Civil Engineering		
Contract role(s) / brief description of responsibilities	Maggie assists the project manager with bridge designs, compiling bridge plans, and QC/QA of load rating models and reports. She also helps EIs in developing load rating models.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/20 - Ongoing	**Mississippi Statewide Complex Bridge Inspections & Load Ratings | Mississippi Office of State Aid Road Construction, Statewide, MS** – Bridge Engineer. Maggie's main task is to QC and QA the load rating models and reports that are developed by the EIs. She uses Bridge Rating and RC-Pier load rating software to review different types of bridges, including timber bridges, box culvert bridges, slab spans, prestressed beams etc. She also reviews the hand calculation of LLDF for culvert box, dead load input for substructure, and timber piles' load rating factors.
10/21 - 04/22	**Truss Bridge Inspections and Load Rating | MDOT, Statewide, MS** – Bridge Load Rater. Maggie used the existing plans and site measurements to load rate the complex truss bridge. The load rating consisted of rating truss members, gusset plates, stringers and floor beams. She prepared the load rating reports including detailed truss rating results in accordance with client's requirement.
02/19 - 08/19	**Load Testing of Berwick Bay Bridge and LA-1 Bridge | LADOTD, Statewide, LA** – Site Engineer. Maggie assisted the project engineer to installing sensors on the bottom of the bridge deck and connecting the sensors to computers. She guided the loaded truck on the bridge and analyzed the collected deflections from sensors. She gained on-site experience as well as knowledge that the load rating results were much more conservative than the load testing results.
02/19 - 08/19	**27 Complex Off-System Bridges Rating and Evaluation | LADOTD H.009859.5, Statewide, LA** – Structural Engineer. This project consisted of load rating of 27 complex off-system bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised ferry-toll, pontoon, steel I-beam, plate girder swing spans, plate girder continuous spans, plate girder bascule spans, low truss swing spans, plate girder swing spans and steel box girder. Maggie's responsibilities included reviewing the as-built drawings of the bridges and determining the appropriate load rating method, developing the load rating models and preparing the load rating reports.
02/19 - 08/19	**Load Rating Of 396 Off System Bridges | LADOTD H.012485.5, Statewide, LA** – Bridge Load Rater. Load rating of 396 bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate-girders, in addition to RC box and arch culverts. Substructures comprised various components including reinforced concrete caps, timber caps, timber piles and steel H piles. Maggie participated in performing the load rating analysis for the bridges and preparation of the load rating reports.
11/19 - 04/20	**US-90 Macarthur Interchange Phase II | LADOTD, Jefferson, LA** – Bridge Designer. This project consisted of designing two access ramps to/from the service roads to the elevated viaduct. Ramps structures consisted of complex structural elements including precast- prestressed U-shaped girders and LG-girders, inverted-T piers, complex columns, and foundations. Maggie's responsibilities included performing the final design of the superstructure including the deck, prestressed LU girders and LG girders for the 22 spans off-ramp and the 24 spans on-ramp along with preparation of the plans.

16. Staff Experience:

Firm employed by	HNTB		
Name	**Joshua Porter, PE**	Years of relevant experience with this employer	7
Title	Bridge Project Engineer	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	BS / 2010 / Civil Engineering / Louisiana State University		
Active registration number / state / expiration date	39513 / LA / 09-30-25		
Year registered	2015	Discipline	Bridge
Contract role(s) / brief description of responsibilities	**MPR #4 and MPR #5**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2023-Present	**LADOTD H.009859: Load Rating of 70 Statewide Bridges, Statewide, LA** – Project Manager overseeing the load rating of 5 complex bridge structures, including pontoon, swing spans, lift spans, and steel girder spans.
2020-2021	**LADOTD H.012889: I-20 Rehabilitation Pines Road to I-220, Bossier City, LA** – Task Manager overseeing the load rating of 14 structures, including complex structures, along the I-20 corridor in Bossier City, Louisiana. The ratings were performed using BrR, RC Pier, and 3D FEA software LARSA. Structure types included curved steel structures, haunched concrete girders, and straight steel continuous girders with kinked connections to allow for the roadway curvature. The overall project was to develop median barrier replacement to coincide with the replacement of the existing pavement. Approach slabs and backwalls were replaced on several of the structures.
2019-2020	**LADOTD Off-System Bridge Rating (53 Bridges), Statewide, LA** – Project manager and lead load rating engineer for a large off-system load rating task. To comply with FHWA NBIS Metric #13, a substantial number of structures required load rating. Lead the effort overseeing the team to rate the various structures, which included pre-stressed girder bridges, rolled I-beam bridges, steel plate girders, and reinforced concrete slab spans. Many structures had poor quality, incomplete, or completely missing plans. Utilized engineering judgment and coordination efforts with the DOTD load rating group to develop the load ratings of structures with missing or incomplete plans.
2019-2020	**LADOTD H.003931 Calcasieu Load Ratings, Calcasieu Parish, LA** – Task manager on the load ratings of 27 structures, including complex structures, along the I-10 corridor in Calcasieu Parish, Louisiana. Structures included haunched concrete girders T-beams, steel girders, prestressed concrete girders.
2016-2019	**LADOTD H.009859 – Load Rating of Complex Bridges, Rapides and St. Mary Parishes, LA** – Lead rating engineer for this project which involved the inspection and load rating of two truss bridges: the LA 182 over Charenton Canal Bridge and the Jackson Street Bridge over the Red River. Completed the load rating of the Charenton Canal truss and reinforced concrete spans, developed the load rating report, and in a separate project, developed means to rehabilitate the structure. Lead the inspection of the Jackson Street Bridge in Alexandria, Louisiana. Also oversaw and checked the rating of the truss and steel girder spans and substructures of the Jackson Street Bridge.
2016	**LADOTD Inspection and Load Rating of 3 Complex Truss Bridges, Statewide, LA** – Project consisted of performing load rating analysis of three (3) major truss bridges in Louisiana with the goal of providing LADOTD with an overall assessment of the current condition of each bridge. Performed inspection of the gussets and load rating of the truss and gussets.
2014-2016	**LADOTD Load Rating of 125 Bridges, Various Locations, LA** – Load rating engineer led the analysis, load rating and report development for 125 bridges throughout the state of Louisiana. The bridges included complex and conventional structures, including straight and curved steel I-girder spans, prestressed precast concrete girder spans, reinforced concrete girder spans and slab span superstructures. Pile supported sub structures consisting of timber, concrete and steel piles were included in the ratings.

16. Staff Experience:

Joshua Porter, PE (CONT.)	
2014-2015	**LADOTD 18 Posted Bridges, Various Locations, LA** – Load rating engineer inspector who assisted in the development of recommendations of methods to remove the load posting of 18 bridges throughout major truck routes in Louisiana. Led the inspections to verify major deficiencies listed in previous inspection reports. Also assisted in the analysis, evaluation and final recommendations on removing the posting, rehabilitation or replacement of the bridges. The bridges included reinforced concrete girder spans, prestressed concrete girder spans, steel truss swing spans and reinforced concrete slab spans. Refined analysis was used to justify the removal of the posting on some of the structures. For others, it was determined to either rehabilitate or replace the structures.
2014-2015	**LADOTD H.003003, H.003014 & H.010601: I-10 Bridge Evaluation near Lafayette, Lafayette and St. Martin Parishes, LA** – Load rating engineer who developed load rating models for many of the superstructures, determined which bridges met the minimum criteria allowing widening, developed cost analysis for widening versus replacements, developed reports outlining the benefits of each. The project was to evaluate 22 bridges along the I-10 corridor near Lafayette, LA for widening.
2012-2013	**Boeuf River Bridge – Complex Truss Load Rating** – Load rating engineer who performed the analysis of a truss span after an over-height vehicle hit. The hit to the portal bracing caused deformation in a vertical member. The load rating incorporated the deformation and included a second order analysis to account for increased bending.
2011-2012	**Valero Refinery Super-Overload, St. John the Baptist Parish, LA** – Load rating task manager who developed a method to effectively load rate the U.S. 61 bridge over the Bonnet Carre' Spillway to allow for a super-overload to cross. The load was part of an expansion project of the Valero refinery in Norco, Louisiana. Once it was determined that the structure would not pass with conventional methods of analysis, developed a refined analysis model incorporating the transfer of movement through a continuous deck and continuity diaphragm, allowing the vehicle to cross. Prior to the crossing, the bridge was instrumented and the vehicle was weighed by a consultant. The results obtained by the consultant were then used to further refine the model. This new model allowed larger vehicles to pass

16. Staff Experience:

Firm employed by	HNTB			
Name	**Marc Hoffmann, PE**		Years of relevant experience with this employer	6
Title	Project Engineer		Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization			MS /2018 / Civil Engineering / Louisiana State University BS / 2015 / Civil Engineering / Louisiana State University	
Active registration number / state / expiration date			44342 / LA / 09-30-24	
Year registered	2020	Discipline	Bridge	
Contract role(s) / brief description of responsibilities			**MPR #5**	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
08/19-12/20	**Load Rating of 50 Off-System Bridges, Statewide, LA** – Project consisted of analyzing 50 off-system bridges in Louisiana with the goal of providing LADOTD with an overall assessment of the current condition of each bridge. The bridges to be analyzed consisted of reinforced concrete slab bridges, prestressed concrete girder bridges, steel I-beam bridges, and bridges with timber pile substructures. As a technical engineer and team lead for the project, Marc used computer-aided software (AASHTOWare Bridge Rating and Bentley RC Pier) to calculate superstructure girder capacities and substructure bent cap capacities for a portion of the bridges and develop summary reports for each bridge. Marc also performed quality control of bridges that were analyzed by younger engineers to ensure compliance with AASHTO codes. Marc ensured the results and evaluation reports compiled by younger engineers accurately reflected the condition of the bridge.
10/20-03/22	**LADOTD LA 3250: I-49/UPRR Overpass Repair, Alexandria, LA** – Technical engineer for partially replacing a 95-foot concrete pre-stressed girder span that was hit by an over-height vehicle. To ensure minimal impact to traffic, the new portion of the span was constructed off-site and moved into place using Self-Propelled Modular Transporter (SPMT). He designed the new girders to replace the damaged girders and ensured the newly constructed portion of the span would fit into place once it was moved with SPMT. He used computer-aided software (LEAP Bridge Concrete) to calculate superstructure girder capacities and loads. Marc also used Bentley MicroStation to produce drawings for the plan set.
10/21-Present	**LADOTD I-20: Orange Street Overpass Repair, Monroe, LA** – Technical engineer for the project, which consisted of repairing a 123-foot steel girder span that was hit by an over-height vehicle. The project consisted of replacing 57 transverse stiffeners and performing heat straightening of two steel I-beam girders. His responsibilities included performing quality control on the transverse stiffener replacement design, heat straightening means and methods, and reviewing the MicroStation sheets. He also assisted with developing the cost estimate and quantities for the project.
08/19-05/20	**LADOTD Load Rating of 27 Complex Bridges, Calcasieu, LA** – Project consisted of analyzing 27 complex on-system bridges in Louisiana with the goal of providing LADOTD with an overall assessment of which bridges would be candidates for widening. The bridges to be analyzed consisted of haunched reinforced concrete girder bridges, prestressed concrete girder bridges, steel I-beam bridges, and curved steel I-beam bridges. As a technical engineer and team lead for the project, Marc used computer-aided software (AASHTOWare Bridge Rating and Staad.Pro) to calculate superstructure girder capacities and substructure bent cap capacities for a portion of the bridges and develop summary reports for each bridge. Marc also permed quality control of bridges that were analyzed by younger engineers to ensure compliance with AASHTO codes. Marc ensured the results and evaluation reports compiled by younger engineers accurately reflected the condition of the bridge.
05/18-08/18	**LADOTD 70 Over Pierre Part Bay (H.010007), Assumption Parish, LA** – Technical engineer tasked with load rating the superstructure and substructure, as well as providing a condition assessment report based on the inspection findings with recommended repairs. The superstructure was modeled using AASHTOWare Bridge Rating, and the substructure was modeled using STAAD Pro. Once the load rating and condition assessment were completed, the findings were presented to LaDOTD with the recommended repair plan and a preliminary cost estimate. Project consisted of inspecting, load rating, and providing a condition assessment report that included suggested items for rehabilitation of the LA 70 bridge over Pierre Part. The bridge is a movable bridge consisting of a two-girder floorbeam system that pivots on a center pier. The inspection encompassed all portions of the bridge including mechanical and electrical systems.

16. Staff Experience:

Marc Hoffmann, PE (CONT.)	
02/18-06/18	**LADOTD LA 27: I-10 Overpass Repairs, Sulphur, LA** – Inspector and technical engineer who performed the initial site inspection of the bridge after it was struck by an overheight vehicle, tasked with executing the current load rating analysis of each bridge and producing MicroStation sheets for the rehabilitation plans. He took measurements, recorded observations during the inspection, performed post-analysis, and generated inspection reports for each bridge. For the analysis: created models for the superstructure of each bridge using AASHTOWare Bridge Rating.
06/16-02/17	**Inspection and Load Rating of 3 Complex Truss Bridges, Statewide, LA** – Project consisted of performing load rating analysis of three (3) major truss bridges in Louisiana with the goal of providing LADOTD with an overall assessment of the current condition of each bridge. Along with analyzing each truss bridge, inspections were performed for the gusset plates of each truss bridge. As an inspector and technical engineer for the project, Marc performed the inspections of the gusset plates for each of the three truss bridges with colleagues. For the inspection, Marc took measurements of cracks/deficiencies, recorded observations, organized and uploaded written field observations to a central server, and developed inspection reports for each bridge. Load rating analysis of the three (3) truss bridges was performed after the inspections. For the load rating, computer-aided software (AASHTOWare Bridge Rating) was used to calculate the capacity of each truss member as well as calculate the capacity of each gusset plate for a variety of different limit states (gross section yielding, shear, compression, block shear rupture). Computer-aided software was also used to calculate controlling live load locations to find maximum axial force values for all the truss members. Maximum values were used to calculate rating factors for each vehicle for each truss member for each bridge. Once rating factors were calculated for each vehicle, summary reports were written to communicate the overall condition and assessment of each bridge and submitted to Louisiana Department of Transportation

16. Staff Experience:

Firm employed by	HNTB			
Name	**Patrick Duffy, PE**		Years of relevant experience with this employer	3
Title	Project Engineer		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization		MS / Civil Engineering / Louisiana State University BS / Civil Engineering / Louisiana State University		
Active registration number / state / expiration date		45363 / LA / 09-30-25		
Year registered	2021	Discipline	Bridge	
Contract role(s) / brief description of responsibilities		**MPR #5**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
2023-Present	**LADOTD H.009859: Load Rating of 70 Statewide Bridges, Statewide, LA** – Project Engineer assigned as task lead for the rating of five complex bridges. The project consists of analyzing five complex bridges with the goal of providing LaDOTD with an overall assessment of the current condition of each bridge as well as repair recommendations and plans if necessary. Bridge structure types in this project include swing span, pontoon, and vertical lift. Tasks include determining the appropriate load rating method and procedures, assisting engineers through the load rating process, and providing QA/QC on all deliverables to the client.
2019-2020	**LADOTD Load Rating of 27 Bridges, Statewide, LA** – Structural engineer intern responsible for load rating and evaluation performed on 27 complex bridges throughout the state. The bridge types consisted of cast-in-place slab, prestressed concrete girders, steel plate-girders, truss bridges, and swing spans. The superstructures were rated using Bridge Rating AASHTOWARE and the substructures were rated using RC-Pier and MathCad Sheets. The bridge load rated in this project is South Broad Ave. over the Pontchartrain Expressway, a 2589-foot-long steel I-Beam bridge, in New Orleans built in 1951. To properly load rate this bridge, he reviewed the as-built drawings of the bridge, determined the appropriate load rating method and procedures, created 59 unique span and cross girder models in AASHTOWARE BrR, and compiled a thorough report. This report contained descriptions of the existing bridge and conditions, the procedures used for the analysis, and the load rating results.
2018-2019	**LADOTD Load Rating of 18 Complex Bridges, Statewide, LA** – Structural engineer intern tasked with the load rating of two bridges: a Steel High Truss Swing Span (Chef Menteur Highway over East Pearl River) and a Steel Plate Girder Swing Span Bridge (Bayou Jacob Rd over Intercoastal Waterway). To properly load rate these bridges, he reviewed the as-built drawings of the bridge, determined the appropriate load rating method and procedures, created superstructure models in AASHTOWARE BrR, and compiled a thorough report. The overall project consisted of analyzing 18 on-system complex bridges with the goal of providing LaDOTD with an overall assessment of the current condition of each bridge. The bridges to be analyzed consisted of truss bridges, movable truss bridges, movable steel two-girder swing span bridges, pontoon bridges, continuous curved steel beam bridges, and skewed prestressed concrete beam on/off ramp bridges.
07/19-09/20	**LADOTD Load Ratings of 396 Bridges, Statewide, LA** – Structural engineer intern responsible for rating 13 bridges, assisting younger engineers on the load rating process, and provided QA/QC review of the bridge models, results, and reports of 46 other bridges. He reviewed the as-built drawings of the bridges, determined the appropriate load rating method, performed load rating analysis on the selected bridges using AASHTOWARE Bridge Rating, LEAP Bridge Concrete, and MathCad, and wrote the load rating reports of the findings. Load rating and evaluation was performed on 396 off-system bridges throughout the state. The bridge types in this project are cast-in-place slab, precast slab units, concrete deck girder, prestressed concrete girders, steel plate-girders, frame culverts, arch culverts, and swing spans.

16. Staff Experience:

Patrick Duffy, PE (CONT.)	
02/18-06/18	**LADOTD LA 27: I-10 Overpass Repairs, Sulphur, LA** – Inspector and technical engineer who performed the initial site inspection of the bridge after it was struck by an overheight vehicle, tasked with executing the current load rating analysis of each bridge and producing MicroStation sheets for the rehabilitation plans. He took measurements, recorded observations during the inspection, performed post-analysis, and generated inspection reports for each bridge. For the analysis: created models for the superstructure of each bridge using AASHTOWare Bridge Rating.
01/15-06/16	**LADOTD Load Rating of 125 Bridges, Statewide, LA** – Project consisted of analyzing 125 on-system bridges in Louisiana with the goal of providing LADOTD with an overall assessment of the current condition of each bridge. The bridges to be analyzed consisted of reinforced concrete slab bridges, reinforced concrete beam bridges, prestressed concrete beam bridges, and steel I-beam bridges. As a technical engineer for the project, Marc used computer-aided software (AASHTOWare Bridge Rating and Bentley RC Pier) to calculate superstructure girder capacities and substructure bent cap capacities for a portion of the bridges and develop summary reports for each bridge. Computer-aided software was also used to calculate controlling live load locations to find maximum moment and shear values for superstructure and substructure elements. Maximum moment and shear values were used to calculate rating factors for each vehicle for each bridge. Marc assisted in generating summary reports for a portion of the bridges to communicate the overall condition and assessment of each bridge.
06/16-02/17	**Inspection and Load Rating of 3 Complex Truss Bridges, Statewide, LA** – Project consisted of performing load rating analysis of three (3) major truss bridges in Louisiana with the goal of providing LADOTD with an overall assessment of the current condition of each bridge. Along with analyzing each truss bridge, inspections were performed for the gusset plates of each truss bridge. As an inspector and technical engineer for the project, Marc performed the inspections of the gusset plates for each of the three truss bridges with colleagues. For the inspection, Marc took measurements of cracks/deficiencies, recorded observations, organized and uploaded written field observations to a central server, and developed inspection reports for each bridge. Load rating analysis of the three (3) truss bridges was performed after the inspections. For the load rating, computer-aided software (AASHTOWare Bridge Rating) was used to calculate the capacity of each truss member as well as calculate the capacity of each gusset plate for a variety of different limit states (gross section yielding, shear, compression, block shear rupture). Computer-aided software was also used to calculate controlling live load locations to find maximum axial force values for all the truss members. Maximum values were used to calculate rating factors for each vehicle for each truss member for each bridge. Once rating factors were calculated for each vehicle, summary reports were written to communicate the overall condition and assessment of each bridge and submitted to Louisiana Department of Transportation

16. Staff Experience:

Firm employed by	HNTB			
Name	**Travis Honore, PE**		Years of relevant experience with this employer	1
Title	Engineer III		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		MS / 2019 / Civil Engineering BS / 2017 / Civil Engineering		
Active registration number / state / expiration date		#0034017 / LA / 09-30-2024		
Year registered	2019	Discipline	Bridge	
Contract role(s) / brief description of responsibilities		**Load Rating Engineer**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
06/16 - 12/16	**Horace Wilkinson Bridge Inspection, Baton Rouge, LA** – Engineer responsible for evaluating damage, deterioration, and basic bridge conditions to ensure public safety. Other tasks included analyzing and reviewing plans, survey reports, maps, and other data to verify correctness and quality control.
10/19 - 02/21	**Load Rating of 311 Bridges, Statewide, LA** – Engineer intern responsible for load rating and evaluation of both simple and complex bridges throughout the state using AASHTOWare BrR and Bentley LEAP RCPier. He also assisted other engineers on the load rating process and provided QA/QC reviews on bridge models, results, and reports of many bridges. Bridge types include: steel I-beam, prestressed concrete girder, pontoon, and concrete box culverts. He reviewed as-built drawings, determined the appropriate procedures to properly evaluate, created unique models in the load rating software, and compiled a complete report detailing findings and/or suggestions.
01/18 - 08/19	**Load Rataing of 27 Bridges, Statewide, LA** – Engineer intern responsible for load rating and evaluation of 27 complex bridges throughout the state using AASHTOWare BrR and Bentley LEAP RCPier. Bridge types include: steel I-beam, steel plate girders, steel trusses, and swing spans. He reviewed as-built drawings, determined the appropriate procedures to properly evaluate, created unique models in the load rating software, and compiled a complete report detailing findings and/or suggestions.
04/20 - 02/22	**Macarthur Interchange Completion Phase II, Jefferson Parish, LA** – Engineer who developed demolition and construction phasing plans to show the phases for removing old structures and constructing new structures. Designed the bridge deck reinforcement using AASHTO LRFD Bridge Design Specifications and developed plans for the deck reinforcement. I calculated the quantities of steel reinforcement and concrete for new ramps structures.
06/21 - 08/21	**Mermentau River Bridge Rehab, Cameron Parish, LA** – Engineer who designed member rehabilitation using software such as AASHTOWARE BrR. Developed plans for both member rehabilitation and other general bridge repairs.

16. Staff Experience:

Firm employed by	HNTB		
Name	**Aravind Tankasala, Ph.D, PE**	Years of relevant experience with this employer	5
Title	Bridge Engineer	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization	Ph.D / 2017 / Civil Engineering MS / 2013 / Civil Engineering BS/ 2011 / Civil Enginering		
Active registration number / state / expiration date	#46286 / LA / 03-31-2024		
Year registered	LA 2016	Discipline	Bridge
Contract role(s) / brief description of responsibilities	**Load Rating Engineer**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
Aravind is a professional bridge engineer in HNTB’s New Orleans office. He is a registered member of the American Concrete Institute (ACI) and possesses a working knowledge of bridge design, structural analysis, drafting in MicroStation and national codes/standards such as AASHTO, ASCE, and ACI. He has worked on multidisciplinary projects in the laboratory as well as on the field and has worked with multiple teams in developing strong interpersonal and communication skills. Dr. Tankasala has drafted reports and possesses strong design and drafting skills which includes experience with STAAD.Pro, LEAP Bridge, MicroStation, AASHTO BrR, and MS Excel.	
10/20-08/21	**LA 1 Phase 2C – Leeville to Golden Meadow Bridge (H.011208), Lafourche Parish, LA** – Bridge engineer tasked with designing and drafting the substructure for multiple prestressed girder spans. Checked the prestressed girder, bearing seat elevations, bearing pad, and deck designs. Rated the superstructure and substructure for both the girder and slab spans. Put together rating reports and performed quality control checks.
08/19-07/20	**Louisiana Bridge Rating (H.012485.1), Statewide, LA** – Bridge engineer who rated the superstructure and substructure for various types of bridges. The bridges include prestressed concrete girder spans, slab spans and continuous reinforced concrete girder spans. Compiled rating reports and performed quality control checks on the spans.
10/18-05/19	**LA 1 Phase 2B - Leeville to Golden Meadow Bridge (H.011208), Lafourche Parish, LA** – Bridge engineer for this design-build contract to construct a pre-stressed concrete girder bridge superstructure and concrete floodwall design. He assisted with the quality control check on the final plans comprising of three alternative bridge designs which included the super and sub-structure.
12/18-04/19	**LA 532 over I-20 Webster, Richland Parish, LA** – Bridge engineer for this design-build contract to construct a pre-stressed concrete girder bridge superstructure and substructure over I-20. Assisted with the design and detailed drafting of both the super and substructure. Developed custom made excel spreadsheets to check for column design and prestressed girder design. Performed quality control check on the final plans which included the super and sub-structure.

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)	33
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 Insp. 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 #4 & #5**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
10/22 – 6/23	**IDIQ Master Contract, Bridge Inspection and Related Services, Statewide, MS**– Project Manager & Lead Structural Engineer supervising load ratings of four bridges involving modeling within AASHTOWare’s BrR software for superstructures and LEAP for substructures in accordance with LRFR and LFR. Supervised the team who identified bridge defects from inspection reports, developed a load rating report, and provided bridge posting recommendations.
01/07 – 12/07	**West Drive & Lock #2 Road Bridges Inspection & Load Analysis, St. Tammany Parish, LA** – PM 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, LA** – 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, LA** – 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, LA** – 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, LA** – Project Manager who 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 curved steel plate girders, simple and multi-span normal and skewed box girders, and curved box girders.

16. Staff Experience:

Firm employed by	moffatt & nichol		
Name	**Chace Hulon, PE**	Years of relevant experience with this employer	9
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, Rehab. & Countermeasures FHWA-NHI-133113 Work Zone Traffic Control for Maintenance Operations FHWA-NHI-135047 Stream Stability & Scour at Highway Bridges for Brdg Insp 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**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).
10/22 – Present	**IDIQ Master Contract, Bridge Inspection and Related Services, Statewide, MS** – Project Manager & Team Leader for this inspection task (Task 1) to perform repair design inspections on 8 bridges. Provided input to load rating task (Task Two) involving load ratings of 4 bridges which utilized AASHTOWare BrR and LEAP for load rating. Project done for MS Office of State Aid Road Construction (OSARC)
11/19 – Present	**LADOTD IDIQ for In-Depth Inspection of Complex Bridges, Statewide, LA** – As a subconsultant, M&N’s PM & Team Leader to perform in-depth bridge inspections on complex, signature, long-span bridges. Inspected two cable-stayed bridges (Audubon & Luling) with rope access techniques to inspect 208 cables on the two bridges, their Gensui Dampers, and anchorages. Inspected I-10 Horace Wilkinson Bridge utilizing rope access techniques and rolling lane closures to greatly minimize traffic impacts. Performed a supplemental inspection of GNO Cantilever Truss Bridges in New Orleans utilizing rope access techniques. Performed a fracture critical inspection of Green Bridge, a steel tied arch in New Orleans utilizing rope access and UAS access techniques. Inspected 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/ implementation of 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, LA** – As a subconsultant, M&N’s PM/Team Leader for in-depth bridge inspections on complex, movable, long span, and precast segmental box girder bridges. Performed structural inspections of six (6) movable bridges utilizing detailed, nondestructive, & laboratory testing methods with hand sketches. Utilized NDE methods (laser & acoustic) to analyze rotational movement of an unstable pivot pier. Hands-on management/implementation of QC review plan is vital to continued success of this project.
09/13 – Present	**LADOTD IDIQ for Underwater Bridge Inspection, Statewide, LA** – Project Director/Team Leader for the third cycle of contracts under which M&N has 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	**Iris Leoncio, SE, PE**	Years of relevant experience with this employer	4
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	2003	Discipline	Civil and Structural Engineer
Contract role(s) / brief description of responsibilities	**Analysis & Load Rating / MPR #4, 5**		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/20 – present	**LADOTD IDIQ for In-Depth Bridge Inspection of Complex Structures, Statewide, LA** – Team Leader, performed 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.
05/16 - present	**VDOT Limited Services Term Agreement for NBIS Inspection of Highway Structures and Bridges, and Support Structures, Hampton Roads, VA** – • **Floorbeam Repairs, WBL Berkley Bridge (I-264) over the Eastern Branch of Elizabeth River.** PM/Structural Engineer for Stage II inspection and repair design of floor beams in the 178-ft-long double-leaf bascule span in order to improve its bridge load rating. Load rating studies were performed for as-designed and as-built conditions using AASHTOWare Bridge Rating (BrR). Design complexity was complicated by restrictions from 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. Required careful consideration of construction sequencing and design of temporary falsework and scaffolding. Provided Stage III construction phase services involving review & consultation. • **Route 17 over the James River Bridge Beam Strengthening.** PM/Structural Engineer for overseeing repairs to prestressed concrete beams to improve the load rating of the 4.4-mile-long bridge, which consists of 302 approach spans and a vertical lift span for both north/southbound directions. Carbon Fiber Reinforced Polymer (CFRP) was used to improve 29 beams with significant strand losses. Various anchoring methods were assessed to delay failure from fiber debonding that might compromise the full capacity of the repair system. Other post-tensioning repair techniques, including GRABB-IT cable splice assemblies, are also evaluated. Crucial aspects of design included use of recent research publications to manually calculate load ratings outside of VDOT's standard bridge rating software, avoiding lane closures on Route 17, maximizing efficient use of available construction funds, and adopting ACI guidelines. • **George P. Coleman Memorial Bridge (Route 17) over York River Bridge Load Rating.** Senior project engineer for the as-inspected load rating study of the truss spans of the 3750-ft-long 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 was 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.
10/07 – 12/07	**Walk Bridge, Norwalk, CT** – Project Engineer for condition evaluation and load rating of the 560-ft-long movable steel truss swing bridge over the Norwalk River, which carries railroad traffic.

16. Staff Experience:

Firm employed by	moffatt & nichol		
Name	**Eric Vugteveen, PE**	Years of relevant experience with this employer	25
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: 38667 / Louisiana / 09/30/24 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	1995	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.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/22 – 12/22	**Heavy Lift Transport Structural Analysis, Ukudu Power Station, Tamuning, Guam** – PM & lead structural engineer who led structural team performing pre-/post-transport special inspections and load ratings for nine bridges and culverts associated with an overweight permit application to move power generation equipment from the Port of Guam to the new Ukudu Power Station being constructed 12 miles north of the port. Twenty pieces of oversized/overweight equipment were moved using 16- or 22-axle self-propelled modular transport (SPMT) units with maximum vehicle loads up to 440 tons. BRASS CULVERT and BRASS GIRDER programs were used for load ratings of the larger structures. Structural analysis was also performed for 22 drainage structures/utility vaults the transports would cross.
07/18 – 12/23	**VDOT Statewide Limited Services Design Term Contract for Highway Structures and Bridges, Virginia** – PM, Asst. PM, or Sr. Structural Engineer for numerous tasks under this statewide, multi-year, on-call contract primarily for design of bridge replacements or maintenance & repair projects, but also including planning, load rating, construction services, and claim support. Mr. Vugteveen worked on two load rating tasks under this contract: • Load Rating & Additional Stage III Services, Route 644 over Meherrin River, Brunswick County. Lead structural eng. for as-built load rating of emergency repairs that utilized a temporary bent. Involved two major components: load rating of superstructure using AASHTOWare BrR program and load rating of temporary bent superstructure using hand/spreadsheet calculations. Repaired structure load rating completed in conformance with VDOT policies and Structure & Bridge Division Instructional and Information Memorandum for load rating. • Floorbeam Repairs, Berkley Bridge Westbound Lanes, Norfolk. Senior structural engineer for inspection & repair design of floorbeams in 178-ft-long, double-leaf bascule span in order to improve the bridge load rating. As-designed load rating study was performed using AASHTOWare Bridge Rating (BrR). Restrictions by U.S. Coast Guard and VDOT Hampton Roads District on permissible lane and channel closures, limited work hours at night, and likelihood of unscheduled bridge openings during construction added complexity to design. Careful consideration of construction sequencing and design of temporary falsework, scaffolding, containment structures, and other attachments to existing bascule leaves was required. Provided construction phase services involving review/consultation.
03/12 – 03/15	**VDOT Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures, Statewide, VA** – As a subconsultant, M&N provided load rating for structures in VDOT Region III using AASHTOWare's Bridge Rating program (formerly VIRTIS) in accordance with LRFR and LFR methodologies. As Senior Structural Engineer, Mr. Vugteveen provided guidance, technical input, and QC review of bridge load rating tasks under task 4. Superstructure types included RC slabs and tee beams, PS beams and voided slabs, steel beams with timber and concrete decks, steel plate girders, and steel floorbeam systems. Provided input to and QC review of load rating of 20 bridges which involved steel and concrete multi-girder or concrete slab bridges from Bristol, Salem, Richmond, Hampton Roads, Culpeper, and Staunton Districts. Rating performed in accordance with AASHTO Manual for Bridge Evaluation (2011) and VDOT Structure and Bridge Division Instructional and Information Memorandum. Utilized Load Resistance Factor Rating for 11 loads described in VDOT "Load Rating and Posting of Structures" using AASHTOWare's BrR.

16. Staff Experience:

Eric Vugteveen, PE (CONT.)	
11/08 – 11/11	**VDOT Region III, Limited Services Term Contract for Load Rating of Existing Structures, Arlington, Albemarle, Augusta, Fairfax, Fauguier, Fluvanna, Louisa, Prince William, Rockbridge, Shenandoah, and Warren Counties, and Several Independent Cities, Virginia,** – As a subconsultant, M&N provided load rating for 76 structures in VDOT Region III. Mr. Vugteveen was Asst. Project Manager/Sr. Structural Engineer for task orders to evaluate inspection reports & load rate bridges. Bridge types included steel, steel continuous, concrete, concrete continuous, & prestressed concrete. Spans ranged from two to eight spans. Utilized Load Resistance Factor Rating (LRFR) for 11 loads described in VDOT's "Load Rating and Posting of Structures" (2009) and AASHTO's VIRTIS program for analysis & load rating.
02/06 – 07/11	**VDOT Region II On-Call Contact for Bridge Inspection and Design, VA** – Structural Engineer who assisted various task orders as needed to meet increased demand, schedule, and budget constraints, primarily for load rating tasks. Assisted with rating in Northern Virginia, Hampton Roads, and Culpeper Districts. Completed or provided QC review of load ratings for steel, concrete, and timber bridges ranging in complexity from short, simple spans to longer, multiple-span curved bridges, including concrete arches and prestressed and post-tensioned concrete bridges. Load rating utilized ASSHTO's VIRTIS computer program. Also served as Assistant Project Manager to help manage contract.
11/02 – 09/03	**VDOT Region II On-Call Contract for Bridge Inspection and Design, Culpeper, Fredericksburg, Hampton Roads, Northern Virginia, and Richmond, Districts, VA** – Structural engineer for various task orders under the contract involving bridge inspection, load rating, and noise abatement (2002-2004). Tasks included: • Bridge Load Ratings for Northern Virginia District. Provided analysis and load rating of 32 bridges for bridge load rating based on as-built plans and most recent bridge inspection reports. Bridges were reinforced concrete slab (4), reinforced concrete beam (4), prestressed concrete slab (3), prestressed concrete beam (4), and steel beam (17) structures. Utilized AASHTO's program for bridge analysis and load rating (BARS).

16. Staff Experience:

Firm employed by	moffatt & nichol		
Name	**David Wolfe, PE**	Years of relevant experience with this employer	24
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 / 07/31/2025	
Year registered	2001	Discipline	Civil
Contract role(s) / brief description of responsibilities		**Analysis & Load Rating / MPR #4, 5**	

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/22 – 6/23	**IDIQ Master Contract, Bridge Inspection and Related Services, Statewide, MS** – Structural Engineer who provided guidance, technical input, and QC review of load ratings and load rating report of four bridges involving modeling within AASHTOWare's BrR software for superstructures and LEAP for substructures in accordance with LRFR and LFR.
05/22 – 12/22	**Heavy Lift Transport Structural Analysis, Ukudu Power Station, Tamuning, Guam** – Sr. structural eng. for pre-/post-transport load ratings of 9 bridges and several culverts associated with an overweight permit application to move power generation equipment from the Port of Guam to the new Ukudu Power Station being constructed 12 miles north of the port. Twenty pieces of oversized/overweight equipment were moved using 16- or 22-axle self-propelled modular transport (SPMT) units with maximum vehicle loads up to 440 tons. Provide load rating for one structure and QC review of 8 other bridges and culverts analyzed; BRASS CULVERT & BRASS GIRDER programs were used for load ratings of larger structures. Structural analysis was also performed for 22 drainage structures/utility vaults that the transports crossed.
08/18 – 06/20	**HDOT General Structural Engineering Services, Oahu, HI** – Bridge engineer for two tasks involving load ratings of various bridges/viaducts. M&N provided load rating for a subset of HDOT's bridge inventory, generally working on the more complex bridges that were outside of capabilities of HDOT's typical load rating software, BRASS. Ratings completed 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'. 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. Tasks involved: • Load Rating of 8 Segmental Concrete Bridges: provided load ratings for 8 segmental concrete bridges using finite element model LARSA 4D to account for time dependent effects of stresses associated with various construction stages. • Load Rating of 13 Post-Tensioned Concrete Box Girders: M&N performed load ratings of 13 post-tensioned concrete box girder bridges for FAST Act EVs. Finite element modeling using CSI Bridge was performed to more accurately model load sharing across the girders.
07/18 – 12/23	**VDOT Statewide Limited Services Design Term Contract for Highway Structures and Bridges, VA** – Sr. Structural Engineer for numerous tasks under this statewide, multi-year, on-call contract primarily for design of bridge replacements or maintenance & repair projects, but also including planning, load rating, construction services, and claim support. Under this contract, Mr. Wolfe worked on one load rating task: • Load Rating & Additional Stage III Services, Route 644 over Meherrin River, Brunswick County. Structural engineer who provided QC review of as-built load rating of emergency bridge repairs that utilized a temporary bent. Involved two major components: load rating of superstructure using AASHTOWare BrR program and load rating of temporary bent superstructure using hand/spreadsheet calculations. Repaired structure load rating completed in conformance with VDOT policies and Structure & Bridge Division Instructional and Information Memorandum for load rating.

16. Staff Experience:

David Wolfe, PE (CONT.)	
03/15 – 03/18	**VDOT Limited Services Term Contracts for Providing Load Ratings of Existing Highway Structures, Statewide, VA** – As a subconsultant, M&N's PM/lead 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. Provided rating, checking, or QC review of load ratings of 60 bridges under 11 task orders involving superstructure types 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 (FY 2015), Oahu, HI** – Bridge engineer for load ratings tasks for various bridges on Oahu in accordance with the AASHTO Manual for Bridge Evaluation as amended in the HDOT 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, VA** – Bridge engineer for nine tasks and PM/bridge engineer for a 10th task for load ratings using AASHTOWare's Bridge Rating program (formerly VIRTIS) in accordance with LRFR and LFR methodologies. Completed rating or checking for load ratings of more than 100 bridges involving 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. M&N completed ratings for 205 bridges under the contract.
11/08 – 11/11	**VDOT Region III, Limited Services Term Contract for Load Rating of Existing Structures, Arlington, Albemarle, Augusta, Fairfax, Fauguier, Fluvanna, Louisa, Prince William, Rockbridge, Shenandoah, and Warren Counties, and Several Independent Cities, VA** – As a subconsultant for this IDIQ contract, M&N provided load rating for 351 structures in VDOT Region III. As a Bridge Engineer, Mr. Wolfe evaluated inspection reports & provided bridge load rating. Bridge types included steel, steel continuous, concrete, concrete continuous, & prestressed concrete. Spans ranged from two to eight spans. Utilized Load Resistance Factor Rating (LRFR) for 11 loads described in VDOT's "Load Rating and Posting of Structures" (2009) and AASHTO's VIRTIS program for analysis & load rating.
11/09 – 07/10	**VDOT Limited Services Term Contract for New Design Plans and Inspection Services of Highway Structures and Bridges, Culpeper District, Culpeper County, VA** – Under this LSC, Mr. Wolfe was bridge engineer for six task orders to rate bridges within the Culpeper District. Rated or checked 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). In total, M&N rated 46 bridges under the 6 task orders.

16. Staff Experience:

Firm employed by	moffatt & nichol		
Name	**Isabella Mejdrech, PE**	Years of relevant experience with this employer	4
Title	Structural Engineer	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization	MS / 2020 / Civil Engineering BS / 2019 / Civil Engineering		
Active registration number / state / expiration date	56189 / North Carolina / 12/31/2023		
Year registered	2023	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.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/22 – 06/23	**IDIQ Master Contract, Bridge Inspection and Related Services, Statewide, MS** – Structural Engineer for load ratings of super-/substructures of four bridges involving modeling within AASHTOWare's BrR software for superstructures and LEAP for substructures in accordance with LRFR and LFR. Analysis included incorporating findings from field work and inspection reports. In addition to the rating, a summary report was generated to provide findings/give recommendations for posting if necessary.
03/22 – 03/23	**Bridge & Culvert Load Ratings, 85 Structures, Virginia Beach, VA** – Structural engineer who led and provided load rating of existing bridges (58) and culverts (27) using AASHTOWare BrR which were completed in 8 months to meet Fixing America's Surface Transportation (FAST) Act requirements. Structures were steel &/or concrete structures. Identified bridge defects from inspection reports. Created as-built and existing condition models. Prepared Load Rating Report & Load Rating Summary Form for submittal to the City. Provided bridge posting recommendations.
03/21 – 06/21	**VDOT Limited Services Term Agreement for NBIS Inspection of Highway Structures and Bridges, and Support Structures, Hampton Roads, VA** – Structural Engineer for several tasks under this VDOT LSC including: • Load Rating, Berkley Bridge (I-264) over Eastern Branch of Elizabeth River, Norfolk. Provided load rating of approach & double bascule spans (eastbound/westbound lanes). Developed AASHTOWare BrR model for load rating. Identified bridge defects from inspection reports, prepared load rating report, and made bridge posting recommendations.
09/20 - present	**Engineering Services – Bridge Design, Suffolk, VA** – Structural engineer for an engineering services contract with the City primarily for bridge repair &/or replacement tasks. Specific tasks included: • Freeman Mill Road Bridge Replacement. Assisted field investigation & bridge replacement design utilizing current AASHTO & VDOT specifications. Prepared construction drawings, load rating, & cost estimate following VDOT Cost Estimating Manual. Utilized AASHTOWare BrR software for load rating. Coordinated with roadway designer to verify compatibility between road & bridge design. Assess geotechnical report to design substructure elements. • Longstreet Lane Bridge Replacement. Assisted bridge replacement design utilizing current AASHTO & VDOT specifications. Included load rating & construction document preparation following VDOT Cost Estimating Manual. Utilized AASHTOWare BrR software for load rating. Coordinated with roadway designer to verify compatibility between road & bridge design. Assessed geotechnical report to design substructure elements. Currently providing construction support services (RFI responses, submittal review, and occasional site inspections).
07/20 – 07/23	**IDQ for Bridge Inspections & Engineering Services, City of Norfolk, VA** – Structural engineer for inspection and rehabilitation of bridges, culverts, and depressed roadways within the City. Services included inventory & operating load rating analyses per VDOT guidelines, in-depth inspection/reports, underwater inspection, construction documents for bridge repair, rehabilitation, or replacement, and construction administration services. Ms. Mejdrech worked on the following task: • Hampton Boulevard Bridge (Northbound) Rehabilitation, Norfolk, VA. Assisted preparation of construction documents, load rating, and cost estimate for rehabilitation of the Hampton Boulevard Bridge.

16. Staff Experience:

Isabella Mejdrech, PE (CONT.)	
07/18 - present	**Inspection of Bridges, Traffic Control Device Structures, & Review of Overweight Vehicle Permits, Suffolk, VA** – Structural engineer for this on-call contract to provide inspection of City bridges, culverts & traffic control devices as well as overweight vehicle permit reviews, bridge repair design, & construction document preparation. Bridge types were vehicle, railroad, & pedestrian and included underpasses. For several tasks, Ms. Mejdrech provided load rating of timber, concrete, and steel bridges and culverts which involved developing AASHTOWare BrR models. For those models, she identified bridge defects from inspection reports, developed load rating report, and provided bridge posting suggestions. Under three tasks, load rating was provided for 27 bridges & 22 culverts.
07/18 – 12/23	**VDOT Statewide Limited Services Design Term Contract for Highway Structures and Bridges, VA** – Structural Engineer for numerous tasks under this statewide, multi-year, on-call contract primarily for design of bridge replacements or maintenance & repair projects, but also including planning, load rating, construction services, and claim support. Under this contract, Ms. Mejdrech worked on one load rating task: • Superstructure Replacement and Bridge Repairs on Rte 708 over North Fork Hardware River, Albemarle County. Perform structural analysis/ design of bridge components following AASHTO and VDOT specifications. Checked as-designed & as-built load ratings performed using AASHTOWare Bridge Rating (BrR).
06/18 – 12/21	**Annual Bridge & Culvert Inspection Program, City of Newport News, VA** – Structural engineer for load rating of bridges and culverts for SHVs and FAST Act vehicles using AASHTOWare BrR. For those models, she identified bridge defects from inspection reports, developed load rating report, and provided bridge posting suggestions, if required. Bridge and culverts types were timber, concrete, and steel.
06/18 – 07/20	**Bridge Load Rating Analysis, Newport News, VA** – Structural engineer who provided load rating of 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. Tasks included: • Load Rating, Route 17 Bridge over the James River. Provided load rating of approach spans (NBL & SBL) of James River Bridge. Using AASHTO BrR, created load rating model. Identified bridge defects from inspection reports, developed load rating report, and made bridge posting recommendations.

SECTION 17

FORTE & TABLADA

17. Firm Experience:

Firm name	FORTE & TABLADA Forte and Tablada, Inc.	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**Retainer Contract for Off-System Complex Bridge Load Rating – TO2 & TO4**	Firm responsibility (prime or sub?)	Prime
Project number	S.P. No. H.012485.1/H.012485.5	Owner's name	LADOTD
Project location	Statewide, LA	Owner's Project Manager	Dana Feng, P.E.
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1200, Dana.Feng@LA.gov	
Services commenced by this firm (mm/yy)	04/19	Total consultant contract cost ($1,000's)	$2,157.1
Services completed by this firm (mm/yy)	05/22	Cost of consultant services provided by this firm ($1,000's)	$2,005.2

As part of Task Orders 2 and 4 of a Load Rating retainer contract with LADOTD, **Forte and Tablada has load rated over 500 bridges** and over 220 culverts statewide. Due to deadlines imposed by FHWA, this work was done **on a severely compressed schedule**. For the bridges, where conditions warranted, or if the structural details to be used for the load rating could not be determined from previous photographs, inspections to determine structural details and to measure deficiencies were performed. Additionally, Load Rating Plans were developed, as necessary.

The culvert load ratings were based on field measurements and condition assessment reports produced by Forte and Tablada under TO3.

For all approximately 700 structures, the scope of work also included the submittal of a Load Rating Report in accordance with LADOTD requirements.

BY THE NUMBERS

546 BRIDGES RATED

$4,109 PER BRIDGE*

30 BRIDGES RATED PER MONTH

*Savings enabled F&T to laser scan and load rate the Linwood Rd Bridge, a deteriorated steel bridge without plans and with multiple railroad crossings

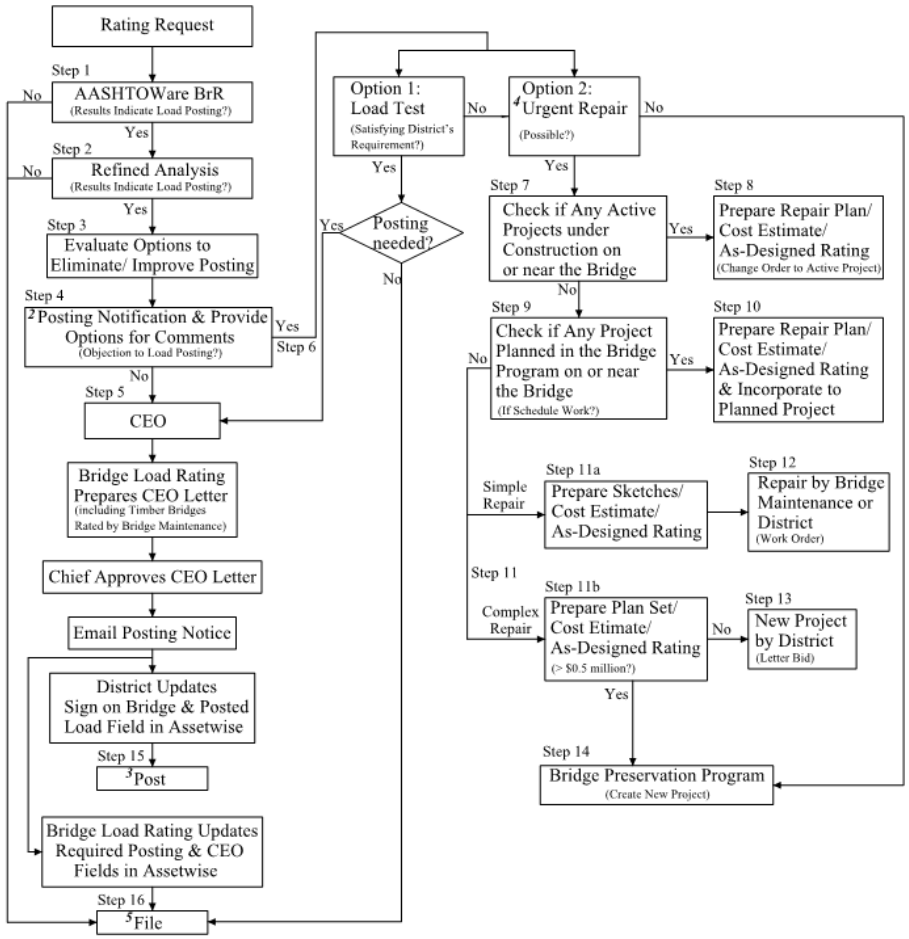
Project Team:

Joey Coco, Jr., P.E. - Principal-in-Charge
Joffrey Easley, P.E. - Project Manager
Jason Fennell, P.E.

17. Firm Experience:

Firm name	FORTE & TABLADA Forte and Tablada, Inc.	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**IDIQ Contract for Bridge Load Rating Services – TO1**	Firm responsibility (prime or sub?)	Prime
Project number	S.P. No. H.009859.5	Owner's name	LADOTD
Project location	Statewide, LA	Owner's Project Manager	Corey Bourgeois, PE
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1027, corey.bourgeois@LA.gov	
Services commenced by this firm (mm/yy)	09/22	Total consultant contract cost ($1,000's)	$1,352.3
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$913.9

As part of a Load Rating retainer contract with LADOTD, Forte and Tablada is currently tasked with inspecting and **load rating 95 on-system slab span** bridges that have experienced a Superstructure or Substructure Condition Rating drop since the last time it was load rated. The load ratings are being performed in accordance with **LADOTD BDEM.96** – Publication of Load Rating, Posting and Strengthening Standard Operating Procedure (SOP). Task 1 entails the **gathering of bridge documentation**; Tasks 2 and 3 include the load rating and **creation of a Load Rating Report** in accordance with the requirements of the LADOTD BDEM; Task 4 is a **Site Visit** (as required to gather bridge characteristics for the load rating and to observe deficiencies). While many of these bridges were constructed using historical LADOTD Standard Details, due to the age and poor condition of these bridges, the load ratings required consideration of multiple deteriorated and retrofitted components. Many required an advanced analysis in order to maximize the posted load. For bridges that required a posting (or closure), repair recommendations that would improve (or remove) the posting were developed. Once the repairs were made, updated load rating reports were quickly provided to restore the functionality of these bridges.



Project Team:

Joey Coco, Jr., P.E. - Principal-in-Charge
Joffrey Easley, P.E. - Project Manager
Levi Yantis, P.E.
Jennifer Nicaud, P.E.

17. Firm Experience:

Firm name	FORTE & TABLADA Forte and Tablada, Inc.	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**Retainer Contract for Off-System Complex Bridge Load Rating – TO1**	Firm responsibility (prime or sub?)	Prime
Project number	S.P. No. H.009859.5	Owner's name	LADOTD
Project location	Statewide, LA	Owner's Project Manager	Dana Feng, P.E.
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1200, Dana.Feng@LA.gov	
Services commenced by this firm (mm/yy)	01/18	Total consultant contract cost ($1,000's)	$1,316.8
Services completed by this firm (mm/yy)	02/19	Cost of consultant services provided by this firm ($1,000's)	$1,136.4

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

Project Team:

Joey Coco, Jr., P.E. - Principal-in-Charge
Joffrey Easley, P.E. - Project Manager
Jason Fennell, P.E.
Levi Yantis, P.E.

St. Claude Bridge for Port of New Orleans Inspected and Rated

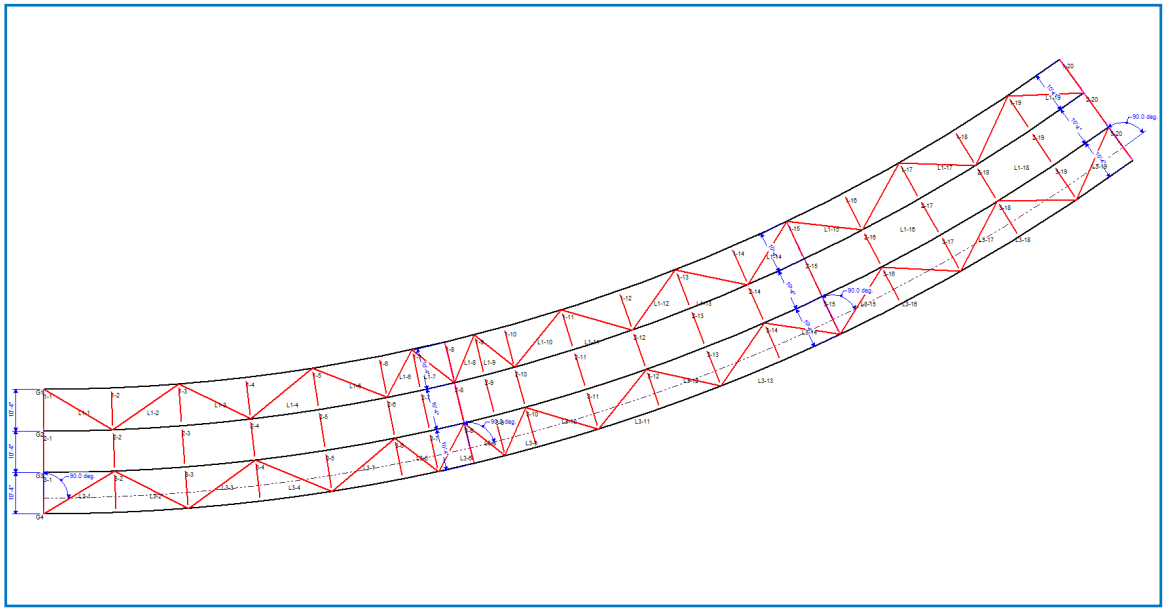
17. Firm Experience:

Firm name	FORTE & TABLADA Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project name	**Retainer Contract for On-System Bridge Load Rating**		Firm responsibility (prime or sub?)	Sub-Consultant
Project number	13205	Owner's name	LADOTD c/o Stantec	
Project location	Statewide, LA	Owner's Project Manager	Brian Johnson, P.E. (Stantec)	
Owner's address, phone, email		Stantec, 500 Main Street, Baton Rouge, LA 70801, 225-765-7400, brian.johnson2@stantec.com		
Services commenced by this firm (mm/yy)	03/14	Total consultant contract cost ($1,000's)	Unknown	
Services completed by this firm (mm/yy)	03/17	Cost of consultant services provided by this firm ($1,000's)	$881.0	

As a sub-consultant to Stantec, Forte and Tablada load rated approximately **220 bridges** across the state of Louisiana. Bridge size and complexity varied greatly, from small **slab span bridges** constructed using LADOTD Standard Plans, to **miles-long bridges on Interstate routes** constructed of PPC and steel girders. AASHTOWare BrR (formerly Virtis), Bentley LEAP Bridge (formerly RC Pier), and other software packages were used to determine the LRFR Rating Results and provide Load Rating reports in conformance with LADOTD requirements.

Project Team:

Joey Coco, Jr., P.E. - Principal-in-Charge
Joffrey Easley, P.E. – Project Manager
Jason Fennell, P.E.
Levi Yantis, P.E.



Framing Plan View of a Curved Steel Plate Girder Modeled in BrR (formerly Virtis)

17. Firm Experience:

Firm name	FORTE & TABLADA Forte and Tablada, Inc.	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**E Lewis St Load Rating and Rehabilitation / Replacement**	Firm responsibility (prime or sub?)	Prime
Project number	S.P. No. H.009859.5	Owner's name	Lafayette Consolidated Government (LCG)
Project location	Statewide, LA	Owner's Project Manager	Alison Lognion, P.E.
Owner's address, phone, email		1515 E University Ave., Lafayette, LA 70501, 337-291-8522, ALognion@LafayetteLA.gov	
Services commenced by this firm (mm/yy)	07/23	Total consultant contract cost ($1,000's)	$Unknown
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$9.1 (to date)

The **E Lewis Street bridge over Mine Coulee** (Recall No. 200286) is adjacent to US 167 (Johnston Street) in Lafayette, Louisiana and serves the University Louisiana at Lafayette (ULL). This is a two-lane bridge with sidewalks and is composed of two slab spans and one steel girder span. A recent load rating (and subsequent load testing) of this bridge by others resulted in a **3-Ton load posting** recommendation. This required significant changes to the commuter bus route for ULL, which resulted in longer commute times.

Forte and Tablada was engaged by LCG to investigate this bridge to determine rehabilitation/replacement options to **increase the load posting** of this bridge. We engaged testing companies to determine the concrete compressive strength and the chemical composition of the steel beams to determine the steel grade. Also, **the bridge was laser scanned** in order to determine precise dimensions and component sizes since plans are not available for this bridge. Using the field-determined properties and the results of the previous load testing, an u**pdated load rating resulted in a No Posting** recommendation.

Currently, we are working with LCG to develop plans to strengthen the steel girders to improve their long-term performance. We are also determining preservation details (concrete spall repairs, concrete-lined channel improvements, concrete crack injection, etc.) to provide for **years of additional service**.

Project Team:

Joey Coco, Jr., P.E. - Principal-in-Charge
Joffrey Easley, P.E. - Project Manager
Levi Yantis, P.E.

17. Firm Experience:

Firm name	Stantec	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**LADOTD Bridge Load Rating Retainer**	Firm responsibility (prime or sub?)	
Project number	N/A	Owner's name	Louisiana Department of Transportation and Development
Project location	Statewide, Louisiana	Owner's Project Manager	Billy Metcalf
Owner's address, phone, email		1201 Capital Access, Baton Rouge, LA 70808 | 225-379-1741 | William.metcalf@la.gov	
Services commenced by this firm (mm/yy)	03/13	Total consultant contract cost ($1,000's)	$2,993
Services completed by this firm (mm/yy)	03/17	Cost of consultant services provided by this firm ($1,000's)	$2,110

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

The scope of services included plan and document review, condition verification, load rating analyses, and developing reports with posting recommendations. Structure types included concrete slab spans, prestressed concrete girder spans, structural steel girder units, voided concrete decks, steel trusses, pile bents (timber, concrete, and steel), and concrete hammerhead piers.

Project Relevance:

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

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

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

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

Team Members Involved: B. Johnson, K. Malpani, J. Krebs, A. Botros* (*not w/Stantec at time)

17. Firm Experience:

Firm name	Stantec	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**Truss Bridges Inspection and Load Rating**	Firm responsibility (prime or sub?)	Prime
Project number	NBIS (140)/108451-101000	Owner's name	Mississippi Department of Transportation
Project location	Itawamba, Leflore, Quitman and Stone Counties, Mississippi	Owner's Project Manager	Neal Terry
Owner's address, phone, email		401 North West Street, Jackson, MS 39201 | 601-359-7200 | nterry@mdot.ms.gov	
Services commenced by this firm (mm/yy)	12/20	Total consultant contract cost ($1,000's)	$461
Services completed by this firm (mm/yy)	04/22	Cost of consultant services provided by this firm ($1,000's)	$461

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

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

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

Project Relevance:

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

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

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

Team Members Involved: B. Johnson, R. Nataluk, A. Botros, M. Ye

17. Firm Experience:

Firm name	Stantec	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**Mississippi Complex Bridge Inspection and Load Rating**	Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Mississippi Office of State Aid Road Construction
Project location	Statewide, Mississippi	Owner's Project Manager	David Barrett
Owner's address, phone, email		412 Woodrow Wilson Ave., Jackson, MS 39215 | 601-359-7129 | dbarrett@osarc.state.ms.us	
Services commenced by this firm (mm/yy)	08/20	Total consultant contract cost ($1,000's)	$1,567
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$1,289

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

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

Project Relevance:

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

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

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

Team Members Involved: B. Johnson, J. Krebs, K. Malpani, A. Botros, M. Ye, M. Brodnax, J. Tisdale, S. Torry, R. Nataluk, T. Perkins

17. Firm Experience:

Firm name	HNTB	Past Performance Evaluation Discipline(s)*	Bridge
Project name	Complex Load Rating of 9 Bridges	Firm responsibility (prime or sub?)	Sub
Project number	4400004920 T.O. #01	Owner's name	Louisiana Department of Transportation and Development
Project location	Rapids Parish and St. Mary Parish, LA	Owner's Project Manager	William Metcalf, PE
Owner's address, phone, email		1201 Capitol Access Rd, Baton Rouge, LA 70802 | (225) 379-1070 | william.metcalf@la.gov	
Services commenced by this firm (mm/yy)	03/16	Total consultant contract cost ($1,000's)	$581
Services completed by this firm (mm/yy)	09/19	Cost of consultant services provided by this firm ($1,000's)	$581

As part of a five-year complex bridge load rating as a subconsultant to another firm, HNTB was tasked with a LRFR load rating on two complex truss bridges as part of a 9 bridge complex load rating bundle. The bridges included were the Charenton Canal Bridge (LA 182) in St. Mary Parish and the Jackson Street Bridge over the Red River in Rapids Parish. Both structures are steel truss bridges, with the Jackson Street Bridge being a steel truss vertical lift bridge. Prior to performing the load ratings, HNTB performed inspections of both structures to account for any structural defects.

The load ratings of these structures were primarily performed using AASHTOWare BrR (formerly Virtis) utilizing the truss analysis feature. Other span types were also rated using BrR. Substructures were rated using RC Pier and Microsoft Excel.

In a separate task order under another contract, HNTB wrote rehabilitation recommendations report for the Charenton Canal Bridge.

Project Team: Josh Porter

Project Relevance:

- Load rating of Complex bridge structures
- Inspection of Complex Bridge Structures

17. Firm Experience:

Firm name	HNTB	Past Performance Evaluation Discipline(s)*	Bridge
Project name	I-10 Calcasieu Load Ratings	Firm responsibility (prime or sub?)	Prime
Project number	H.009859.5	Owner's name	Louisiana Department of Transportation and Development
Project location	Calcasieu Parish, Louisiana	Owner's Project Manager	Kelly Kemp
Owner's address, phone, email		1201 Capitol Access Rd, Baton Rouge, LA 70802; (225) 379-1741; Kelly.Kemp@la.gov	
Services commenced by this firm (mm/yy)	01/19	Total consultant contract cost ($1,000's)	$426
Services completed by this firm (mm/yy)	08/20	Cost of consultant services provided by this firm ($1,000's)	$426

The I-10 corridor in Calcasieu Parish, Louisiana is currently under environmental investigation for widening. As part of the environmental investigation, it was noted that LRFR load ratings had not been performed on many of the structures along this corridor. In order to determine whether structures would be widened, or replaced as part of the widening project, the structures required updated load ratings.

As a part of is bridge preservation IDIQ contract, HNTB was tasked with load rating 23 structures of varying structure type and complexity. Structure types included continuous reinforced concrete deck girders, prestressed concrete girders, rolled steel I-beams and continuous steel plate girders. Several of the structures required unique approaches to allow for AASHTOWare BrR to adequately account for the existing conditions. Two continuous reinforced concrete girder bridges with on/off ramps joining main spans were required to be rated. This required creating a "dummy" girder line to account for continuous live loads.

Project Team: Joshua Porter, Marc Hoffmann, Nicholas Hart, Ben Goodner

Project Relevance:

- Steel Girder Spans
- Continuous Reinforce Concrete Girders
- Load rating using AASHTOWare BrR

17. Firm Experience:

Firm name	HNTB	Past Performance Evaluation Discipline(s)*	Bridge
Project name	I-20 Rehabilitation (Pines Road to I-220)	Firm responsibility (prime or sub?)	Prime
Project number	H.012889.5	Owner's name	Louisiana Department of Transportation and Development
Project location	Bossier Parish, Louisiana	Owner's Project Manager	Andrew Windmann
Owner's address, phone, email		1201 Capitol Access Rd, Baton Rouge, LA 70802 | (225) 379-1741 | Andrew.Windmann@la.gov	
Services commenced by this firm (mm/yy)	08/20	Total consultant contract cost ($1,000's)	$908
Services completed by this firm (mm/yy)	08/21	Cost of consultant services provided by this firm ($1,000's)	$908

HNTB was tasked with performing LRFR load ratings as part of a larger road reconstruction, median barrier construction and bridge rehabilitation project. The task included the performance of load ratings at 7 bridge sites for a total of 14 bridges. Bridge types included curved steel plate girders, including spans with pin and hanger connections, continuous concrete deck girders, and prestressed concrete girders. Curved steel continuous bridges with pin and hanger connections were required to be analyzed using 3-D FEA modeling. Influence lines were also created to aid the DOTD in future overload vehicle analysis. The analysis was done utilizing AASHTOWare BrR software when applicable. 3-D FEA modeling was performed using LARSA.

In addition to the load ratings of the structures along this corridor, several of the structures required abutment, backwall, and approach slab rehabilitations through separate task orders. Accelerated bridge construction techniques were utilized to replace the backwalls and approach slabs with weekend lane closures. This allowed the construction to be completed while limiting impacts to traffic along this very heavily travelled corridor.

Project Team: Joshua Porter, Marc Hoffmann

Project Relevance:

- Complex bridge structures
- Load rating
- FE analysis
- Bridge rehabilitation

17. Firm Experience:

Firm name	moffatt & nichol	Past Performance Evaluation Discipline(s)*	Bridge
Project name	**IDIQ Master Contract, Bridge Inspection and Related Services**	Firm responsibility (prime or sub?)	Sub
Project number	NBIS (150)/107621 -106100 & -106000	Owner's name	Mississippi Office of State Aid Road Construction (OSARC)
Project location	Mississippi	Owner's Project Manager	C. David Barrett (Program Manager)
Owner's address, phone, email		412 E. Woodrow Wilson Avenue, Jackson, MS 39216 (601) 359-7129 dbarrett@osarc.ms.gov	
Services commenced by this firm (mm/yy)	10/22	Total consultant contract cost ($1,000's)	Unknown
Services completed by this firm (mm/yy)	12/26	Cost of consultant services provided by this firm ($1,000's)	$ 115

As a subconsultant, Moffatt & Nichol has provided engineering services involving bridge inspection, load rating, and other on-call services under OSARC's National Bridge Inspection Standards (NBIS) Bridge Inspection program for bridges owned/maintained by various counties, cities, or towns throughout Mississippi. Tasks included performance of NBIS compliant inspections, evaluations, and load ratings for various bridge types (routine & complex) involving routine, initial, in-depth, special, fracture critical, damage, supplemental, and/or repair inspections and load rating.

Under our second task order, M&N provided load rating analysis for 4 bridges using AASHTOWare BrR (v7.4.0) for primary superstructure members & LEAP Bridge Concrete (v20) model together with MicroSoft Excel. Services included downloading bridge information/inspection data from AssetWise, performing load ratings, & creating a load rating report in AssetWise. Load rating incorporated all deficiencies from the most recent inspection report. Ratings were provided for inventory loads, operating loads, & legal loads vehicles.

The four rated bridges and the results of those ratings were:

- Westside Avenue over Indian Bayou (SA67-068), Sunflower County - Controlling members were varied between a girder in the superstructure and a bent cap in the substructure. Depending on the vehicle analyzed, controlling ratings varied between the two members. Based on rating results, no posting was recommended for the interior girders in the superstructure. Based upon the load rating results, posting was recommended for the EV3 vehicle.
- Preacher Powell Road over Catahoula Creek (SA23-006), Hancock County - Controlling ratings were for the interior girders in the superstructure. Based upon the load rating results, posting was recommended for the EV3 vehicle.
- D. Newman Road over Five Mile Creek (SA25-100), Hinds County – Controlling ratings were primarily for the exterior girders in the superstructure (one vehicle was controlled by bent cap). Based upon the load rating results, no posting was recommended.
- Hardy Billips Road over Magowah Branch (SA44-17), Lowndes County – Controlling ratings were primarily for the exterior girders in the superstructure and the as-built bent cap for the substructure. Depending on the particular vehicle analyzed, controlling ratings varied between the two members. Based upon the load rating results, no posting was recommended.

Under our initial task, M&N completed NBIS inspections for 8 bridges. Acquired general information, inventory photos, channel soundings, channel/ scour data, and deck/super/substructure condition. Provided reports (generated in AssetWise) covering inspection findings with summary noting structural deficiencies. Inspected bridges were 1, 2, or 3 span structures utilizing timber, steel, &/or concrete superstructures with timber, steel, &/or concrete substructures. Bridge decks included gravel, gravel/dirt, asphalt/gravel, or asphalt/dirt/gravel overlays.

Project Team:
Herodotos Pentas, PhD, PE,
Chace Hulon, PE
David Wolfe, PE
Isabella Mejdrech, PE
Stephanie Athanas, EI

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	Contract DOT-18-031	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)	08/18	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

Moffatt & Nichol was retained by the Hawaii DOT (HDOT) to conduct load ratings on the states' inventory of concrete bridges/viaducts. 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 provided load rating for a subset of HDOT's bridge inventory, generally working on the more complex bridges that were outside of capabilities of HDOT's typical load rating software, BRASS.

As the prime consultant, M&N led the project and provided Load and Resistance Factor Rating (LRFR) and Load Factor Rating (LFR) reports for each bridge. 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 utilized for 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.

Load rating reports were compiled in the client's format, using standard HDOT tables, and included descriptions of analytical models and 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: M&N performed load ratings for 8 segmental concrete bridges. Finite element modeling using LARSA 4D was performed to account for time dependent effects of stresses associated with various stages of bridge construction.
- PAO-2: Load Rating of 13 Post-Tensioned Concrete Box Girders: M&N performed load ratings of 13 post-tensioned concrete box girder bridges for 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: M&N completed 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.

Project Team:
Eric Vugteveen, PE
David Wolfe, PE

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	Statewide, 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)	11/08	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	

Moffatt & Nichol, as a subconsultant under three consecutive contracts (2008 to 2018), performed load ratings of various types of highway structures on a regional (Culpeper, Staunton, & Northern Virginia Districts) and statewide basis for the Virginia DOT (VDOT). To provide the highest quality for load ratings, the team developed QA/QC plans specifically for these contracts. Load ratings were performed in accordance with VDOT policies and procedures and the AASHTO Manual for Bridge Evaluation. Results were reported on VDOT's standard load rating summary form along with documentation of the load rater's assumptions. Superstructure load ratings were accomplished using AASHTOWare Bridge Rating (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 were 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
- 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
- 54 structures with precast (Con/span, Bebo and Omega) and cast-in-place concrete frames and arches (including Luten arches)

Project Team:
Eric Vugteveen, PE
David Wolfe, PE.

SECTION 18

Introduction

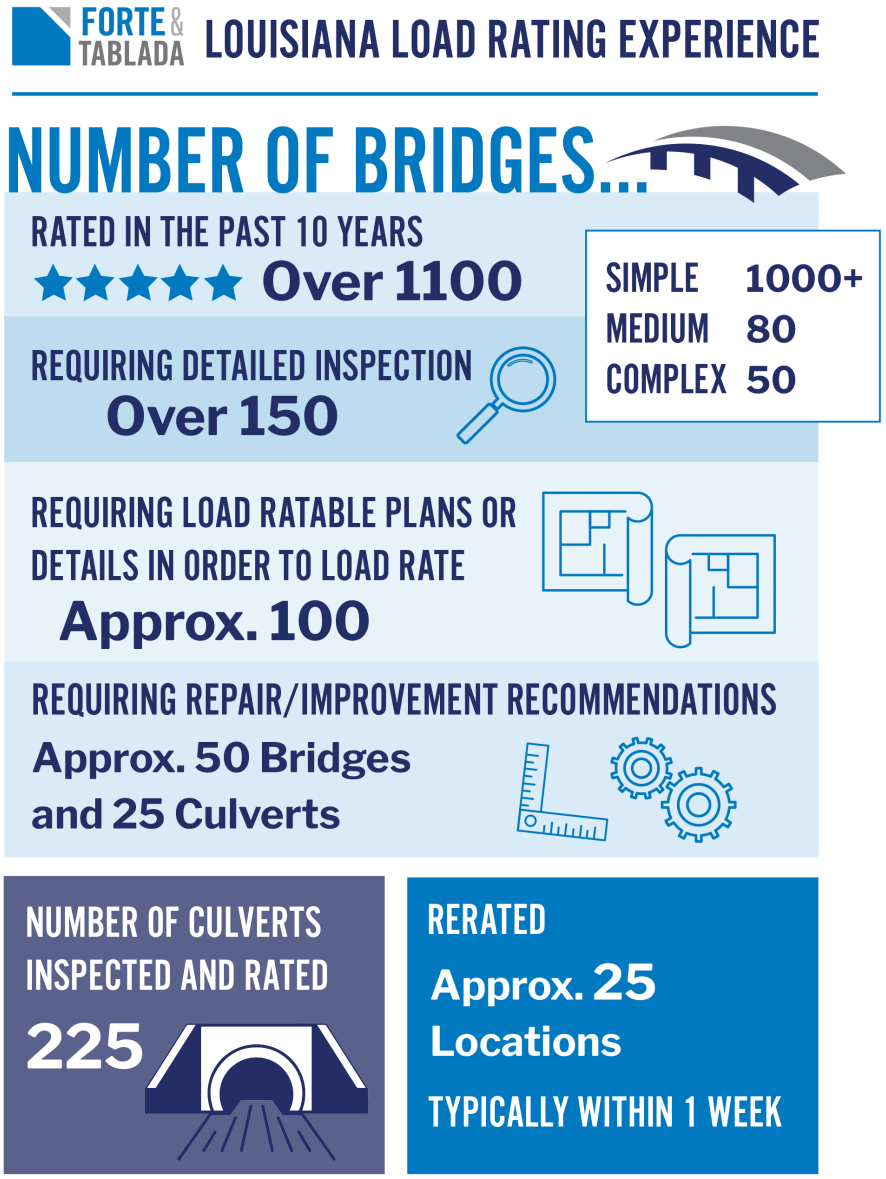
The F&T team is comprised of a group of knowledgeable and well-respected engineers that are uniquely experienced in all aspects of the management of existing bridges. We have vast experience in the inspection, load rating, and rehabilitation of all bridge types, from timber stringer bridges to complex movable bridges. Our team has load rated thousands of numerous bridges across the state, both for LADOTD through IDIQ contracts and for numerous municipal clients. All of these factors make our team uniquely qualified to provide load ratings for all bridge types that are efficient, accurate, and take into account the specifics of the bridge site. We are very aware that in many cases load posting a bridge that has a significant impact on the traveling public. We will work closely with LADOTD throughout the process to keep everyone informed of our findings and to discuss the best path forward when the load rating results in a load posting, including utilizing advanced analysis methods and making repair recommendations to improve the posting.

Task 1: Plan and Document Retrieval and Review

SPOTLIGHT

F&T recently earned a 5.0 out 5.0 rating from LADOTD for its efforts in bridge load rating / evaluation / instrumentation. We have met and exceeded schedule and budget expectations set forth by LADOTD through each Task Order we have been issued.

The F&T team will perform an exhaustive review of all available information on bridges to be load rated. This includes previous Inspection Reports, plans, previous load ratings, repair details, pile sketches, and any other documents from the AssetWise database, as well as LADOTD HQ (Sections 51 and 25), District offices, Parish offices, and engineering firms involved with the design and rehabilitation of the bridge. For bridges without plans, our team will use our vast database of historical LADOTD Standard Plans, photos on AssetWise, and the knowledge that has been gained by load rating hundreds of bridges without plans to determine if the load rating can be performed by assuming a Standard Plan. Once all available information is gathered and reviewed, Task 2: Site Visits will be planned based on a determination of the information that is required to be obtained in the field.



Task 2: Site Visits

The F&T team offers LADOTD a local skilled staff with deep experience across the state of Louisiana in the inspection of existing bridges, both NBIS level inspections and inspections to gather dimensions, properties, and deterioration information to be able to perform a load rating. Thorough planning prior to performing a site visit is a critical component to the safety, efficiency, and overall success of this Task.

The site visits for this project will follow the requirements of the LADOTD Bridge Inspection Manual (Section 5.16), AASHTO's MBE, and EDSM IV.4.1.2 and will be specifically focused on obtaining the most current bridge conditions in order to produce the most accurate results for the load rating purposes.

Based on a review of the condition of the bridge noted in the Inspection Report and the availability of plans, the inspection team and load rating team members will work together to determine if an inspection is required, and if so, what information will need to be gathered in the field. During the site visit, we will:

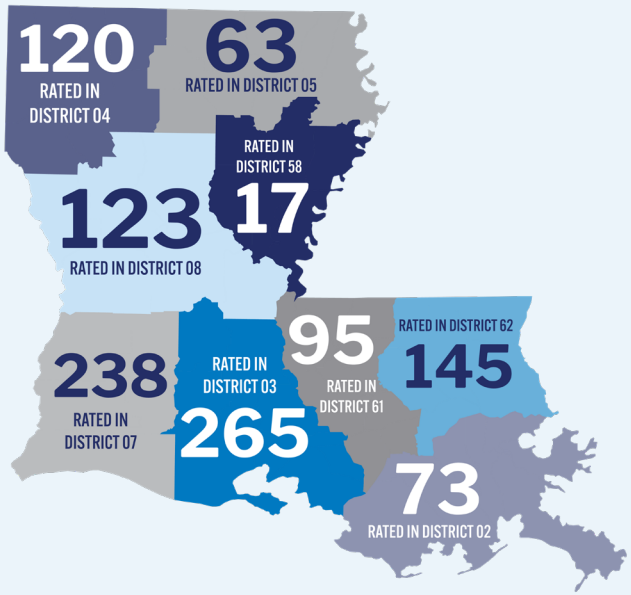
- Identify a safe staging area at the bridge site for all parties to conduct daily tailgate safety meetings that include potential hazards, a communication plan, agree on weather response notifications for inclement weather and the planned positioning of all equipment and inspection teams.
- A thorough documentation of deficiencies for each element in a clear and concise manner will be thoughtfully organized.
- Conditions are reviewed in the previous report and are referenced to note the rate of change in the assessment.
- 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 damage at any given location.
- Nondestructive testing tools and technology may be used for thorough and accurate documentation.

TYPES OF BRIDGES LOAD RATED

- ✓Timber Spans
- ✓Slab Spans
- ✓PPC and Steel Girder Spans
- ✓Moveable – Lift, Swing, Bascule
- ✓Steel Truss Spans
- ✓Railcar Spans
- ✓Multicell Concrete Box Spans
- ✓CMP and Concrete Culverts
- ✓Pile Bent, Column Bent, Hammerhead, and Steel Frame Substructures

- Measure expansion joints and bearings for movement with weather conditions recorded.
- Upon return to the office, all field notes will be cataloged, photos cross-referenced, and information required for the load rating will be summarized.
- Should our team find a structural or safety-related deficiency, will immediately notify LADOTD of our findings.

F&T RATED BRIDGES



1,139 TOTAL

Task 3: Analysis and Load Rating Modeling & Analysis

The F&T team is composed of a collection of engineering firms and staff with experience load rating thousands of bridges throughout Louisiana and the Gulf Coast, from small timber bridges to complex movable bridges and major river crossings. We are uniquely qualified and staffed to be a valuable resource to LADOTD to quickly and efficiently load rate any type of bridge in Louisiana's inventory. We are well-versed in the requirements in the AASHTO MBE and the LADOTD BDEM, as well as the use of AASHTOWare BrR, LEAP Bridge, FEM packages, and in-house Mathcad and Excel spreadsheets to perform the load ratings. In addition, we have gathered LADOTD Standard Plans and Specifications from as far back as the 1950's. We will use this library of prior bridge data, our knowledge gained over many years load rating bridges throughout the state, and pictures in the LADOTD AssetWise database to correlate observed bridge properties with details to be utilized to perform the load rating.

Load Rating

For many slab span bridges, the load rating of the substructure can be complex and time-consuming due to current conditions and repairs that have been made throughout the life of the bridge. Because there are so many of this bridge type throughout the state, Forte and Tablada has developed and continually improves a series of Mathcad spreadsheets to load rate concrete and timber pile bent caps, as well as timber and steel piles. We are also extremely conscientious of the implications of load posting a bridge when determining the load rating method to be used. For this reason, we utilize the AASHTO General Method to determine loads and capacities in LEAP Bridge, which is a more accurate method and results in significantly less load postings.

In addition to an aging population of slab span bridges, there is also a wide assortment of aging and deteriorating large and complex bridges across the state, as well as numerous movable bridges. Our team has experience inspecting and load rating all types of bridges; including simple girder spans utilizing historical Standard Plans, elevated miles-long urban thoroughfares, major river crossings, and movable (lift, swing, bascule, and pontoon) spans. Our team possesses a thorough understanding of the limitations of AASHTOWare BrR when it comes to rating complex bridges and will utilize our specialized knowledge to provide an accurate load rating, as well as meet LADOTD's requirements related to the ability to perform future load ratings accounting for additional deterioration and permit vehicle crossings.

TOOLBOX

- ✓ AASHTOWare BrR
- ✓ Finite Element Modeling
- ✓ LEAP Bridge
- ✓ Refined Load Rating Procedures
- ✓ Laser Scanning
- ✓ Certified Bridge Inspectors
- ✓ UAV-Assisted Inspections
- ✓ Advanced Culvert Assessment Methods

Load Rating Plans

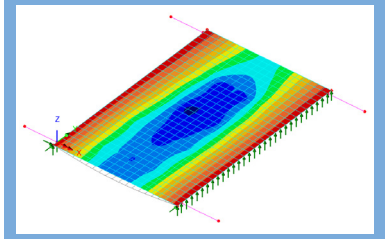
For bridges without plans and when an appropriate Standard Plan is not able to be determined, Forte and Tablada will develop load rating plans. We have experience in doing this for dozens of bridges, from complex truss bridges to small unique slab spans. Our team has a multitude of specialty tools to gather information in the field, including 3-D laser scanners, and a collection of non-destructive testing and data gathering equipment. For the load rating of gusset plates, we have also used 3-D laser scanning to determine gusset plate dimensions and bolt locations.

Recommendations to Improve the Posting

For all bridges that require a posting, Forte and Tablada will communicate our findings with LADOTD prior to submittal of the Load Rating report to discuss reasons for the required posting and complete the LADOTD Options Form to identify repairs that would improve (or remove) the posting requirement.

For bridges with specific deficiencies that result in a reduced posting or recommendation of closure, the F&T team will coordinate with LADOTD personnel (and Parish personnel as requested) to develop repair recommendations, and in some cases repair plans, to increase the posted load. We have utilized laser scanning to quickly facilitate the creation of repair plans. Repair details have included timber deck and stringer replacement, timber cap strengthening, concrete spall repair, timber pile stubbing and barrel splices, approach slab replacement, and FRP wrapping of PPC girders and caps to provide additional capacity.

SPOTLIGHT



F&T used a LUSAS FE Model to remove the posting on a slab span bridge after the typical AASHTOWare BrR method resulted in a load posting.

Update Rating Files

After each rating is submitted to and reviewed by LADOTD, the Load Rating Report and Rating Factor information will be uploaded to AssetWise by the F&T team. When additional bridge records (including as-built plans, repair plans, etc.) are discovered during the document retrieval task, we will inform LADOTD so that this information can be added to AssetWise as appropriate.

QC/QA

Forte and Tablada has developed QC/QA procedures that comply with the AASHTO 23 Metrics and LADOTD QC/QA requirements. Once the available bridge documentation is gathered, the load rating team will discuss the appropriate load rating procedures and any assumptions that will be required to perform the load rating. Discussions are held throughout the process to confirm initial assumptions based on field measurements and/or load rating plan development. Once the load rating is complete, each bridge goes through a multi-level QC process with checklists for the superstructure, substructure, and report items before a final QC and QA review is conducted on the completed Load Rating Report.

Task 4: Training

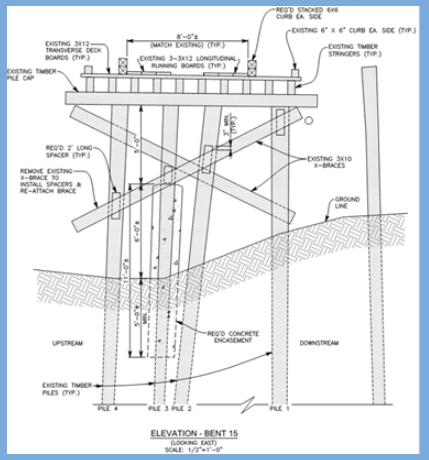
HNTB's lead rating engineer, Mr. Josh Porter has load rating experience of 13+ years which began in the load rating group at LA DOTD; working below the current DOTD load rating engineer, William Metcalf. After leaving DOTD, Mr. Porter continued to build on his load rating experience through IDIQ Load Rating retainers and bridge impact repair. Over this time, he has trained younger staff, including Mr. Marc Hoffmann and Patrick Duffy, to aid in the delivery of large load rating task orders.

HNTB has taken on several load rating tasks since Mr. Porter, Mr. Hoffmann, and Mr. Duffy have joined the firm. With younger staff joining HNTB in recent years, the need for a formal training program arose. To reduce this learning curve, this team has developed in house training sessions for superstructure and substructure rating, as well as an introduction of the fundamentals of load rating.

Having worked closely with the DOTD Mr. Porter, Mr. Hoffmann, and Mr. Duffy teach and guide younger engineers not only in general practices of load rating but also in the specific load rating practices of LA DOTD to develop the best product. They have vast experience in simplifying complex structures to fit within the parameters of BrR allowing for DOTD to easily add these structures into their rating inventory.

HNTB has also recently been tasked by the DOTD to develop a new section of the Bridge Inspection Manual for bridge load rating. The manual will be developed in collaboration with the DOTD Load Rating Section. HNTB not only has load rating experience locally but also has vast resources nationwide that are adept at writing load rating manuals and working closely with other state DOTs to develop guidance tailored to each state's preferences. HNTB will utilize these local and nationwide resources to develop the new manual as well as provide training to the DOTD on load rating procedures.

SPOTLIGHT



F&T inspected, laser scanned, load rated, and developed repair details to reopen the closed Westdale Road bridge over Bayou Pierre, which was the only access to several residences.

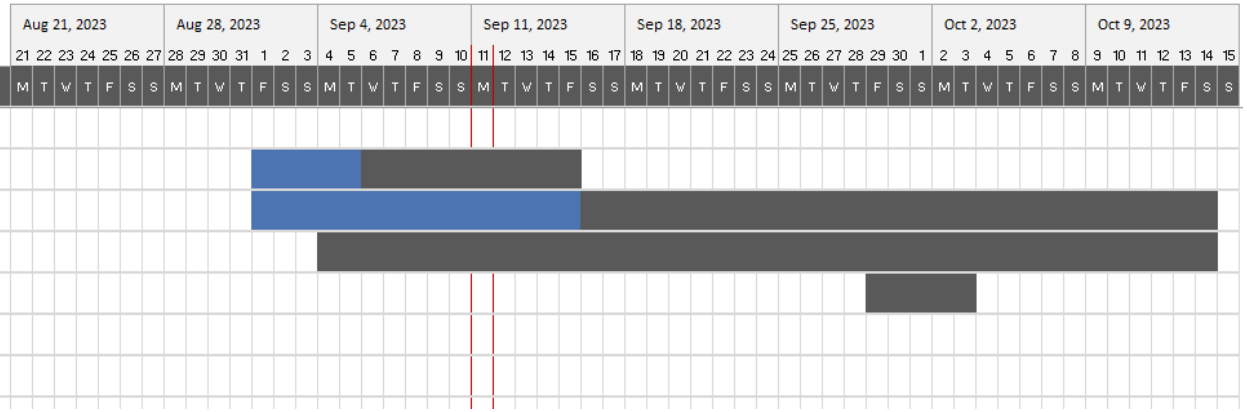
211208.TO1 Load Rating Schedule

FORTE & TABLADA

Project Start: Fri, 9/9/2022

Display Week: 51

TASK	ASSIGNED TO	PROGRESS	START	END
BATCH 7 - Weeks 49-56				
Task 1: Bridge Files and Documentation Search and Review		38%	9/1/23	9/15/23
Task 2: Structural Analysis and Load Rating		31%	9/1/23	10/20/23
Task 3: Rating Reports		0%	9/4/23	10/27/23
Task 4: Site Visit		0%	9/29/23	10/3/23
Task 5: Repair/Strengthening Plans (as needed)		Add as needed		
Task 6: Load Rating Update (as needed)		Add as needed		



SECTIONS 19-23

FORTE & TABLADA

19. Workload:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Discipline(s) *	Contract Number and State project number	Project name	Remaining Unpaid Balance**
FORTE & TABLADA	Road, Bridge	H.005734.5	LA 447 Corridor Improvements	$225,999
	Bridge, Survey	H.011965.6	LA 47:IWGO Bridge Rehab	$53,871
	Bridge	H.009859.5	Load Rating Retainer - Load Rate Statewide Bridges	$279,504
	Bridge	H.000303.6	Load Rating Retainer - Danziger Bridge Rehab	$11,442
	Bridge	H.009730.5	Load Rating Retainer - T-1 Steel Weld Inspections	$10,726
	Bridge	H.015228.5	Load Rating Retainer - LA 70: Sunshine Bridge	$329
	Bridge	H.009859.5	Load Rate Selected Bridges	$2,690,660
	Bridge, Survey	H.014261	Off-System Highway Bridge Program, Rapides Parish	$3,136
	Bridge, Survey	H.014981.5	OSBR Hosston River Road over Kelly Bayou	$3,194
	Bridge, Survey	H.014989.5	OSBR Neff Lane over Wind Creek	$3,366
	Bridge, Survey	H.014990.5	OSBR South Tiger Bend Road and East Achord Road Bridges	$62,300
	Survey	H.011684.5	LA 327 Spur: Staring Lane Extension Route LA 327-S	$50,279
	Survey	H.014416	LA 3125 at LA 3274 Roundabout	$16,572
	Survey	H.012563.5	LA 73 Bayou Manchac Bridge	$18,049
	Survey	H.015047.1	Three Mile Lake Flood LWI (Prime is Michael Baker, Inc.)	$5,510
	Survey	H.004273.5	I-49 Connector Lafayette (Prime is Stantec)	$189,178
	Survey	H.014128.5	Florida Boulevard - Airline to Livingston Parish	$155,370
	Bridge	H.014261	Off-System Highway Bridge Program, Ouachita Parish Bridges	$23,249
	Survey	H.014554	LA 3025: Coule Scour Repair	$50
	Survey	H.004100	I-10 ROW Staking	$106,417
Stantec	Bridge	S. P. No. 700-99-0430	Retainer Contract for Bridge Preservation [Statewide, Louisiana]	
			T.O. 701-65-1018 Bayou Tech Bridge	$1,053
		Contract No. 4400024629 S. P. No. H.005967.6	Nelson Road Ext. and Bridge [Calcasieu Parish]	
	CE&I/OV		CE&I and Construction Support	$483,575
	Road		Striping Pln. Changes	$4,610
	Other/Lighting		Roadway & Nav. Lighting	$44,598

19. Workload:

Stantec		Contract No. 440004128 S. P. No. H.004273.5	Lafayette Regional Airport to I-10/I-49/US 167 Interchange [Lafayette Parish]	
	Planning		Prog. Mgmt.; Context Sensitive Design Process; Impl. Strategies	$1,117,329
	Traffic		Traffic Engineering	$95,570
	ITS		ITS	$16,585
	Road		Geometric Design/Analysis	$42,808
	Bridge		Structure & Bridge	$418,193
	ROW		ROW Acquisition	$73,509
	Survey		Survey	$22,731
	Other/PR; Ltg; Av.		Public Relations/Comm.; Lighting; Aviation	$80,419
	Other/Lighting	Contract No. 4400011353 S. P. No. H.014302.6	IDIQ Contract for Electrical Services (Sub to Buchart Horn, Inc.) [Statewide, LA]	
			H.014302.6 US 165 Roadway Lighting [Ouachita Parish]	$19,301
		S. P. No. H.011670	Loyola Dr./I-10 Interchange to New Airport Terminal Design Build (Sub to Gilchrist Co., LLC) [Jefferson Parish]	
	Road		Roadway	$0
	CE&I/OV		CE&I/OV	$0
	Bridge		Bridge	$0
	Other/Lighting		Aesthetic Lighting	$0
	Traffic/ITS	Contract No. 4400020058	H.013710.6 I-10: US-61 to Laplace ITS Deployment [Ascension, St. James & St. John Parishes]	$8,315
			H.002424.5 LA 70: Sunshine Bridge - LA 22 [St. James & Ascension Parishes]	$427
			H.015136 Statewide ITS Architecture Update [Statewide]	$34,351
			H.013261.6 I-110 ITS Deployment [EBR Parish]	$23,537
			H.011152.6 I-12: US 190 to LA 59 [St. Tammany Parish]	$35,513
			H.013866.6 I-12: LA 21 to US 190 [St. Tammany Parish]	$29,610
			H.003047.6 I-10: Pecue Lane/I-10 Interchange Phase III [EBR Parish]	$32,541
			H.002424.6 LA 70: Sunshine Bridge - LA 22 [St. James & Ascension Parishes]	$24,198
			H.015137.1 Bonnet Carre ITS Upgrades [St. John the Baptist, St. Charles & Jefferson Parishes]	$120,244

19. Workload:

Stantec			T.O. 16 I-10 WBR Queue Warning System [Iberville & WBR Parishes]	$215,835
			T.O. 17 New Orleans Regional Arch Updates [Orleans, St. Tammany & Tangipahoa Parishes]	$89,244
			T.O. 18 Shreveport Phase 2b ITS SEA Updates [Caddo Parish]	$85,645
			T.O. 19 Monroe Phase 3 SEA [Ouachita Parish]	$101,775
	Other (Lighting)	Contract No. 4400020064	IDIQ Contract for Electrical Services [Statewide, LA]	
			H.014286.5 I-10: LA 26 (Jennings) Interchange Lighting [Jefferson Davis Parish]	$297
			H.014272.5 I-10: LA 97 (Jennings) Interchange Lighting [Jefferson Davis Parish]	$19,263
			H.014287.5 I-10: LA 99 (Welsh) Interchange Lighting [Jefferson Davis Parish]	$54,095
			H.014286.6 I-10: LA 26 (Jennings) Intchg Lighting [Jefferson Davis Parish]	$140,423
		Contract No. 4400024461 S. P. No. H.012685.5	LA 385: Ryan Street Intersection Improvements [Calcasieu Parish]	
	Traffic		Traffic Study; Signal Design	$136,229
	Road		Roadway Design	$224,828
		Contract No. 4400022901 S. P. Nos. H.011094.5	LA 3094: Hearne Ave. Bridge and US 80: KCS RR Overpass (HBI) [Caddo Parish]	
	Road		Roadway	$322,507
	Bridge		Bridge	$376,058
	Environmental	Contract No. 4400023972	IDIQ Contract for Cultural Resources	
			H.014197.5 Phase I Cultural Resources Survey [Tensas Parish]	$0
	Right-of-Way	Contract No. 1 S. P. No. H.011670	State of LA, DOTD versus 2845 Loyola Blvd., LLC ET AL [Jefferson Parish]	
			Right-of-Way Expert Witness	$6,050
	Other/C&AV	Contract No 44-17922	IDIQ Contract for Intelligent Transportation Systems (ITS) System Design, Integration and System Verification Services [Statewide, LA]	
			H.012845.1 Connected & Autonomous Vehicles - Team Support [Statewide]	$337,878
	Other/Lighting	Contract No. 44-04761	I-12 to Bush Corridor, LA 3241: I-12 to LA 36 (Sub to Evans-Graves Engineering, Inc.) [St. Tammany Parish]	
			H.004957.5 I-12/LA 434 Lighting Project	$217,517

19. Workload:

HNTB	Environmental	H.003931	I-10 Calcasieu NEPA Restart (Lake Charles, LA)	$277,756
		State Contract No. 44-17329	IDIQ Contract for Innovative Procurement Support Services	
	Bridge	H.003931.5	Calcasieu River Bridge (Sampson St)	$48,839
	Other (Railroad)	H.015223.1	BR No Pass Rail	$165,698
	Other (Railroad)	H.003931	Calcasieu River Bridge (RR)	$1,065,154
	Bridge	State Contract No. 44-17264	Retainer Contract for Bridge Preservation	
		H.001166.6	Caddo Lake CRES	$80,283
		H.002337.5	LA 327-5 Bayou Fountain	$10,193
		H.010251.5	Chippewa Street Pump Station	$260,214
		H.014454.6	Boeuf River Bridge CRES	$33,316
		H.014591.5	I-12: US 61 Bridges Girder Repairs	$51,757
	Bridge	State Contract No. 44-24189	Statewide Bridge Preservation	
			Task Order 1 – H.010319 I-110 North St to Plank Rd	$406,700
			Task Order 2 – H.12899.6 I-20 Rehab CRES	$157,783
	Transportation	State Contract No. 44-23812	Statewide Weigh Station Assessment, Rehab and Plan Development	
			TO1 H.015377.1 Weigh State Assessment, Rehab and Plan	$294,798
	Other (Tolling)	State Contract No. 44-23640	Task Order No. 2: PIBC Integration	$346,965
			Task Order No. 3: LA1 Facility Implementation	$401,597
			Task Order No. 4: Marketing	$110,990
			Task Order No. 6: Toll Services	$2,562,380
	Other (Planning)	State Contract No. 44-21094	Statewide Transportation Plan	$2,238,331
	Bridge	State Contract No. 44-25029	IIJA Off-System Bridge Program	$2,545,320
	Bridge	State Contract No. 44-23512	Statewide Complex Bridge Inspection	
			H.009730.5, TO1	$765,489
			H.009730.5, TO2	$119,514
	CE&I/OV	State Contract No. 44-4900		
		H.008145.6	LA 1 Phase 2	$5,909,572

19. Workload:

moffatt & nichol	Bridge	44-13321 / H.009730.5	Greater New Orleans Bridges #1 & #2 over Mississippi River, New Orleans, LA (10938/05)	$259,711
	Bridge	44-13322 / H.009730.5	IDIQC for In-Depth Bridge Inspection, Task Order #5 (Vicksburg Bridge), Delta, LA (10801/05)	$15,514
	Bridge	44-19121 / H.009730.5	IDIQ Contract for Underwater Bridge Inspection – TO2, Statewide (211288/02)	$1,727,181
	Other (Signs)	44-17089 / H.011331.1	IDIQ Inventory and Inspection of Sign Trusses, Statewide (11168/02)	$838,635
	Bridge	44-23512 / H.009730.5	Huey P Long (US-190) Bridge Inspection, Bridge City, LA (212837/01)	$123,695

20. Certifications/ Licenses

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

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

Mr. Russell Joseph Coco Jr.

License/Certificate Type - Number	Expiration Date
PE.0031337	09/30/2024

Status: Active

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

Mr. Joffrey Elliott Easley

License/Certificate Type - Number	Expiration Date
PE.0031542	03/31/2025

Status: Active

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

Ms. Jennifer Ross Nicaud

License/Certificate Type - Number	Expiration Date
PE.0033687	03/31/2024

Status: Active

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

Mr. Levi Ethan Yantis

License/Certificate Type - Number	Expiration Date
PE.0042390	09/30/2024

Status: Active

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

Mr. Jason Paul Fennell

License/Certificate Type - Number	Expiration Date
PE.0037237	09/30/2024

Status: Active

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

Ms. Hannah Nicole DiLeo

License/Certificate Type - Number	Expiration Date
EI.0034507	09/30/2024

Status: Active

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

Mr. Dexter L. Grogan III

License/Certificate Type - Number	Expiration Date
PE.0023431	03/31/2024

Status: Active

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

Mr. William Gabriel Sauerwin

License/Certificate Type - Number	Expiration Date
EI.0035345	09/30/2025

Status: Active

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT

Acknowledges that

LEVI YANTIS

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

CERTIFIED

Level 1 Rope Access Technician

SPRAT #2100328
AWARDED: February 26, 2021
Expires: February 26, 2024

20. Certifications/ Licenses

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

Mead &Hunt

In cooperation with the
Louisiana Department of Transportation & Development
presents this

Certificate of attendance and participation for:

Levi Yantis

Training Course:
Maintenance and Rehabilitation of Historic Bridges

July 2020

You have earned 4 PDH units that can be applied to applicable continuing education requirements for professional engineering licensure.

Mead & Hunt Instructor, Amy Squitieri — Mead & Hunt Instructor, John A. Rathke, PE, SE

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

LEVI YANTIS

has Successfully Completed

FHWA-NHI-130053
Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

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

Instructor — Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

---

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

KUNAL MALPANI

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: January 7-9, 2019 — Hours of Instruction: 18
Location: Baton Rouge, LA

Instructor — Local Coordinator
Instructor — Michael Davies, Director, National Highway Institute

---

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

John P. Krebs

has Successfully Completed

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Office of State Aid Road Construction

Date: August 30-September 01, 2022 — Hours of Instruction: 18
Location: Ridgeland, MS

Instructor — Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

---

ATSSA
SAFER ROADS SAVE LIVES

Dear Certified Flagger:

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

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

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

Sincerely,

VP of Education and Technical Services

Laminating the front of your card with Dual Laminate:

ATSSA American Traffic Safety Services Association

This is to affirm that
Joffrey Easley
has satisfied the requirements to be designated as a
CERTIFIED FLAGGER

Issue Date: 4/13/2023
Exp. Date: 4/13/2027
State Issued: LA

Verify at Flagger.com

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

Mead &Hunt

In cooperation with the
Louisiana Department of Transportation & Development
presents this

Certificate of attendance and participation for:

Joffrey Easley

Training Course:
Maintenance and Rehabilitation of Historic Bridges

Transportation Training and Education Center
4099 Gourrier Avenue, Room 175
Baton Rouge, Louisiana 70808

Please select the date you attended the course:
- [ ] Tuesday, April 12, 2016
- [ ] Wednesday, April 13, 2016
- [x] Tuesday, May 10, 2016
- [ ] Wednesday, May 11, 2016
- [ ] Tuesday, June 7, 2016
- [ ] Wednesday, June 8, 2016

You have earned 8 PDH units that can be applied to applicable continuing education requirements for professional engineering licensure.

Mead & Hunt Instructor, Amy Squitieri — Mead & Hunt Instructor, Darrell Berry, PE, SE

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

Brian Johnson

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Louisiana Department of Transportation & Development

Date: April 20-22, 2021 — Hours of Instruction: 18
Location: Virtual Delivery, LA

Instructor — Allison H. Landry, Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

---

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

Michael Brodnax

has participated in

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

hosted by

Office of State Aid Road Construction

Date: August 2-13, 2021 — Hours of Instruction: 67
Location: Ridgeland, MS

Instructor — Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

---

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

Ryan Nataluk

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Arizona Department of Transportation

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

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

---

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

JACOB TISDALE

has Successfully Completed

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

hosted by

LA DOTD/LTRC

Date: November 29 – December 10, 2021 — Hours of Instruction: 67
Location: Baton Rouge, LA

Instructor — Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

---

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

Stephen Torry, Jr.

has Successfully Completed

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

hosted by

Office of State Aid Road Construction

Date: March 21-April 01, 2022 — Hours of Instruction: 67
Location: Ridgeland, MS

Instructor — Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

---

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

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

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

Baton Rouge, LA
Location

Director of Training
President, CEO

ATSSA American Traffic Safety Services Association ATSSA.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

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

11/29/2022 to 11/29/2026
Training Valid Through

Baton Rouge, LA
Location

Director of Training
President, CEO

ATSSA American Traffic Safety Services Association ATSSA.com

U.S. Department of Transportation Federal Highway Administration

National Highway Institute

Certificate of Training

Jacob Tisdale

has Successfully Completed

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

hosted by

Office of State Aid Road Construction

Date: February 07-10, 2023 — Hours of Instruction: 25
Location: Ridgeland, MS

Instructor — Local Coordinator
Instructor — Thomas Harman, Director, National Highway Institute

20. Certifications/ Licenses

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

National Highway Institute

Certificate of Training

Michael Brodnax, Jr.

has Successfully Completed

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

hosted by

Office State Aid Road Construction

Date: June 07-10, 2022 Hours of Instruction: 25

Location: Ridgeland, MS

Instructor — Local Coordinator: Marie Allbritton

Instructor — Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

Stephen Torry, Jr.

has Successfully Completed

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

hosted by

Office State Aid Road Construction

Date: February 07-10, 2023 Hours of Instruction: 25

Location: Ridgeland, MS

Instructor — Local Coordinator: Marie Allbritton

Instructor — Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

Jacob Tisdale

has participated in

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

hosted by

Office of State Aid Road Construction

Date: March 21, 2023 Hours of Instruction: 6

Location: Ridgeland, MS

Instructor — Local Coordinator: Marie Allbritton

Instructor — Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

Michael Brodnax

has participated in

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

hosted by

Office of State Aid Road Construction

Date: March 21, 2023 Hours of Instruction: 6

Location: Ridgeland, MS

Instructor — Local Coordinator: Marie Allbritton

Instructor — Thomas Harman, Director, National Highway Institute

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Michael Brodnax
has attended
Traffic Control Supervisor-LA State Specific
Training Course

4/5/2023 to 4/5/2027 Training Valid Through — Vice President of Education and Technical Services

Baton Rouge, LA Location — President, CEO

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jacob Tisdale
has attended
Traffic Control Supervisor-LA State Specific
Training Course

11/30/2022 to 11/30/2026 Training Valid Through — Director of Training

Baton Rouge, LA Location — President, CEO

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Stephen Torry
has attended
Traffic Control Supervisor-LA State Specific
Training Course

4/5/2023 to 4/5/2027 Training Valid Through — Vice President of Education and Technical Services

Baton Rouge, LA Location — President, CEO

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Michael Brodnax
has attended
Traffic Control Technician-LA State Specific
Training Course

4/4/2023 to 4/4/2027 Training Valid Through — Vice President of Education and Technical Services

Baton Rouge, LA Location — President, CEO

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jacob Tisdale
has attended
Traffic Control Technician-LA State Specific
Training Course

11/29/2022 to 11/29/2026 Training Valid Through — Director of Training

Baton Rouge, LA Location — President, CEO

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

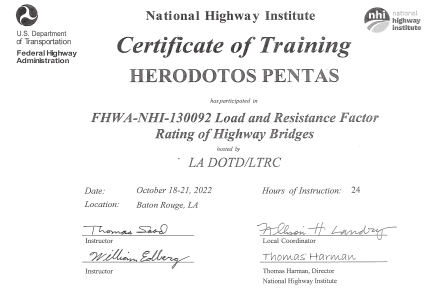
Stephen Torry
has attended
Traffic Control Technician-LA State Specific
Training Course

4/4/2023 to 4/4/2027 Training Valid Through — Vice President of Education and Technical Services

Baton Rouge, LA Location — President, CEO

20. Certifications/ Licenses

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



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

Instructor — Local Coordinator

Instructor — Thomas Harman, Director, National Highway Institute

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 — Local Coordinator

Instructor — Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

Chace Hulon

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

National Highway Institute

Certificate of Training

Chace Hulon

has participated in

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

hosted by

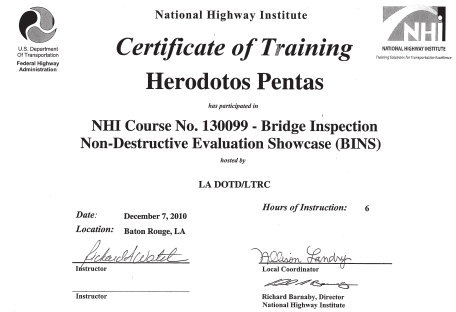
Texas Department of Transportation

Date: July 17 –18, 2018 *Hours of Instruction:* 14

Location: Fort Worth, TX

Instructor — Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute



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

Date: December 7, 2010 *Hours of Instruction:* 6

Location: Baton Rouge, LA

Instructor — Local Coordinator

Instructor — Richard Barnaby, Director, National Highway Institute

National Highway Institute

Certificate of Training

CHACE HULON

has participated in

FHWA-NHI-130110 Tunnel Safety Inspection

hosted by

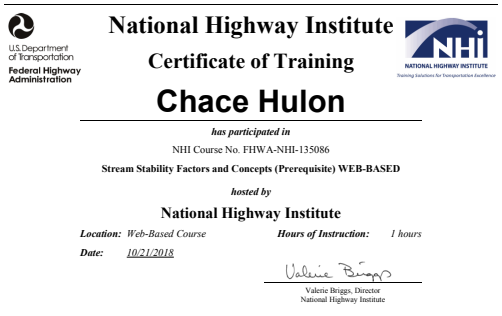
LA DOTD/LTRC

Date: March 27-31, 2017 *Hours of Instruction:* 30

Location: Baton Rouge, LA

Instructor — Local Coordinator

Instructor — Valerie Briggs, Director, National Highway Institute



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

National Highway Institute

Certificate of Training

CHACE HULON

has participated in

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

hosted by

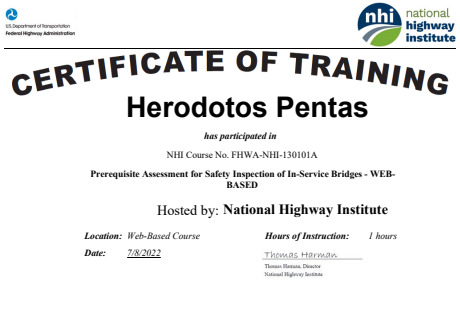
LA DOTD/LTRC

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

Location: Baton Rouge, LA

Instructor — Local Coordinator

Instructor — Michael Davies, Director, National Highway Institute



CERTIFICATE OF TRAINING

Herodotos Pentas

has participated in

NHI Course No. FHWA-NHI-130101A

Prerequisite Assessment for Safety Inspection of In-Service Bridges - WEB-BASED

Hosted by: **National Highway Institute**

Location: Web-Based Course *Hours of Instruction:* 1 hours

Date: 7/8/2022

Thomas Harman, Director, National Highway Institute

National Highway Institute

Certificate of Training

Chace Hulon

has participated in

Safety Inspection of In Service Bridges

NHI Course 130055A

hosted by

Iowa State University

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

Date: June 20 – July 1, 2005

Director, National Highway Institute, Federal Highway Administration

Director, Office of Professional and Corporate Development, 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

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

20. Certifications/ Licenses

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

National Highway Institute

Certificate of Training

CHACE HULON

has Successfully Completed

FHWA-NHI-130125

Tunnel Safety Inspection Refresher

hosted by

LA DOTD/LTRC

Date: February 15-17, 2022 Hours of Instruction: 17

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Thomas Harman, Director

National Highway Institute

National Highway Institute

Certificate of Training

Chace Hulon

has participated in

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

hosted by

ConnDOT

Date: April 27, 2015 Hours of Instruction: 7

Location: Newington, CT

Instructor

Instructor

Local Coordinator

Richard J. Barnaby, Director

National Highway Institute

The American Traffic Safety Services Association

Hereby recognizes that

Chace Hulon

has attended

Traffic Control Supervisor

Training Course

01/27/2016

Date

New Orleans, LA

Location

Training & Products Dept. Director

President, CEO

ATSSA

SAVES ROADS SAVE LIVES

National Highway Institute

Certificate of Training

Eric P. Vugteveen

has Successfully Completed

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Moffatt & Nichol

Date: November 16-18, 2022 Hours of Instruction: 18

Location: Suffolk, VA

Instructor

Instructor

Local Coordinator

Thomas Harman, Director

National Highway Institute

This certifies that

Eric Vugteveen

participated in the course

Inspection & Maintenance of Ancillary Highway Structures

Comprising 14 Professional Development hours (1.2 CEU's)

on

February 10 & 11, 2009

Kent Polytech

Woodside, DE

Lawrence M. Klepner

Delaware 3rd Center

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

Instructor

Local Coordinator

Valerie Briggs, Director

National Highway Institute

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

Instructor

Local Coordinator

Valerie Briggs, Director

National Highway Institute

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*

Instructor

Director, National Highway Institute

Federal Highway Administration

Coordinator

Director, Office of Professional and Corporate Development

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 Hours of Instruction: 25

Location: Laurel, MD

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director

National Highway Institute

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

Instructor

Instructor

Drew Garceau

Local Coordinator

Thomas Harman, Director

National Highway Institute

National Highway Institute

Certificate of Training

Iris Leoncio

has participated in

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

American Council of Engineering Companies of Metropolitan Washington

ACEC/MW

Date: April 19-20, 2011 Hours of Instruction: 12

Location: Fairfax, Virginia

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director

National Highway Institute

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 Hours of Instruction: 80

CEU's: 8.0

Location: Baltimore, MD

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director

National Highway Institute

20. Certifications/ Licenses

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

National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

Certificate of Training

Stephanie Eschenbach

has Successfully Completed

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

hosted by

MP Engineers, P.C.

Date: December 06-07, 2022 Hours of Instruction: 12

Location: Princeton, NJ

Instructor

Local Coordinator Mahendra Patel, P.E.

Instructor

Thomas Harman, Director
National Highway Institute

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

Mr. Patrick Gabriel Duffy

License/Certificate Type - Number: PE.0045363

Expiration Date: 09/30/2023

Status: Active

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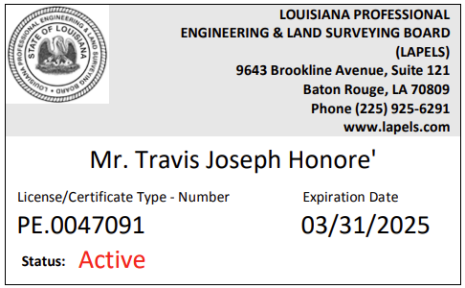
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Marc Alexander Hoffmann

License/Certificate Type - Number: PE.0044342

Expiration Date: 09/30/2024

Status: Active



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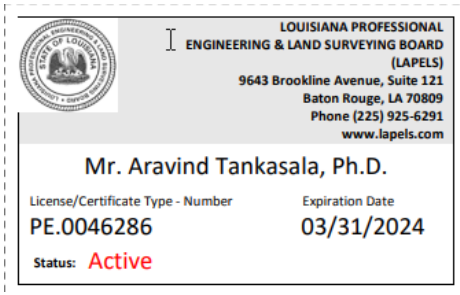
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Travis Joseph Honore'

License/Certificate Type - Number: PE.0047091

Expiration Date: 03/31/2025

Status: Active



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

Mr. Aravind Tankasala, Ph.D.

License/Certificate Type - Number: PE.0046286

Expiration Date: 03/31/2024

Status: Active

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

Mr. Joshua Manning Porter

License/Certificate Type - Number: PE.0039513

Expiration Date: 09/30/2023

Status: Active

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

If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.

22. Sub-consultant information:

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

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
HNTB Corporation	450 Laurel Street, Suite 1200 Baton Rouge, LA 70801	Dusty Bastion, PE Office Leader dbastion@hntb.com	225-368-2808
Stantec Consulting Services Inc.	1200 Brickyard Lane, Suite 400 Baton Rouge, LA 70802	Brian Johnson, PE Brian.johnson2@stantec.com	225-765-7400
Moffatt & Nichol Inc	301 Main Street, Suite 800 Baton Rouge, LA 70801	Herodotos Pentas, PhD, PE hpentas@moffattnichol.com	225-610-1597

23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the advertisement.