



Statement of Qualifications

Contract Nos. 4400036211, 4400036212, 4400036213, and 4400036214

IDIQ Contracts for Bridge Load Rating Services Statewide

SUBMITTED BY:

Hardesty & Hanover, LLC

3850 N. Causeway Blvd, Suite 1625

Metairie, LA 70002

T: 504.962.9212

SUB-CONSULTANTS:

Stantec Consulting Service Inc.

Russo Structural Services LLC

August 2026



3850 N. Causeway Boulevard
Suite 1625
Metairie, LA 70002
T: 504.962.9212
www.hardestyhanover.com

Louisiana Department of Transportation and Development
Consultant Contracts Services

August 25, 2026

Re: Contract Nos. 4400036211, 4400036212, 4400036213, and 4400036214 IDIQ Contracts for Bridge Load Rating Services

Dear Selection Committee Members:

Hardesty & Hanover (H&H) is submitting our qualifications for Contract No. 4400036211, 4400036212, 4400036213, and 4400036214 to support DOTD's statewide Bridge Load Rating Services contract. Our team has extensive experience performing load ratings for concrete, truss, movable, segmental, and other complex bridge types in accordance with FHWA, AASHTO, and DOTD requirements. We understand the importance of producing accurate, well-documented ratings that reflect current bridge conditions and support safe, informed decisions for Louisiana's transportation infrastructure.

Our team exceeds the Minimum Personnel Requirements and includes experienced technical leaders and project management staff who are available to support these contracts. H&H has provided DOTD, other state departments of transportation, and local agencies with decades of comprehensive bridge design and load rating services. Our bridge specialists understand the challenges associated with aging structures and the need for careful analysis, consistent documentation, and thorough quality control.

I will serve as Project Manager and Point of Contact. As a former DOTD engineer and administrator, I bring 44 years of experience in bridge and roadway design and contract management that included several large IDIQ contracts with multiple concurrent task orders. I will oversee team coordination, schedule, budget, and compliance with applicable procedures and standards. I will be supported by Louisiana-registered professional engineers with extensive experience rating complex structures and using AASHTOWare Bridge Rating (BrR).

H&H's technical resources, supplemented by professionals from Stantec Consulting Services Inc. and Russo Structural Services LLC, provide the depth and availability needed to support multiple concurrent task orders. H&H has successfully teamed with these subconsultants on previous transportation projects. Our experienced bridge specialists will provide technical oversight and rigorous QA/QC throughout each assignment.

We appreciate your consideration and look forward to the opportunity to support DOTD through these contracts. If you have any questions regarding our proposal, please contact me using the information below.

Sincerely,

A handwritten signature in black ink that reads 'Babak Naghavi'.

Babak "Bobby" Naghavi, PE, PH, PhD

Project Manager and Point of Contact

504.605.7940

bnaghavi@hardestyhanover.com

DOTD FORM: 24-102

PROPOSAL TO PROVIDE CONSULTANT SERVICES

(Revised August 1, 2026)

1. Contract Name as shown in the advertisement	IDIQ Contracts for Bridge Load Rating Services Statewide
2. Contract Number(s) as shown in the advertisement	4400036211, 4400036212, 4400036213, and 4400036214
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match <u>exactly</u> as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; <u>include screenshot from SOS at the end of Section 20</u>)	Hardesty & Hanover, LLC
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.0005124
6. Prime consultant mailing address	3850 N. Causeway Blvd. Ste. 1625 Metairie, LA 70002
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	3850 N. Causeway Blvd. Ste. 1625 Metairie, LA 70002
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Babak "Bobby" Naghavi, PE, PH, PhD, Regional Manager 504.605.7940 bnaghavi@hardestyhanover.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Babak "Bobby" Naghavi, PE, PH, PhD, Regional Manager 504.605.7940 bnaghavi@hardestyhanover.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:

August 25, 2026

Date:

Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association. In addition, proposer certifies it will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.

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 has been set for this contract

Firm(s)' %:

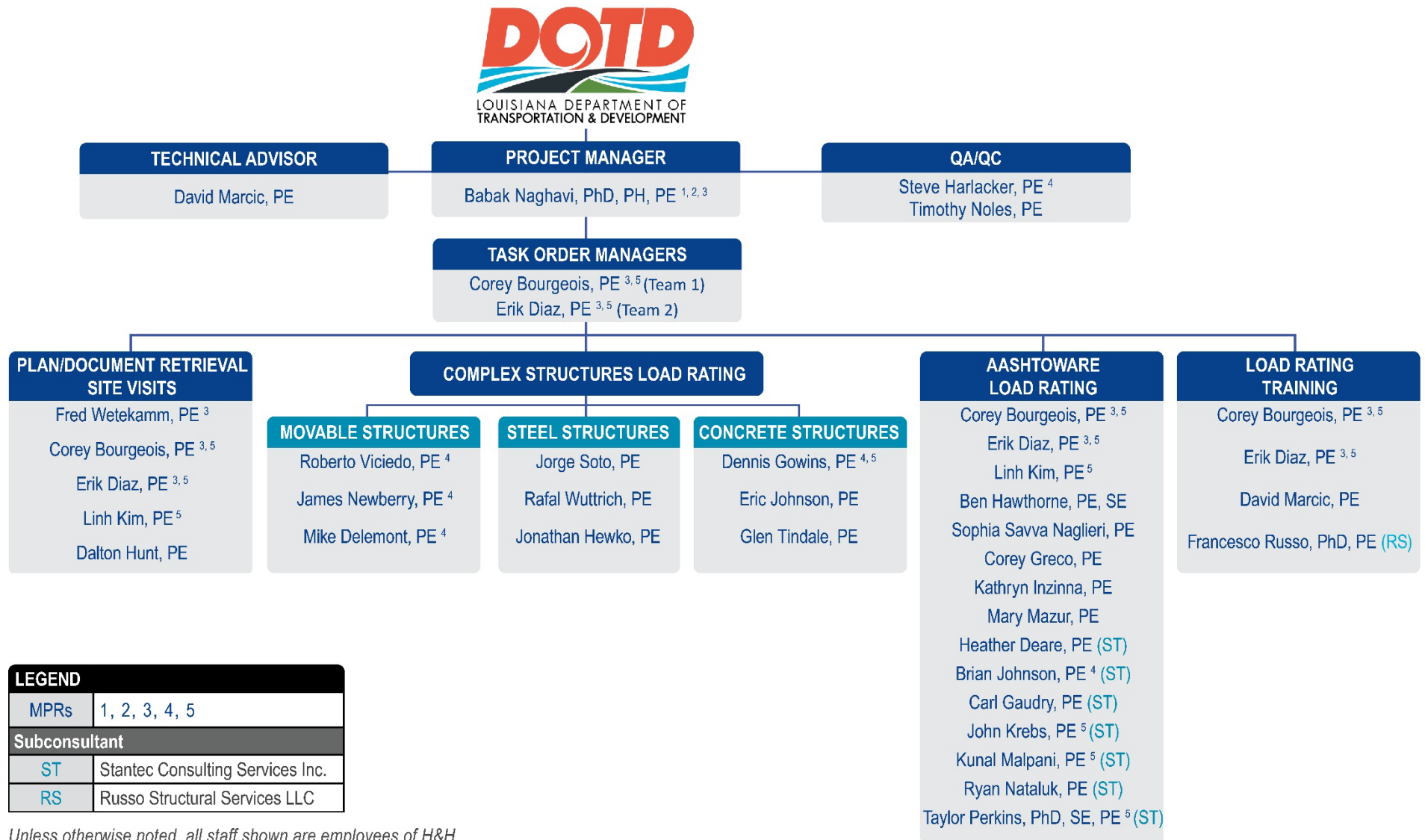
12. Discipline Table:

Discipline(s)	% of Overall Contract	Prime: 	Subconsultant: Stantec Consulting Services Inc.	Subconsultant: Russo Structural Services LLC	Each Discipline must total to 100%
Bridge	100%	90%	8%	2%	100%
Identify the percentage of work for the <u>overall contract</u> to be performed by the prime consultant and each sub-consultant.					
Percent of Contract	100%	90%	8%	2%	

13. Team 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)
Hardesty & Hanover, LLC 	Principal	2	4
	Supervisor - Eng	6	12
	Engineer	8	16
	Engineer - Other	8	16
	Engineer Intern	6	12
	Administrative	1	2
Stantec Consulting Services Inc. 	Principal	1	2
	Engineer	6	9
	Engineer Intern	1	4
Russo Structural Services LLC 	Engineer	1	1

14. Organizational Chart:



15. Minimum Personnel Requirements:

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	Babak Naghavi, PE, PH, PhD	Hardesty & Hanover, LLC	PE #20745 – Civil Engineer, Environmental Engineer	LA	09/30/2028
2	Babak Naghavi, PE, PH, PhD	Hardesty & Hanover, LLC	PE #20745 – Civil Engineer, Environmental Engineer	LA	09/30/2028
3	Babak Naghavi, PE, PH, PhD	Hardesty & Hanover, LLC	PE #20745 – Civil Engineer, Environmental Engineer	LA	09/30/2028
3	Frederick Wetekamm III, PE	Hardesty & Hanover, LLC	PE #25369 – Civil Engineer, Environmental Engineer	LA	03/31/2028
3	Erik Diaz, PE	Hardesty & Hanover, LLC	PE #37712 – Civil Engineer	LA	09/30/2027
4	Steven Harlackner, PE, SE	Hardesty & Hanover, LLC	PE #37057– Civil Engineer, Structural Engineer	LA	09/30/2026
4	Dennis Gowins, PE	Hardesty & Hanover, LLC	PE #24468 – Civil Engineer	LA	09/30/2027
4	Roberto Vicedo, PE	Hardesty & Hanover, LLC	PE #36533 – Civil Engineer	LA	03/31/2028
4	James Newberry, PE	Hardesty & Hanover, LLC	PE #45742 –Structural Engineer, Civil Engineer	LA	09/30/2027
4	Michael Delemont, PE	Hardesty & Hanover, LLC	PE #43170 – Structural Engineer	LA	09/30/2027
4	Joseph “Brian” Johnson, PE	Stantec Consulting Services Inc.	PE #31273 – Civil Engineer	LA	09/30/2026
5	Dennis Gowins, PE	Hardesty & Hanover, LLC	PE #24468 – Civil Engineer	LA	09/30/2027
5	Corey Bourgeois, PE	Hardesty & Hanover, LLC	PE #42362 – Civil Engineer	LA	09/30/2028
5	Linh Kim, PE	Hardesty & Hanover, LLC	PE #47527 – Civil Engineer	LA	09/30/2027
5	John Krebs, PE	Stantec Consulting Services Inc.	PE #37259 – Civil Engineer	LA	09/30/2026

5	Kunal Malpani, PE	Stantec Consulting Services Inc.	PE #43016 – Civil Engineer	LA	03/31/2027
5	John “Taylor” Perkins, PhD, SE, PE	Stantec Consulting Services Inc.	PE #47449 – Structural Engineer	LA	09/30/2027

16. Staff Experience:

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Babak "Bobby" Naghavi, PE, PH, PhD	Years of relevant experience with this employer	9
	Title	Regional Manager	Years of relevant experience with other employer(s)	35
Degree(s) / Years / Specialization		PhD / 1993 / Civil Engineering / Louisiana State University MS / 1982 / Civil Engineering / Louisiana State University BS / 1979 / Civil Engineering / Louisiana State University		
Active registration number / state / expiration date		Professional Engineer: 20745 / LA / 9/30/2028 Professional Hydrologist: 95-H-1121 Certifications: Maintenance and Rehabilitation of Historic Bridges (LADOTD); NEPA Transportation Decision Making Workshop; Work Zone Traffic Control Supervisor/Flagger; NHI 130053 Safety Inspection of In-Service Bridges Refresher; NHI 133091 Underwater Bridge Inspection; NHI 130099A Bridge Inspection Nondestructive Evaluation		
Year registered	1983	Discipline	Civil Engineer and Environmental Engineer	
Contract role(s) / brief description of responsibilities		Principal in Charge / Project Manager – Meets MPR 1, 2, and 3		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
03/25 – Present	H4400021516: Bridge Rehabilitation for Five Movable Bridges, Lafourche, Terrebonne, and Pointe Coupee Parishes, LA – LADOTD Project Manager for the inspection, evaluation, and rehabilitation design services for five movable bridges under LADOTD Contract No. 4400021516 as part of the LADOTD Movable Bridge Rehabilitation Program. Supported structural, mechanical, electrical, and architectural rehabilitation efforts to extend bridge service life, improve load capacity, and achieve current code compliance. Project services also included NBIS in-depth inspections, load ratings using AASHTOWare BrR , NDT and strain gage testing, scope and report development, design calculations, PS&E production, technical specifications, permit coordination, construction cost estimates, shop drawing and RFI review, and mechanical/electrical system inspections and functional testing. Four bridges carry historic designations, including the Golden Meadow Bridge Preservation Priority structure, with all rehabilitation designed in accordance with LADOTD historic bridge requirements and the Secretary of the Interior's Standards.			
12/25 – Present	IDIQ for Bridge Inspection and Load Rating Services, Statewide, MS – Mississippi Office of State Aide Road Construction Project Manager for bridge inspection and load rating services for selected bridges across the state of Mississippi. Bridges are load rated for inventory and operating loads as well as Legal Load and Emergency Vehicles. Load Rating Reports for each bridge is prepared using AASHTOWARE Bridge Rating Software (BrR) . Other tasks include developing and entering inspection and load rating reports into AssetWise.			
06/23 - Present	H.009730.5; LADOTD In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Project Manager supervising inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis and Miller's Bluff) and a vertical lift bridge (West Fork) have been completed to date.			
06/22 – 12/24	SR 605 & SR 609 Movable Bascule Bridge Inspection and Load Rating, Ocean Springs, MS – Mississippi DOT Project Manager responsible for the inspection and load rating services of bascule bridges, as a task-order under the IDIQ Master Bridge Contract. Scope of work includes the in-depth, NSTM, routine, and element level inspection of structural, mechanical, and electrical components of the bridge, as well as the roadway approaches. Load rating is being performed using AASHTOWare BrDR load rating software.			

03/23 – 12/24	In-Depth Inspection & Load Rating of Box Girder Bridges, Meridian, MS – Mississippi DOT Project Manager for load rating services being performed on the two bridges based on inspection findings and plan details for Bridge No. 147.9A at I-59 and Bridge No. 131.5B at I-20 located near Meridian in Lauderdale County. The analyses included developing a finite element model of each bridge and for load ratings to follow LFR considering MDOT's permitted vehicle legal loads. If warranted, repair recommendations will be made based on the inspection results and the load rating.
06/18 – 08/26	H.002798.6; Bayou Teche Movable Bridge at Oaklawn Rehabilitation, St. Mary Parish, LA – LADOTD Project Manager responsible for design and plan preparation of the bridge power distribution and relay-based control system for this movable bridge located in St. Mary Parish, LA. The new through girder swing-span rotates with hydraulically actuated slewing (push-pull) cylinders.
08/20 - Present	H.001498.6; LA 24 and LA 16 Company Canal Vertical Lift Bridge, Bourg, LA – LADOTD Project Manager delivering construction engineering and inspection services for a new vertical lift bridge and operator's house. Scope of work include daily monitoring of all construction activities; maintaining all construction field records; coordinating with DOTD, contractor, parish government, and utilities; performing field testing; maintaining records of contractual operations, pay estimates, and progress reports; preparing final estimate packages; conducting construction progress meetings; construction closeout, etc.
08/18-6/22	Lake Pontchartrain Causeway Safety Bay Improvement Project, New Orleans, LA - Greater New Orleans Expressway Project Manager responsible for construction engineering and inspection services for this fast-paced \$60 million bridge improvement project designed according to LADOTD Standards and Specifications . Scope of work utilized the Construction Manager at Risk (CMAR) delivery method. Improvements increased emergency stopping areas and widened causeway bridges to provide new shoulders in at least six locations in each direction.
01/19 - Present	H.004396 Lapalco Boulevard Movable Bridge over Harvey Canal, Westwego, LA – Jefferson Parish DPW/LADOTD Project Manager for the pre-design inspection, the rehabilitation and widening of the existing four-lane Lapalco Boulevard to provide a facility carrying three lanes of traffic in each direction, and the design of a new three-lane double bascule movable bridge crossing of Harvey Canal. Scope of work includes rehabilitation to the existing four-lane bridge with three lanes of traffic and a new pedestrian/bike lane. The scope of work also includes the design of a new bridge to be constructed as an independent structure immediately adjacent and north of the existing bridge with a new operator house. Improvements to bridge and roadway approaches for eastbound and westbound traffic is also included in scope of work. Load rating was performed using AASHTOWare BrDR load rating software. All design work is according to LADOTD Standard and Specifications and reviewed by LADOTD.
01/11 – 12/13	I-10 Calcasieu River Bridge Repairs, Calcasieu Parish, LA – LADOTD Project Manager , for construction engineering and inspection for structural repairs to I-10 Calcasieu River Bridge. The project consisted of repairs to main deck truss and steel cantilever truss members, approach trestle pin plate connections, approach trestle anchor bolt repair, approach trestle bent repairs, deck joints repair, bridge railing repair, and approach roadway pavement expansion joints. The project also included cleaning and removal of lead-based paint and painting of truss connections and the replaced railing.
03/14 – 01/17	Off-System Hwy Bridge Replacement – St. Ann Bridge Over Bayou Terrebonne, Terrebonne, LA – LADOTD Project Manager for this construction engineering and inspection project that involved removal of a single-lane truss swing span bridge structure, existing fender system, timber bulkhead, operator house, and existing timber piling. New construction involved a single swing span bridge, concrete slab bridge approaches, concrete approach slabs, timber fender system, navigational lighting, grading, and asphaltic concrete roadway paving.
08/81 – 08/87	Road Design Section, Hydraulics Unit, Baton Rouge, LA - LADOTD Senior Hydraulics Engineer responsible for the review and design of the numerous drainage projects including the drainage design of roadway and bridge structures, scour analysis of bridges; and stabilization of stream banks and shorelines according to Louisiana Standard Specifications for roads and bridge. Also developed the Hydraulic Design Manual and all the hydraulics and hydrologic computer programs that were used by the LADOTD, other government agencies, and the consultant community for hydraulic design of roads and bridges.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Steven Harlacker, PE, SE	Years of relevant experience with this employer	30
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S. / 1996 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 37057 / LA / 09/30/2026		
Year registered	2012	Discipline	Civil Engineer and Structural Engineer	
Contract role(s) / brief description of responsibilities		Quality Assurance / Quality Control Manager (QA/QC) – Meets MPR 4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage,” “designed girders,” “designed intersection,” etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
05/18 – Present	Replacement of the Connecticut River Bridge, Old Saybrook and Old Lyme, CT - Amtrak Project Manager / Engineer of Record for the replacement of this movable bridge carrying two tracks of Amtrak Northeast Corridor traffic over the Connecticut River. Feasible study alternatives for rehabilitation or replacement were determined, and these were analyzed for estimated costs and for comparative benefits as related to the degree to which project needs are met. Navigation clearance requirements are taken from a Navigation Study previously prepared by H&H for the Connecticut River. Cost analysis and impacts to right-of-way, utilities, tidal marshlands, and navigation were investigated. A set of highly ranked alternatives was selected, termed “Best Solution Study Alternatives,” each providing Amtrak combined advantages of cost and of technical benefits. Estimated construction costs for the best solution study alternatives were more than \$100 million. Included were alignment and profiles layout for various rail gradient options. The existing bridge, constructed circa 1907, is a two-track, open deck, electrified railroad bridge, 1,564-foot-long, consisting of seven thru-truss spans, two deck girder spans, and one 158-foot Scherzer-type rolling lift span. In recent years, the draw span of the bridge has been operated approximately 3,700 times annually to accommodate navigation on the Connecticut River.			
04/07 – 07/08	Load Ratings and Scour Evaluations for the Woods Memorial Bridge, Boston, MA – Mass. Dept. of Conservation & Recreation Project Engineer for concept development, design team management, and design of the rehabilitation of this formerly movable bridge, which was locked into the closed position. Design included lock bar removal and replacement with a supplementary restraint system to eliminate bridge bounce under live load. New live load bearings and repairs to the supporting structure were also designed.			
06/15 – 06/21	Eastbound I-84 Bridge Rehabilitation, Hartford, CT – Connecticut DOT Project Manager responsible managing the preliminary and final design services for a bridge and roadway rehabilitation featuring Bridge 1765, a 10-span steel multi-girder structure with pin and hanger supported spans carrying four travel lanes of I-84 through downtown. Scope included deck repair, membrane, overlay, deck joint replacement, header replacement, expansion bearing replacement, bearing keeper construction partial structural painting, structural steel repairs, repairs to concrete substructure, parapet modification and repair, drainage repairs, and lighting repair. Performed complete LRFR load ratings in compliance with the AASHTO Manual for Bridge Evaluation, using AASHTOWare Bridge Rating Software.			

06/14 – 06/20	Rehabilitation of the Aetna Viaduct, Phase II, Hartford, CT – Connecticut DOT Project Manager responsible for the development of repair concepts, economic and feasibility evaluations, and structural rehabilitation of this vital, high-volume series of bridges carrying I-84 over Amtrak, CT Fastrak busway, parking areas, and local streets. The rehabilitation included deck and deck joint rehabilitation, structural steel rehabilitation, bearing replacement, parapet safety upgrades, illumination, IMS facilities, and concrete substructure repairs. Developed the project scope; managed the design, project, schedule, and budget; and ensured compliance with H&H's standards for Quality Management and client standards. H&H prepared rehabilitation plans for bearing replacement, repairs to over 125 concrete substructure units, and repairs to nearly 300 steel superstructure members. Also included, was the replacement of the median barrier along with the adjacent bridge deck, modifications to the left and right parapet along the entire length of the viaduct structure, highway illumination, and IMS facilities. This series of structures, which governs the load capacity of the I-84 corridor through Hartford, was also load rated using LRFR load rating methods and AASHTOWare BrDR software. The load rating computations included consideration and reporting for steel cap girders, chorded girders, hunched girders, variable deck overhang segments, pin and hanger spans, and deficient beam end areas. In total, H&H performed structural load ratings for 40 transverse steel pier cap girders and all members within 129 multi-girder spans, including complete accounting of documented deterioration remaining on unrepaired members at the completion of the rehabilitation.
05/17 – 09/19	Stevenson Dam Bridge Route 34 Over Housatonic, Monroe/Oxford, CT – Connecticut DOT Project Manager for design of the new Route 34 bridge over the Housatonic River. Coordinated with highway team subconsultant to develop and evaluate alignment and structure type alternatives. The initial phase included the computation of bridge load ratings for AASHTO design vehicles and the State of Connecticut Legal and Permit Vehicles to determine the existing capacity and sufficiency of the bridge. Load ratings were performed following AASHTO Manual For Bridge Evaluation and CTDOT Load Rating Manual requirements with the use of AASHTOWare. Worked with CTDOT to determine the appropriate load posting for the structure. Supplemental computations were performed to assess the ability to support emergency vehicles owned by the Monroe and Oxford Fire Departments. Developed an operating protocol to allow safe passage of the vehicles under specific traffic conditions and at specific positions on the bridge deck.
02/19 – 12/22	Brorein Street Bascule Bridge Rehabilitation, Tampa, FL – City of Tampa Structural Engineer responsible for design services, including a load rating analysis, for the rehabilitation of the movable span of the Brorein Street bascule bridge over the Hillsborough River in downtown Tampa, FL. The project included widening of the approach spans and the bascule leaves to provide a 10-foot shared use path on each side.
05/16 – 06/18	Route 133 Truss Bridge over Housatonic River Rehabilitation, Brookfield, CT – Connecticut DOT Project Manager managed the preliminary and final design engineering services. Preliminary design work included a structural feasibility study of alternatives to increase roadway vertical clearance to truss bracing elements, as well as developing bridge rehabilitative repair designs. The rehabilitation included partial and full depth patching of the bridge deck, replacement of bridge deck joints, deck drainage modifications, and replacement of the bridge parapets. Scope included calculating LRFR load ratings of the as-built, as-inspected, and as-rehabilitated conditions using Midas Civil software in compliance with Connecticut DOT and AASHTO Manual for Bridge Evaluation requirements.
09/17 – 6/19	Bridge No. 901 US Route 202/Route 67 over the Housatonic River, New Milford, CT – Connecticut DOT Project Manager for the rehabilitation load rating of the single span 325-foot-long arched truss. The 13-panel modified Parker through truss was constructed in 1953. It carries two lanes of traffic and includes a sidewalk cantilevered off the north truss. The rehabilitation includes deck repairs, steel truss member repairs and anchoring the superstructure to the substructure for lateral loading.
12/11 – 05/12	Saugus Drawbridge Rehabilitation, Saugus, MA – Massachusetts Bay Transportation Authority Project Engineer responsible for the analysis and design supervision for this project involving comprehensive modeling, load ratings analysis of as-inspected conditions, real-time structural monitoring, and resultant strengthening of an existing pier compromised by extensive structural deterioration. Responsibilities included development of load rating methods to determine existing substructure capacity and design of an interim strengthening concept which included a temporary pier to allow the bridge to remain in service at full capacity until a comprehensive replacement project was undertaken.

	Firm Employed by Hardesty & Hanover, LLC			
	Name	Timothy Noles, PE	Years of relevant experience with this employer	42
	Title	Principal	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S. / 1984 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 31675 / LA / 9/30/2027		
Year registered	2005	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Quality Assurance / Quality Control Manager (QA/QC)		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
12/19 – Present	H.014530: Almonaster Ave Bridge Rehabilitation and New Connector Road, New Orleans, LA - Port of New Orleans/LADOTD Technical Advisor / Quality Control Manager for the bridge assessment, complete rehabilitative engineering design, and construction inspection services required for the partial replacement of the Almonaster Ave Bridge, a movable Strauss-heel trunnion bridge that crosses over the Industrial Canal and provides two vehicular lanes and a single railroad track crossing down the center of the span. H&H's 2019 assessment of the circa-1920, eligible for the National Register of Historical Places bridge revealed that improvements to the electrical and mechanical systems, superstructure, and counterweight were required to return this bridge to its full operating capability. Although the existing substructure could remain, modifications were deemed necessary to accommodate the rehabilitated superstructure. Developed necessary design plans to replace the span drive and span lock machinery, operating strut, guide assembly, live load bearings, counterweight trunnion pin, and bushing.			
07/16 – 9/21	SR A1A North Bridge Replacement, Fort Pierce, FL – Florida DOT Technical Advisor for the planning and design of a new high-level fixed bridge carrying SR A1A and the East Coast Greenway over the Intracoastal Waterway, FEC Railroad, and Old Dixie Highway. Scope included staged construction to maintain traffic, elimination of at-grade rail crossing, design of new roadway alignments and access roads, and integration of an observation deck. H&H coordinated extensively with utilities, FEC Railroad, adjacent businesses, and permitting agencies. The project also included geotechnical, drainage, hydrogeology, lighting, signals, signage, and maintenance of traffic for both vehicular and marine users.			
01/19 – Present	H.004396 Lapalco Blvd Movable Bridge over Harvey Canal, Jefferson Parish, Louisiana - Jefferson Parish DPW/LADOTD Technical Advisor for the pre-design inspection and design of a new three-lane double bascule movable bridge crossing of Harvey Canal and the widening of the existing four-lane Lapalco Blvd to provide a facility carrying three lanes of traffic in each direction. The new bridge is constructed as an independent structure adjacent and north of the existing bridge with a new operator house. The project includes rehabilitation of the existing four-lane bridge with three lanes of traffic and a new pedestrian/bike lane. Scope includes improvements to bridge and roadway approaches for eastbound and westbound traffic as well as development of a Traffic Control Plan.			
04/17 – Present	I-395 Segmental Bridges, Miami, FL – Florida DOT Project Manager for the design of the superstructure and performing the load ratings. H&H is designing seven new precast segmental bridges that are a part of the SR 836 / I-95 / I-395 corridor upgrade. This design-build project is being constructed by the Archer Western-De Moya Joint Venture. The overall construction value of the project is \$800 million, and the segmental bridges have a deck area of 700,000 square feet (approximately \$200 million). Construction is scheduled to be completed in late 2027.			
08/16 - 06/18	I-75 SB Exit Design from S of Bypass Canal to EB/WB, Tampa, FL – Florida DOT Technical Advisor responsible for project oversight of plans preparation and engineering documentation. This two-mi. roadway improvement project included the addition of a new auxiliary lane for southbound I-75 from south of the Bypass Canal to the southbound off-ramp and widening the I-75			

	southbound off-ramp from one to two lanes. A unique aspect of the design approach was the incorporation of this design into a long-term buildout of the interchange. This project was expedited for construction based on no right of way acquisition or impacts to Florida Gas Transmission lines.
08/20 – Present	H.001498.6; LA 24 and LA 16 Company Canal Vertical Lift Bridge, Bourge, LA – LADOTD Technical Advisor / Quality Control Manager ensuring consistent performance by the construction engineering and inspection staff throughout the term of the project, including services for a new vertical lift bridge and operator's house. Monitoring construction activities; reviewing construction engineering inspection field records and reports; determining compliance with field testing methods and results; maintaining records of contractual operations, pay estimates and progress reports; preparing final estimate packages; conducting construction progress meetings; and construction close-out.
02/08 – 12/10	SR-5/US-1 Parker Bridge over ICWW, Palm Beach, FL – Florida DOT Principal-in-Charge / Lead Design Engineer for construction management at-risk project which included in-depth inspection, condition report with load ratings, and rehabilitation recommendations. The project also included preparation of structural, architectural, mechanical, and electrical plans to rehabilitate this Hopkins Trunnion twin double-leaf bascule span bridge. The \$8 million rehabilitation included hydraulic machinery retrofit, electrical system improvements, control house 2nd story addition, bridge widening, as well as roadway and embankment improvements.
01/15 – 03/17	Broad Causeway Bridge over ICWW, Bay Harbor Islands, FL – City of Bay Harbor Islands Principal-in-Charge / Lead Design Engineer for the project involving construction inspection for three bridges including a 1630-foot bascule span bridge. Scope included maintenance of traffic, roadway work, and bascule span rehabilitation including cathodic protection for the approach bridges substructure for \$14 million.
09/07 – 01/09	SR-814/Atlantic Boulevard Bridge, Pompano Beach, FL – Florida DOT Principal-in-Charge / Lead Design Engineer for this \$5 million Construction Management Risk to rehabilitate a Hopkins Trunnion double-leaf bascule span bridge. The project included hydraulic machinery retrofit; electrical system improvements, control house modifications, and bascule span structural steel rehabilitation and bridge railing replacement.
04/12 – 04/16	Boca Grande Causeway Swing Bridge Replacement, Placida, FL – Gasparilla Island Bridge Authority Technical Advisor / Quality Control Manager for the design of the replacement of a structurally deficient swing span bridge located on the Boca Grande Causeway. The fixed portion of the bridge utilized Florida I-beam girders founded on hammerhead pier caps and cast in place footings with 24-inch precast concrete piles. The project also included the installation of a permanent steel sheet pile bulkhead wall with cast in place concrete caps. Construction of critical temporary sheet pile walls required for phased construction, and a total of 0.24 miles of roadway construction.
01/19 – 12/24	SR 605 Movable Bascule Bridge Rehabilitation, Ocean Springs, MS – Mississippi DOT Technical Advisor / Quality Control Manager for the assessment, design, plan review, and quality control of SR 605 double-leaf bascule bridge, as a task-order to the IDIQ Master Bridge Contract which included developing standard and special bridge services, statewide for MDOT. Work included inspection and rehabilitation of structural, mechanical, and electrical bridge components, roadway approaches and development of maintenance and repair plans. All designs were in accordance with AASHTO, FHWA and MDOT guidelines and specs.
08/10 – 08/19	Bayou Teche Bridge at Oaklawn, St. Mary Parish, LA – LADOTD Principal-in-Charge providing inspection, engineering design, and post-design services for new Bayou Teche Bridge at Oaklawn project. Built in 1941 to carry LA Route 323 over Bayou Teche, the original bridge is being replaced with a new hydraulically operated swing bridge. H&H provided the electrical design for the bascule bridge in line with LADOTD's design requirements and standard design details. This bridge replacement project included new traffic signals, gates, and a barrier system design which were provided by LADOTD's roadway, structural, and mechanical designers.
08/08 – 08/13	Judge Seeber Vertical Lift Bridge, New Orleans, LA - LADOTD Technical Advisor / Quality Control Manager overseeing the task order involving the replacement of the vertical life bridge's entire electrical system, counterweight ropes, counterweight guides, and span locks in addition to miscellaneous structural repairs. Design work for this eligible for the National Register of Historic Places bridge was completed within three months to meet the FEMA funding deadline. The electrical system was replaced in-kind using secondary resistance control operated with a drum switch in accordance with LADOTD preference.

	Firm employed by		Hardesty & Hanover, LLC	
	Name	David Marcic, PE	Years of relevant experience with this employer	31
	Title	Chief Complex Analysis Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			MS / 1999 / Civil Engineering BS / 1995 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 077478 / NY / 06/30/2029	
Year registered	2000	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Technical Advisor and Load Rating Training	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
12/20 – 03/21	Goethals Cable Stay Bridge Load Rating, New York, NY – Port Authority of NY & NJ Senior Structural Engineer responsible for oversight and review of the analytical models for the Load Rating of the Eastbound and Westbound cable stayed bridges. Developed analytical approach, modelling techniques and performed load rating calculation checks.			
01/18 – 04/18	Bridges 3A and 19A Load Rating and Evaluation, Ontario, CA – St. Lawrence Seaway Management Corporation Project Manager and Lead Structural Engineer for the load rating and inspection of two rolling-lift bascule bridges, the Welland Canal and Carlton Street Bridges. Mr. Marcic led the team responsible for creating comprehensive models that captured various open/closed bridge positions as well as live, wind, and seismic load cases. The team produced ratings for all critical members for live load, special permit loads, and fatigue; and crafted a permit load rating tutorial for the client to conduct load ratings independently for any future permit vehicles.			
11/17 – 12/17	Throgs Neck Suspension Bridge, Bronx, NY – Triborough Bridge and Tunnel Authority Structural Engineer for the load rating and evaluation of the Throgs Neck Bridge for all AASHTO Special Haul Vehicles. Mr. Marcic used analysis models to conduct comprehensive ratings for the floorbeam trusses, the stringers at span, anchorage and tower locations, the deck slab, the stiffening trusses, and the suspension cables.			
01/17 – 11/17	Load Rating and Inspection of Bridge 3A and 19A, St. Catherine's and Port Colborne, ON – St. Lawrence Seaway Management Corporation Project Manager and Lead Structural Engineer for the load rating and inspection of two rolling-lift bascule bridges. Led the team responsible for creating comprehensive models which captured various open/closed bridge positions as well as live, wind, and seismic loads. The team produced ratings for all critical members for live load, special permit loads, and fatigue; and crafted a permit load rating tutorial so the client could conduct load ratings independently for any future permit vehicles.			
02/15 – 05/17	Bay Bridge Deck Replacement Study, Arnold, MD Structural Engineer responsible for the deck replacement study for the eastbound Bay Bridge truss spans. The study involved the evaluation of multiple deck types, including accelerated construction methods using prefabricated concrete, Exodermic or steel orthotropic systems with improvements to the bridge geometry. The load rating of the trusses was also evaluated for the effect of the new deck system weigh and associated strengthening methods and cost. Concept plans and construction staging plans were developed as well as preliminary construction and life cycle cost estimates for all options considered. Developed a comprehensive concept report. This task also included the review of concept reports prepared by other consultants for the deck replacement on other parts of the structure			

03/14 – 12/14	Staging Dock Inspection and Analysis, Arnold, MD Structural Engineer responsible for the condition evaluation and load rating of the existing timber staging dock at the Bay Bridge Facility. Developed an inspection report and load rating findings for the deteriorating structure. This task also included the development of a concept study for the rehabilitation or replacement of the structure, including preliminary construction cost estimates and schedule.
03/15 – 08/15	Live Load Rating and Seismic Evaluation, Ontario, Canada – St. Lawrence Seaway Management Corporation Project Manager for vertical lift highway bridge on the Welland Canal. Responsible for live load rating and seismic evaluation of this vertical lift bridge as per Canadian bridge code. The project included site visits, developing two 3D models of the bridge in CSI Bridge, analysis of the towers, lift truss and floor system (crossbeams, stringers and floorbeams) for dead, live, wind, and seismic loads. Load rating of the lift truss and floor system for live loads, legal loads, and permit trucks as per the Canadian bridge code were also performed.
03/05 – 12/16	Bridge Engineering Services, Statewide, MD – Maryland State Highway Administration Lead Structural Engineer responsible for structural engineering services for multiple cycles of this Contract. Mr. Marcic was the Inspection Team Leader for complex bridges (Thomas Johnson Bridge) and movable bridge inventory. Load Ratings were performed for the steel superstructure elements in the bascule span of the Snow Hill and the Woodrow Wilson bascule bridges. SHA design trucks and special permit trucks were used in the analysis to develop the Inventory and operating ratings for the girders, floorbeams and stringers. Strain gage balance testing has also been performed for SHA under this ongoing Contract. Strain data was recorded and analyzed from the Chester River Bridge to establish a base-line balance condition of the bridge prior to a painting and rehabilitation contract.
04/17 – 09/22	Rehabilitation of the Arlington Memorial Bridge, Washington, DC – Federal Highway Administration/National Park Service Project Manager and Lead Structural Engineer on the design-build team for rehabilitation of the Arlington Memorial Bridge. The bridge is an iconic crossing over the Potomac River in the nation's capital and is listed on the National Register of Historic Places. The existing bridge consists of multiple-arch spans on the D.C and Virginia approaches with a central double-leaf bascule span. The project involved the rehabilitation of the approach arch spans, emergency repairs for the central double-leaf bascule span, removal of central bascule span, and replacing it with a fixed span. Mr. Marcic led H&H's efforts for the bridge engineering services of the bascule span removal and its replacement with a fixed span.
02/17 – 12/17	Final Design and Construction Support Services for the Route 195 SB Lanes over Route 76, CSX Railroad, Ramp S, Richmond, VA – Virginia DOT Project Manager for the assessment of the bridge and to determine whether it can be repaired and rehabilitated or if it needs a replacement. Mr. Marcic led the assessment team, considering the existing alignment of the bridge and other alternatives for repair, rehabilitation, and replacement. He also conducted a life cycle cost analyst. Once the in-depth inspection was complete, Mr. Marcic led the team to develop best-value plans to bring the fracture-critical bridge up to current stands. The design addressed the challenges posed by the urban environment, such as tight geometric constraints and minimizing traffic, utility, and right-of-way impacts.

	Firm employed by	Hardesty & Hanover, LLC		
	Name	Corey Bourgeois, PE	Years of relevant experience with this employer	3
	Title	Senior Project Engineer	Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization			B.S. / 2013 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 42362 / LA / 09/30/2028 Certifications: NHI 130078 Fracture Critical Inspection Techniques for Steel Bridges; NHI 130092 Fundamentals of LRFR and Applications of LRFR For Bridge Superstructures; NHI 130081 Load and Resistance Factor Design (LRFD) For Highway Bridge Superstructures; NHI 130056 Safety Inspection of In-Service Bridges	
Year registered	2018	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Task Order Manager; Plan/Document Retrieval Site Visits; AASHTOWare Load Rating; and Load Rating Training – Meets MPR 3 and 5	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
01/21 – 11/23	LADOTD Bridge Maintenance Section, Statewide, LA – LADOTD Load Rating Manager responsible for overseeing statewide off-system and timber bridge load rating programs, including coordination, quality control, and technical review of load rating deliverables. Performed load ratings for a wide variety of bridge types, including timber, prestressed concrete, reinforced concrete, and steel structures, using AASHTOWare BrR in accordance with the AASHTO Manual for Bridge Evaluation and LADOTD requirements. Additionally, Corey conducted load ratings and structural evaluations for routine permit and superload vehicles, including route-specific analyses and expedited assessments to support permitting decisions. Also performed emergency field assessments of bridges following significant inspection findings and damage events providing prompt recommendations regarding traffic restrictions, load postings, monitoring, or necessary repairs.			
01/14 – 01/21	LADOTD Bridge Design Section, Statewide, LA – LADOTD Bridge Design Engineer responsible for the analysis and design of a wide range of bridge components, including precast prestressed concrete girders, structural steel members, slab span superstructures, bent caps, reinforced concrete columns, drilled shafts, deck continuity details, and bearing assemblies. Duties included developing construction plans, performing structural calculations in accordance with AASHTO and LADOTD specifications, and completing as-designed load ratings for every bridge project to verify load-carrying capacity.			
12/25 – Present	IDIQ for Bridge Inspection and Load Rating Services, Statewide, MS – Mississippi Office of State Aide Road Construction Project Engineer for bridge inspection and load rating services for selected bridges across the state of Mississippi. Bridges are load rated for inventory and operating loads as well as Legal Load and Emergency Vehicles. Load Rating Reports for each bridge is prepared using AASHTOWARE Bridge Rating Software (BrR). Other tasks include developing and entering inspection and load rating reports into AssetWise.			
11/23 – Present	2021–2025 and 2025–2028 Biennial and Interim Bridge Inspection Contracts, Bronx, Kings, and Richmond Counties, NY – New York State DOT Load Rating Task Manager for NYSDOT bridge inspection contracts, responsible for overseeing staffing, scheduling, technical coordination, and quality control for all load rating activities on 600+ bridges in conjunction with their biennial and interim inspections. Directed and performed load rating activities for a diverse inventory of bridge types, including the development and maintenance of bridge-specific AASHTOWare Bridge Rating (BrR) models, incorporation of inspection findings and deterioration data, and evaluation of structural capacity impacts resulting from damaged or deteriorated components. Responsibilities included performing site-specific and flag load evaluations, providing rapid engineering assessments in response to emergency inspection findings, and developing recommendations for load posting, monitoring, repairs, and operational restrictions. Additionally, conducted independent peer reviews of load ratings prepared by other firms, verifying modeling assumptions, rating methodologies, and load cases.			

11/23 – 12/24	In-Depth Inspection & Load Rating of Box Girder Bridges, Meridian, MS – Mississippi DOT Quality Control Review for load rating services being performed on the two bridges based on inspection findings and plan details for Bridge No. 147.9A at I-59 and Bridge No. 131.5B at I-20 located near Meridian in Lauderdale County. The analyses included developing a finite element model of each bridge and for load ratings to follow LFR considering MDOT's permitted vehicle legal loads. If warranted, repair recommendations will be made based on the inspection results and the load rating.
03/25 – Present	H4400021516: Bridge Rehabilitation for Five Movable Bridges, Lafourche, Terrebonne, and Pointe Coupee Parishes, LA – LADOTD Bridge Engineer for the inspection, evaluation, and rehabilitation design services for five movable bridges under LADOTD Contract No. 4400021516 as part of the LADOTD Movable Bridge Rehabilitation Program. Supported structural, mechanical, electrical, and architectural rehabilitation efforts to extend bridge service life, improve load capacity, and achieve current code compliance. Project services also included NBIS in-depth inspections, load ratings using AASHTOWare BrR, NDT and strain gage testing, scope and report development, design calculations, PS&E production, technical specifications, permit coordination, construction cost estimates, shop drawing and RFI review, and mechanical/electrical system inspections and functional testing. Four bridges carry historic designations, including the Golden Meadow Bridge Preservation Priority structure, with all rehabilitation designed in accordance with LADOTD historic bridge requirements and the Secretary of the Interior's Standards.
11/23 – Present	H.004396 Lapalco Blvd Movable Bridge over Harvey Canal, Jefferson Parish, Louisiana - Jefferson Parish DPW/LADOTD Project Manager for the pre-design inspection, structural evaluation, and design of a new three-lane double-bascule movable bridge crossing of the Harvey Canal and associated widening of Lapalco Boulevard. Responsibilities included managing bridge inspection data collection, coordinating structural analyses, and overseeing the development of bridge load rating models to evaluate existing and proposed bridge capacities. Oversaw detailed load ratings using AASHTOWare Rating (BrR) for the existing movable bridge approaches, assessing structural capacity under current design loads, permit vehicles, and future traffic demands to support rehabilitation and widening decisions. The project also includes rehabilitation of the existing four-lane bridge, modifications to accommodate a shared-use pedestrian/bicycle facility, improvements to bridge and roadway approaches, and development of a Traffic Control Plan, with all work performed in accordance with LADOTD standards and specifications.
08/18 – 06/20	H.000133 US 80 at KCS Railroad, Simsboro, LA - LADOTD Bridge Task Manager for the replacement of a 290-ft-long railroad overpass located on a horizontal S-curve. The structure consisted of reinforced concrete slab spans with a LG-36 girder span crossing the railroad, supported on column bent substructures with drilled shaft foundations. The project presented numerous geometric and structural challenges, including roadway superelevation, combined horizontal and vertical curvature, maintenance of required railroad clearances, and construction considerations. Corey was responsible for managing the bridge design effort and performing the structural analysis and design of all bridge components, including the superstructure, substructure, foundations, and associated bridge details. He also developed the as-designed load rating for the completed structure, utilizing AASHTOWare BrR. As Bridge Task Manager, he coordinated technical disciplines, oversaw design production and quality control, and ensured successful delivery of this approximately \$6.5M project in accordance with applicable design standards and railroad requirements.
03/24 – Present	H.009730.5 LADOTD Movable Bridge Manual, New Orleans, LA - LADOTD Structural Engineer responsible for the development of the LADOTD Movable Bridge Inspection Manual (including details, photos, illustrations, and specific examples); building a lesson plan and materials for the classroom training from the inspection manual; and providing classroom and field training. The manual includes bridge inspection principles and overview; movable bridge overview; mechanical, electrical, and structural inspection of movable bridges; operator house; and classroom and field training for electrical, mechanical, and structural).

	Firm employed by		Hardesty & Hanover, LLC	
	Name	Erik Diaz, PE	Years of relevant experience with this employer	7
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	11
Degree(s) / Years / Specialization			B.S. / 2008 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 37712 / LA / 09/30/2027 Certifications: NHI 130056 Safety Inspection of In-Service Bridges; Maintenance & Rehabilitation of Historic Bridges (LADOTD); NHI 130081 Load and Resistance Factor Design (LRFD) For Highway Bridge Superstructures; NHI 130078 Fracture Critical Inspection Techniques for Steel Bridges	
Year registered	2013	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Task Order Manager; Plan/Document Retrieval Site Visits; AASHTOWare Load Rating; and Load Rating Training – Meets MPR 3 and 5	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
03/25 – Present	H.013818 Golden Meadow Vertical Lift Bridge Rehabilitation, Golden Meadow, LA - LADOTD Project Manager for this inspection and rehabilitation project for a 200-foot-long steel vertical lift bridge. After performing an In-Depth inspection of the bridge is complete, a LRFR load rating will be performed based on the inspection findings. A recommended rehabilitation scope of work will be created and once approved by the client, the plans will begin development. This bridge is considered a Historic Preservation Priority bridge therefore the rehabilitation will need to take extra care in maintaining as much as possible of the appearance and function of the bridge to when it was first built.			
03/18 – 10/24	2018-2024 IDIQ Master Bridge Contract (Bridge Inspection & Rehabilitation), Statewide, MS – Mississippi DOT Senior Structural Engineer for bridge inspection and rehabilitation services under this IDIQ Master Bridge Contract. Scope includes inspections and developing standard and special bridge services for multiple bridges across Mississippi. Services include structural and geotechnical design for bridges and retaining walls; mechanical and electrical bridge components; hydraulic design for bridges; design for roadway, traffic signals plans, ITS, and roadway lighting; design review services and constructability review. In addition, the contract includes specialized services such as: bridge scope analysis, bridge load rating , bridge safety or repair inspections, and development of maintenance and repair plans. All designs are in accordance with AASHTO, FHWA and MDOT guidelines and specifications.			
01/23 – Present	H4400023909: IDIQ Contract for Movable Bridge Preservation, Statewide, LA – LADOTD Project Manager for several task orders under this movable bridge preservation and rehabilitation IDIQ contract. Services include mechanical, structural, and electrical improvements for swing and lift bridges throughout Louisiana. Projects included the Boudreaux Canal Swing Bridge, Jackson Street Vertical Lift Bridge, and Bayou Teche Swing Bridge. Services include the design, plans/specifications production, and construction-phase services for hydraulic systems, operator facilities, ADA-compliant pedestrian gates, bridge control systems, lighting, traffic signals, standby power, navigation aids, and structural support elements in accordance with LADOTD, AASHTO, NEC, and ADA requirements.			
06/23 – Present	H.009730.5 In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Senior Bridge Engineer for the inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis, Miller’s Bluff, and Krotz Springs) and West Fork, LA 433 over Bayou Bonfouca, and LA 657 over Bayou Lafourch movable bridges have been completed to date.			

12/12 – 10/15	Houma Navigation Canal Bridge Rehabilitation, Houma, LA – LADOTD Bridge Structural Engineer responsible for performing bridge inspections to identify repairs for rehabilitation as well as providing bridge load rating using AASHTOWare BrR load rating software to identify areas for strengthening. Also, designed and detailed various elements for bridge rehabilitation.
10/14 – 12/16	H.009859.5; Bridge Ratings for 110 Bridges, Statewide – LADOTD Bridge Structural Engineer responsible for developing spreadsheets and processes for rating of several bridge structures throughout the state. He performed load ratings for bridge superstructures and substructures using AASHTOWare BrR load rating software and Excel. He also developed bridge load rating reports. Erik created the procedure for rating substructures, BrR modeling, report QC, and calculation QC.
08/15 – 02/19	Vermillion River Vertical Lift Bridges Rehabilitation, Vermillion Parish, LA – LADOTD Senior Structural Engineer for the inspection, rating, and final rehabilitation recommendations report for two steel vertical lift bridges over the Vermillion River. Work on this project included inspection and load rating to identify components of the bridge to be rehabilitated. Evaluation of various alternatives for strengthening the bridge and increasing vehicular vertical clearance. Produced engineers cost estimate for repairs, and prepared final report of recommendations.
01/20 – Present	Almonaster Avenue Railroad Bridge of the Industrial Canal Rehabilitation, New Orleans, LA – Port of New Orleans Bridge Structural Engineer for the bridge assessment, rehabilitative engineering design, and construction inspection services required for the partial replacement of the Almonaster Avenue Bridge, a movable Strauss-heel trunnion bridge. H&H's 2019 assessment of the circa-1920, National Register of Historic Places eligible bridge revealed that improvements to the electrical and mechanical systems, superstructure, and counterweight were required to return this bridge to its full operating capability. Although the existing substructure could remain, modifications to other bridge elements were deemed necessary to accommodate the rehabilitated superstructure. All design work is in accordance with LADOTD Standards and Specifications and reviewed by LADOTD.
08/19 – 10/19	Seabrook Bascule Bridge Bearing Repairs, New Orleans, LA – Port of New Orleans Movable Bridge Field Engineer for the construction of repairs to the concrete bent cap at the toe of the span. Work on this project included design of bent cap strengthening due to cracking at bridge bearing, tracking contractor progress, and construction compliance with design plans. Preparation of final acceptance report upon completion of construction.
10/08 – 04/13	Huey P. Long Bridge Over The Mississippi River, Bridge City, LA – New Orleans Public Belt Railroad and LADOTD Bridge Structural Engineer responsible for checking and approving shop drawings as well as performing various construction support calculations. The project was a major widening of the bridge including HPL trusses and approaches.
07/16–07/17	Two US 11 Bascule Bridges over Lake Pontchartrain Rehabilitation, Jefferson and St. Tammany Parishes, LA – LADOTD Senior Bridge Structural Engineer for the comprehensive rehabilitation of one bascule and replacement of another bascule bridge over Lake Pontchartrain. Work on this project included the inspection of old spans, the rehabilitation design development for the north bascule span and fender, as well as the design of construction plans for a new south bascule span.
05/19 – 08/19	Seabrook Bascule Bridge, New Orleans, LA – Port of New Orleans Project Manager for the construction of repairs to the concrete bent cap at the toe of the span. Work on this project included design of bent cap strengthening due to cracking at bridge bearing, tracking contractor progress and construction compliance with design plans. Preparation of final acceptance report upon completion of construction.
12/15 – 10/19	UPRR Angleton Bridge over the San Bernard River Replacement of Swing Bridge with New Vertical Lift, Sweeny, TX - UPRR Lead Senior Structural Engineer for the design and construction of a new through plate girder vertical lift bridge over the San Bernard River near Sweeny Texas. The project included design of new steel through plate girder vertical lift, bridge protection cell (dolphin), approach spans and construction management. Erik provided the design of steel plate girders for the bridge. Erik provided the design of steel plate girders for the bridge. This project also included emergency bridge repairs due to failure of bridge pier from scour produced by Hurricane Harvey flooding.

	Firm employed by		Hardesty & Hanover, LLC	
	Name		Frederick Wetekamm, III, PE	Years of relevant experience with this employer
	Title		Senior Project Engineer	Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization			M.E. / 2018 / Construction Management B.S. / 1984 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 25369 / LA / 03/31/2028 Certifications: Maintenance and Rehabilitation of Historic Bridges (LADOTD); ATSSA Traffic Control Supervisor and Flagger; FHWA NHI #139005, FHWA NHI Course #130053 Bridge Inspection Refresher Training, Driven Pile Foundations – Construction Monitoring	
Year registered	1993	Discipline	Civil Engineer and Environmental Engineer	
Contract role(s) / brief description of responsibilities			Plan/Document Retrieval Site Visits – Meets MPR 3	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
03/25 – Present	H4400021516: Bridge Rehabilitation for Five Movable Bridges, Lafourche, Terrebonne, and Pointe Coupee Parishes, LA – LADOTD Constructability Reviewer & Senior Project Engineer for the inspection, evaluation, and rehabilitation design services for five movable bridges under LADOTD Contract No. 4400021516 as part of the LADOTD Movable Bridge Rehabilitation Program. Supported structural, mechanical, electrical, and architectural rehabilitation efforts to extend bridge service life, improve load capacity, and achieve current code compliance. Project services also included NBIS in-depth inspections, load ratings using AASHTOWare BrR, NDT and strain gage testing, scope and report development, design calculations, PS&E production, technical specifications, permit coordination, construction cost estimates, shop drawing and RFI review, and mechanical/electrical system inspections and functional testing. Four bridges carry historic designations, including the Golden Meadow Bridge Preservation Priority structure, with all rehabilitation designed in accordance with LADOTD historic bridge requirements.			
03/18 – 10/24	2018-2024 IDIQ Master Bridge Contract (Bridge Inspection & Rehabilitation), Statewide, MS – Mississippi DOT Constructability Reviewer & Senior Project Engineer for bridge inspection and rehabilitation services under this IDIQ Master Bridge Contract. Scope includes inspections and developing standard and special bridge services for multiple bridges across Mississippi. Services include structural and geotechnical design for bridges and retaining walls; mechanical and electrical bridge components; hydraulic design for bridges; design for roadway, traffic signals plans, ITS, and roadway lighting; design review services and constructability review. In addition, the contract includes specialized services such as: bridge scope analysis, bridge load rating, bridge safety or repair inspections, and development of maintenance and repair plans. All designs are in accordance with AASHTO, FHWA and MDOT guidelines and specifications.			
06/23 – Present	H.009730.5 In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Project Engineer for the inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis, Miller’s Bluff, and Krotz Springs) and West Fork, LA 433 over Bayou Bonfouca, and LA 657 over Bayou Lafourch movable bridges have been completed to date.			
12/25 – Present	IDIQ for Bridge Inspection and Load Rating Services, Statewide, MS – Mississippi Office of State Aide Road Construction Project Engineer for bridge inspection and load rating services for selected bridges across the state of Mississippi. Bridges are load rated for inventory and operating loads as well as Legal Load and Emergency Vehicles. Load Rating Reports for each bridge is prepared using AASHTOWARE Bridge Rating Software (BrR). Other tasks include developing and entering inspection and load rating reports into AssetWise.			
01/23 – Present	H4400023909: IDIQ Contract for Movable Bridge Preservation, Statewide, LA – LADOTD Constructability Reviewer & Senior Project Engineer supporting movable bridge preservation and rehabilitation task orders under an LADOTD IDIQ contract, including mechanical, structural, and electrical improvements for swing and lift bridges throughout Louisiana. Projects included the Boudreaux			

	Canal Swing Bridge, Jackson Street Vertical Lift Bridge, and Bayou Teche Swing Bridge. Services include the design, plans/specifications production, and construction-phase services for hydraulic systems, operator facilities, ADA-compliant pedestrian gates, bridge control systems, lighting, traffic signals, standby power, navigation aids, and structural support elements in accordance with LADOTD, AASHTO, NEC, and ADA requirements.
01/20 – Present	H.014530: Almonaster Ave Bridge Rehabilitation and New Connector Road, New Orleans, LA - Port of New Orleans/LADOTD Constructability Review Engineer for the bridge assessment, complete rehabilitative engineering design, and road design services required for the partial replacement of the Almonaster Ave Bridge and a new connector road. The Almonaster Ave Bridge crosses over the Industrial Canal and provides two vehicular lanes and a single railroad track crossing down the center of the span. H&H's 2019 assessment of the circa-1920, eligible for the National Register of Historic Places bridge revealed that improvements to the electrical and mechanical systems, superstructure, and the connecting roads were required to return this bridge to its full operating capability. The road design services included a new alignment for the connecting road including all drainage structures. H&H also developed a hydraulic study and a site plan that included several retention ponds for drainage improvements. Other services included environmental, geotechnical, and pavement design. Coordinated with Entergy New Orleans for ROW use for the new connector roads, USACE for reconstruction of the existing roadway over the floodwall, and CSX railroad for implementing a schedule for track time during construction.
11/15 – 03/18	S.P. No 006196 Wisner Bridge Replacement, Orleans Parish, LA – LADOTD Project Manager in responsible charge for contract administration, supervision of the Project Engineer, and LADOTD Certified Inspectors for construction inspection. This project scope was to replace the 1955 bridge with a new structure. The 1,500-foot-long new bridge consists of prestressed concrete pilings, with a combination of precast prestressed concrete girder spans and steel girder spans over I-610. Also coordinated with the Designer/Engineer of Record, the City of New Orleans, and the LADOTD Program Manager from the inception of the project to provide the most effective design to meet the current needs of the public utilizing the current LADOTD BDEM and LSSRB. The bridge provides a dedicated protected bike lane.
09/22 – 12/25	H.013897.6 I-10 & I-12 College Dr Flyover Ramp Design- Build, Baton Rouge, LA – LADOTD Project Manager for design and construction quality control/quality assurance for this road and bridge design-build project which is located at the I-10 West exit to College Drive, in advance of the I-10 & I-12 West merge. H&H serves as Design-Builder's Construction Quality Control Firm (CQCF) and oversees all Design Quality Control and Construction Quality Control activities for the project. Responsibilities include the development and implementation of Comprehensive Quality Plan to ensure the design and construction conforms to all specified requirements.
02/23 – Present	H.015028.6 Bayou Barataria Movable Bridge Replacement (CE&I), Phase 1, LA 302, Jefferson Parish, LA - LADOTD Project Engineer responsible for managing construction contract administration and construction engineering and inspection services for the Bayou Barataria Movable Bridge Replacement. This project consists of construction of the movable swing span bridge, operator's house, associated substructure elements, and pier protection system along relocated LA 302 in Jefferson Parish. Phase 2 consists of construction of new roadway alignment for LA45 to tie into LA 302 in Jefferson Parish. Assisted in coordination of utility location and relocations for Entergy, Cox, Jefferson Parish Water Dept. and Alpine Exploration (LNG lines).
01/96 – 12/07	LADOTD Bridge Maintenance Engineer, LADOTD District 2, LA – LADOTD Bridge Maintenance Engineer responsible for managing the program for Bridge Inspection, Operations and Maintenance Program, bridge operators, bridge repair crews, and bridge inspectors. The New Orleans Area has over 950 bridges (32 movable bridges), three tunnels, two navigation locks, and three drainage pumping stations. Was responsible for creating and distributing repair work orders to the appropriate personnel and coordinating the repairs, materials, equipment, labor, media information, and/or traffic control. Wrote major repair requests and generated project plans and specifications for repair projects and accident damages to the bridges for marine, vehicular and environmental damages. Served as the lead coordinator for the projects with LADOTD District and statewide forces, contractors, consultants, public officials, media, property owners, and the bridge maintenance supervisor. Provided construction inspection for his projects. Championed the first Bridge Operator Manual and the first Bridge Maintenance Manual for the movable bridges. Provided technical training to mechanics and electricians on implementing processes in the Manuals that increased the reliability and performance of the bridges. Aided the legal section providing documentation for the collection of reimbursements for repairs from accident damages to the movable and fixed bridges. Provided damage assessments (DIR) for federally reimbursed repairs from hurricanes and tropical storms. Has extensive experience with specialized traffic requirements for the bridge/tunnel couplets, District traffic and marine requirements for temporary bridge closures, and permit load crossings.

	Firm employed by		Hardesty & Hanover, LLC	
	Name	Linh Kim, PE	Years of relevant experience with this employer	6
	Title	Civil Engineer	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization			B.S. / 2017 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 47527 / LA / 9/30/2027 Certifications: NHI 130081 Load and Resistance Factor Design (LRFD) For Highway Bridge Superstructures; NHI 130055 Safety Inspection of In-Service Bridges; ATSSA Traffic Control Supervisor and Flagger	
Year registered	2023	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Plan/Document Retrieval Site Visits; AASHTOWare Load Rating – Meets MPR 5	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
07/20 – 10/24	2018-2024 IDIQ Master Bridge Contract (Bridge Inspection & Rehabilitation), Statewide, MS – Mississippi DOT Structural Engineer & Bridge Inspector for bridge inspection and rehabilitation services under this IDIQ Master Bridge Contract. Scope includes inspections and developing standard and special bridge services for multiple bridges across Mississippi. Services include structural and geotechnical design for bridges and retaining walls; mechanical and electrical bridge components; hydraulic design for bridges; design for roadway, traffic signals plans, ITS, and roadway lighting; design review services and constructability review. In addition, the contract includes specialized services such as: bridge scope analysis, bridge load rating , bridge safety or repair inspections, and development of maintenance and repair plans. All designs are in accordance with AASHTO, FHWA and MDOT guidelines and specifications.			
03/25 – Present	H4400021516: Bridge Rehabilitation for Five Movable Bridges, Lafourche, Terrebonne, and Pointe Coupee Parishes, LA – LADOTD Structural Engineer & Bridge Inspector for the inspection, evaluation, and rehabilitation design services for five movable bridges under LADOTD Contract No. 4400021516 as part of the LADOTD Movable Bridge Rehabilitation Program. Supported structural, mechanical, electrical, and architectural rehabilitation efforts to extend bridge service life, improve load capacity, and achieve current code compliance. Project services also included NBIS in-depth inspections, load ratings using AASHTOWare BrR , NDT and strain gage testing, scope and report development, design calculations, PS&E production, technical specifications, permit coordination, construction cost estimates, shop drawing and RFI review, and mechanical/electrical system inspections and functional testing. Four bridges carry historic designations, including the Golden Meadow Bridge Preservation Priority structure, with all rehabilitation designed in accordance with LADOTD historic bridge requirements and the Secretary of the Interior's Standards.			
02/21 – Present	H.004396 Lapalco Blvd Movable Bridge over Harvey Canal, Jefferson Parish, Louisiana - Jefferson Parish DPW/LADOTD Structural Engineer for the pre-design inspection, rehabilitation, and widening of the existing four-lane Lapalco Blvd to provide a facility carrying three lanes of traffic in each direction, as well as the design of a new three-lane double bascule movable bridge crossing of Harvey Canal. The scope of services also includes the design of a new bridge to be constructed as an independent structure adjacent and north of the existing bridge with a new operator house. All design work is in accordance with LADOTD Standards and Specifications and being reviewed by LADOTD. Load rating was performed using AASHTOWare BrDR load rating software.			
09/21 – 07/22	Tennessee Bridge Inspection and Load Rating – Norfolk Southern Corp., Decatur, AL - Norfolk Southern Corp. Structural Engineer Intern providing inspection, load rating , and engineering design services under the Systemwide Engineering and Design Services contract. The steel repairs at Gulf Division MP 362.60-A Decatur, AL task was awarded to H&H through this contract. The task involves the performance of an on-site inspection, the preparation of load rating calculations and the development of repair plans for the structure in accordance with the scope of work. The structure consists of three superstructure types: vertical lift span, deck plate girder span and seven through truss spans.			

12/25 – Present	IDIQ for Bridge Inspection and Load Rating Services, Statewide, MS – Mississippi Office of State Aide Road Construction Load Rating Engineer for bridge inspection and load rating services for selected bridges across the state of Mississippi. Bridges are load rated for inventory and operating loads as well as Legal Load and Emergency Vehicles. Load Rating Reports for each bridge is prepared using AASHTOWARE Bridge Rating Software (BRr) . Other tasks include developing and entering inspection and load rating reports into AssetWise.
01/23 – Present	H4400023909: IDIQ Contract for Movable Bridge Preservation, Statewide, LA – LADOTD Structural Engineer supporting movable bridge preservation and rehabilitation task orders under an LADOTD IDIQ contract, including mechanical, structural, and electrical improvements for swing and lift bridges throughout Louisiana. Projects included the Boudreaux Canal Swing Bridge, Jackson Street Vertical Lift Bridge, and Bayou Teche Swing Bridge. Services include the design, plans/specifications production, and construction-phase services for hydraulic systems, operator facilities, ADA-compliant pedestrian gates, bridge control systems, lighting, traffic signals, standby power, navigation aids, and structural support elements in accordance with LADOTD, AASHTO, NEC, and ADA requirements.
06/23 – Present	H.009730.5 In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Bridge Inspector for the inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis, Miller's Bluff, and Krotz Springs) and West Fork, LA 433 over Bayou Bonfouca, and LA 657 over Bayou Lafourch movable bridges have been completed to date.
09/20 – Present	H.014530: Almonaster Ave Bridge Rehabilitation and New Connector Road, New Orleans, LA - Port of New Orleans/LADOTD Bridge Engineer for the bridge assessment, complete rehabilitative engineering design, and road design services required for the partial replacement of the Almonaster Ave Bridge and a new connector road. The Almonaster Ave Bridge crosses over the Industrial Canal and provides two vehicular lanes and a single railroad track crossing down the center of the span. H&H's 2019 assessment of the circa-1920, eligible for the National Register of Historic Places bridge revealed that improvements to the electrical and mechanical systems, superstructure, and the connecting roads were required to return this bridge to its full operating capability. The road design services included a new alignment for the connecting road including all drainage structures. H&H also developed a hydraulic study and a site plan that included several retention ponds for drainage improvements. Other services included environmental, geotechnical, and pavement design.
04/22 – 02/25	SR826 Palmetto Design-Build Design and Post, Miami-Dade County, FL – Florida DOT Structural Engineer for this bridge located in downtown Miami urban area. The bridge design requirement was to keep existing bridge and roadways open to traffic while widening construction was being performed. H&H performed design calculations for concrete superstructure and steel substructure elements for bridge widening and created details and plan sheets for superstructure and substructure elements for bridge widening.
09/19 – 11/19	H.002176.5: LA 10 Bridges (Burton's Lake, Bayou HaHa, Bayou TawPaw) – LADOTD Civil Engineer Intern created General Plans set for three different bridges after receiving information from Road Design and Hydraulics. Linh contributed to the preparation of 60% Preliminary Plans Set to be sent out Hydraulics, Property Survey, and Subgrade Soil Survey sections.
01/19 – 04/19	H.009498.5: LA 121: Calcasieu River Bridge, Lake Charles, LA – LADOTD Civil Engineer Intern designed and detailed an LG-36 (I-Beam) Concrete Prestressed Girder Bridge using continuous deck spans on a horizontal curve with a 5% slope. The continuous deck spans were 240-ft.-long using four 60-ft.-long deck spans with a bridge width of 42.5 ft. The superstructure and girders were designed using Bentley's Conspan software and DOTD's Bridge Design Evaluation Manual. The substructure consists of pile bents that were designed using STAAD Modeling software and Excel.
09/19 – 11/19	H.009482.5: LA 113: Jim Burney Branch Bridge – LADOTD Civil Engineer Intern contributing to the preparation of 60% final plans review and submittal. Linh completed revisions for initial design due to comments from the district and Project Engineer reviewer. He completed bridge load rating using AASHTOWare BRr software and STAAD Analysis.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Dalton Hunt, 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		B.S. / 2021 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 51514 / LA / 9/30/2026 Certifications: ATSSA Traffic Control Supervisor and Flagger; NHI 130055 Safety Inspection of In-Service Bridges		
Year registered	2026	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Plan/Document Retrieval Site Visits		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/22 – 10/24	2018-2024 IDIQ Master Bridge Contract (Bridge Inspection & Rehabilitation), Statewide, MS – Mississippi DOT Structural Designer for bridge inspection and rehabilitation services under this IDIQ Master Bridge Contract. Scope includes inspections and developing standard and special bridge services for multiple bridges across Mississippi. Services include structural and geotechnical design for bridges and retaining walls; mechanical and electrical bridge components; hydraulic design for bridges; design for roadway, traffic signals plans, ITS, and roadway lighting; design review services and constructability review. In addition, the contract includes specialized services such as: bridge scope analysis, bridge load rating, bridge safety or repair inspections, and development of maintenance and repair plans. All designs are in accordance with AASHTO, FHWA and MDOT guidelines and specifications.			
12/25 – Present	IDIQ for Bridge Inspection and Load Rating Services, Statewide, MS – Mississippi Office of State Aide Road Construction Assistant Project Engineer for bridge inspection and load rating services for selected bridges across the state of Mississippi. Bridges are load rated for inventory and operating loads as well as Legal Load and Emergency Vehicles. Load Rating Reports for each bridge is prepared using AASHTOWARE Bridge Rating Software (BrR). Other tasks include developing and entering inspection and load rating reports into AssetWise.			
06/23 - Present	H.009730.5; LADOTD In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Structural Inspector for inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis and Miller’s Bluff) and a vertical lift bridge (West Fork) have been completed to date.			
02/22 – Present	Almonaster Avenue Bridge Rehabilitation and New Connector Road, New Orleans, LA – Port of New Orleans Engineer Intern for the bridge assessment, complete rehabilitative engineering design, and road design services required for the partial replacement of the Almonaster Avenue Bridge and a new connector road. The road design services include a new alignment for the connecting road, including all drainage structures. H&H also developed a hydraulic study and site plan that includes several retention ponds for drainage improvements. All design work is according to LADOTD Standards and Specifications and reviewed by LADOTD.			

02/22 – Present	H.004396 Lapalco Boulevard Movable Bridge over Harvey Canal, Westwego, LA – Jefferson Parish DPW/LADOTD Engineer Intern for the pre-design inspection, rehabilitation, and widening of the existing four-lane Lapalco Boulevard to provide a facility carrying three lanes of traffic in each direction, as well as the design of a new three-lane double bascule movable bridge crossing of Harvey Canal. The scope of services also includes the design of a new bridge to be constructed as an independent structure immediately adjacent and north of the existing bridge with a new operator house. All design work is accordance to LADOTD Standards and Specifications and reviewed by LADOTD. Load rating was performed using AASHTOWare BrDR load rating software.
03/25 – Present	H4400021516: Bridge Rehabilitation for Five Movable Bridges, Lafourche, Terrebonne, and Pointe Coupee Parishes, LA – LADOTD Roadway Engineer for the inspection, evaluation, and rehabilitation design services for five movable bridges under LADOTD Contract No. 4400021516 as part of the LADOTD Movable Bridge Rehabilitation Program. Supported structural, mechanical, electrical, and architectural rehabilitation efforts to extend bridge service life, improve load capacity, and achieve current code compliance. Project services also included NBIS in-depth inspections, load ratings using AASHTOWare BrR, NDT and strain gage testing, scope and report development, design calculations, PS&E production, technical specifications, permit coordination, construction cost estimates, shop drawing and RFI review, and mechanical/electrical system inspections and functional testing. Four bridges carry historic designations, including the Golden Meadow Bridge Preservation Priority structure, with all rehabilitation designed in accordance with LADOTD historic bridge requirements and the Secretary of the Interior's Standards.
01/23 – Present	H4400023909: IDIQ Contract for Movable Bridge Preservation, Statewide, LA – LADOTD Structural Designer for several task orders under this movable bridge preservation and rehabilitation IDIQ contract. Services include mechanical, structural, and electrical improvements for swing and lift bridges throughout Louisiana. Projects included the Boudreaux Canal Swing Bridge, Jackson Street Vertical Lift Bridge, and Bayou Teche Swing Bridge. Services include the design, plans/specifications production, and construction-phase services for hydraulic systems, operator facilities, ADA-compliant pedestrian gates, bridge control systems, lighting, traffic signals, standby power, navigation aids, and structural support elements in accordance with LADOTD, AASHTO, NEC, and ADA requirements.
06/23 – Present	H.009730.5 In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Structural Bridge Inspector for the inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis, Miller's Bluff, and Krotz Springs) and West Fork, LA 433 over Bayou Bonfouca, and LA 657 over Bayou Lafourch movable bridges have been completed to date.
01/22 – Present	H.014530: Almonaster Ave Bridge Rehabilitation and New Connector Road, New Orleans, LA - Port of New Orleans/LADOTD Bridge Designer for the bridge assessment, complete rehabilitative engineering design, and road design services required for the partial replacement of the Almonaster Ave Bridge and a new connector road. The Almonaster Ave Bridge crosses over the Industrial Canal and provides two vehicular lanes and a single railroad track crossing down the center of the span. H&H's 2019 assessment of the circa-1920, eligible for the National Register of Historic Places bridge revealed that improvements to the electrical and mechanical systems, superstructure, and the connecting roads were required to return this bridge to its full operating capability. Erik provided the design of steel plate girders for the bridge. The road design services included a new alignment for the connecting road including all drainage structures. H&H also developed a hydraulic study and a site plan that included several retention ponds for drainage improvements. Other services included environmental, geotechnical, and pavement design.
03/22 – 10/23	H.014363.5 IDIQ Contract for ADA Design Projects Statewide, Slidell, LA – LADOTD Civil Designer responsible for the evaluation and consideration of current sidewalk features of Robert Blvd. in Slidell, LA. Plans were designed and revised in-house in preparation of the overhaul of sidewalks and adding of ADA compliant handicap ramps and landing areas along the roadway to bring the sidewalks up to current LADOTD standards. Services include preliminary plans, final plans, construction engineering, project proposal plans, and inspection for LADOTD Sidewalk Improvements to Conform to ADA Guidelines. The project begins at the intersection of LA 1091 (Robert Blvd) with US 190 (Gause Blvd) in the city limits of Slidell, Louisiana, then continues North along LA 1091 for 2.0+/- miles to a location 175 ft. north of the intersection of LA 1091 with Country Club Blvd. The survey will extend along all major side roads 50 ft. from the PT of the curbing in each direction.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Roberto Vicedo, PE	Years of relevant experience with this employer	29
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization		B.S. / 1995 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 36533 / LA / 03/31/2028		
Year registered	2011	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Movable Structures) – Meets MPR 4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
06/18 – 06/19	SR 609 Movable Bascule Bridge Rehabilitation, Ocean Springs, MS – Mississippi DOT Senior Structural Engineer for full rehabilitation of SR 609 bascule bridge, as a task-order under the IDIQ Master Bridge Contract which included developing standard and special bridge services, statewide for MDOT. Scope of work included inspection and rehabilitation design of structural, mechanical, and electrical components of the bridge, as well as the roadway approaches and development of maintenance and repair plans. All designs are in accordance with AASHTO, FHWA, and MDOT guidelines and specifications. Load rating was performed using AASHTOWare BrDR load rating software.			
07/07 – 06/11	Mathews Bridge (SR 115) Emergency Bridge Repair, Jacksonville, FL – Florida DOT Structural Engineer for emergency repair to the bottom chord and floor system for the 810-foot suspended span on the main channel span cantilevered truss due to a ship collision. Temporary bottom chord and jacking system was designed to temporarily support the severed truss chord, and jack load into the chord to correct truss geometry. Repairs also included heat straightening of truss gusset plates, gusset plate replacement, and lateral bracing replacement. Design was completed in 3 days.			
04/18 – 08/18	Brorein Street Bascule Bridge Rehabilitation, Tampa, FL – City of Tampa Structural Engineer responsible for design services, including a load rating analysis , for the rehabilitation of the movable span of the Brorein Street bascule bridge over the Hillsborough River in downtown Tampa, FL. The project included widening of the approach spans and the bascule leaves to provide a 10-foot shared use path on each side.			
07/18 – 01/21	SR 3/Christa McAuliffe Bridge Over Canaveral Barge Canal, Merritt Island, FL – Florida DOT Project Manager in charge of general project coordination and a task for the design, repair details, load rating analysis using AASHTOWare BrDR , and cost estimate preparations during the design phase. Also provided construction support services for this \$3.9 million span lock replacement project for twin double-leaf bascule bridges. The existing underdeck span locks were removed and replaced with new barrier mounted span locks.			

02/14 – 12/18	SR 968/SW 1st Street Bridge Over Miami River, Miami, FL – FDOT Project Engineer / Structures Task Leader responsible for general project coordination, design, load rating, and managing construction support services phase for the replacement of the nationally registered historic bridge crossing the Miami River. The new 507-foot bridge included a 315-foot double-leaf bascule span over a widened 125-foot navigation channel. Two new approach spans consisting of prestressed concrete beams provided at least 16.5 feet of clearance over North and South River Drives.
07/04 – 07/10	SR 7/NW 5th Street Bascule Bridge Over Miami River, Miami, FL – FDOT Project Engineer responsible for design, load rating analysis and construction support services for this \$50 million bridge replacement project which included double-leaf bascule spans, bridge, control tower, approach roadways, and riverwalk. The 180-foot bridge used the appearance of a deck truss Chicago-style trunnion bascule span to fit in with the historic and aesthetic character of Miami's Little Havana community.
04/98 – 08/07	SR 786/PGA Boulevard Bridge Over ICWW, Palm Beach Gardens, FL – FDOT Structural Engineer responsible for the design, detail of repairs, load rating analysis, and preparation of cost estimates. This \$15 million multi-phase rehabilitation project included in-depth inspection, condition report with load ratings and recommendations, preparation of structural, mechanical, and electrical rehabilitation plans, and bascule span replacement plans for this twin double-leaf bascule span bridge. Project design utilized existing bascule pier foundations and approach span structure to minimize costs. The design required multi-phase construction to maintain traffic.
01/11 – 03/17	SR A1A / Flagler Memorial Bridge Over ICWW, Palm Beach, FL – FDOT Structural Task Leader responsible for the design of twin double-leaf rolling lift bascule span superstructures, load rating, and construction support services for the \$95 million design-build project that included replacement of the entire bridge off-line and parallel to the existing bridge to maintain traffic for this busy causeway connecting West Palm Beach to Palm Beach. The replacement bridge, completed in 2018, included a twin double-leaf rolling lift bascule span bridge with a 150-foot rolling-lift-span over the navigable channel; twelve 150-foot pre-stressed concrete approach spans; and approach roadway work.
08/14 – 07/19	Camino Real Bridge Over ICWW, Boca Raton, FL – Palm Beach County Structural Engineer responsible for the load rating analysis of the main girders and the detailing of the bascule span rehabilitation plans of a historic double-leaf rolling lift span constructed in 1939. The rehabilitation of this historic double-leaf rolling lift span included designs for rehabilitated machinery, new tender house HVAC units, new plumbing systems, new span locks, and the development of technical special provisions. Structural rehabilitation designs involved new roadway grating, floor beam brackets for wider sidewalks, stringers, and bridge railing. Aluminium structural components were used to minimize weight to counterbalance.
01/08 – 08/16	Gasparilla Island Swing Bridge Over ICWW, Placida, FL – Gasparilla Island Bridge Authority Structural Task Leader responsible for the final design and load rating for the replacement of a 220-foot swing span bridge. Also provided construction support services for this \$20-million project consisting of 678 feet of the new bridge including a 250-foot deck girder swing span and approach spans utilizing Florida I-Beams. Embankments, supported by MSE walls, were protected by new bulkheads and revetment. In addition to the bridge structures, a new pile-supported tender house was included.
04/22 - Present	US 92 / SR 600 at Hillsborough River Movable Bridge Rehabilitation, Tampa, FL - FDOT Structures Task Leader responsible for the design, detail of repairs, and preparation of cost estimates for the rehabilitation of the bascule and lift bridges. Repairs to the bascule span included total replacement of the roadway steel open grid deck and modification of the longitudinal filled deck joints. Repairs to the lift span included partial replacement of the roadway steel open grid deck, replacement of the towers steel bracing members and connection plates.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	James Newberry, PE, SE	Years of relevant experience with this employer	10
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		M.S. / 2006 / Civil Engineering B.S. / 2006 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 45742 / LA / 09/30/2027		
Year registered	2011	Discipline	Structural Engineer and Civil Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Movable Structures) – Meets MPR 4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
04/21 – 09/21	Brorein Street Bascule Bridge Rehabilitation, Tampa, FL – City of Tampa Structural Engineer responsible for design services, including a load rating analysis , for the rehabilitation of the movable span of the Brorein Street bascule bridge over the Hillsborough River in downtown Tampa, Florida. The project included widening of the approach spans and the bascule leaves to provide a 10-foot shared use path on each side.			
07/07 – 02/08	Wilson Pigott (SR 31) over Okeechobee Waterway Bascule Bridge Rehabilitation, Fort Myers, FL – FDOT Movable Bridge Structural Designer performed the span balance calculations, assisted with design calculations of other structural components, reviewed, and analyzed load test data to assist in the assessment of priority repairs. Services called for the in-depth inspection, evaluation, load rating per LRFR methodology, and rehabilitation design of this 50-year-old, 3,120-foot-long bridge with a double-leaf trunnion bascule main span. Responsibilities included performing independent peer review of the machinery repairs and steel grid deck replacement – plus performing peer review of the capacity evaluation of the unique precast, post tensioned concrete beams of the approach spans, which were among the first widespread use of prestressed concrete in the United States.			
03/09 – 12/10	LaBelle Drawbridge (SR 29) Repairs & Rehabilitation, Labelle, FL – FDOT Movable Bridge Structural Designer produced assorted designs for the structural components for repairs to the approach and bascule spans, including the bascule leaf cantilever bracket, stringers, approach span bearing pads, and mast arms on the approaches. Checked the adequacy of the existing approach span diaphragms for jacking the spans. Provided quality control check of the bascule span balance calculations. Load rated the 40-foot approach span prestressed concrete beams, bascule span stringers and stringers over machinery, main girder, grid deck, and floorbeams. Load rated the flanking span stringers and floorbeams.			
11/16 – 10/18	I-95 Load Ratings, Broward and Dade Counties, FL - FDOT Structural Engineer calculated load rating for 18 bridges along I-95 in Florida DOT Districts Four and Six before proposed bridge widenings to determine whether rehabilitation / widening was a viable option for each structure.			

02/16 – 12/18	Wave Streetcar / SE 3RD Avenue Bridge Over The New River, Fort Lauderdale, FL – FDOT Structural Engineer responsible for the load rating of the existing post-tensioned concrete beam approach spans for SE 3rd Avenue Bridge. The new WAVE Streetcar will travel across the existing 3rd Avenue Bridge. H&H's scope included all necessary design modifications to the rolling-lift-span, pier, and associated mechanical/electrical systems and load rating to accommodate the new embedded rail while providing sufficient strength, stiffness, and ride-ability for the new mode of transportation. The goal was to replace the leaf with a new bascule span, which is 61-feet-long between centers of roll and features tracks and treads on a 6-foot, 2-inch roll radius, mechanical drive train with enclosed gearing driving the rack pinion, and tail lock mechanism. The SE 3rd Avenue bascule bridge will become the only double-leaf bascule in the nation to carry rail traffic. This challenging project required careful coordination of several disciplines and industry experts including movable bridge, roadway, rail, transportation systems, and control systems.
12/16 – 02/17	Longboat Pass Bridge Bascule Span Condition Assessment Report and Load Rating, Manatee County, FL – FDOT Movable Bridge Structural Engineer responsible for drafting report and cost estimate, conducted structural inspection of bascule span and load rated the existing bascule span structural steel elements. The objective of the report, cost estimate, and load rating was to identify deficiencies of the bascule span that required repairs in the next ten years, including structural, mechanical, and electrical items.
08/12 – 07/14	Crescent Beach (SR 206) Bridge Repairs, St. Johns County, FL - FDOT Lead Structural Designer responsible for load rating the bascule span (main girders, floorbeams, and stringers), steel flanking span, and prestressed concrete approach spans. Assisted with plans production.
06/08 – 04/11	I-75 over Jacaranda Boulevard Bridge Widening Design-Build, Sarasota County, FL - FDOT Structural Designer participated in plans preparation and load rating analysis. Project involved new full-depth cast-in-place decks, which replaced the existing composite precast panel concrete decks, and the design of new steel girders and concrete substructures for the widened portion of the bridges.
04/06 – 08/08	I-75 Southbound and Northbound Bridges Over Fox Creek Sarasota County, FL - FDOT Structural Designer responsible for load rating analysis for a proposed roadway widening. The median portion of the existing two-span continuous 102-foot bridges was removed and the bridges were widened by adding three prestressed concrete AASHTO Type II girders on widened bents. Performed load rating analysis for existing and final configuration of AASHTO precast prestressed concrete girders using AASHTOWare BrDR load rating software.
01/19 – Present	Beckett Bridge Replacement, Tarpon Springs, FL – Pinellas County Movable Bridge Structural Designer on the bridge replacement project which entails replacing an existing historic bridge with a new 360-foot single-leaf, rolling-lift, bascule bridge. The structure carries Riverside Drive over Whitcomb Bayou and features two traffic lanes, and a sidewalk. The movable span features steel plate girder main girders and floorbeam and an Exodermic deck that spans longitudinally between floorbeams. The bascule pier footing and approach pier caps feature precast concrete elements to facilitate accelerated bridge construction. Foundations are drilled shafts and pipe piles, designed to accommodate challenging site conditions including a relict sinkhole under the bridge. Design responsibilities included quality control for approach span substructure and foundations, and retaining walls, and the final design of bascule span structural steel elements.
06/11 – 12/11	Pinellas Bayway Structure “C” Bridge Repairs, Pinellas County, FL – FDOT Structural Designer performed the span balance calculations for the proposed bascule leaf repairs. Performed load rating of the bascule span. This project was shelved in lieu of a replacement.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Mike Delemont, PE	Years of relevant experience with this employer	4
	Title	Senior Bridge Engineer	Years of relevant experience with other employer(s)	22
Degree(s) / Years / Specialization		MS / 2002 / Civil Engineering BS / 2000 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 43170 / LA / 09/30/2027		
Year registered	2019	Discipline	Structural Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Movable Structures) – Meets MPR 4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
02/19 – 12/19	Maple-Oregon Bascule Bridge, Sturgeon Bay, WI - Wisconsin DOT Bridge Lead/ Lead Bridge Engineer for the rehabilitation of a double-leaf bascule bridge with prestressed girder and slab approach spans. Project involved concrete deck repairs, polymer overlay, bascule span balancing, and load rating . Design completed in 2019. Construction completed in 2020.			
06/23 – Present	H.009730.5 In-Depth Bridge Inspection of Complex Structures, Statewide, LA – LADOTD Structural Engineer for the inspection of complex structures such as cantilever trusses, cable-stayed bridges, steel vertical lift bridges, and plate girder bascule bridges statewide under separate task orders. Inspection of two steel truss bridges (Jimmie Davis, Miller's Bluff, and Krotz Springs) and West Fork, LA 433 over Bayou Bonfouca, and LA 657 over Bayou Lafourch movable bridges have been completed to date.			
01/13 – 11/13	Houghton-Hancock Vertical Lift Bridge Load Rating, Hancock, MI - Michigan DOT Lead Structural Engineer Led the load rating of the double-decker truss vertical lift bridge and approach spans. The bridge superstructure consists of stringers, floorbeams and girders for the approach spans, as well as stringers, floorbeams and truss members for the approach truss span and lift truss span. The LFR load rating involved modeling the bridge in STAAD to rate these members for AASHTO, Michigan Legal, and Michigan Overload vehicles.			
05/13 – 12/13	Charlevoix Bascule Bridge Load Rating, Charlevoix, MI - Michigan DOT Lead Structural Engineer who led the load rating of the complex bascule bridge. The LFR load rating involved modeling the bridge in STAAD to rate the bascule girders, floorbeams, and stringers for AASHTO, Michigan Legal, and Michigan Overload vehicles.			
02/21 – 12/22	Lake Street Bascule Bridge, Chicago, IL - Chicago DOT Lead Bridge Engineer for the major rehabilitation and load rating of a double-leaf bascule truss with roadway traffic on the lower level and CTA rail on the upper level. The portions of the truss over the Chicago River will be floated-in with barges to minimize CTA outages. Design to be completed in 2023. Construction scheduled for 2023.			
06/18 – 10/19	I-39 Flyover Bridges, Beloit, WI - Wisconsin DOT Structural QA/QC Quality Reviewer for the design and load rating of a new 574' long four-span curved steel plate girder bridge connecting I-39/90 SB to I-43 NB.			

05/12 – 12/14	I-43 Bridge Rehabilitation, Howard Avenue to Valley Bridge, Milwaukee County, WI - Wisconsin DOT Lead Structural Engineer and Deputy Project Manager for the I-43 Bridge Rehabilitation project which included the rehabilitation and load rating of 22 bridges within the I-43 corridor from the Mitchell Interchange to the Marquette Interchange, including the Menomonee Valley High-Rise Bridge. Ten bridges carrying the mainline received deck overlays. Seven overpasses carrying local roadways over the freeway had their decks replaced. Four ramp bridges had their decks replaced. All structures had substructure repairs and painting. One pedestrian bridge was also rehabilitated.
02/10 – 07/12	USH 41/I-43 Flyover Structures, Brown County, WI - Wisconsin DOT Project Engineer for preliminary engineering and final LRFD design and load rating of three curved welded steel box girder structures for primary directional radial interchange ramps. Designed structural steel and bearings in accordance with AASHTO LRFD and WisDOT LRFD bridge specifications. Prepared plans, specifications, and estimates for the steel fabrication contract.
09/09 – 12/10	USH 41/STH 29 Flyover Structures, Brown County, WI - Wisconsin DOT Project Engineer for preliminary engineering and final LRFD design and load rating of three curved welded steel box girder structures for primary directional radial interchange ramps. One structure had 15 spans with a total length of 2678 feet and another 10 spans with a total length of 2117 feet, and the third one 2 spans with a total length of 374 feet. Designed structural steel and bearings in accordance with AASHTO LRFD and WisDOT LRFD bridge specifications. Prepared plans, specifications, and estimates for the steel fabrication contract.
09/05 – 09/08	17th Street Bascule Bridge over the East Twin River, Two Rivers, WI - City of Two Rivers Project Engineer for the design and load rating of a new single-leaf bascule bridge over the East Twin River. During the preliminary project phase participated in the inspection of the old bridge, feasibility study development, and preparation of preliminary plans for the replacement. Performed the final design including preparation of plans for the steel superstructure and the concrete substructure. Prepared structural specifications and cost estimates. Performed shop inspection of the steel fabrication and provided structural expertise and support during construction.
02/18 – 12/20	Racine Street Bascule Bridge over the Fox River, Menasha, WI - Wisconsin DOT Structural Engineer Lead bridge engineer for the final design and load rating of full replacement of an existing double-leaf rolling lift bascule structure with a new similar structure. Engineer of Record for the superstructure design. Coordinated all bridge design disciplines including structural, mechanical, electrical, architectural, and WisDOT-designed approach spans. Provided support during construction. Design completed in 2020.
03/15 – 10/16	1st Street Bridge Rehabilitation, Milwaukee, WI - City of Milwaukee Bridge Lead for rehabilitation and load rating of a double-leaf trunnion-style bascule bridge over the Kinnickinnic River. Led the completion of a rehabilitation study, final design and construction support. Reviewed submittals and assisted with questions during construction. Design completed in 2016.
06/19 – 12/22	IH 43/894 Bridge Rehabilitation, Milwaukee, WI - Wisconsin DOT Project Manager and Lead Structural Engineer for thirteen bridges between the Hale Interchange and the Mitchell Interchange. Five bridges carrying the mainline and five overpasses carrying local roadways over the freeway received deck overlays. One overpass bridge at 68th Street was replaced. All structures will undergo substructure repairs and painting. Design and load rating completed in 2022. Construction occurred over several projects, the last of which is to be completed in 2023.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Jorge Soto, PE	Years of relevant experience with this employer	10
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization		B.S. / 1998 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 59509 / FL / 2/28/2027		
Year registered	2003	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Steel Structures)		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
05/22 - Present	Linton Boulevard Bascule Bridge Load Rating Analysis, Delray Beach, FL – Palm Beach County Structural Engineer responsible for the load rating analysis and review of stringers, floorbeams, and main girders of this double leaf bascule bridge. The load ratings were performed for LFR and LRFR.			
04/16 – 03/21	Coconut Isle Bridge Replacement, Fort Lauderdale, FL – City of Fort Lauderdale Structural Engineer providing structural design services for the Bridge Alternatives Study and complete set of engineering plans for a single-span fixed concrete replacement bridge. Scope of work includes permitting, geotechnical investigation, load rating , drainage, utility coordination, bridge bulkhead wall design, temporary bridge, MOT, public involvement support, and bid and post-design services.			
12/16 – 12/17	Districtwide Miscellaneous Structural Projects & Minor Design, Miami, FL – FDOT Structural Engineer responsible for the development of plans, specifications, load rating , and estimates under the Districtwide On-Call Structures contract. For the US 1 Bridge over Channel 2 TWO, the scope consisted of repairs to prestressed AASHTO beams and a reinforced concrete deck. Impressed current cathodic protection was also installed on the six-foot drilled shaft.			
04/16 – 12/16	Atlantic Isle Lagoon Bridge, Sunny Isles, FL – FDOT Structural Engineer contributing to the feasibility study to rehabilitate Bridge No. 874218 under a Districtwide On-Call Structures contract. Responsible for the condition assessment, as well as the review of previous biennial inspection and load ratings reports, analysis, report study, and the development of several rehabilitation alternatives that would retain the aesthetics and coquina façade of this historic bridge. Constructed in 1925, the crossing is a low-level closed-spandrel-filled cast-in-place reinforced concrete arch. The lagoon bridge, which has substandard traffic barriers and roadway geometry, had been deemed structurally deficient and functionally obsolete, also showed some structural deterioration.			
02/09 – 09/11	I-595 WB over Pine Island Road (Bridge 860648), Broward County, FL – FDOT Engineer of Record responsible for the design of a 540-foot-long four-span bridge. The bridge consisted of plate girders supported on integral concrete post-tensioned straddle caps. Developed construction documents and prepared superstructure and substructure design of plate girders, load rating , deck, superstructure components, substructure, and foundation.			

11/16 - Present	SR A1A / North Causeway Bridge over ICWW, Fort Pierce, FL – FDOT Engineer of Record responsible for the superstructure design and plans development for the replacement of SR-A1A North Causeway Bridge. The 4,152-foot-long bridge consists of 26-spans of FIB 84 beams crossing the Intracoastal Coastal Waterway. The three main spans consisted of continuity diaphragms made continuous for live load. Scope of services includes the alignment, bridge super, and substructure design and load rating. Also, project engineer for an elevated East Coast Greenway (ECG) pedestrian/bicycle structure, observation deck, and bulkhead walls. The ECG is composed of Florida Slab Beams (FSB) in the straight segment and reinforced flat slabs in the curved alignment. The observation deck is composed of FSB and flat slab type superstructures. The FSBs were designed using corrosion-resistant materials (CFRP and SS strands) with GFRP rebar. The flat slab superstructure and substructure used GFRP rebar. The bulkhead walls consist of concrete sheet piles made of CFRP/SS materials with a bulkhead cap consisting of GFRP.
06/16 – 12/17	I-75 / I-4 Off Ramp Design, Hillsborough County, FL – FDOT Structural Engineer responsible for the design and plans review of several cantilever and span sign structures, bridge culvert replacement, and load rating of existing bridge culvert. The entire scope of work includes the addition of a new auxiliary lane for SB I-75 from south of the Bypass Canal to SB Exit Ramp (Roadway ID 10075000), widening ramp from SB I-75 to EB/WB I-4 (Ramp Number 10075346), and bridge widening for the bridge over Sligh Avenue (Bridge Number 100430). A unique aspect of the approach was the incorporation of this operational improvement into a long-term build-out. This project was expedited for construction due to our unique no-R/W-acquisition and no-impacts-to-FGT approach.
01/04 – 01/11	SR-50 over Lake Lotta, Orange County, FL – FDOT Design Engineer developed construction documents, performed load rating, prepared superstructure and substructure designs including prestressed beams, bent caps, and prestressed piles for the design of a 760-foot, 16-span bridge along with approach retaining walls. The bridge consists of AASHTO Type II prestressed beams supported on concrete bent caps with 18-inch prestressed concrete piles.
09/22 - Present	NW 17th Avenue Emergency Counterweight Replacement, Miami, FL – Miami-Dade Dept of Transportation and Public Works Structural Engineer responsible for the review of the steel box counterweight design for replacement of the existing concrete counterweight with a new steel counterweight box filled with concrete and steel ballast. Also, responsible for the design of the deck over the counterweight, purlins and connections supporting the deck over the counterweight.
06/16 – 01/23	SR 968/SW 1st Street Bridge over Miami River, Miami, FL - FDOT Structural Engineer providing engineering design and load rating services during the design and post design phases for the replacement of the nationally registered historic bridge crossing the Miami River. Responsible for the design of bascule pier footings and foundations, king piles bulkhead walls, bascule leaf main girder, and floor beam and counterweight box. Constructed in 1929, the existing 13-span, 650.5-foot, the bridge was the Miami River gateway crossing into downtown Miami. The new 507-foot bridge includes a 315-foot double-leaf bascule span over a widened 125-foot navigation channel. Two new approach spans consist of prestressed concrete beams providing at least 16.5 feet of clearance over North and South River Drives. The bascule span's Exodermic concrete deck protects the steel superstructure and provides a safer and quieter riding surface.
02/09 – 09/11	I-595 Ramp T-1 (Bridge 860559), Broward County, FL - FDOT Project Engineer involved in the widening of a 1165-foot horizontally curved, 14-span bridge. The spans vary in length from 63' to 91'. The bridge consists of AASHTO prestressed beams supported on concrete hammerhead pier caps. Responsible for the in-depth analysis of the existing pier caps, columns and pile caps and load rating of the beams for this bridge widening.

	Firm employed by		Hardesty & Hanover, LLC	
	Name		Rafal Wuttrich, PE	Years of relevant experience with this employer
	Title		Senior Structural Engineer	Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization			M.S. / 2001 / Civil Engineering B.S. / 1994 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 63030 / FL / 02/28/2027	
Year registered	2005	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Complex Structures Load Rating (Steel Structures)	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
01/19 - Present	H.004396 Lapalco Boulevard Movable Bridge over Harvey Canal, Westwego, LA – Jefferson Parish DPW/LADOTD Structural Engineer for the pre-design inspection, the rehabilitation and widening of the existing four-lane Lapalco Boulevard to provide a facility carrying three lanes of traffic in each direction, and the design of a new three-lane double bascule movable bridge crossing of Harvey Canal. Scope of work includes rehabilitation to the existing four-lane bridge with three lanes of traffic and a new pedestrian/bike lane. The scope of work also includes the design of a new bridge to be constructed as an independent structure immediately adjacent and north of the existing bridge with a new operator house. Improvements to bridge and roadway approaches for eastbound and westbound traffic is also included in scope of work. Load rating was performed using AASHTOWare BrDR load rating software. All design work is according to Louisiana DOTD Standard and Specifications and reviewed by LADOTD.			
03/23 - Present	Outerbridge Crossing, New York & New Jersey – Port Authority of New York and New Jersey Load rating Engineer responsible for performing load rating of the existing steel truss bridge. Tasks included collecting and tabulating all the section properties and material information, gathering and organizing any elements contributing to the dead load on the structure in its existing condition performing the analyses using AASHTOWare for the development of the truss bridge models and load rating of gusset plates. The procedure used in developing the models relies significantly on user inputs and in many cases hand-calculations for items such as dead load, distribution factors, and in some cases member capacity. Additionally, a library of ratings that can be updated will be developed for the client. The structure is rated in accordance with LRFR and LFR methodology including FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., AASHTO Manual for Bridge Evaluation, AASHTO Standard Specifications for Highway Bridges). The models will be structured and well-documented and submitted in a fashion consistent with the Level 1 rating standard. It is critical to understand how a truss functions in addition to the fatigue prone details, specifically for a non-redundant structure, in order to properly analyze a truss bridge. This knowledge allows for a practical analysis and understanding of the results from 2D or 3D analytical tools such as AASHTOWare Virtis or CSiBridge .			
06/15 – 08/19	I-75 CD Ramp over Sligh Avenue, Hillsborough County, FL – FDOT Project Engineer responsible for the preliminary design, Bridge Development Report, and load rating of the widening of 233foot three-span interstate ramp bridge over Sligh Avenue. The proposed widening superstructure and substructure included prestressed beams on a hammerhead pier substructure.			

03/17 – 06/19	SR 80 Southern Boulevard Bridges Construction Engineering, West Palm Beach, FL – FDOT Structural Engineer responsible for assistance on the bridge re-design efforts, as well as engineering support for the design of a temporary fender system and falsework support system, needed during the construction of the two bridges. Contractor EOR services included the redesign of the Main Bridge approach span superstructure, which consisted of longitudinally and transversely post-tensioned flat slabs with two 360' five-span continuous units. The original design was specified to be constructed by incremental launching. The proposed redesign was to be constructed cast-in-place on falsework over the water as a Contractor Savings Initiative (CSI). Specialty engineering services included: design and detailing of the Main Bridge approach span falsework over water; preparation of bascule span balance calculations; field instrumentation and measurement of span balance; preparation of bascule leaf field erection and alignment procedures; preparation of post-tensioned concrete shop drawings and erection manual; load rating of the temporary bridge approach spans; technical assistance for construction of the Acrow vertical lift span (structural, mechanical, electrical).
02/01 – 08/03	Treasure Island Causeway, Treasure Island, FL – City of Treasure Island Staff Engineer responsible for design and load rating of three replacement bridges including two low-level fixed bridges and a twin double-leaf bascule bridge with 21 feet of vertical clearance over the Gulf Intracoastal Waterway (ICWW). The bascule bridge featured a main span of 176 feet between trunnions. The bascule spans structural system included two main longitudinal plate girders, a composite Exodermic deck system featuring a lightweight concrete riding surface, and a steel box counterweight. Performed finite element analyses of several components such as main girder webs at openings, torque tube for the hydraulic drives.
03/03 – 11/03	17th Street Causeway Bridge (A1A) Replacement, Fort Lauderdale, FL – FDOT Engineer responsible for performing load rating analysis of new superstructure, including double bascule leaf and segmental approach spans. The project involved the design of a "signature" trunnion bascule bridge. The new bridge features twin double-leaf bascule spans (three spans continuous hinged structure) with a span length of 210 feet, center to center of trunnions. The new bridge also features unique transversely and longitudinally post-tensioned concrete V-shaped bascule pier integrally connected to the precast segmental concrete box girder approach spans. The project won a 2004 ACEC National Honor Award and a Prize Bridge Award from the National Steel Bridge Alliance.
04/17 – Present	SR 75 (US 231) from SR 30A (US 98) to Pipeline Road, Panama City, FL – FDOT Project Engineer responsible for the design of a new 840-foot steel bridge on SR 75, crossing US 231 and the CSX railroad, as part of a new single-point urban interchange (SPUI). The design consists of a single three-span continuous unit (215, 355, and 215 feet) with steel plate girders and a concrete deck. The intermediate pier columns support integral post-tensioned concrete caps. Responsible for Bridge Development Report (BDR), and leading role for all aspects of the structural design.
05/10 – 08/11	SR 30/US 98 Bridge Replacement over Aucilla River, Lamont, FL – FDOT Structural Engineer responsible for various structural calculations and plan production. The new design replaced two multi-span simply supported steel beam bridges with a single 1,365-foot-long 13-span bridge with precast concrete FIB-54 beams.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Jonathan Hewko, PE	Years of relevant experience with this employer	9
	Title	Structural Engineer	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization		B.S. / 2013 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 53578 / MD / 12/9/2026 NHI 130055 – Safety Inspection of In-Services Bridges		
Year registered	2018	Discipline	Structural Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Steel Structures)		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/21 – 03/21	Bridge No. 1 Structural Analysis and Bridge Modeling, Ontario, Canada – Saint Lawrence Seaway Management Corporation Lead Structural Engineer Bridge No. 1 is a rolling bascule lift bridge in St. Catharines, Ontario, which carries two lanes of traffic over the Welland Canal that is owned by the Saint Lawrence Seaway Management Corporation. Responsibilities for this project included: Creating and analyzing the full three-dimensional computer model using the CSiBridge software. The analysis included studying the effects of dead load, live load, wind, and seismic loads following current CSA code requirements. A sub-consultant was used to perform the enhanced bridge inspection and coordinated with them to obtain as-inspected conditions to provide an as-built and as-inspected load rating analysis . The results of the analysis and any critical findings were provided in a final detailed report given to the St. Lawrence Seaway.			
08/22 – 12/22	Great Bridge Load Rating Analysis, Chesapeake, VA – City of Chesapeake Load Rating Engineer responsible for calculating both as-built and as-inspected capacities, calculated distribution factors for the main bascule span and floor system members to be rated, and developed the 2D Finite Element model of the truss to be used for the load rating analysis. As part of the on-call contract with the City of Chesapeake, the City asked H&H to perform updated load ratings for the double leaf rolling lift bascule bridge. The Great Bridge is a 255' truss style double-leaf rolling lift bascule bridge with a span length of 127'. The floor system is comprised of a concrete fill grid deck with composite stringers and floorbeams. Using the most recent inspection report, we determined the updated cross-sectional properties and capacities of the members. The floor system was able to be analyzed using conventional methods, using the appropriate distribution factors to be applied to the vehicle in question. Since the main bascule span is comprised of a truss structure, a 2D finite element model was created to fully capture the live load effects on the truss as the truck crosses the spans. Due to the location of the live load bearing, the truss members experience load reversal with the passage of the design vehicle. The load reversal was considered, and the truss members were analyzed for tension and compression forces.			
01/20 – 01/22	Bridge No. 5 Structural Analysis and Rehabilitation, Ontario, Canada – Saint Lawrence Seaway Management Corporation Structural Engineer Bridge No. 5 is a vertical lift bridge in St. Catharines, Ontario, which carries two lanes of traffic over the Welland Canal that is owned by the Saint Lawrence Seaway Management Corporation. The bridge was originally built in the 1930s and has had several rehabilitations completed to it over the years. The previous inspection report that was presented to the SLSMC indicated moderate to severe corrosion in the front tower columns at the intermittent diaphragm connections. H&H was tasked with doing an in-depth hands-on inspection of these diaphragms to quantify the amount of material loss on the interior of the front tower columns as well as creating a full model of the bridge to perform a load rating analysis and wind analysis on the structure which were both my responsibility. The wind analysis indicated that the rear tower legs were inadequate for the new design wind loading criteria and showed a slight overstress in the front tower columns due to the material loss. The SLSMC awarded H&H the contract to develop full rehabilitation plans to address the two issues with the tower structure. For this rehabilitation, Jonathan was solely responsible for the creation of the contract drawings, the engineering calculations, cost estimate, and the construction schedule to be used when the project goes out to tendering. Construction was completed in January 2022.			

10/20 – 05/21	1st Avenue and Park Avenue Tunnel Load Rating, New York, NY – NYSDOT Structural Engineer and Load Rating Engineer to perform field inspections on the <i>1st Avenue and Park Avenue Tunnels</i> and perform a load rating analysis utilizing the As-Built Plans and inspection reports developed during the field inspections. The 1st Avenue Tunnel consists of steel bent frame structures that are spaced approximately every 7 feet for the entire length of the tunnel. The steel bents are encased in concrete and the dead load was accounted for appropriately. SAP 2000 was used to model the governing steel bent frame sections which was based on the amount of fill above the structures while also considering the “W” sections that were used in each section. A 2-D frame was created, and the dead and live loads were applied to each frame structure while taking into consideration the amount of distribution that is present that the live load could be reduced by. The steel bent cap beams and supporting wall columns were analyzed for moment, shear, and axial forces (wall columns only). The Park Avenue Tunnel was built in the early 1900s as an unreinforced masonry arch structure with two portal sections on the North and South ends. A load rating was completed in 2007 on the unreinforced masonry arch, and it was found the masonry was overstressed which led to the current rehabilitation of the tunnel. The rehabilitation consists of reinforcing the arch with lattice girders every two feet and then encasing the girder with shotcrete. The newly reinforced masonry arch was rated using the LRFR Method since the strength of the effective section could be calculated. The unreinforced masonry walls were analyzed utilizing the ASR Method, as recommended by the AASHTO MBE. Due to the high trusting loads that are induced into the unreinforced masonry walls, soil spring were developed to allow the bases of the walls to be pinned and consider the passive restraint the soil provides on the walls to resist the active forces applied with the application of live load above. The reinforced arch was analyzed for moment, shear, and bearing forces while the unreinforced masonry walls were analyzed for the combination of axial and flexural stresses.
03/20 – 09/20	Fort McHenry and Baltimore Harbor Tunnel Load Rating, Baltimore, MD - Maryland Transportation Authority Structural Engineer and Load Rating Engineer H&H was tasked by the MDTA to perform a load rating analysis on the cut and cover sections of the tunnel for the two major tunnels they own in Baltimore, MD. He was responsible for load rating analysis of the various sections. The Fort McHenry Tunnel consisted of Cast in Place sections for both the East and West Cut and Cover approaches. The various cross sections were broken into 1ft equivalent strips for the analysis and analyzed as 2D frame structures. With the presence of backfill, the HL-93 Live Loading on each section could also be distributed through the fill to reduce the live load effects on the top slab of the tunnel structure. All dead load effects and live load effects were extracted from SAP and the load rating analysis was completed utilizing excel to determine the respective load rating factor for each element analyzed. The load effects on every floor beam and girder were extracted from CSiBridge and the governing floor beam type was determined and analyzed accordingly for the load effects. The supporting wall structures were rated using hand calculations using the dead and live load reactions extracted from CSiBridge considering the lateral load effects acting on the wall structures.
03/23 - Present	Outerbridge Crossing, New York & New Jersey – Port Authority of New York and New Jersey Load rating Engineer responsible for performing load rating of the existing steel truss bridge. Tasks included collecting and tabulating all the section properties and material information, gathering and organizing any elements contributing to the dead load on the structure in its existing condition performing the analyses using AASHTOWare for the development of the truss bridge models and load rating of gusset plates. The procedure used in developing the models relies significantly on user inputs and in many cases hand-calculations for items such as dead load, distribution factors, and in some cases member capacity. Additionally, a library of ratings that can be updated will be developed for the client. The structure is rated in accordance with LRFR and LFR methodology including FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., AASHTO Manual for Bridge Evaluation, AASHTO Standard Specifications for Highway Bridges). The models will be structured and well-documented and submitted in a fashion consistent with the Level 1 rating standard. It is critical to understand how a truss functions in addition to the fatigue prone details, specifically for a non-redundant structure, in order to properly analyze a truss bridge. This knowledge allows for a practical analysis and understanding of the results from 2D or 3D analytical tools such as AASHTOWare Virtis or CSiBridge.

	Firm employed by	Hardesty & Hanover, LLC		
	Name	Dennis Gowins, PE	Years of relevant experience with this employer	17
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization			MS / 1990 / Civil Engineering BS / 1978 / Civil Engineering	
Active registration number / state / expiration date			Professional Engineer: 24468 / LA / 09/30/2027	
Year registered	1991	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities			Complex Structures Load Rating (Concrete Structures) – Meets MPR 4 and 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 years of experience specified in the applicable MPR(s).			
03/23 – 12/24	In-Depth Inspection & Load Rating of Box Girder Bridges (Mississippi DOT 2021-2024 IDIQ), Meridian, MS – Mississippi DOT Project Engineer for load rating services being performed on the two bridges based on inspection findings and plan details for Bridge No. 147.9A at I-59 and Bridge No. 131.5B at I-20 located near Meridian in Lauderdale County. The analyses included developing a finite element model of each bridge and for load ratings to follow LFR considering MDOT’s permitted vehicle legal loads. If warranted, repair recommendations will be made based on the inspection results and the load rating.			
05/21 - Present	I-395 Segmental Bridges, Miami, FL – Florida DOT Structural Engineer for the design of five new precast segmental bridges that are a part of the SR 836/I-95/I-395 corridor improvements. This design-build project is being constructed by the Archer Western-De Moya Joint Venture. The overall construction value of the project is \$800 million, and the segmental bridges have a deck area of 700,000 square feet (approximately \$200 million). Directed the development of the bridge layouts, cross sections, and construction methodology. The work also includes design, load rating , oversight of the final design, shop drawings, and construction engineering.			
08/14 – 10/15	I-269 Over Coldwater River, Marshall County, MS – Mississippi DOT Structural Engineer responsible for the seismic analysis and load rating of this 4,054-foot-long, 62 span bridge (17 units) carrying I-269 over Coldwater River. The 98-foot-wide bridge carries six lanes of traffic with barriers. The 65-foot spans are comprised of nine Type III AASHTO beams on 11-foot, 6-inch spacings with an 8-inch concrete deck. The bridge is supported on precast concrete pile bents with 24-inch prestressed concrete piles. A site-specific response spectrum analysis was performed with an extensive 3D finite element model. Nonlinear springs were applied along each pile element to emulate the response of the extremely variable soil layers.			
06/03 – 12/04	Replacement of the US 17A Over I-26, Berkeley County, SC – South Carolina DOT Structural Engineer for the development of the final design including load rating of the 360-foot, four-span bridge replacement. This structure, which was analyzed for site-specific seismic loads and is located on a main arterial between the northern suburbs and the City of Charleston. The 145-foot-wide superstructure is supported by bulb-tee and AASHTO girders, which in turn are supported by traditional bents and drilled shafts founded in cooper marl.			
09/13 – 06/14	Tampa International Airport Taxiway B Bridge, Tampa, FL – Hillsborough County Aviation Authority Structural Engineer responsible for independent checks of the longitudinal analyses, principal stresses, load rating, and 3-D finite element analyses of the adequacy of the existing bridge. The project included the inspection / peer review of the 227-foot, 6-inch-long by 217-foot, 6-inch-wide bridge and calculations following inspection. The inspection revealed cracking in the deck and blocked tendons. The major spans of the bridge are 97 and 94 feet with a small outer span of 36 feet. The bridge is a multicell cast-in-place post-tensioned (31K6 tendons) concrete bridge. The bridge is founded on columns supported on four-foot drilled shafts.			

08/16 – 06/21	SR 836 / I-95 / I-395 Interchange, Miami , FL – Florida DOT Structural Engineer responsible for all substructure and miscellaneous structural designs and load rating for the segmental bridges during the successful design-build pursuit. For final design, responsible for review of all substructure bridge designs (bridges 4,5,6w,6e,7w,7e and 11 – 12,600 lf) and final design of all abutments and miscellaneous structures. The segmental bridges are built in balanced cantilever and are founded on footings supported by auger cast concrete pilings. This \$800 million project is all about transforming Miami by reconnecting communities that were once divided, creating a safer environment for pedestrian and vehicular traffic, and solving mobility challenges that have inhibited traffic for many years.
06/97 – 12/01	SR 84 Bridge over South Fork New River, Davie, FL – Florida DOT Bridge Structural Engineer responsible for the design, detail of repairs, and preparation of cost estimates for a \$4 million Hopkins trunnion single-leaf bascule span bridge rehabilitation. The project included in-depth structural, mechanical, and electrical inspection; reports; load ratings on bascule and approach spans; and rehabilitation plans for the structural, mechanical, and electrical systems.
02/08 – 12/10	SR 5 / US 1 Parker Bascule Bridge Rehabilitation, Palm Beach, FL – Florida DOT Bridge Project Engineer responsible for project coordination for the twin double-leaf Hopkins trunnion bascule span bridge rehabilitation project. Scope included in-depth inspection, condition report with load ratings, rehabilitation recommendations, as well as preparation of structural, architectural, mechanical, and electrical plans for hydraulic machinery retrofit, electrical system improvements, control house modifications, bridge widening, roadway design, and embankment improvements
01/98 – 08/07	SR 786/PGA Boulevard Bascule Bridge Rehabilitation, Palm Beach Gardens, FL – Florida DOT Bridge Structural Engineer responsible for the design, repair details, load rating analysis, and cost estimate preparation. This \$15 million multi-phase construction project included in-depth inspection, condition report with load ratings and recommendations, preparation of structural, mechanical, and electrical rehabilitation plans, and bascule span replacement plans for this twin double-leaf bascule span bridge. Project design utilized existing bascule pier foundations and approach span structure to minimize costs. The design required multi-phase construction to maintain traffic.
06/20 – 12/20	Roosevelt Bridge Emergency Post-Tensioning Repairs, Stuart, FL – Florida DOT Structural Engineer for the emergency repairs. The twin, 4,500-foot-long post-tensioned segmental bridges carry US Highway 1 over the St. Lucie River. During a routine biannual inspection, inspectors found significant cracking, leading to the closing of both the northbound and southbound bridges was discovered on June 16, 2020 by the Florida DOT . The cracking was the result of post-tensioning tendon failures as a result of excessive corrosion. The engineering team was mobilized the following day under emergency conditions. Within 5 days, the bridges were inspected and analyzed, such that the northbound bridge could reopen to reduced two-way traffic. Two months later the final analysis, design, and repair plans were completed. Using an innovative CMGC contract, repairs were made and the bridges opened to traffic in November of 2020. The work included partial deconstruction and then reconstruction of the segmental bridge, the addition of new post-tensioning tendons, load rating calculations and analysis, and repair plans.
05/14 – 02/22	Replacement of the Viaducts at I-59/I-20 Central Business District (CBD) Birmingham, AL Alabama DOT 5/2014-2/2022 Senior Design Engineer providing load rating and design of the precast segmental superstructure for this project. Interstates 59 and 20 converge in downtown Birmingham to form the most heavily traveled roadway in Alabama. H&H designed segmental concrete urban viaducts to replace substandard steel bridges built in the early 1970s. The project, which includes 1 million square feet of elevated bridge deck, was constructed in less than 12 months, and plays a significant role in the wider revitalization of the central business district.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Eric Johnson, PE	Years of relevant experience with this employer	27
	Title	Senior Bridge Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		MS / 2000 / Structural Engineering BS / 1998 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 60838 / FL / 02/28/2027		
Year registered	2004	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Concrete Structures)		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
03/23 – 12/24	In-Depth Inspection & Load Rating of Box Girder Bridges, Meridian, MS – Mississippi DOT Lead Engineer for load rating services being performed on the two bridges based on inspection findings and plan details for Bridge No. 147.9A at I-59 and Bridge No. 131.5B at I-20 located near Meridian in Lauderdale County. The analyses included developing a finite element model of each bridge and for load ratings to follow LFR considering MDOT’s permitted vehicle legal loads. If warranted, repair recommendations will be made based on the inspection results and the load rating.			
05/14 – 02/22	Replacement of the Viaducts at I-59/I-20 Central Business District (CBD), Birmingham, AL – Alabama DOT Engineer of Record/Project Manager who performed the longitudinal analysis of the precast segmental superstructure for the project. Interstates 59 and 20 converge in downtown Birmingham to form the most heavily traveled roadway in Alabama. As a subconsultant to Volkert, Corven Engineering designed segmental concrete urban viaducts to replace substandard steel bridges built in the early 1970s. The project, which includes 1 million square feet of elevated bridge deck, was constructed in less than 12 months, and plays a significant role in the wider revitalization of the central business district.			
11/08 – 10/12	Design-Build of the Jordan Bridge, Portsmouth and Chesapeake, VA – United Bridge Partners Design Manager for the erection for the 5,372’ precast segmental concrete bridge was accomplished using the span-by-span and balanced cantilever methods. The superstructure is supported by precast segmental concrete piers. Provided technical guidance for the conceptual and final bridge designs, assisted with the project development of the privately financed design-build project and coordinated with the subconsultant, subcontractor and material supplier for a detailed construction pricing initiative. Also developed permitting and land-acquisition documents.			
01/13 – 04/13	Lafayette Bridge, St. Paul, MN – Minnesota DOT Project QC Lead Engineer/Engineer of Record for this segmental concrete bridge alternate. Coordinated and provided technical direction to the independent design review team. Also provided technical oversight to the design team for the analyses of a three-span, cast-in-place segmental concrete unit.			
06/17 -- Present	Design-Build for the I-395 Segmental Bridges – Metromover, Miami, FL – Florida DOT Project Manager/Lead Designer responsible for overseeing the design of the new Metromover Pier. The Miami-Dade Transit (MDT) Metromover is an automated, driverless people-mover system serving Downtown Miami, Brickell, and the surrounding urban core. The elevated system operates on an approximately 21-mile network of guideways and provides frequent connections between major employment centers, residential areas, transit facilities, and destinations throughout downtown Miami. The Metromover is supported primarily by elevated bridge structures, including steel girder spans and			

	concrete piers, and is a critical component of Miami-Dade County's regional transit system. As part of the I-395 improvement project, MDT Metromover Bridge Pier No. P23968OB conflicts with the proposed highway improvements and must be removed to accommodate an additional through lane on I-395. The pier currently supports the end of a three-span continuous steel girder unit. Replacement of the existing pier requires the development of a new structural support system capable of transferring the existing girder loads while maintaining the existing Metromover guideway and operations. The work involves removal of the existing pier and construction of a new post-tensioned cantilever beam structure to support the existing steel girder spans. The replacement structure will be designed and constructed within the highly constrained I-395 and Metromover corridors, requiring careful consideration of existing structural conditions, construction sequencing, temporary support, load transfer, and interface with the active transportation systems. A critical project requirement is that all work be performed without interrupting Metromover operations, requiring detailed coordination with MDT and careful planning of construction activities and temporary conditions.
12/04 – 12/06	Design-Build of the Penobscot Narrows Bridge, Prospect-Verona, ME – Maine DOT Project Engineer developed the erection manual, designed the steel erection equipment, designed steel erection equipment including strongback beams, main span closure struts and various scaffoldings and falsework. Maintained close coordination with the Contractor and Owner during construction. Oversaw the plans production for the erection manual and erection equipment. This 2,120' cable-stayed segmental concrete bridge was an owner facilitated design-build project on an aggressive schedule.
12/07 – 09/08	Design-Build for the Emergency Replacement of the I-35W Bridge, Minneapolis, MN — Minnesota DOT Design Engineer for the emergency replacement of this urban interstate bridge over the Mississippi River. This segmental concrete bridge is 1,220' long and provides for ten lanes of traffic. This was a design-build project with an extremely aggressive schedule and opened to traffic in just 11 months. Participated in the community-involvement process for selection of bridge aesthetics. Coordinated the design of the state-of-the-art Health Monitoring System. Developed the corrosion protection plan including a life cycle cost analysis. Provided construction engineering services including development of the detailed erection manual, longitudinal camber analysis, and construction equipment design.
08/13 – 04/14	Reconstruction of the Cline Avenue Bridge, East Chicago, IN – United Bridge Partners Technical Lead for over 12,000' of bridge and ramps. This project featured twin precast segmental concrete bridges with three ramp structures. All bridges were erected in the balanced cantilever fashion.
08/05 – 12/05	Rehabilitation of the Cochrane Bridge, Mobile, AL – Alabama DOT Project Manager/Technical Lead who led the evaluation of the bridge and coordinated the development of repair plans, specifications, and procedures. During Hurricane Katrina, an oil rig broke loose from its moorings and crushed against the superstructure of the bridge, damaging several key components, and moving the cable-stayed main-span. Evaluated the condition of the bridge, developed and designed procedures for jacking the superstructure back into position, replaced bearings and addressed the concrete and cable-stay repairs. Coordinated the development of repair plans, specifications, and procedures.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Glen Tindale, PE	Years of relevant experience with this employer	31
	Title	Senior Bridge Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 1999 / Civil Engineering BA / 1998 / Physical Science		
Active registration number / state / expiration date		Professional Engineer: 60797 / FL / 02/28/2027		
Year registered	2004	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Complex Structures Load Rating (Concrete Structures)		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
06/17 – Present	Design-Build for the I-395 Segmental Bridges, Miami, FL – Florida DOT Bridge Engineer for the design of the superstructure and performing the load ratings. Corven Engineering is designing five new precast segmental bridges that are a part of the SR 836 / I-95 / I-395 corridor upgrade. This design-build project is being constructed by the Archer Western-De Moya Joint Venture. The overall construction value of the project is \$800 million, and the segmental bridges have a deck area of 700,000 square feet (approximately \$225 million).			
11/10 – 01/14	Inspection of the Plymouth Avenue Bridge, Minneapolis, MN – City of Minneapolis Inspector for location and condition of interior post-tensioning in twin five-span bridges heavily damaged by salt laden runoff. Severe post-tensioning corrosion was found during a routine inspection. Corven Engineering performed in-depth inspections to determine the condition of the bridge's post-tensioning system. Structural analyses replicating the construction of the bridge were performed to determine the current state of stress within the bridge. The results of inspections and structural analyses were used to develop detailed designs, plans and specifications for the rehabilitation of the bridge. During construction, Corven Engineering provided on-site assistance to address varying conditions as they were encountered. The project concluded with a load rating of the bridge in its as-built rehabilitated condition.			
06/08 – 08/10	New Bridge Design of the Vista Avenue over I-84, Boise, ID – Idaho DOT Bridge Engineer who performed a superstructure analysis including dynamic loading associated with moving pre-constructed bridge into place using SPMTs. He also performed LRFR load rating of the final structure. Vista Avenue is a two-span bridge passing over ten lanes of I-84. It is an elevated SPUI structure approximately 197' wide and 187' long. The superstructure was designed to be built off-site and moved into place using self-propelled modular transporters in four quadrants. Precast abutments and pier caps were utilized to minimize impacts to traffic. Corven Engineering designed and served as engineer of record for the bridge.			
07/15 – 08/18	Inspection and Remediation of FDOTs District 3 Segmental Bridges, Destin, Panama City and Pensacola, FL – Florida DOT Project Leader for the evaluation and remediation of FDOT's District 3 Segmental Bridges. These bridges include the Garcon Point Bridge in Pensacola, the Mid-bay Bridge in Destin and the Hathaway Bridge in Panama City. Tasks include leading inspection teams, load rating and post-tensioning replacement plans, design of near surface carbon fiber reinforcing and an internal truss to redistribute live load forces.			

03/06 – 07/06	Construction Engineering for the Design-Build of the Ernest Lyons Bridge, Stuart, FL – Florida DOT Project Leader for the LRFR load rating of the Ernest Lyons bridge. The Ernest Lyons bridge is a \$46 million design-build project with a 4,661' long precast segmental bridge and two short access bridges. The segmental bridge consists of a 61' wide box girder and 152' spans, constructed span-by-span. Corven Engineering provided peer review services during design, technical support during construction and load rating of the bridge incorporating as-built conditions.
11/04 – 07/05	Load Rating for the Widening of the I-75/SR 826 Ramp A, Miami, FL – Florida DOT Bridge Engineer who checked calculations and preformed a LRFR load rating for the project. This project represents the first segmental bridge to be widened in America. The 17-year-old, single lane bridge was widened to accommodate a second lane of traffic. Corven Engineering prepared the final design for the widening. Time-dependent construction analyses were performed to determine the current state of stress in the bridge and to study the effects of additional post-tensioning to strengthen the bridge. Three-dimensional analyses of the complete bridge were performed to determine the effect of the sequence of bridge widening transversely and the effects of lateral shifts in traffic required to maintain traffic throughout the widening.
11/23 -- Present	Evaluation of the Post-tensioning for the Sunshine Skyway Bridge, Tampa, FL – Florida DOT Bridge Engineer, Inspector and Project Manager who took samples of the post-tensioning duct and borescope tendons for the evaluation. Led the load rating of the bridge. Carrying I-75 over Tampa Bay, the Sunshine Skyway is a 21,878' long bridge with 8,860' of precast segmental structures. The 4,000' long precast segmental main span unit which includes a 1,200' long center cable-stayed span and was built in balanced cantilever. The high-level approach spans are 135' in length and were built in span-by-span with external tendons. Corven Engineering assisted with the inspection of the longitudinal post-tensioning tendons and performed a LRFR load rating of the cable-stayed main-span unit and high-level approaches.
04/13 – 02/22	New Bridge Design for the I-59/I-20 Central Business District, Birmingham, AL – Alabama DOT Bridge Engineer who investigated the plausibility of erecting four bridges side-by-side in the congested downtown area using underslung trusses. Interstates 59 and 20 combines in downtown Birmingham to form the most heavily traveled roadway in Alabama. As a subconsultant to Volkert, Corven Engineering designed segmental concrete urban viaducts to replace substandard steel bridges built in the early 1970s. The project, which includes 1 million square feet of elevated bridge deck, was constructed in less than 12 months, and plays a large role in the wider revitalization of the central business district.
07/20 – 02/21	Roosevelt Bridge Emergency Post-Tensioning Repairs, Stuart, FL – Florida FDOT District 4 Project Manager and Structural Engineer for the emergency repairs to the Roosevelt Bridge in Stuart, Florida. The twin, 4,500' long post-tensioned segmental bridges carry US Highway 1 over the St. Lucie River. During a routine biannual inspection, inspectors found significant cracking, leading to the closing of both the northbound and southbound bridges was discovered on June 16, 2020, by the Florida Department of Transportation. The cracking was the result of post-tensioning tendon failures because of excessive corrosion. The engineering team was mobilized the following day under emergency conditions. Within 5 days, the bridges were inspected and analyzed, such that the northbound bridge could reopen to reduced two-way traffic. Two months later the final analysis, design and repair plans were completed. Using an innovative CMGC contract, repairs were made, and the bridges opened to traffic in November of 2020. The work included partial deconstruction and then reconstruction of the segmental bridge and the addition of new post-tensioning tendons.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Benjamin Hawthorne, PE, SE	Years of relevant experience with this employer	21
	Title	Senior Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S. / 2005 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 44620 / LA / 09/30/2026		
Year registered	2011	Discipline	Structural Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/19 – Present	East Haddam Swing Bridge over the Connecticut River Rehabilitation, Haddam, CT – CTDOT Bridge Project Engineer responsible for the preparation of load ratings and feasibility study reports in support of a rehabilitation of this four-span truss swing bridge. The bridge, which opened in 1913 and has been listed on the National Register of Historic Places, carries two lanes of Route 82 traffic over the Connecticut River and includes a deck truss span, through truss span, and a 465-foot-long through truss swing span. Rated elements included gusset plates, pins, tension and compression members, truss chord box members subject to bending, floor beams, and stringers. The structural feasibility study evaluated the addition of an external sidewalk to allow pedestrian access across the bridge, which has a narrow 24.5-foot roadway. Load rating and feasibility analysis included the use of AASHTOWare Bridge Rating software and the creation of a 3D computer model using Midas Civil finite element analysis software. Ben has remained involved in the rehabilitation project through preliminary and final design as a Senior Structural Engineer providing technical expertise and review of truss strengthening, floor system replacement, and cantilever sidewalk development.			
08/17 – 07/19	Rehabilitation of Route 202 Bridge Over Housatonic River, New Milford, CT - CTDOT Team Leader/Structural Engineer responsible for condition inspection of the New Milford truss bridge over the Housatonic River. This single-span, steel, through-truss bridge rehabilitation project addressed deficiencies on the steel truss superstructure and post-tensioned concrete deck and included sidewalk repairs and new bridge rail. The project included inspection, load rating , preliminary and final design as well as environmental permitting and public involvement. Ben provided technical oversight and peer review of the truss load rating procedures with the use of AASHTOWare as well as the structural repair details developed from the inspection.			
07/16 – 07/17	Rehabilitation of Route 133 Truss Bridge Over Housatonic River, Brookfield, CT – CTDOT Project Engineer responsible for performing load ratings , document reviews, field inspections and compiling reports for this four-span simply supported Pratt through truss bridge carrying two lanes of traffic over the Housatonic River. Load ratings were performed in accordance with the latest AASHTO LRFR requirements for the as-built, as-inspected, and as-rehabilitated condition of the bridge, including gusset plate evaluations per the latest AASHTO Manual for Bridge Evaluation revisions. Load rating analysis included the use of AASHTOWare Bridge Rating software and the creation of a 3D model using Midas Civil finite element analysis software. Based on the results of the load rating analysis, emergency repairs were required at end node gusset plates and Ben led the design effort to develop an expedited solution.			
01/19 – Present	Middletown Swing Railroad Bridge Rehabilitation, Middletown, CT – CTDOT Project Manager for the rehabilitation of a 300-foot, single-track swing span, four 200-foot through truss approach spans, and a 60-foot through girder span. The structure serves Providence & Worcester Railroad customers in Portland, CT. Rehabilitation and repair details are based on results of an in-depth structural, mechanical, and electrical inspection and load rating of the structure. Structural repairs target primary members in poor condition and any elements that do not rate for a 286K carload. Additional work includes safety upgrades to the access system and fender system repairs. Swing span operating system rehabilitation includes replacement of low-torque high-speed mechanical equipment and upgrades to the electrical system.			

07/13 – 05/19	Sarah M. Long Vertical Lift Bridge, Kittery, ME – Maine DOT Bridge Structural Engineer on joint-venture team for a complete vertical lift bridge replacement. Responsible for design of the steel box girder lift span and associated structural elements. Ben was involved in all phases of the project, providing design services for the preliminary design, final design, and design support during construction, including providing a preliminary design report, plans, design and design check computations, load ratings, specifications, and estimates, for the replacement of the Sarah Mildred Long Bridge located on U.S. Route 1 Bypass between Kittery and Portsmouth. The bridge carries Pan Am Railway and highway traffic and was designed in accordance with AREMA and AASHTO specifications.
11/14 – 06/20	AETNA Viaduct (I-84) Bridges/Phase 2 Rehabilitation, Hartford County, CT - CTDOT Project Engineer for the design and construction support phases of the rehabilitation of bridges carrying I-84 over Amtrak's Hartford Line, Fastrack busway, parking areas, and local streets. Preliminary design phases included condition inspection and load rating of the approximately 5,000-foot-long multi-girder viaduct structure to determine rehabilitation and repair strategies. Rehabilitation included deck patching and overlay, deck end reconstruction and joint replacement, structural steel repairs primarily at beam ends, elastomeric bearing replacement, parapet safety upgrades including reconstructed median barrier with new deck overhangs, illumination upgrades, IMS facilities upgrades, and concrete substructure repairs. During construction, led the effort to design new high-load multi-rotational (HLMR) disc bearings and developed concrete column top reconstruction details to facilitate installation and improve long- term durability of the column.
12/11 – 01/13	Saugus Drawbridge Rehabilitation, Saugus, MA – Massachusetts Bay Transportation Authority Bridge Structural Engineer responsible for analysis and design for this project involving comprehensive modeling, ratings analysis of as inspected conditions, real time structural monitoring, and strengthening of an existing pier compromised by extensive structural deterioration. Responsibilities included development of load rating methods to determine existing substructure capacity and design of an interim strengthening concept including a temporary pier to allow the bridge to remain in service at full capacity until a comprehensive replacement project can be undertaken. Temporary pier design included an integrated fender design that incorporated energy absorbing elements to provide adequate protection of the existing pier in a narrow footprint and in an area of poor soil conditions. As a subconsultant, it required cooperation of multiple parties to balance existing structural capacities, emphasis on rapid construction, and the need to maintain traffic prior to and during construction of the interim strengthening.
02/19 – 12/22	Brorein Street Bascule Bridge Rehabilitation, Tampa, FL – City of Tampa Structural Engineer responsible for design services, including a load rating analysis, for the rehabilitation of the movable span of the Brorein Street bascule bridge over the Hillsborough River in downtown Tampa, FL. The project included widening of the approach spans and the bascule leaves to provide a 10-foot shared use path on each side.
12/09 – 01/10	Grand Avenue Swing Bridge Rehabilitation, New Haven, CT – City of New Haven Inspector/ Movable Bridge Structural Engineer responsible for field inspection, report preparation, and feasibility and economic analysis of preliminary rehabilitation and replacement options for this 220 foot-long, thru-truss swing bridge.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Sophia Savva Naglieri, PE	Years of relevant experience with this employer	14
	Title	Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2012 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 097888 / NY / 05/31/2028		
Year registered	2017	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/21 – Present	2021–2025 and 2025–2028 Biennial and Interim Bridge Inspection Contracts, Bronx, Kings, and Richmond Counties, NY – New York State Department of Transportation Project Engineer supporting the inspection and load rating of highway, local roadway, pedestrian, and multi-span bridges under successive NYSDOT contracts. Reviewed available plans and records, participated in site visits, and evaluated inspection findings that could affect structural capacity. Updated and corrected bridge-specific AASHTOWare Bridge Rating (BrR) files to reflect deterioration, repairs, rehabilitation work, and other changes in condition. Performed site-specific and flag load evaluations for critical findings and unusual structural configurations and supported recommendations regarding posting, monitoring, repairs, and operational restrictions. Also assisted with independent technical reviews of bridge load ratings prepared by other consultants.			
05/14 – 01/15	2013-2014 Biennial and Interim Bridge Inspection of Long Island Bridges, Long Island, NY – NYSDOT Load Rating Engineer for biennial inspections of over 300 Long Island Bridges in both Nassau and Suffolk Counties. The structures vary in size and type and include the Robert Moses Causeway NB and SB bridges over Great South Bay, as well as the Fire Island Inlet Bridge, Loop Parkway over Swift Creek, Bayville Bridge, Meadowbrook and Wantagh Parkway bridges over Goose Creek and Sloop Channel near Jones Beach. The inspections included decks, structural framing (fracture critical at approximately 100 structures) and piers, as well as all abutments and retaining walls. In addition to these primary structural elements, Hardesty & Hanover inspected the structures appurtenances, signs and their supporting structures, light standards, and electrical equipment on the bridges. Responsibilities included checking the state’s load rating models for each bridge in AASHTOWare Bridge and performing Level 1 load ratings , as necessary.			
03/23 - Present	Outerbridge Crossing, New York & New Jersey – Port Authority of New York and New Jersey Load rating Engineer responsible for performing load rating of the existing steel truss bridge. Tasks included collecting and tabulating all the section properties and material information, gathering and organizing any elements contributing to the dead load on the structure in its existing condition performing the analyses using AASHTOWare for the development of the truss bridge models and load rating of gusset plates. The procedure used in developing the models relies significantly on user inputs and in many cases hand-calculations for items such as dead load, distribution factors, and in some cases member capacity. Additionally, a library of ratings that can be updated will be developed for the client. The structure is rated in accordance with LRFR and LFR methodology including FHWA, and AASHTO practices, guidelines, policies, and standards (<i>i.e.</i> , AASHTO Manual for Bridge Evaluation, AASHTO Standard Specifications for Highway Bridges). The models will be structured and well-documented and submitted in a fashion consistent with the Level 1 rating standard. It is critical to understand how a truss functions in addition to the fatigue prone details, specifically for a non-redundant structure, in order to properly analyze a truss bridge. This knowledge allows for a practical analysis and understanding of the results from 2D or 3D analytical tools such as AASHTOWare Virtis or CSiBridge software.			

05/15 – 12/16	2015-2016 Biennial and Interim Inspections of Gowanus Spans, Brooklyn, NY – NYSDOT Load Rating Engineer for biennial inspection of over 320 spans of Gowanus Viaduct in Brooklyn, NY. The inspections included decks, structural framing, fracture critical members, piers, as well as all abutments and retaining walls. In addition to these primary structural elements, Hardesty & Hanover inspected the structures appurtenances, signs and their supporting structures, light standards, and electrical equipment on the bridges. Responsible for checking the state's load rating models for each bridge in AASHTOWare Bridge and performing Level 1 load ratings as necessary, developing new models for the Gowanus Mainline Bridge, and updating models of rehabilitated structures.
07/12 – 12/22	Rehabilitation of the Center Avenue and Lemoine Avenue Bridges, Fort Lee, NJ - Port Authority of NY & NJ Structural Engineer for the \$50 million rehabilitation of two heavily travelled bridges on the I-95 corridor. Work involves deck replacement, superstructure replacement on select spans, seismic upgrades, load rating, utility and lighting work, complex MPT and, staged construction. Specific responsibilities include design analysis of existing substructure elements, design of substructure modification details, and design of seismic retrofit for substructure elements.
10/13 – 01/15	Replacement of Four Bridges on the Bronx River Parkway over MNR, Amtrak, and NYCT, Bronx, NY – NYSDOT Structural Engineer for \$210 million project which involved a replacement of three bridges on the Bronx River Parkway, spanning over a busy commuter rail corridor, including Metro North: Amtrak and CSX tracks. The project also included rehabilitation of a 1,500-foot viaduct over NYCT train yard. Project involved preliminary and final design, including development of the replacement alternatives utilizing steel trapezoidal box girders, prestressed concrete beams, and concrete segmental box girders, load rating, utility relocation/protection, evaluation of environmental, wetland, and land use impacts, including tree survey and development of Section 4(f) documents. The project scope included the following components: 1) replacement of a two-span bridge over Amtrak and CSX (3 tracks) and eliminating center pier to increase horizontal railroad clearances; 2) replacement of concrete arch structure over the Bronx River; 3) replacement of 1500 ft. of viaduct over NYCT yard (12 tracks); 4) replacement of a single-span structure over Metro North (6 tracks). Responsibilities included the design of structural repairs of the bridge over Metro North (Site A) in addition to the presentation development for the proposed project over Amtrak tracks (Site B).
01/14 – 04/14	Design-Build Proposal for LaGuardia Airport Landside Roadway Network, Flushing, NY – Port Authority of NY & NJ Structural Engineer for the design of 3+ miles of elevated and at-grade roadway to improve access to the newly reconstructed Central Terminal Building (CTB) and adjacent terminals. Hardesty & Hanover is part of the LaGuardia Gateway Partners team, a PPP (the country's largest) that will design and construct a new world-class facility at LaGuardia Airport. The project includes demolishing the CTB and creating a new facility with a new central entry portal to the airport and improved access to terminals at the airport. Infrastructure challenges include on-site stormwater drainage management, extensive utility coordination, embankment settlement, and tight vertical and horizontal clearances. Also includes design of associated retaining walls for the approaches connecting these retaining walls.
07/14 – 08/18	Replacement for the Bruckner Expressway over Westchester Creek (Unionport Bridge), New York, NY – NYSDOT Structural Engineer on federally funded final design project for a new single leaf bascule bridge. The current phase of the project involves extensive coordination effort with various stakeholders including NYSDOT, FHWA, as well as local communities during the alternative development phase and Design Report preparation. Responsibilities include the design of the construction staging and substructure foundation at the west approach, the development of the construction schedule and assisting in the development of the final contract drawings. Other responsibilities included the preparation of the Preliminary Structure Plans and load rating for the NYSDOT.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Corey Greco, PE	Years of relevant experience with this employer	11
	Title	Structural Engineer	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization		MS / 2017 / Civil Engineering BS / 2015 / Civil Engineering		
Active registration number / state / expiration date		Profession Engineer: 88296 / FL / 02/28/2027		
Year registered	2019	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/21 – Present	2021–2025 and 2025–2028 Biennial and Interim Bridge Inspection Contracts, Bronx, Kings, and Richmond Counties, NY – New York State Department of Transportation Project Engineer supporting the inspection and load rating of highway, local roadway, pedestrian, and multi-span bridges under successive NYSDOT contracts. Reviewed available plans and records, participated in site visits, and evaluated inspection findings that could affect structural capacity. Updated and corrected bridge-specific AASHTOWare Bridge Rating (BrR) files to reflect deterioration, repairs, rehabilitation work, and other changes in condition. Performed site-specific and flag load evaluations for critical findings and unusual structural configurations and supported recommendations regarding posting, monitoring, repairs, and operational restrictions. Also assisted with independent technical reviews of bridge load ratings prepared by other consultants.			
12/17 – 03/18	2017-2018 Biennial and Interim Bridge Inspections, Long Island, NY – New York State DOT, Region 10 Structural Engineer for biennial inspections of over 300 Long Island Bridges in both Nassau and Suffolk Counties. For this contract, Mr. Greco was responsible for the Level 1 Load Ratings of several structures that could not be rated using AASHTOWare, due to their unusual structure type and geometry. The structures included the Old South Country Road Bridge over the LIRR Montauk Branch consisting of a concrete encased built-up steel girder system. For this rating, Mr. Greco had to first study the existing plans and most recent inspection reports to assess the original and existing condition of the bridge. To rate the bridge, Mr. Greco created a SAP2000 model of the Old South Country Road Bridge to determine the dead load in the members under analysis. Live loading on the bridge elements were performed by hand. With the SAP2000 and hand calculation results, Mr. Greco performed the load rating using LFD for the bridge at the critical locations. Also, under this contract, Mr. Greco was responsible for the load rating of the Elmont Road Bridge over the Southern State Parkway Eastbound consisting of a concrete T-Beam frame system. For this load rating , Mr. Greco was responsible for the review of existing contract drawings that would be used for the creation of a SAP2000 model to generate both the dead and live load acting across the frame. Mr. Greco also performed load ratings at the critical locations using LFD for both the existing condition and the noted condition from the red flag reports from NYSDOT.			
03/18 – 05/24	West Tremont Avenue Bridge Rehabilitation over Metro-North Railroad, New York, NY – New York City DOT Lead Structural Engineer providing design and construction support services to rehabilitate or replace the existing West Tremont Avenue Bridge because of its deteriorated condition. The bridge consists of eight spans and carries 1 lane of traffic and 1 sidewalk in each direction. The rehabilitation/replacement of the West Tremont Avenue Bridge is a challenging and complex project because of frequent railroad traffic under the bridge and the ramifications of construction over railroad tracks; the proximity to adjacent structures and facilities; the need to maintain traffic and access to these facilities throughout construction; the need to maintain all utilities on the structure and in the project vicinity; and the incorporation of three spans in a park building. Due to these site constraints, work will involve extensive coordination with several public and private stakeholders, including MNR, NYCDPR, NYCDEP, Con Edison, NYSDEC, NYSDPRHP, Bronx Community Board 5, NYCDOE, and PDC. Mr. Greco is responsible for the existing			

	bridge Load Ratings in their current state from recent in-depth inspection reports, using AASHTOWare (for the steel superstructure spans) and LEAP Bridge Concrete (for the prestressed concrete slab spans) along with various hand calculations. In the final design for the West Tremont Avenue Bridge, Mr. Greco helped prepare the CSI Bridge Model to perform a site-specific seismic analysis. Mr. Greco was also involved in the final design and detailing of new various superstructure (steel plate girder, prestressed concrete beams, diaphragms, bearings, and traditional concrete deck) and substructure (steel pier cap and columns, concrete foundations, micropiles, and traditional concrete abutment). In addition to the new bridge elements, Mr. Greco also performed the design and detailing of an existing abutment retrofit to bring it to current code. Mr. Greco was heavily involved with the proposed staging of the removal of existing bridge and reconstruction of the new bridge and carried the impacts of the staging throughout the analysis of the new structure. Mr. Greco was the Engineer-of-Record for this project.
11/18 – 04/19	Port Clinton Lift Bridge, Port Clinton, OH – Ohio DOT Structural Engineer involved in the load rating of the recently replaced Port Clinton Lift Bridge in Port Clinton, Ohio. The Port Clinton Lift Bridge is a double leaf bascule bridge that had reopened in late 2018 after undergoing a replacement in 2017 along with several existing steel girder approaches that were constructed in 1932 and were not replaced under the recent rehabilitation. For this project, Mr. Greco was responsible for the providing the load rating of the new bascule girder and floor system along with the existing approach spans. Due to the overall complexity of the bridge structure, which is a double leaf bascule, to rate the individual members in the bridge, Mr. Greco modelled the structure in MIDAS Civil to obtain loading for a variety of design vehicles according to AASHTO, FHWA and ODOT codes and regulations. Using the program results, hand calculations were performed to determine the load rating factors in accordance with the ODOT Bridge Manual, AASHTO and the Manual for Bridge Evaluation. Load Ratings for the approach spans were performed using AASHTOWare.
11/18 – 01/19	Atlantic Beach Bridge, Long Island, NY – Nassau County Bridge Authority Structural Engineer involved in the FHWA Fast Act load rating for the Atlantic Beach Bridge in Atlantic Beach, NY. The Atlantic Beach Bridge originally built in 1952 and since rehabbed twice (1997 & 2016) is a double leaf bascule bridge with a variety of steel and concrete approach spans, for a total of 21 spans. For the job, Mr. Greco performed a Fast Act load rating for the bascule, flanking and approach spans to adhere to the recent FHWA regulations mandating specific emergency vehicles capacities be checked for all existing bridges. To perform the load rating, AASHTOWare was utilized for the steel and concrete approaches, while hand calculations were done to rate the bascule and flanking span elements due to the overall complexity of the structural system. This required in-depth study of the existing contract documents to determine the most practical means of analysis
04/20 – 04/22	Emergency Contract for 181st Street (Washington Bridge) over Harlem River Repairs, New York, NY – New York City DOT Structural Engineer responsible for the final design and detailing of various repairs for existing roadway stringers and floorbeams on the Washington Bridge (181st Street Bridge) in the boroughs of Manhattan and the Bronx. Mr. Greco performed the final design of a specialized joint system and temporary support system to be utilized during the stringer repairs. He was also responsible for performing the as-built load ratings of the existing structure using AASHTOWare BrR. Additionally, Mr. Greco had worked on the Fatigue Analysis Memorandum that went over, in detail, the results of a finite element model (FEM) that was used to replicate the actual loading conditions on the Washington Bridge and how it had been part of the cause of the observed defects on the bridge.
07/20 – 03/25	Replacement of the Bronx River Parkway Bridge over Metro-North Railroad, Bronx, NY – New York State DOT Lead Structural Engineer responsible for design services including calculations and analyses along with contract plan preparation of the Bronx River Parkway Bridge and Bronx River Parkway. The existing Bronx River Parkway over Metro North was originally constructed in the 1950s as a steel through girder bridge and was replaced with a new 220-ft long single span bridge supported on integral abutments on a 45-degree skew. For this bridge, Mr. Greco led the design of the steel plate girders, diaphragms, traditional reinforced concrete deck and proposed concrete fascia barrier modifications. He also designed the integral abutment, which was to be constructed over several stages. For this analysis, Mr. Greco, modelled all stages in CSI Bridge, and performed a stage-by-stage assessment of the structure, resulting in the need to implement temporary supports to provide stability that was included in the contract design plans. For the existing Bronx River Parkway over Bronx River, which was a concrete arch constructed in the 1950s, Mr. Greco was also responsible for the design of the existing arch parapet modifications, resulting from the need to raise the existing roadway up several feet to provide better horizontal sight distance. Mr. Greco had performed the official Level 1 Load Ratings for the new proposed Bronx River Parkway Bridge over Metro-North and the proposed modifications to the Bronx River Parkway over Bronx River (concrete arch).

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Kathryn Inzinna, PE	Years of relevant experience with this employer	13
	Title	Structural Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		MS / 2016 / Civil Engineering BS / 2013 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 098857 / NY / 10/31/2026		
Year registered	2018	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/24 – Present	Rehabilitation of Bridge Nos. 03015A and 03015B – I-91 SB and Ramp 139 Over State Street, Mill River, and Ramps in New Haven, CT, New Haven, CT – Connecticut Department of Transportation Project Engineer for the rehabilitation of a 14-span viaduct bridge and a 3-span on-ramp bridge rehabilitation located over State Street, the Mill River, and two I-91 NB on and off ramps. Final design included load rating , steel repairs, steel strengthening, bearing replacement, joint replacement, deck repair, substructure repairs, pin and hanger replacement, cleaning and metallizing the entire steel structure without long term closures on I-91 SB in the heavily traveled area. Responsibilities included coordination with the highway and traffic subconsultant and the project liaison for CTDOT, and leading the design team. She also designed steel repairs and was responsible for quality control of each of the design deliverables.			
01/21 – Present	2021–2025 and 2025–2028 Biennial and Interim Bridge Inspection Contracts, Bronx, Kings, and Richmond Counties, NY – New York State Department of Transportation Project Engineer supporting the inspection and load rating of highway, local roadway, pedestrian, and multi-span bridges under successive NYSDOT contracts. Reviewed available plans and records, participated in site visits, and evaluated inspection findings that could affect structural capacity. Updated and corrected bridge-specific AASHTOWare Bridge Rating (BrR) files to reflect deterioration, repairs, rehabilitation work, and other changes in condition. Performed site-specific and flag load evaluations for critical findings and unusual structural configurations and supported recommendations regarding posting, monitoring, repairs, and operational restrictions. Also assisted with independent technical reviews of bridge load ratings prepared by other consultants.			
05/24 – 02/25	Rehabilitation of Bridge Nos. 01469B (Dutch Point Viaduct), I-91 SB Over Connecticut Southern Railroad, SR 598 WB and TR 803 in Hartford, CT, Hartford, CT – Connecticut Department of Transportation Lead Structural Engineer for the deck reconstruction package for the deck replacement of the 51-span viaduct. Final design included deck replacement, joint replacement, load rating , steel repairs, steel strengthening, bearing replacement, metallizing beam ends. Responsibilities included the coordination of the detailing in the deck reconstruction package and leading the design team. She also designed the deck reinforcement and was responsible for quality control of the deck reconstruction package.			
10/23 – 03/24	Rehabilitation of Bridge No. 0164, South Street Over I-84 in Middlebury, CT, Middlebury, CT – Connecticut Department of Transportation Lead Structural Engineer for the preliminary design package for the deck replacement of the 13-span bridge, which includes a steel arch over the I-84 eastbound and westbound lanes. Preliminary design included deck replacement with GFRP reinforcement, new barriers, replacement of fracture critical pin and hanger assemblies, strengthening of steel members to meet load rating requirements, steel repairs, bearing replacement, clean and painting the structure, approach reconstruction. Responsibilities include load rating analysis of the steel arch, columns, floorbeams, and stringers, preparation of the preliminary design report and design drawings, and determination of steel repair locations.			

12/21 – 01/22	NYSDOT R11 Bridges Biennial 2021-2023 – Task 6 – Load Rating Analysis -Level 1, Bronx, NY – New York State DOT Structural Engineer for the load rating of the concrete pier cap supporting the Bruckner Expressway in the Bronx, NY. Responsible for load rating calculations to determine the capacity of the concrete pier cap to determine if emergency repairs were needed after a yellow flag was issued for the pier cap by the inspection team. Inspection team noted significant deterioration including extensive spalling and exposed reinforcement to the cap beam which carries four girders on a major highway.
02/22 – 01/24	Penn Station Access, Bronx, NY – Metropolitan Transportation Authority Structural Engineer on Penn Station Access, which will connect Amtrak's existing Hell Gate Line to Penn Station Access and bridge the line into a state of good repair. The project involved the superstructure replacement and substructure rehabilitation of three 2-span railroad bridges including Eastchester Road Bridge, Bronxdale Avenue Bridge, and Bronx River Bridge and the rehabilitation in the Bronx River Bridge which includes an approach span, a track girder span, and a truss span over the Bronx River. Responsible for designing precast concrete approach slabs for the three bridges in accordance with AREMA loads, determining and detailing miscellaneous steel repairs for the truss span over the Bronx River based on the inspection report findings, and computing as-inspected load rating calculations for the Bronx River Bridge to identify components requiring repairs. Also was responsible for providing quality assurance for MTA comment resolution for several of the design packages. Responsible for leading the steel shop drawing review effort for the three 2-span steel railroad bridges on an accelerated schedule. H&H was responsible for meeting the Contractor's expedited construction schedule. Lead and coordinated the shop drawing effort among the 8 team members, subconsultant, and design lead.
08/17 – 04/18	East 3rd Street and Saw Mill River Parkway Bridges – Region 8 Design Build, Yonkers, NY – New York State DOT Structural Engineer for three bridge replacement designs. (Two bridges are located along the Saw Mill River Parkway; the other East 3rd Street bridge runs over the Hutchinson River and Hutchinson River Parkway.) Final designs reduced flooding vulnerability; address environmental commitments; include utility scopes; and optimize design efficiencies and design service life. Effective construction sequencing will minimize the impact to the traveling public and local communities. Responsibilities included the hunched steel plate girder superstructure design and splice design for the East 3rd Street Bridge, which used a complex construction concrete pour sequence to counteract the uplift in the short span over the river. She also designed the wall pier for the East 3rd Street Bridge. Responsibilities included the steel girder superstructure design and splice design for both Saw Mill River Parkway Bridges. She also designed the four cap beams and columns for the four pile bents on both Saw Mill River Parkway Bridges.
03/18 – 07/19	Shore Road Bridge Reconstruction, Bronx, NY – New York City DOT Structural Engineer for replacement of a rolling lift bridge over the Hutchinson River. Located entirely within Pelham Bay Park, the Shore Road Bridge spans the Hutchinson River and is a link on the NYC Mosholu-Pelham Bay Greenway bike and pedestrian route. The bridge is comprised of a 90-foot-long Scherzer double-leaf rolling lift bascule span with three earth-filled concrete spandrel arch approach spans on each end. The total structure length is 865 feet. The bridge is 52 feet wide and accommodates two non-standard ten-foot lanes in each direction, plus a 7.5-foot sidewalk on the south side. The clear channel width is 59 feet, and the vertical clearance at mean high water is about 12.5 feet. The 108-year-old bridge was previously evaluated and considered eligible for inclusion on both the New York State and National Registers of Historic Places. The unique architectural towers, or pylons, on the bridge were described in contemporary documents from 1910 as a means of emphasizing the gateway to vessels. The bridge has been rehabilitated and repaired several times in recent decades to extend its service life, including most recently in 2002, but the main steel members and the concrete approach spans have continued to deteriorate. The project included studies, alternate assessment, NYSDOT design approval, preliminary & final design for this locally administered federal aid project. Responsibilities included various documents and drawings for the Design Approval Document. She also worked on the preliminary steel girder and concrete girder design alternatives, the preliminary bascule design layouts, quantified environmental impacts for the movable bridge, approach bridges, and approach roadways, and wrote various preliminary design reports.

	Firm Employed by	Hardesty & Hanover, LLC		
	Name	Mary Mazur, 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 / 2017 / Civil Engineering BS / 2015 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 102315 / NY / 01/31/2028		
Year registered	2020	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOware Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/21 – Present	2021–2025 and 2025–2028 Biennial and Interim Bridge Inspection Contracts, Bronx, Kings, and Richmond Counties, NY – New York State Department of Transportation Project Engineer supporting the inspection and load rating of highway, local roadway, pedestrian, and multi-span bridges under successive NYSDOT contracts. Reviewed available plans and records, participated in site visits, and evaluated inspection findings that could affect structural capacity. Updated and corrected bridge-specific AASHTOware Bridge Rating (BrR) files to reflect deterioration, repairs, rehabilitation work, and other changes in condition. Performed site-specific and flag load evaluations for critical findings and unusual structural configurations and supported recommendations regarding posting, monitoring, repairs, and operational restrictions. Also assisted with independent technical reviews of bridge load ratings prepared by other consultants.			
07/21 – Present	Rehabilitation of Belt-Shore Parkway Bridges over Bedford Avenue, Nostrand Avenue, Sheepshead Bay Road & Ocean Avenue, Brooklyn, NY – New York City DOT Project Engineer for the preliminary engineering phase to reconstruct the Belt Parkway bridges over Sheepshead Bay Road, Ocean Avenue, Bedford Avenue, and Nostrand Avenue. The project aims to improve roadway geometry and safety along this segment of the Belt Parkway corridor and address structural deficiencies on the four existing bridges. Other major components of the project include coordination with NYC Parks to address the extensive vegetated areas adjacent to the highway, coordination with NYC DEP to improve drainage on the project site, and architectural features consistent with the history of the Belt Parkway. Mary's responsibilities include coordinating efforts amongst in-house design teams and subconsultants across multiple disciplines to perform tasks including inspection, load rating, subsurface exploration, traffic analysis, development of both bridge rehabilitation and replacement alternatives, and preliminary design of the selected alternative to replace all four bridges and reconstruct the highway segments in between. Additional responsibilities include overseeing the environmental review process and preparation of the Design Approval Document to meet NYCDOT, NYSDOT, and FHAW requirements. The project is being progressed as a Design-Build, and Mary is responsible for coordinating scope of work and technical requirements with the team preparing the procurement documents.			
03/23 – 08/24	2021-2025 Biennial and Interim Bridge Inspection, Bronx County, Region 11, Bronx, NY – New York State DOT Structural Engineer responsible for overseeing load rating updates for 355 bridges in Bronx County. Mary's responsibilities included coordination with inspection teams to obtain the latest general, interim, and special inspection findings and overseeing corresponding updates to load ratings utilizing AASHTOware and other analysis methods. Mary was also responsible for the load rating of flagged conditions and design of corresponding repairs.			

04/20 – 03/21	Rehabilitation and Repairs for the Bayview Avenue Bridge, Great Neck, NY – Nassau County DPW Structural Engineer responsible for field inspection and load rating of the Bayview Avenue Bridge, located in the Village of Saddle Rock in Great Neck. The existing bridge is a three-span, concrete arch bridge nearing 50 years in age. The project aims to address deterioration of the concrete bridge deck and cracking along the arch ribs and other substructure components. Due to the complexity of the existing structure, Mary was responsible for modeling the existing bridge using 3D finite element software to accurately determine load distribution and force effects. This analysis also included an assessment of thermal forces to investigate possible causes of cracking observed throughout the bridge. Using the findings obtained from the in-depth inspection and load rating analysis, H&H developed alternatives for immediate repairs as well as several alternatives for long-term rehabilitation.
09/19 – 12/22	Reconstruction of Grand Street Bridge over Newtown Creek, Brooklyn & Queens, NY – New York City DOT Structural Engineer for the preliminary design phase for the replacement of the Grand Street Bridge, a steel truss swing bridge across Newtown Creek that connects Maspeth, Queens to Williamsburg, Brooklyn. Mary's responsibilities included field investigations and a load rating analysis of the existing bridge and preliminary design of alternatives for the replacement bridge. Alternatives including different movable bridge types and span configurations were developed and assessed based on factors including marine navigation needs, vehicular and pedestrian traffic needs, future maintenance, construction staging, and environmental impacts. Mary was also responsible for the preparation of a scoping report to summarize alternatives development and assessment.
09/18 – 10/23	Rehabilitation of the Smith Point Bridge, Mastic and Shirley, NY – Suffolk County DPW Structural Designer responsible for field inspection and design of remedial repairs for flagged conditions on the Smith Point Bridge, which is a double-leaf bascule bridge spanning Narrow Bay to Smith Point County Park and Fire Island National Seashore. Mary was responsible for designing repairs on the bascule pier columns, bascule girders, and flanking span stringers while maintaining the regular operation of the bridge. Responsibilities included calculations to support the proposed repairs, ensuring that the existing load rating of the bridge was maintained, and preparation of final contract plans.
04/18 – 07/21	Rehabilitation of the Promenade over FDR from East 81st Street to East 90th Street, New York, NY – New York City DOT Structural Engineer responsible for inspection, load rating, and preliminary design of alternatives. The project aims to rehabilitate the existing superstructure and substructure elements which comprise this 53-span concrete structure built in 1942. This complex structure carries Carl Schurz Park on the upper level, FDR Drive Southbound on the middle level, and FDR Drive Northbound on the lower level, involving multiple stakeholders including NYC Parks, NYSDOT, NYC Public Design Commission, and Community Board 8. Mary's responsibilities included collecting data from as-built documents and inspection findings to conduct both as-built and as-inspected load ratings and using findings to develop design alternatives for both rehabilitation and replacement options. The development of design alternatives included addressing structural and safety issues on the structure, seismic assessment, landscape design for Carl Schurz Park, upgrading ADA compliance, and maintaining traffic along the FDR Drive during construction.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	Heather Deare, PE	Years of relevant experience with this employer	5
	Title	Bridge Inspection Engineer	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization		BS / 2007 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 36800 / LA / 3/31/2028		
Year registered	2011	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOware Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
02/26 – Present	Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS – Mississippi Office of State Aid Road Construction Bridge Inspection Engineer. Heather manages all field and office work for inspecting and load rating over 200 bridges annually through the state of Mississippi. Inspections and load ratings are performed in accordance with current NBIS and SNBI and procedures as outlined in the AASHTO MBE. Her responsibilities also include inspection scheduling / coordination, performing QC/QA on field inspections, load ratings, and inspection reports, and assisting with invoicing. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, and reinforced concrete box culverts.			
01/12 – 03/13	State Route 178 Bridge Replacements, Marshall County, MS – Mississippi DOT Structural Engineer. Under a Master Bridge Retainer contract, Stantec was tasked with designing 3 bridges along a corridor of SR 178 in Marshall County. The first, over Chewalla Creek and BSNF Railway will be a 894-foot prestressed concrete structure. The other two, both prestressed concrete bridges on Type III and BT-72 girders, will span 1374 and 280 feet over the Tippah River and Tippah Relief, respectively. Design Phase A will involve the preliminary plans, bridge hydraulics, with Phase B final plans and seismic design to be submitted in October 2012. Heather was responsible for the design of all bridge elements including: bridge decks, prestressed girders, plain and laminated bearing pads, columns, drilled shafts, and pile bent caps. All design is in accordance with the 2012 AASHTO LRFD Bridge Design Specifications.			
01/20 – 05/23	Bridge Maintenance Precast Slab Span Standards, Statewide, LA – LADOTD Project Manager. LADOTD's Bridge Maintenance section has two in-house construction crews that can handle a variety of complex construction projects including slab span spot replacements and at the time they were following an older standard plan that no longer met the MASH criteria that the Department had moved towards. Heather took on the role of designing a new set of Bridge Maintenance precast slab span standards which included the precast panels themselves as well as the precast bent caps. She worked closely with one of the prominent precast fabricators in the area to develop a precast panel that would be easily constructable while meeting the MASH criteria. Achieving the appropriate barrier rail crash requirements involved casting the single-slope barrier rail directly onto the exterior panel to create a structurally adequate slab span when coupled with high-strength concrete closure pours. These standards have been used by the bridge maintenance construction crews since 2021 without issue.			

02/20 – 03/23	Load Testing of Bridges, Statewide, LA – LADOTD Project Manager. Occasionally, the results of a load rating may appear to conflict with the physical condition of the bridge due to conservative calculation assumptions. In those cases where it is desired that the load rating results be verified, load tests would be utilized to accurately measure the bridge's response to known loading. Detailed models can then be created and analyzed to determine the true load carrying capacity. Heather managed several of these load tests across Louisiana as situations arose. These tests involved lining up instrumentation installation prior to the work, traffic control, nearby material stockpiles to accurately load the test trucks, mobile weight scales, and consultant availability.
01/21 – 02/23	LA 1: Bayou Plaquemine Bridge Strengthening H.014608, Iberville Parish, LA – LADOTD Project Manager. LA 1 is a major highway used by many commercial industries for transporting large/heavy equipment. This corridor should not be load posted unless absolutely necessary for public safety. A load rating at the time determined that the bridge over Plaquemine Bayou needed to be load posted until repairs could be made. Heather was the project manager and coordinated with the consultant to, first, perform a load test and, second, to design the necessary repairs as the load test still indicated that a load posting would be required. This project was accelerated due to the economic importance of keeping this corridor open. Due to the alignment of the roadway in this section of the highway extensive traffic control was required which involved moving southbound traffic over to the northbound lanes far in advance of the bridge location and, ultimately on to the northbound adjacent bridge. The repairs were completed quickly and the bridge load posting was removed.
03/09 – 12/12	L'auberge Baton Rouge Hotel & Casino, River Road Relocation, Baton Rouge, LA – LADOTD Structural Engineer. The project consisted of several offsite improvements near the intersection of Gardere Ln. and Nicholson Dr. A retaining wall was necessary at this particular roadway widening location due to the embankment requirements within an area lacking the necessary ROW. The retaining wall is supported on both spread footings as well as drilled shafts at separate locations along the project. The drilled shaft foundation is used to alleviate ground pressures over gas utility pipelines present in the area. Also within the area was a precast slab "land bridge" unit over a pipeline that was necessary in order to provide safe utility access to an energy substation. Heather was responsible for the retaining wall, foundation, and precast slab designs, quantity calculations, plan review, and has attended several meetings with various utility companies during the design phase to resolve any design conflicts.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	Joseph "Brian" Johnson, PE	Years of relevant experience with this employer	21
	Title	Principal, Structural Section Manager	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		Professional Engineer: 31273 / LA / 9/30/2026		
Year registered	2004	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating – Meets MPR 4		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/17 - 10/18	Load Rating and Posting of 110 On-System Bridges, Statewide, LA – LADOTD 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, Statewide, LA – LADOTD 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, Statewide, AL – Alabama DOT 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, Statewide, MS – Mississippi DOT Project Manager. Brian served as the project manager for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with current MBE standards. Brian was responsible for managing project activities, developing rating criteria, scheduling internal and external progress meetings, performing QC/QA, and delivering final reports.			

08/10 - Present	Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS – Mississippi Office of State Aid Road Construction 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.
12/20 - 04/22	Truss Bridge Inspections and Load Ratings, Statewide, MS – Mississippi DOT 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
08/19 – 04/24	I-10/Loyola Interchange Design-Build, Contract No. H.011670, New Orleans, LA – LADOTD 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.
02/05 – 03/08	Florida Avenue Bridge / Navigational Canal, Contract No. H.005967, New Orleans, LA – LADOTD Project Manager. Brian oversaw the structure layout, design, and project coordination for this project resulting in a three-level, fully directional interchange to serve as the approaches to the main span bridge over the Inner Harbor Navigational Canal. Project components included long span (up to 280-ft) horizontally curved steel plate girders at an extremely tight curvature (radius equal to 265-ft); prestressed concrete girders (Types III, IV, BT-72, and BT-78); high-level piers (60-ft to 90-ft tall); and complex footing designs within tight utility corridors. Project design was in accordance with the LRFD bridge design specifications. Steel girders were designed and analyzed using MDX and STAAD. In 2008, 95% plans were completed and transmitted to the client; however, the project was put on hold to determine future project scope that is pending decisions by state and local leaders regarding recovery and redevelopment of the New Orleans East area.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	Carl Gaudry, PE	Years of relevant experience with this employer	1
	Title	Senior Bridge Engineer	Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization		MS / 2011 / Civil Engineering BS / 2007 / Civil Engineering		
Active registration number / state / expiration date		Professional Engineer: 37365 / LA / 3/31/2027		
Year registered	2012	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOware Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/08 – 07/13	LA 835 Bridges, H.001756 H.005529 (834-07-0017), LA – LADOTD Bridge Design Task Manager. This project was an in-house design project utilizing the slab span standard plans requiring the design/detail of bridge general plan per LADOTD Bridge Design Manual and AASHTO Green Book; and design of Guardrail in accordance with AASHTO RSDG 3rd edition and LADOTD GR-200 Standard Plan. At the end of plan development, Carl was responsible for the bridge quantities and construction cost estimates. During construction, performed construction related engineering services tied to the implementation of the plans and specifications, such as requests for information for clarification of the contract documents. He served as DOTD Project Manager under the department's mainframe database tracking of projects (TOPS) system, until the department upgraded their system to the SAP Project Systems in 2011. Under Project Systems, a Licensed professional engineer (PE) was required to be a project manager, which he did not receive until August 2012.			
10/22 – 12/25	US 190: US 61 Overpass Int. Repairs, East Baton Rouge Parish, LA – LADOTD Project Manager. Project called for the strengthening of the existing concrete girders (circa 1930s) with Fiber Reinforced Polymer (CFRP). He managed the project for the department, oversaw plan development by the design consultant, and processed proposed updates to the NS-item specifications (special provisions to the contract). While most submittals related to the FRP system went to the design consultant, he provided reviews of the Structural Concrete Patching material for compliance with the LSSRB 2016 specs and the NS-item specs.			
01/08 – 02/15	LA 514 Grand Bayou Bridge H.001756 (100-01-0021), Red River Parish, LA – LADOTD Bridge Design Task Manager responsible for the delivery of the Bridge Plans. Project was an in-house design project utilizing some of the slab span standard plans: design of curved, superelevated slab span bridge using the AASHTO LRFD 4th edition with 2009 interims; design/detail of bridge general plan per LADOTD Bridge Design Manual and AASHTO Green Book; and design of Guardrail in accordance with AASHTO RSDG 3rd edition and LADOTD GR-200 Standard Plan. At the end of plan development, Carl was responsible for bridge quantities and construction cost estimates. During construction, he performed construction related engineering services tied to the implementation of the plans and specifications, such as requests for information for clarification of the contract documents.			

01/08 – 09/12	US 80 Black Lake Bridge, H.000127 (001-06-0048), Bienville Parish, LA – LADOTD Bridge Design Task Manager. Task Manager responsible for the delivery of the Bridge Plans. This project was an in-house design project utilizing some of the slab span standard plans: design of skewed bent cap with 24" diameter piles using AASHTO LRFD 4th Edition with 2009 interims; design/detail of bridge general plan per LADOTD Bridge Design Manual and AASHTO Green Book; and design of Guardrail in accordance with AASHTO RSDG 3rd edition and LADOTD GR-200 Standard Plan. At the end of plan development, Carl was responsible for the bridge quantities and construction cost estimates. During construction, performed construction related engineering services tied to the implementation of the plans and specifications, such as requests for information for clarification of the contract documents.
01/13 – 01/15	LA 1077: Black Bayou Br Near Madisonville H.008358, St. Tammany Parish, LA – LADOTD Bridge Design Task Manager. As the TM, he developed the Stage 0 study, oversaw the development of the preliminary plans, and participated in the design checking of the Bridge preliminary plans. This project was an in-house design project, requiring full design of bridge plans using AASHTO LRFD 4th edition with 2009 interims: design elements included slab spans, pile bent caps, and span anchor plates per AASHTO LRFD; design/detail of bridge general plan per LADOTD Bridge Design and Evaluation Manual and AASHTO Green Book; and design of Guardrail in accordance with AASHTO RSDG 4th edition and GR-MASH-ON Standard Plans. At the end of plan development, he was responsible for the bridge quantities and construction cost estimates. As Task Manager during the construction phase, he provided construction related engineering services, such as RFI responses and review of elastomeric bearing pads, span anchor plates, and detour bridge shop drawings in accordance with the Louisiana Standard Specifications for Roads and Bridges 2006 and the construction plans.
01/08 – 03/12	LA 3051 Drainage Canal Bridges, H.005530 (834-17-0006), Morehouse Parish, LA – LADOTD LADOTD Bridge Design Task Manager. Task Manager responsible for the delivery of the Bridge Plans. This project was an in-house design project, requiring full design of bridge plans using AASHTO LRFD 4th edition with 2009 interims: design elements included Quad Beam girders, Pile Bent Caps, and Continuous Deck Spans per AASHTO LRFD; design/detail of bridge general plan per LADOTD Bridge Design Manual and AASHTO Green Book and design of Guardrail in accordance with AASHTO RSDG 3rd edition and GR-200. At the end of plan development, Carl was responsible for the bridge quantities and construction cost estimates. During construction, performed construction related engineering services tied to the implementation of the plans and specifications, including fabrication shop drawing review (girders and end dams) and requests for information for clarification of the contract documents.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	John Krebs, PE	Years of relevant experience with this employer	13
	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		Professional Engineer: 37259 / LA / 9/30/2026		
Year registered	2012	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating – Meets MPR 5		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
10/24 - 12/25	Bascule Load Rating Contract, Statewide, MS – Mississippi DOT Load Rating Project Manager. Stantec was responsible for developing a methodology to load rate bascule bridges in AASHTOWare BrR for MDOT and then use the developed methodology to load rate three bridges. The first bridge was modeled in AASHTOWare BrR and then in CSIBridge to compare the results and guide BrR model revisions. The remaining two bridges were then modeled in BrR using the methodology developed on the first bridge. John’s responsibilities included vetting the methodology for loading bascule bridges in BrR, providing QC to all load rating models, quality control/quality assurance of the load rating report, and general coordination with the MDOT Project Manager.			
03/13 - 03/17	LADOTD Load Rating and Posting of 630+ On-System Bridges, Statewide, LA – LADOTD 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.			
10/17 - 01/19	AASHTOWare Bridge Load Rating, Statewide, MS – Mississippi DOT 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.			
08/10 - Present	Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS – Mississippi Office of State Aid and Road Construction 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.			

12/15 - Present	Nelson Road Extension and Bridge, Contract No. H.005967, Lake Charles, LA – LADOTD 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.
08/10 - Present	Mississippi Statewide Timber Bridge Inspections & Load Ratings, Statewide, MS – Mississippi Office of State Aid and Road Construction 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.
02/19 - 04/19	ALDOT Load Rating of 30 Bridges, Statewide, AL – Alabama DOT 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.
04/11 - 03/15	I-210: Cove Lane Interchange and Improvements Project, H.010151, Lake Charles, LA – LADOTD 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.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	Kunal Malpani, PE	Years of relevant experience with this employer	13
	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		Professional Engineer: 43016 / LA / 3/31/2027		
Year registered	2018	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating – Meets MPR 5		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
03/13 - 03/17	LADOTD Load Rating and Posting of 630+ On-System Bridges, Statewide, LA – LADOTD 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 – LADOTD 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 – LADOTD 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, Statewide, MS – Mississippi DOT 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.			

02/19 - 04/19	ALDOT Load Rating of 30 Bridges, Statewide, AL – Alabama DOT Load Rating Engineer. The project included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with the AASHTO LFR method and current ALDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0. Kunal was responsible for load ratings and performing QC/QA.
06/16 - Present	Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS – Mississippi Office of State Aid Road Construction 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.
08/19 - Present	Mississippi Statewide Timber Bridge Inspections & Load Ratings, Statewide, MS – Mississippi Office of State Aid Road Construction 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.
01/19 - Present	I-10 Loyola Design-Build, Contract No. H.011670, New Orleans, LA – LADOTD 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.
02/19 - Present	LA 12 BRIDGE REPLACEMENTS, Calcasieu Parish, LA – LADOTD Project Engineer. Kunal is responsible for overseeing all superstructure and substructure design elements, performing load ratings, and reviewing construction submittals. As part of value engineering, Stantec is responsible for designing and detailing the replacement of six structurally deficient bridges along LA State Route 12 in Calcasieu Parish. The project is being executed in two phases of construction, with the first phase of widening to one side in order to accommodate two lanes of traffic, and a second phase to complete the reconstruction. This would allow structure replacement without the requirement of temporary bridges. All bridges consist of LA Quad beam girder spans supported on pile bents. Kunal is currently looking over the as-built load rating of all the structural components.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	Ryan Nataluk, PE	Years of relevant experience with this employer	19
	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		Professional Engineer: . 37837 / CO / 10/31/2027		
Year registered	2003	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		AASHTOWare Load Rating		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
05/12 - 05/16	Load Rating and Posting of On-System Bridges, Statewide, WV – West Virginia DOT Project Manager, Senior Team Leader and SPRAT Climbing Supervisor for the 1,900-ft 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 United States Congress to establish NBI and NBIS Standards between 1968 and 1971.			
03/14 - 05/15	LA 511: Jimmie Davis Bridge Rehabilitation H.010662, Bossier, LA – LADOTD Lead Inspector. Total structure length is 2,823-ft, including three main steel truss simple spans – 354-ft, 402.5-ft, and 354-ft long - 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 of 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, Ocean Springs, MS – Mississippi DOT 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 – 11/22	Bridge Inspection and Load Rating for Local Public Agency and Privately Owned Bridges Statewide, ND – North Dakota DOT 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.			

04/17 - 08/17	SR 605 Over the Industrial Waterway In-Depth Bridge Inspection, Gulfport, MS – Mississippi DOT 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 Stayed In-Depth NBI Inspection, Washington County, MS – Mississippi DOT Assistant Project Manager and Field Team Leader. Ryan served as the assistant PM and field team leader for the in-depth, fracture critical and element level inspection of US 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 - Present	On + Off-System Bridge Inspections, Statewide, CO – Colorado DOT 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-ft in clear span. Performed field inspections in accordance with all CDOT, FHWA, NBIS, SPRAT and OSHA guidelines and requirements. Confined space entry protocol and NDT 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 AASHTOWare BrR and per the CDOT Bridge Rating Manual. All scour analyses are performed per the FHWA's HEC 18. In-depth elemental reporting includes recommendations for maintenance, replacement and/or repair, sketches, photographs, and streambed measurements.
09/12 - Present	Bridge Inspection and Analysis Services, Statewide, NV – Nevada DOT 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.
01/13 - Present	Mike O'Callaghan – Pat Tillman Memorial Bridge, Boulder City, NV – Nevada DOT Program Manager. As part of the NDOT statewide inspection contract, Ryan served as 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-ft 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.

	Firm Employed by	Stantec Consulting Services Inc.		
	Name	John “Taylor” Perkins, PhD, PE	Years of relevant experience with this employer	19
	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		Professional Engineer: 47449 / LA / 9/30/2027		
Year registered	2023	Discipline	Structural Engineer	
Contract role(s) / brief description of responsibilities		AASHTOware Load Rating – Meets MPR 5		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
03/16 – 09/18	Statewide Fracture Critical Inspection Services - Package 2 - Simon Kenton Bridge Load Rating, Statewide, Kentucky – Kentucky Transportation Cabinet 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-ft side spans and an 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. 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 – TBTA Technical Lead for the load rating of the 200+ ft spans of the Robert F. Kennedy Bridge over the East River and Bronx Kill in NYC. The rated portions include a suspension bridge unit with 1,380-ft main span and 672-ft side spans as well as several through-truss spans. Ratings were performed for both the LRFR and ASR methodologies and incorporated AASHTO specialized hauling vehicles and FHWA FAST act's emergency vehicles. For the suspended spans, a nonlinear finite element model was built in CSi Bridge analyze the large displacements and stress-stiffening effects of the suspension cables. Ratings included stringers, floorbeams, and stiffening trusses, including gussets. Ratings for the Bronx Kill truss spans included stringers, floorbeams, main truss members, and gusset plates. The project also includes ratings for the orthotropic steel decks, which were modeled in 3-D using Ansys.			
09/18 - Present	Statewide Fracture Critical Inspection Services (Package 2) Simon Kenton Bridge Load Rating, Maysville, KY – Kentucky Transportation Cabinet 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 – 01/22	I-70 Bridges Upgrade Design & QAM Services, Wheeling, WV – West Virginia Highways 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, Various Locations, KY – Kentucky Transportation Cabinet 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.
03/15 – 12/25	US 60 Over Cumberland River Bridge Replacement (Smithland Design), Smithland, Kentucky – Kentucky Transportation Cabinet District 1 Deputy Project Manager and Load Rating Engineer of Record. This \$60M project replaces the existing structure, which carries US 60 over Cumberland River in the town of Smithland, KY. As deputy PM, Taylor had been involved with the project from the planning and environmental phase, in which he led navigation simulation modeling, a span arrangement and structure type selection study, and performed USCG coordination. The replacement structure has a 40-ft clear roadway width and is 1909.83-ft long consisting of a 3-span (368') PPC I-beam south approach unit, a 700.33-ft single truss span over the river, and a 6-span (841.5') PPC I-beam north approach unit. A modified warren through-truss was used for the main span which 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, he 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.
09/17- 04/21	KY 676 Load Rating and Testing, Frankfort, KY – Kentucky Transportation Cabinet Load Rating Engineer Lead for the twin 3-span post-tensioned segmental box bridge. LRFR ratings, completed under the 2015 Statewide Fracture Critical Bridge Inspection Package 3, were performed for HL-93 load, four state posting vehicles, four specialized hauling vehicles, state superload vehicles, and FHWA FAST act's emergency vehicles. Analysis for the structure included two independent models in CSi Bridge and BD2 to capture the stage construction effects of the balance cantilever erection. After the load ratings, Taylor supported a load testing of the bridge, which was performed by the Kentucky Transportation Center.

	Firm Employed by	Russo Structural Services LLC		
	Name	Francesco Russo, PhD, PE	Years of relevant experience with this employer	5
	Title	Founder & Principal	Years of relevant experience with other employer(s)	28
Degree(s) / Years / Specialization		Ph.D. / 2000 / Civil Engineering M.S. / 1994 / Civil Engineering B.S. / 1992 / Civil & Construction Engineering Technology		
Active registration number / state / expiration date		Professional Engineer: PE.0047522 / Louisiana / 09/30/2027		
Year registered	2000	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Load Rating Training		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
07/23-08/23	I-10 Mississippi River Bridge Fatigue Cracking Repair. When distortion-induced fatigue cracks at bearing stiffener / floorbeam connection plates were discovered in the I-10 bridge over the Mississippi River at Baton Rouge, was retained to provide fatigue repair consulting. Worked with the engineers to identify the source of cracking and to develop effective repair concepts. Provided peer review of the design plans, calculations, and FEA models.			
09/2021 - Present	NHI LRFD Course Development and Instruction. Lead instructor for various FHWA bridge design courses including: (1) FHWA-NHI-130081 LRFD for Highway Bridge Superstructures, (2) FHWA-NHI-130092 Fundamentals of LRFR and Applications, (3) FHWA-NHI-130095 LRFD and Analysis of Curved Steel Highway Bridges, (4) 130102 - Engineering for Structural Stability in Bridge Construction, (5) FHWA-NHI-130122 Design and Evaluation of Bridges for Fatigue and Fracture, (6) FHWA-NHI-130126 Strut-and-Tie Modeling (STM) for Concrete Structures. Provided virtual training during COVID shutdown period. Provided subject matter expert consulting on the update of course 130078 Bridge Inspection Techniques for NSTMs. Since 2006, firm principal, Dr. Russo, has instructed over 160 sessions in nearly 40 states and twice been recognized as an “Instructor of Excellence”.			
10/25 - Present	AASHTO Safety and Evaluation Load Rating SME. Russo Structural Services is a consultant to the AASHTO Committee on Safety and Evaluation with specific focus on the areas of bridge load rating. This includes participation in monthly meetings and responding to various load rating issues the states encounter in the use of the Manual for Bridge Evaluation and with load rating software such as BrR. Various topics have been addressed including clarifying the calibration intent of AASHTO HL93 double truck loading, providing assistance with shear and flexure load rating and the use of concurrent forces, shear load rating in transfer and development length regions of pretensioned beams, providing guidance on remaining fatigue life analysis and the use of effective slab widths for slab bridge load rating.			
06/22-11/22	Tacony Palmyra Gusset Plate Load Rating Peer Review. When unsatisfactory load ratings were obtained for numerous gusset plates on the Tacony Palmyra bridge, Russo Structural Services was retained to provide a technical review of the load rating approach, meet with project staff to discuss the analysis methods, and provide a QAQC peer review of calculations and the project load rating report. A thorough review resulted in various changes and refinements to the load rating report. Only a single gusset plate was deemed to have an inadequate capacity and was included in a steel repair package. Edited the final report and met with the client to review the findings.			
09/21-Present	SCDOT Bridge Design Manual. Provided structural and bridge engineering expertise for a major update to the SCDOT Structural Design Manual for Bridges. The project was a multi-year and multi-firm effort to provide substantial updates to the SCDOT Manual. Russo Structural Services is lead author on the following chapters: Structural Analysis and Evaluation; Structural Steel; Substructures; Joints and Bearings; Bridge Widening and Rehabilitation; Pedestrian Bridges; and Load Rating. Provided additional engineering expertise for many other SDM chapters. Project includes annotating and commenting on existing content, suggesting changes for SCDOT based on best practices of other agencies and updated industry practices, reconciling comments in various online meetings, and providing final content.			

08/24 - Present	Minnesota DOT Inverted T Standards Development. The project developed an inverted-T precast/prestressed concrete beam standard for MNDOT. Russo Structural Services provided a review of university research reports, design procedures used by other DOT's, and of existing designs previously produced by MNDOT. Based on this review, RSS recommended modifications to concrete detailing, design approaches for continuity, and the treatment of thermal and creep restraint moments. A design methodology and recommended language for inclusion in the MNDOT Bridge Design Manual were prepared for which RSS was a primary author of significant portions of the document. RSS developed various spreadsheets used for final design including the methods and tools for continuity moment reinforcing. Our work included checking and a detailed review of an annotated design example for a three-span continuous bridge unit. RSS provided an overall technical and plans presentation review of the completed plan set and provide advice and guidance on the development of the load rating technical guidance document.
09/23 - Present	Ohio DOT Sum 8-1.75 Construction Engineering. Providing design and design review services for the incremental launching of dual six-span continuous plate girder spans with maximum spans of 340 ft. Both bridges are being incrementally launched because of site access constraints. Serving as the independent check engineer for the construction JV and their construction engineer. Developed FEA models of the incremental launching sequence for checking of bridge behavior, stresses, deflections, and buckling characteristics for each stage of construction. Developed numerous spreadsheets and MathCad files to check various elements of design. Recommended strengthening of selected permanent bridge elements due to the contractors revised construction procedure differing from the as-designed sequence. Reviewed the launching pit design including the rollers, launching rail, crane mats and forces imposed on the abutment during launching. Provided detailed engineering checking of the rollers and wind restraint system for ASME and AASHTO design criteria. Performed detailed checking of the erected steel for AASHTO Guide Specification wind loads. Provided independent calculations for the lowering sequence.
12/23-03/26	I-84 Constructability Review. Retained to provide constructability advice for two large steel fly-overs as part of a new interchange project for I-84 and SH16 in Nampa, ID, a western suburb of Boise. Provided plan review of the design consultants draft final plans and recommended changes in foundation types from pile caps to drilled shafts to minimize construction disturbance to I-84. Reviewed the framing plans, substructure locations, and overall layout of Ramps I and J for potential shoring tower and crane locations. Developed independent FEA models to study the behavior of Ramps I and J during an assumed erection sequence compatible with the owners traffic and lane closure requirements. Computed pick weights for all single and paired girder picks required for crane / equipment selection for erection. Providing an erection plan schematic and participating in a plans review meeting with the Department and design consultants. During construction, reviewed the erection plans and submissions as the owners representative.
12/22-Present	City of Philadelphia Department of Streets On-Call Support Contract. Open-end agreement to provide on-call engineering services and technical support to the Department of Streets bridge and construction staff. Meet bi-weekly with City staff to review any ongoing technical issues and provide assistance. Have written Department policy documents and memos on subjects such as shear design of prestressed concrete beams joined with link slabs, design loading for bridges with parking lanes, water casing loading for bridge design and load rating, prestressed concrete beam utility attachment design and detailing, deck casting sequencing for continuous steel bridges, and the use of rigid rotation model use for live load distribution factors. Provided peer review and independent analysis of load rating calculations for the upper level roadway floorbeams of 30th street over the 30th street lower access level. Prepared a constructibility review for Leverington Street over the Manayunk Canal analyzing potential use of ABC construction techniques such as bridge removal and replacement using an overhead gantry crane and runway system. Reviewed the design plans (by others) for suitability for ABC construction. Assisted the City with assessment and emergency demolition of a severely deteriorated pedestrian bridge at Duval Street. Assisted the City in advertising, pre-bid and award support, pre-construction meetings with the contractor, independent stability analysis of the arch including recommendations for remedial support and strengthening during demolition, and field support throughout construction.
10/25-Present	Inspection and Load Rating of Deteriorated Members. Under a Blanket Purchase Agreement with the FHWA, Russo Structural Services is supporting task orders related to bridge inspection, design, and evaluation. The first task order, Development of Guidelines for Inspection, Evaluation, and Load Rating of Deteriorated Highway Bridges, includes a critical review of AASHTO and FHWA guidance and training materials to find gaps in knowledge and practice in the area of deteriorated member assessment. The project is to develop protocols for inspection and evaluation of deteriorated bridges, strengthening and repair recommendations, guidance on load rating deteriorated bridges, and bridge closure guidelines. Russo Structural Services is supporting the project as a participant in development of the project work plan and literature reviews, as a peer reviewer of the inspection and strengthening project components, and has a more prominent role in the Task 5 load rating guidelines.

17. Firm Experience:

Firm name	Hardesty & Hanover, LLC		Discipline(s)*		Bridge	
Project name	2021-2025 and 2025-2028 Biennial and Interim Bridge Inspection, Bronx County, Region 11			Firm responsibility (prime or sub?)		Prime
Project number	N/A		Owner's name	New York State Department of Transportation		
Project location	Bronx, NY			Owner's Project Manager	Joseph Piccolo, PE	
Owner's address, phone, email		4740 21st Street, Long Island City, NY 11101 718 482-4723 Joseph.Piccolo@dot.ny.gov				
Services commenced by this firm (mm/yy)		01/21	Total consultant contract cost (\$1,000's)			\$2,803
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$1,598

H&H served as the Prime Consultant for the New York State Department of Transportation's (NYSDOT) 2021-2025 Biennial and Interim Bridge Inspection Contract for Bronx County and was subsequently selected as Prime Consultant for the 2025-2028 Biennial and Interim Bridge Inspection Contract covering Kings (Brooklyn) and Richmond (Staten Island) Counties. These contracts demonstrate H&H's extensive experience managing large-scale bridge inspection and load rating programs for complex transportation networks.

The Bronx County contract encompasses the inspection of approximately **355 bridge structures**, while the Kings and Richmond Counties contract includes approximately **398 bridge structures**, consisting of highway, local roadway, pedestrian, and multi-span bridge assets. Services include routine biennial inspections, interim inspections, special inspections, condition assessments, and emergency response inspections as required by NYSDOT and in accordance with FHWA and SNBI requirements.

A key component of both contracts involves maintaining and updating the bridge load rating inventory. Following each inspection, H&H updates the bridge-specific **AASHTOWare Bridge Rating (BrR)** models to incorporate documented changes in condition, deterioration, repairs, rehabilitation projects, and other field observations that may affect structural capacity. This work ensures that load rating analyses remain current and accurately reflect the in-service condition of each structure.

In addition to maintaining network-wide load rating databases, H&H routinely performs **site-specific load evaluations and flag load ratings** for critical structural findings identified during inspections. These evaluations are often required when damage occurs, unusual structural configurations, or deteriorated conditions cannot be adequately assessed using standard AASHTOWare BrR analytical models. In these cases, H&H develops engineering analyses using refined calculations, structural modeling, and engineering judgment to determine the immediate effect of the condition on the bridge's load-carrying capacity and to support decisions regarding posting, monitoring, repair prioritization, or operational restrictions.

H&H's responsibilities have also included conducting **independent peer reviews of bridge load ratings** prepared by other consultants throughout the New York City metropolitan area. H&H has provided quality assurance and technical oversight for numerous complex bridge rating assignments, helping NYSDOT ensure consistency and reliability across their bridge inventory.

Scope of Work Relevant to the Contract

- Plan and Document Retrieval
- Site Visits
- Analysis and Load Rating
- Update Rating Files
- Review, Update, and Correct BrR File
- Independent Bridge Rating Review

Key Members: Corey Bourgeois, PE; Dennis Gowins, PE; Corey Greco, PE; Kathryn Inzinna, PE; Sophia Savva Naglieri, PE; and Mary Mazur, PE

Firm name	Hardesty & Hanover, LLC		Discipline(s)*		Bridge	
Project name	Bridge Rehabilitation for Five Movable Bridges			Firm responsibility (prime or sub?)		Prime
Project number	4400021516	Owner's name	Louisiana Department of Transportation and Development			
Project location	LADOTD Districts 02 and 61 – Lafourche, Terrebonne, and Pointe Coupee Parishes, LA		Owner's Project Manager		Fallon M. Farber, PE – Assistant Bridge Design Administrator (Mechanical and Electrical Units); TJ Dunlevy, PE – Mechanical Design Manager	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802-4438 225-379-1986 fallon.farber@la.gov				
Services commenced by this firm (mm/yy)		03/25	Total consultant contract cost (\$1,000's)			\$5,096
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$5,000

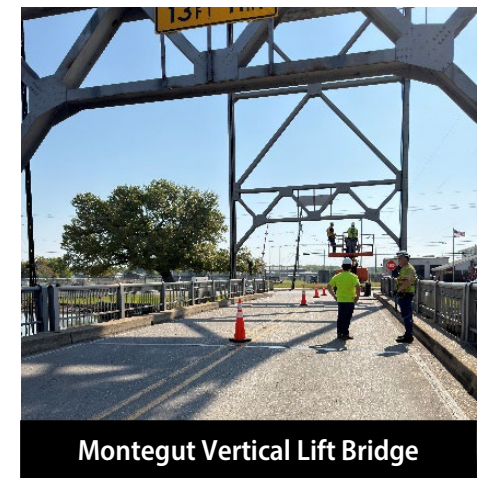
Under LADOTD Contract No. 4400021516, H&H serves as the prime consultant and Engineer of Record for the inspection, scoping, design, and construction-related engineering services (CRES) for five (5) vertical lift movable bridges in the LADOTD Movable Bridge Rehabilitation Program. The scope of work encompasses full structural, mechanical, electrical, and architectural rehabilitation of each bridge to extend service life 30–40 years with routine maintenance, remove existing load postings where practical, and bring all maintenance access, life-safety, NEC, and ADA-applicable systems into current code compliance.

H&H is performing in-depth inspections of all five vertical lift bridges within the program and conducting **LRFR (Load and Resistance Factor Rating)** load ratings for three of these structures. The inspection scope includes detailed hands-on evaluations of critical structural components, including lift spans, towers, counterweight systems, trusses, girders, machinery supports, connections, bearings, and fracture-critical (NSTM) members. Inspection findings are used to assess structural condition, identify deterioration, document maintenance and rehabilitation needs, and evaluate the operational integrity of each movable bridge. In conjunction with the inspections, H&H is developing comprehensive **LRFR** analyses for three of the vertical lift bridges using AASHTOWare BrR and other LADOTD approved software when applicable. The load ratings incorporate field-observed conditions, material properties, section loss, and updated load paths to accurately determine available structural capacity for inventory, operating, and permit vehicle loadings.

During the design phase, H&H is utilizing the inspection findings and load rating results to develop rehabilitation and preservation recommendations for the vertical lift bridges. The design effort includes evaluating repair alternatives for structurally deficient and deteriorated elements, assessing the impacts of operational demands on long-term bridge performance, and preparing rehabilitation plans, specifications, and cost estimates. Load rating results are being used to prioritize repairs, validate proposed strengthening measures, and confirm that rehabilitated structures will meet current legal and permit load requirements. H&H's integrated approach combining inspection, load rating, and design services ensures that recommended improvements are both structurally effective and cost-efficient while supporting the continued safe and reliable operation of these critical movable bridge assets.

Scope of Work Relevant to the Contract

- Document Review, Site Visits, and Field Verification
- Non-Destructive and Strain-Gage Testing
- LRFR Load Ratings Using AASHTOWare BrR
- Complex Movable Bridge Structural Analysis



Montegut Vertical Lift Bridge

Key Members: Babak “Bobby” Naghavi, PE, PH, PhD; Tim Noles, PE; Corey Bourgeois, PE; Erik Diaz, PE; Fred Wetekamm, PE; Dalton Hunt, PE; and Linh Kim, PE

Firm name	Hardesty & Hanover, LLC		Discipline(s)*		Bridge	
Project name	2018-2024 Bridges Services IDIQ Master Contract			Firm responsibility (prime or sub?)		Prime
Project number	N/A	Owner’s name	Mississippi Department of Transportation			
Project location	Statewide, MS			Owner’s Project Manager	Scott Westerfield, PE	
Owner’s address, phone, email		401 North West Street, Jackson, MS 39215 601.359.7000 swesterfield@mdot.ms.gov				
Services commenced by this firm (mm/yy)		03/18	Total consultant contract cost (\$1,000’s)			\$5,100
Services completed by this firm (mm/yy)		10/24	Cost of consultant services provided by this firm (\$1,000’s)			\$4,800

H&H conducted bridge inspections and developed bridge design plans and specifications for the rehabilitation of the SR 609 and SR 605 bridges under our Mississippi DOT Master Bridge Contract. Rehabilitation plans included structural, mechanical, and electrical bridge components, roadway approaches, and improvements to the operator house.

SR 605 and SR 609 Bascule Bridges: Performed load rating services for the SR 605 and SR 609 movable bascule bridges using multiple analysis methods tailored to the bridge components. AASHTOWare BrR was used to rate the stringers and floorbeams, Mathcad was used to evaluate the grid deck system, and Excel-based analyses and hand calculations were performed to determine the capacity of the bascule girders.

I-59 over I-20 Box Girder Bridges: H&H provided load rating services for two reinforced concrete box girder bridges, Bridge No. 147.9A carrying I-59 and Bridge No. 131.5B carrying I-20, located at the I-20/I-59 interchange near Meridian in Lauderdale County, Mississippi. The inspection effort included extensive field investigations requiring nighttime operations to minimize impacts to traffic on both Interstate highways, implementation of traffic control for lane closures, and the use of a confined-space rescue team to safely access and inspect the interior cells of the box girders.

Based on the field observations and available design documentation, H&H is developing detailed finite element models of each bridge to accurately represent the unique geometry, load distribution characteristics, and structural behavior of the box girder systems. The analyses include comprehensive load rating evaluations using Load Factor Rating (LFR) methodologies and consideration of MDOT legal and permit vehicle loadings. Inspection findings are being incorporated into the analytical models to account for any observed deterioration or changes in structural condition that may influence load-carrying capacity.

Scope of Work Relevant to the Contract

- Load Rating Calculations & Analysis
- Complex (Movable Structures) Load Rating & Analysis
- Use Of AASHTOWare BrDR Bridge Rating Software



SR 605



SR 609



I-59 over I-20

Key Members: Babak “Bobby” Naghavi, PE, PH, PhD; Dalton Hunt, PE; Erik Diaz, PE; Fred Wetekamm, PE; Linh Kim, PE; Timothy Noles, PE; Michael Delemont, PE; and Roberto Viedro, PE

Firm name	Hardesty & Hanover, LLC		Discipline(s)*		Bridge	
Project name	I-395 Segmental Bridges			Firm responsibility (prime or sub?)		Prime
Project number	N/A		Owner’s name	Florida Department of Transportation		
Project location	Miami, FL			Owner’s Project Manager	Auraliz Benitez, PE	
Owner’s address, phone, email		FDOT District Six, 1000 NW 111 Avenue, Miami, FL 33172 305.470.5471 Auraliz.Benitez@dot.state.fl.us				
Services commenced by this firm (mm/yy)			03/21	Total consultant contract cost (\$1,000’s)		\$13,000
Services completed by this firm (mm/yy)			Ongoing	Cost of consultant services provided by this firm (\$1,000’s)		\$13,000

Hardesty & Hanover is designing five new precast segmental bridges that are a part of the SR 836/I-95/I-395 corridor upgrade in Downtown Miami. The Archer Western-De Moya Joint Venture is constructing this design-build project. The segmental bridges are constructed with over 2,000 precast and cast-in-place segments erected using the balanced cantilever method. Typical span lengths range from 225 feet to 255 feet supported on cast-in-place piers with auger-cast pile foundations and include C-Piers as well as integral Straddle and T-Piers.

H&H created the design-build proposal and pre-bid engineering ahead of the selection process and is providing analyses, final design, shop drawings, construction engineering and the design and as-built **load ratings** for the segmental bridges. The project's overall construction value is \$840 million, and the segmental bridges have a deck area of 700,000 square feet (approximately \$200 million). Longitudinal and transverse load ratings of the 20 continuous structural units of segmental bridges and the integral piers was performed for both temporary and final traffic conditions for both the partially completed and completed bridges, incorporating staged construction and time-dependent analysis. Several of the bridges are connected transversely using longitudinal closure pours, requiring refined analysis in determining load distribution and structural behavior.

The **load ratings** are performed in accordance with the AASHTO Manual for Bridge Evaluation and the FDOT Bridge Load Rating Manual per the LRFR methodology, operating and special legal and permit vehicle rating evaluations at the service and strength limit states. Load ratings are performed both as design ratings prior to construction and as-built load ratings following construction prior to traffic. The as-built ratings consider the actual segment cast and erect dates as well as any construction modifications that may have occurred to provide an accurate assessment of the bridge capacity prior to traffic and future permit load applications.



Scope of Work Relevant to the Contract

- Load Rating Calculations & Analysis
- AASHTO Manual for Bridge Evaluation
- Complex (Concrete Structure) Load Rating
- Segmental Bridge Design

Key Members: Dennis Gowins, PE; Eric Johnson, PE; and Glen Tindale, PE

Firm name	Hardesty & Hanover, LLC		Discipline(s)*		Bridge	
Project name	Outerbridge Crossing Structural Rehabilitation			Firm responsibility (prime or sub?)		Prime
Project number	N/A	Owner's name	Port Authority of New York & New Jersey			
Project location	Staten Island, New York & Perth Amboy, New Jersey		Owner's Project Manager		Ramesh Panchalan	
Owner's address, phone, email		4 World Trade Center 20 th floor, New York, NY 10007 212.435.6230 rpanchalan@panynj.gov				
Services commenced by this firm (mm/yy)		03/23	Total consultant contract cost (\$1,000's)			\$5,882
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$2,688

Outerbridge Crossing Load Rating: H&H is performing a comprehensive load rating of the Outerbridge Crossing, a major steel cantilever truss bridge spanning the Arthur Kill between Perth Amboy, New Jersey, and Staten Island, New York. The project includes collection and verification of structural data, development of detailed analytical models, and evaluation of the bridge's load-carrying capacity in accordance with current AASHTO and FHWA requirements. As part of the effort, H&H is compiling and validating member section properties, material characteristics, and connection details using original design plans, shop drawings, as-built records, previous inspection reports, and available rehabilitation documentation.

A significant component of the project involves dead load verification, which is critical to accurately assessing the capacity of this complex truss structure. H&H is identifying, quantifying, and validating all sources of permanent load carried by the bridge, including structural steel members, floorbeams, stringers, deck systems, sidewalks, barriers, utilities, safety appurtenances, connection plates, and other superimposed dead loads. Particular attention is being given to secondary members and gusset plates within the truss system, whose cumulative weight can have a substantial effect on force distribution and member demand. The dead load evaluation includes detailed plan review, calculation of component weights, comparison with original design assumptions, and understanding of modifications made throughout the bridge's service life to ensure the analytical model accurately reflects the existing structure.

H&H is utilizing **AASHTOWare Bridge Rating (BrR)** as the primary load rating platform and developing detailed analytical models of the truss system to evaluate both primary structural members and critical gusset plate connections. The BrR models are supplemented by refined structural analyses using software such as CSiBridge to evaluate complex load paths, member force distributions, and structural behavior that may not be fully captured through conventional rating approaches. The load rating analyses incorporate bridge-specific geometry, member capacities, connection details, load distribution characteristics, and field-observed conditions to establish reliable inventory, operating, and permit load capacities. Particular focus is being placed on the evaluation of fracture-critical truss members and gusset plate connections utilizing FHWA-recommended assessment procedures and AASHTOWare's gusset plate analysis capabilities. The ratings are being performed using both LRFR and LFR methodologies, with a combination of advanced software analysis and engineering calculations used to accurately determine member and connection capacities and support future bridge management, permitting, maintenance, and rehabilitation decisions.



Scope of Work Relevant to the Contract

- Load rating calculations & analysis
- Use of AASHTOWare BrDR
- Complex (Truss Structure) Load Rating
- Document Review
- Field Assessment

Key Members: Rafal Wuttrich, PE; David Marcic, PE; Sophia Savva Naglieri, PE; Corey Greco, PE; Kathryn Inzinna, PE; and Mary Mazur, PE

Firm Name	Stantec Consulting Services Inc.		Discipline(s)*	Bridge
Project Name	Bridge Load Rating Retainer		Firm Responsibility (prime or sub?)	Prime
Project Number	N/A	Owner's Name	Louisiana Department of Transportation and Development	
Project Location	Statewide, LA		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.

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.

Scope of Work Relevant to the Contract

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



Key Members: Brian Johnson, PE; Kunal Malpani, PE; and John Krebs, PE

Firm Name	Stantec Consulting Services Inc.		Discipline(s)*	Bridge
Project Name	Truss Bridges Inspection and Load Rating		Firm Responsibility (prime or sub?)	Prime
Project Number	N/A	Owner's Name	Mississippi Department of Transportation	
Project Location	Itawamba, Leflore, Quitman and Stone Counties, MS		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.

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.

Scope of Work Relevant to the Contract

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

Key Members: Brian Johnson, PE and Ryan Nataluk, PE

Firm Name	Stantec Consulting Services Inc.		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, MS		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)	01/26	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. All Stantec team leaders are NBI certified.

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

Bridge load ratings are performed in accordance with AASHTO Allowable Stress Design (ASD), Load Factor Rating (LFR) or Load and Resistance Factor Rating (LRFR) requirements. Each structure's inspection and load rating results are documented using AssetWise 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 250 different bridges.

Scope of Work Relevant to the Contract

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



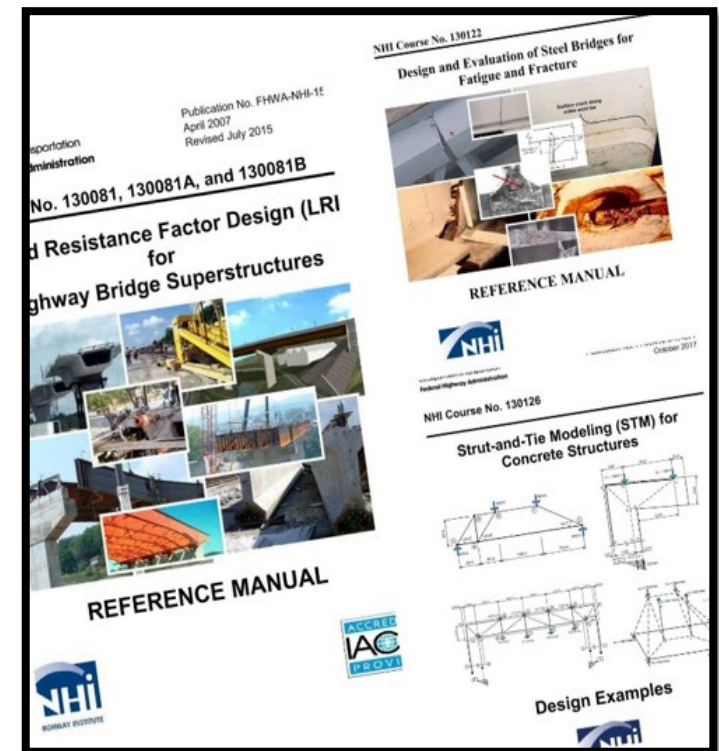
Key Members: Brian Johnson, PE; John Krebs, PE; Kunal Malpani, PE; Ryan Nataluk, PE; and Taylor Perkins, PhD, SE, PE

Firm name	Russo Structural Services LLC		Discipline(s)*		Bridge	
Project name	FHWA / NHI Instructor-Led Training 2023-2028 (Nationwide)				Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	FHWA			
Project location	Nationwide			Owner's Project Manager		Rachel Sharp
Owner's address, phone, email		100 Airside Drive, Moon Township PA, 15108 412-269-7941 rsharp@mbakerintl.com				
Services commenced by this firm (mm/yy)		02/23	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)			\$183

The project is an open-end agreement extending from February 2023 – 2028 providing engineering training and course delivery for the Federal Highway Administration National Highway Institute. Covered by the agreement is the project is the delivery of seven different bridge design and construction courses, on demand, covering a broad range of bridge engineering topics. The following NHI classes are included in the delivery:

- 130081 LRFD for Highway Bridge Superstructures
- **130092 Load and Resistance Factor Rating of Highway Bridges**
- 130095 LRFD and Analysis of Curved Steel Highway Bridges
- 130096 Cable Stayed Bridge Seminar
- 130102 Engineering for Structural Stability in Bridge Construction
- 130122 Design and Evaluation of Steel Bridges for Fatigue and Fracture
- 130126 Strut and Tie Modeling

Russo Structural Services has provided these services directly since 2021 but our Founder and principal, Dr Francesco Russo, has instructed over 160 courses for NHI with 20 years' experience in the program. Russo was recognized with the "Instructor of Excellence" award in 2019 and 2024 for his outstanding teaching and consistently high participant evaluations. Under prior phases and agreements, the courses on steel bridge fatigue and fracture (130122) and concrete strut-and-tie design (130126) were developed by our firms Principal. Substantial revisions to existing courses (130081, 130092, 130102) were made to provide design and load rating specification updates. Additional subject matter expertise was provided by Russo Structural Services for the update of bridge inspection classes for fracture-critical / non-redundant steel tension members.



Scope of Work Relevant to the Contract

- Bridge Load Rating Training

Key Members: Francesco M Russo, PhD, PE

Firm name	Russo Structural Services LLC		Discipline(s)*		Bridge	
Project name	Erection Engineering Services for Ohio SR 8				Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Ohio DOT			
Project location	Akron, OH			Owner's Project Manager	Jared Fasick	
Owner's address, phone, email		250 Insurance Street, Suite 304, Beaver, PA 15009 412.445.3794 jfasick@fasickgroup.com				
Services commenced by this firm (mm/yy)		08/23	Total consultant contract cost (\$1,000's)			Unknown
Services completed by this firm (mm/yy)		01/26	Cost of consultant services provided by this firm (\$1,000's)			\$150

Russo Structural Services LLC served as the independent design and checking engineer for the incremental launching of two six-span continuous plate girder bridges. The Ohio DOT required that the erection engineering be designed and subject to a completely independent check. Russo Structural Services provided the independent check on behalf of Fasick Group and their contractor partners Ruhlin – Great Lakes JV. The analysis and design used tools such as MIDAS Civil, Mastan, Excel, and MathCad to produce various models and checking tools used throughout the project. Specifications such as AASHTO LRFD were used for member checks and ASME B30.20 - Below-the-Hook Lifting Devices for the design of custom machined parts for various brackets and jacking hardware.

- Part 1 was the independent verification of the structural behavior during the launch. For each of the six spans, detailed construction sequence models were created in MIDAS Civil to simulate the incremental launching of the six-girder cross-section with a launching nose. The models were used to predict the touchdown of the system and the corresponding stresses and deformations before and after the nose touchdown. Eigenvalue buckling analysis was conducted. It was determined that strengthening of end cross-frame connections between the nose and main girders and multiple lateral bracing elements would be needed to meet the stability bracing and strength requirements for stresses due to launching and inactive condition wind loads at intermediate stages. The field-measured touchdown locations were within several feet of the predicted location for all six of the launches, indicating excellent correlation between the models and observed performance.
- Part 2 was the design, checking, and plans checking of the articulated roller systems at the substructures and the lateral guidance system. Custom articulated rollers were needed and were designed to structural and machine design codes and specifications. A lateral guidance system was provided to prevent the bridge from nosing during the launch.
- Part 3 was the design of the launching pit components. This included a complete independent calculation and subsequent plans check for the design and detailing of the jacking system for both push and retract operations, assessment of forces imposed on the abutment adjacent to the pit, launching rails, adequacy checks of timber mats providing intermediate rail support, and the custom fabricated attachments to the girders.
- Part 4 was the post-launch lowering sequence. These checks included stress checks of the permanent steel as the fully launched bridge is being jacked from the rollers and lowered to the final bearing seats. Jack capacities were verified along with the capacity of various load plates and timber blocking. Girder webs and flanges were checked for concentrated load effects from the jacking.

Scope of Work Relevant to the Contract

- Bridge Load Rating

Key Members: Francesco M Russo, PhD, PE

18. Approach and Methodology:

Firm Introduction: H&H is a nationally recognized engineering firm with 139 years of experience delivering innovative and practical transportation infrastructure solutions. With extensive expertise in bridge engineering, inspection, load rating, rehabilitation, and asset management, H&H has successfully supported state departments of transportation, local agencies, and transportation authorities across the United States. Our team combines a thorough understanding of DOTD load rating policies, AASHTO load rating methodologies, SNBI requirements, and modern bridge analysis techniques with a commitment to providing accurate, timely, and cost-effective services. H&H's experienced structural engineers have performed load ratings for thousands of bridge structures of varying types, materials, and complexities, utilizing advanced analysis tools and engineering judgment to maximize bridge capacity while maintaining public safety. H&H will be supported by Stantec Consulting Services Inc. and Russo Structural Services LLC. These sub-consultants bring additional expertise in load rating and structural analysis, broad transportation infrastructure experience, and staff training capabilities that will enhance our capacity and responsiveness in delivering services under this contract. Through our collaborative approach and dedication to technical excellence, H&H is uniquely qualified to assist DOTD in maintaining a safe, reliable, and resilient bridge network throughout Louisiana.

Contract Management: H&H will employ a proven management and delivery approach to successfully execute multiple task orders, including those issued concurrently. H&H retains a large number of experienced senior rating staff specifically to address time-critical task orders. Under the leadership of Dr. Babak Naghavi, PE, Project Manager, each task order will be assigned to a dedicated Task Order Manager whose experience aligns with the bridge type, complexity, and technical requirements of the assignment. Another key member of the team is Corey Bourgeois, PE, who previously served as a Load Rating Manager with DOTD, brings more than 10 years of experience performing and overseeing load rating activities for DOTD bridge structures. His in-depth understanding of DOTD policies, procedures, and bridge inventory provides valuable insight that enhances project delivery, quality, and consistency across all task orders.

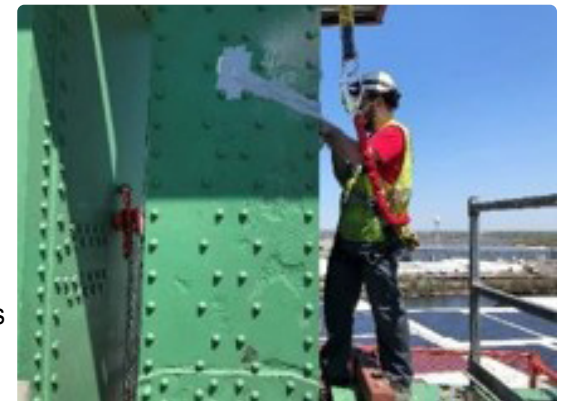
Task Order Managers will be supported by senior bridge engineers with extensive expertise in bridge evaluation, structural analysis, and load rating. Working closely with Dr. Naghavi and Mr. Bourgeois, this leadership team will assign production and quality control personnel with specialized experience in the specific structure type, including movable, truss, segmental, and other complex bridge systems. By assembling project teams with targeted technical expertise and relevant bridge-specific experience, H&H ensures that every task order receives the focused attention, engineering judgment, and quality oversight necessary to deliver accurate, efficient, and successful outcomes for DOTD.

A detailed schedule will be developed to complete each project within an acceptable schedule. The time required to complete each project will vary, depending on the scope and size, as well as LADOTD reviews. **H&H strives to complete projects ahead of their scheduled completion date, when possible.**

Sample Complex Bridge Load Rating Schedule					
Task	Months				
	1	2	3	4	5
Document Retrieval & Review					
Site Visits					
Load Rating Modeling & Analysis					
QA/QC Reviews of Structural Load Ratings					
Update Rating Files & Submit Rating Reports					

Plan and Document Retrieval and Review: H&H will perform a comprehensive review of all available bridge records and supporting documentation to establish the basis for accurate load rating analyses. Our team will retrieve and evaluate bridge inspection reports, original design and as-built plans, shop drawings, existing load rating documentation, repair and rehabilitation records, and any available field measurements or load testing data. When complete bridge plans are unavailable, H&H will conduct a thorough search of all identified sources to collect critical information regarding bridge configuration, design standards, construction history, previous ratings, and modifications. Particular attention will be given to identifying details that may influence structural behavior and load-carrying capacity. Leveraging our extensive experience with DOTD record systems, including InspectX and General Files, H&H will efficiently compile, organize, and assess all relevant information to support subsequent evaluation and load rating activities, and to permanently improve the Department's record for each structure being evaluated.

Site Visits & Field Verification: Site visits under this contract are performed for load rating purposes and are distinct from SNBI bridge condition inspections. Their objective is twofold: to confirm the current field condition of the structure so that rating results reflect it accurately, and to gather field measurements and condition documentation that support both the rating and the recovery of incomplete structure records. All H&H field personnel assigned to this contract hold active work zone training appropriate to their role, with at least one member of every crew working within the clear zone certified as a Traffic Control Supervisor or Traffic Control Technician. H&H has extensive experience accessing and documenting difficult-to-reach bridge components through a variety of specialized methods, including Unmanned Aerial Systems (drones), Under-Bridge Inspection Trucks (UBITs), and rope access



techniques. This combination of advanced access technologies and experienced bridge engineers enables H&H to efficiently collect accurate field data while minimizing impacts to traffic and improving the safety of inspection personnel. Information obtained during site visits will be incorporated into the load rating process to ensure the most accurate and reliable evaluation of each structure.

Load Rating Modeling & Analysis: For this contract, H&H will develop and analyze system-level structural models to accurately determine member forces, stresses, and load effects resulting from dead loads and applicable live loads. Analyses will primarily be performed using AASHTOWare Bridge Rating (BrR); however, for complex bridge types or structural conditions that cannot be adequately represented within BrR, H&H will utilize three-dimensional finite element models and other DOTD-approved analysis software as appropriate. Live load evaluations will include all required loading conditions specified in the DOTD Bridge Design and Evaluation Manual (BDEM), including design loads, legal loads (including SHVs), permit vehicles, and emergency vehicle (EV) loadings. Where applicable, additional effects such as secondary stresses, thermal forces, staged construction effects, and other bridge-specific behaviors will be evaluated to ensure that the analysis accurately reflects the structure's performance and load-carrying capacity.

H&H's extensive experience in bridge design, evaluation, and load rating uniquely positions our team to support DOTD's diverse bridge inventory and evolving program needs. Our engineers possess expert knowledge of the latest AASHTO LRFD Bridge Design Specifications, the AASHTO Manual for Bridge Evaluation, the AASHTO Standard Specifications for Highway Bridges, and the DOTD Bridge Design and Evaluation Manual (BDEM). We also have substantial experience developing, reviewing, and maintaining bridge models using the latest versions of AASHTOWare Bridge Rating (BrR), including the implementation of Load and Resistance Factor Rating (LRFR) methodologies. H&H is committed to producing clear, well-documented, and reproducible load rating analyses that can be efficiently maintained, updated, and utilized throughout the service life of each structure.

For bridge types and structural details that cannot be adequately evaluated using AASHTOWare BrR alone, H&H employs advanced analysis tools such as CSiBridge, MIDAS Civil, and LUSAS to develop refined analytical models and accurately assess structural behavior. When initial load rating results indicate a posting may be required, our team will perform additional evaluations and refined analyses, where appropriate, to better characterize load distribution,



redundancy, and system behavior. This approach often enables more accurate determination of bridge capacity and helps DOTD make informed decisions regarding postings, permit loads, and long-term bridge management. H&H will perform all analysis using software from the pre-approved list maintained by the Bridge Design Section. If a structure's configuration requires software not appearing on the list, H&H will submit a summary to the DOTD Project Manager for approval prior to use, identifying the software, describing its functions, and documenting our experience using the software.

Load Rating Preparation: When appropriate, H&H will assign specialized teams based on bridge type, ensuring that each structure is evaluated by engineers with relevant load rating experience. In general, the following methodology will be used to perform the load rating assignments under this contract.

Step 1 - Section Properties and Capacity: This step will focus on compiling and documenting all relevant member section properties, material characteristics, and structural details necessary to support the load rating analysis. H&H will identify critical rating locations throughout each structure, including non-redundant steel tension members (NSTMs), splices, section transitions, cover plate terminations, field and shop connections, pin and hanger connections, fatigue-prone details, areas of section loss, and other locations where changes in geometry, material properties, or force distribution may govern load-carrying capacity. Capacities will be developed for all critical sections and organized in clear, concise tables for efficient reference and quality control.

For truss bridges, H&H will also develop gusset plate geometries and capacities, recognizing the critical role gusset plates play in overall structural performance. When available, as-built plans and shop drawings will be utilized and supplemented with field verification to confirm plate dimensions and thicknesses. In cases where complete information is unavailable, design plans and engineering judgment will be used to establish appropriate assumptions. Gusset plate ratings will be developed in accordance with the latest AASHTO Manual for Bridge Evaluation (MBE) and AASHTO LRFD requirements and incorporated into the AASHTOWare BrR analysis.

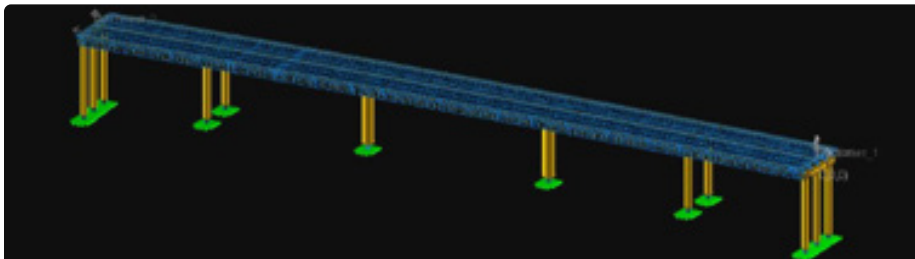
Step 2 - Dead Load Verification: This step will focus on accurately determining the existing dead load of each bridge by collecting, reviewing, and documenting all information related to the structure's current configuration. For bridges that have undergone rehabilitations, widenings, deck replacements, overlays, or other major modifications, H&H will review the original design plans in conjunction with all available repair, rehabilitation, and reconstruction records to identify changes that affect the structure's dead load.

For older and more complex structures, particularly long-span trusses and other non-redundant bridge systems, H&H will utilize original design plans, stress sheets, and historical calculations whenever available to establish a reliable baseline for verification. These records provide valuable insight into the weights of secondary members, connection plates, utilities, and other elements that may not be readily apparent from current drawings or inspections. Original design forces and stresses will be used as an important validation tool to confirm the accuracy of the developed analytical

models. Field verification will be performed as necessary to supplement available records and confirm key dimensions and structural details. Measurements may include deck thicknesses, overlays, barrier and railing dimensions, utilities, and other dead load components. This comprehensive approach ensures that the dead load model accurately reflects the bridge's current condition and provides a reliable foundation for subsequent load rating analyses.

Step 3 - Bridge Modeling: H&H will develop structural models and perform load ratings using AASHTOWare Bridge Rating (BrR) as the primary analysis platform. For bridge types or conditions that cannot be adequately represented within BrR, advanced DOTD-approved 3D FEM software such as CSiBridge, MIDAS Civil, or LUSAS will be utilized to develop refined analytical models and accurately evaluate structural behavior. H&H will document the basis for the exception and provide influence lines for all critical members, including substructure elements, so that the controlling load positions and force effects are fully traceable and independently verifiable by DOTD. With extensive experience using these programs, our team understands both the capabilities and limitations of each platform and will select the most appropriate analysis tool based on the complexity and characteristics of the structure.

The development of each model will be supported by detailed engineering calculations and independent verification of critical inputs, including dead loads, structural geometry, material properties, member capacities, and load distribution characteristics. All models will be organized in a clear, traceable manner with supporting calculations, assumptions, and reference documents appropriately documented to facilitate future updates and reviews.



All bridges will be rated in accordance with the latest Load and Resistance Factor Rating (LRFR) methodology and applicable FHWA, AASHTO, and DOTD requirements, including the AASHTO Manual for Bridge Evaluation, AASHTO LRFD Bridge Design Specifications, and the DOTD Bridge Design and Evaluation Manual (BDEM). Analyses will include all required loading conditions, such as HL-93, LADV-11, Louisiana legal loads, Special Hauling Vehicles (SHVs), permit vehicles, and emergency vehicle loadings. Both as-built and as-inspected load ratings will be performed, with as-inspected ratings incorporating the latest inspection findings and observed deterioration.

When rating results indicate that a bridge may require posting, H&H will perform refined analyses, where appropriate, to better characterize bridge behavior and capacity. These efforts may include enhanced modeling techniques, system-level analyses, or the use of

advanced software to reduce conservatism and more accurately assess load-carrying capacity. If posting cannot be eliminated through refined analysis, H&H will provide recommendations to improve or eliminate the posting, developed to a level of detail appropriate to the scope of the repair. Recommendations will address the controlling member or members, describe candidate strengthening or repair concepts, and identify the anticipated rating improvement associated with each concept.

Reporting and Electronic Deliverables: The load rating report will serve as a complete engineering record of the evaluation and will document the basis, methodology, analyses, assumptions, and results for each structure. The report will include bridge descriptions, inspection findings relevant to the rating, dead load verification, section property and capacity calculations, structural modeling assumptions, load rating results, and engineering recommendations. Supporting figures, photographs, member identification sketches, framing diagrams, span elevations, cross-sections, influence lines, and analytical model graphics will be incorporated throughout the report to clearly illustrate the structure and communicate the evaluation process. Rating summaries will identify controlling members and critical load cases, while detailed calculation exhibits and supporting analyses will provide full traceability of results.

The final rating package will include an electronic copy of all information retrieved and used in the load rating — inspection reports, plans and shop drawings, prior rating documentation, repair and rehabilitation records, and field measurements — organized and indexed by structure so that the complete basis of the rating is preserved in a single deliverable and available to support future evaluations. The final submission will also include all required electronic deliverables to support future updates and independent review by DOTD. Electronic copies of all bridge models, analysis files, and supporting calculations developed during the project will be provided in editable formats, including AASHTOWare BrR files, MathCAD worksheets, spreadsheets, finite element models, and other analysis documents used in the evaluation. In addition, H&H will provide all required District Response Forms and Posting Option Forms for structures requiring posting or posting modifications.

Update Rating Files: H&H will review and update existing bridge rating files provided by DOTD, including AASHTOWare BrR models, Bridge Inspection Software rating files, and other related rating data, as applicable. Each file will be evaluated against current bridge plans, inspection reports, and inventory information to ensure compliance with DOTD requirements and FHWA SNBI standards. When discrepancies, modeling issues, or software-related problems are identified, H&H will troubleshoot and correct the files as needed, updating bridge conditions, assumptions, and analysis parameters to reflect the current state of the structure. The result will be accurate, reliable, and fully functional rating files that support future load ratings, inspections, and permitting activities.

QA/QC Reviews of Structural Load Ratings: H&H utilizes a detailed and thorough QA/QC policy for all structural load ratings and calculations. The process begins with assembling a team of senior and junior engineers and identifying roles and

responsibilities. A QC Engineer is also identified who will review and oversee the checking process. Our practice ensures that those checking the work are qualified and have extensive experience with the type of work under review. Program inputs are verified against as-built documentation, and outputs are reviewed for completeness and accuracy. For complex structures, an independent load rating or review may be performed to ensure analytical assumptions and methods are valid and repeatable using an alternate approach. H&H will submit a program-wide QA/QC plan to the DOTD Project Manager within ten business days of award notification, addressing the review of all H&H and sub-consultant work and deliverables under this contract. The plan will be refined for each task order so that the level of review is matched to the structure type and complexity of the assignment. All deliverables will be transmitted with a DOTD Quality Assurance/Quality Control Checklist and a certification that the deliverable meets the Department's quality standards.

Staff Training: H&H will develop and deliver a comprehensive training program tailored to the needs of DOTD's load rating staff, focusing on the analysis and evaluation of complex bridge structures. The training may be provided either in person or virtually and will combine technical presentations, practical examples, and hands-on demonstrations to enhance participants' understanding of advanced load rating analyses. Emphasis will be placed on the use of AASHTOWare Bridge Rating (BrR) for the analysis of complex structures whenever feasible, including model development, load application, interpretation of results, and quality assurance practices. For bridge types or analytical requirements not within the current capabilities of BrR, the training will incorporate DOTD-approved supplemental software and modeling techniques. Drawing upon H&H's extensive experience performing load ratings for truss, movable, arch, segmental, cable-supported, and other non-conventional bridge structures, the course will provide real-world examples and practical guidance to strengthen DOTD's capabilities in evaluating complex bridge systems and making informed load posting and asset management decisions. The training team will also include Frank Russo, PE, a nationally recognized bridge engineering expert and experienced National Highway Institute (NHI) instructor who has developed and delivered training programs on bridge design and load rating to transportation agencies across the country. As an experienced NHI instructor, Mr. Russo will contribute proven training techniques and industry best practices that will enhance the effectiveness of the program and provide DOTD staff with valuable insights applicable to real-world load rating challenges.

Overweight Permit Review: H&H will provide timely and technically sound reviews of overweight vehicle permit requests to determine the ability of Louisiana bridges to safely accommodate proposed loads. Working under the direction of DOTD and in accordance with established DOTD procedures and guidance, our team will evaluate permit vehicles through structural analysis and load rating methodologies to assess their impact on bridge components and overall system behavior. Reviews will primarily be performed using AASHTOWare Bridge Rating (BrR), supplemented by other DOTD-approved structural analysis software when necessary to address complex loading conditions or bridge configurations. H&H will provide clear recommendations and supporting

documentation that enable DOTD to make informed permit decisions while maintaining the safety, reliability, and serviceability of the state's bridge network.

AASHTOWare BrR Support: H&H will review and validate existing AASHTOWare BrR models provided by DOTD to ensure they accurately represent bridge geometry, material properties, member details, boundary conditions, load paths, and rating assumptions. Our team will perform a comprehensive quality assurance review of each model, comparing BrR inputs against available plans, inspection records, load rating reports, and other supporting documentation to identify discrepancies, omissions, or outdated information. As necessary, H&H will update and correct model data, refine analytical parameters, and verify rating results to improve accuracy and reliability. By developing robust and validated BrR models for each structure, H&H will help DOTD maximize the effectiveness of its automated permitting program, enabling faster and more reliable bridge-specific permit evaluations while maintaining confidence in the underlying structural analyses.

Miscellaneous Rating Work: H&H will assist DOTD with miscellaneous rating tasks as they arise, with particular emphasis on the continued implementation of the Department's automated permitting system. Our team will support the population and validation of the bridge-specific analytical models on which automated permit decisions are based.

Independent Load Rating Review and Quality Assurance: H&H will provide independent technical reviews of load rating analyses and supporting documentation prepared by other consultants on behalf of DOTD. Serving as an extension of DOTD's quality assurance and quality control process, our experienced load rating engineers will verify the accuracy of modeling assumptions, bridge geometry, material properties, load applications, rating methodologies, software inputs, calculations, and final rating results. By providing thorough and efficient independent reviews, H&H will help maintain the quality and consistency of bridge load ratings statewide while allowing DOTD staff to focus on emergency response efforts, critical infrastructure needs, and other high-priority assignments.

Conclusion: H&H's approach to this contract is founded on technical excellence, responsive project management, and a thorough understanding of DOTD's bridge load rating program. Our team combines nationally recognized load rating expertise with extensive Louisiana-specific experience, including personnel who have directly supported and managed DOTD load rating activities. Through meticulous document review, targeted field investigations, advanced structural analysis, comprehensive quality control procedures, and specialized training services, H&H will provide reliable and defensible engineering solutions tailored to DOTD's needs. By leveraging experienced staff, proven workflows, and industry-leading technologies, **H&H is prepared to efficiently deliver high-quality services across multiple concurrent task orders while supporting DOTD's goals** of maintaining a safe bridge network, improving automated permitting capabilities, and ensuring the long-term stewardship of Louisiana's transportation infrastructure.

19. Workload:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline(s)*	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
Hardesty & Hanover, LLC 	Bridge	4400021516; H.011962; H.012063; H.013818; H.011986; H.012734	Contract 4 for Movable Bridges (5) – Original contract plus Supplemental Agreement (SA) No 1	\$1,424,303
Stantec Consulting Services Inc. 	Bridge	4400027651	IDIQ Contract for Bridge Load Rating Services Statewide (Sub)	\$555,737
Russo Structural Services LLC 	Bridge	N/A	No active DOTD contracts	N/A

20. Certifications/Licenses:**Secretary of State**

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
HARDESTY & HANOVER, LLC	Limited Liability Company (Non-Louisiana)	WILMINGTON	Active

Previous Names

Business: HARDESTY & HANOVER, LLC
Charter Number: 40880812Q
Registration Date: 7/6/2012

Domicile Address

2711 CENTERVILLE ROAD, SUITE 400
WILMINGTON, DE 19808

Mailing Address

1501 BROADWAY, 6TH FLOOR
NEW YORK, NY 10036

Principal Business Office

1501 BROADWAY, 6TH FLOOR
NEW YORK, NY 10036

Registered Office in Louisiana

201 RUE BEAUREGARD, STE. 202
LAFAYETTE, LA 70508

Principal Business Establishment in Louisiana

3850 N. CAUSEWAY BOULEVARD, SUITE 1625
METAIRIE, LA 70002

Status

Status: Active
Annual Report Status: In Good Standing
Qualified: 7/6/2012
Last Report Filed: 6/24/2026
Type: Limited Liability Company (Non-Louisiana)

Registered Agent(s)

Agent:	REGISTERED AGENTS INC
Address 1:	201 RUE BEAUREGARD, STE. 202
City, State, Zip:	LAFAYETTE, LA 70508
Appointment Date:	5/27/2026

Officer(s)

Additional Officers: No

Officer:	SEAN BLUNI
Title:	Member
Address 1:	1501 BROADWAY, 6TH FLOOR
Address 2:	HARDESTY & HANOVER, LLC
City, State, Zip:	NEW YORK, NY 10036

Officer:	RICHARD STEVENS
Title:	Manager
Address 1:	1501 BROADWAY, 6TH FLOOR
City, State, Zip:	NEW YORK, NY 10036

Amendments on File (2)

Description	Date
Foreign LLC Statement of Change	6/1/2017
Foreign LLC Statement of Change	5/27/2026

[Print](#)

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
STANTEC CONSULTING SERVICES INC.	Business Corporation (Non-Louisiana)	ALBANY	Active

Previous Names

STANTEC CONSULTING GROUP INC. (Changed: 4/12/2005)
STANTEC CONSULTING GROUP, INC. (Changed: 4/12/2005)
THE SEAR-BROWN GROUP, INC. (Changed: 4/12/2005)

Business: STANTEC CONSULTING SERVICES INC.

Charter Number: 34554273F

Registration Date: 3/17/1997

Domicile Address

80 STATE STREET
ALBANY, NY 12207

Mailing Address

10220 - 103 AVENUE NW
SUITE 300
EDMONTON, AB, T5J 0K4
CANADA

Principal Business Office

410 17TH STREET
SUITE 1400
DENVER, CO 80202

Registered Office in Louisiana

450 LAUREL STREET, 8TH FLOOR
BATON ROUGE, LA 70801

Principal Business Establishment in Louisiana

1340 POYDRAS STREET
SUITE 1420
NEW ORLEANS, LA 701121274

Status

Status: Active

Annual Report Status: In Good Standing

Qualified: 3/17/1997

Last Report Filed: 3/8/2026

Type: Business Corporation (Non-Louisiana)

Registered Agent(s)

Agent: CORPORATION SERVICE COMPANY
Address 1: 450 LAUREL STREET, 8TH FLOOR
City, State, Zip: BATON ROUGE, LA 70801
Appointment Date: 4/12/2005

Officer(s)

Additional Officers: No

Officer: SUSAN REISBORD
Title: Director
Address 1: 1060 ANDREW DRIVE
Address 2: SUITE 140
City, State, Zip: WEST CHESTER, PA 19308

Officer: JEFFREY P STONE
Title: Director
Address 1: 61 COMMERCIAL STREET
Address 2: SUITE 100
City, State, Zip: ROCHESTER, NY 14614

Officer: GORDON A JOHNSTON
Title: President
Address 1: 300-10220 103 AVENUE NW
City, State, Zip: EDMONTON, AB, T5J 0K4
Country: CANADA

Officer: CHRISTOPHER O HEISLER
Title: Secretary
Address 1: 300-10220 103 AVENUE NW
City, State, Zip: EDMONTON, AB, T5J 0K4
Country: CANADA

Officer: VITO CULMONE
Title: Treasurer
Address 1: 200-325 25 STREET SE
City, State, Zip: CALGARY, AB, T2A 7H8
Country: CANADA

Mergers (6)

Filed Date	Effective Date:	Type	Charter#	Chater Name	Role
4/12/2005	4/12/2005	MERGE	34554273F	STANTEC CONSULTING SERVICES INC.	SURVIVOR
			35478510F	STANTEC CONSULTING SERVICES INC.	NON-SURVIVOR
8/4/2010	8/4/2010	MERGE	34554273F	STANTEC CONSULTING SERVICES INC.	SURVIVOR
			35553355Q	INDUSTRY AND ENERGY ASSOCIATES LLC	NON-SURVIVOR
8/20/2010	8/20/2010	MERGE	34554273F	STANTEC CONSULTING SERVICES INC.	SURVIVOR
			36297376F	STANTEC CONSULTING, INC.	NON-SURVIVOR
1/26/2012	1/26/2012	MERGE	34554273F	STANTEC CONSULTING SERVICES INC.	SURVIVOR
			34476723F	STANTEC CONSULTING CORPORATION (US)	NON-SURVIVOR
6/5/2012	6/5/2012	MERGE	34554273F	STANTEC CONSULTING SERVICES INC.	SURVIVOR

			34174511D	ABMB ENGINEERS, INC.	NON-SURVIVOR
2/21/2017	2/21/2017	MERGE	34554273F	STANTEC CONSULTING SERVICES INC.	SURVIVOR
			32839620F	MWH AMERICAS, INC.	NON-SURVIVOR

Amendments on File (17)

Description	Date
Name Change	4/12/2005
Name Change	4/12/2005
Stmnt of Chg or Chg Prin Bus Off	4/12/2005
Merger	4/12/2005
Name Change	4/12/2005
Merger	8/4/2010
Merger	8/20/2010
Stmnt of Chg or Chg Prin Bus Off	8/24/2011
Merger	1/26/2012
Merger	6/5/2012
Stmnt of Chg or Chg Prin Bus Off	12/28/2015
Merger	2/21/2017
Disclosure of Ownership	4/10/2017
Stmnt of Chg or Chg Prin Bus Off	7/16/2021
Stmnt of Chg or Chg Prin Bus Off	11/7/2022
Stmnt of Chg or Chg Prin Bus Off	9/1/2023
Stmnt of Chg or Chg Prin Bus Off	9/7/2023

Print

State of
Louisiana
Secretary of
State



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Officer(s)

Additional Officers: No

Officer: FRANCESCO RUSSO
Title: Member
Address 1: 121 KATHMERE ROAD
City, State, Zip: HAVERTOWN, PA 19083

Amendments on File

No Amendments on file

[Print](#)

Name	Type	City	Status
RUSSO STRUCTURAL SERVICES LLC	Limited Liability Company (Non-Louisiana)	HAVERTOWN	Active

Previous Names

Business: RUSSO STRUCTURAL SERVICES LLC
Charter Number: 45564491Q
Registration Date: 8/23/2023

Domicile Address

121 KATHMERE ROAD
HAVERTOWN, PA 19083

Mailing Address

121 KATHMERE ROAD
HAVERTOWN, PA 19083

Principal Business Office

121 KATHMERE ROAD
HAVERTOWN, PA 19083

Registered Office in Louisiana

201 RUE BEAUREGARD, STE. 202
LAFAYETTE, LA 70508

Principal Business Establishment in Louisiana

201 RUE BEAUREGARD
STE 202
LAFAYETTE, LA 70508

Status

Status: Active
Annual Report Status: In Good Standing
Qualified: 8/23/2023
Last Report Filed: 7/24/2026
Type: Limited Liability Company (Non-Louisiana)

Registered Agent(s)

Agent: REGISTERED AGENTS INC
Address 1: 201 RUE BEAUREGARD, STE. 202
City, State, Zip: LAFAYETTE, LA 70508
Appointment Date: 8/23/2023

21. QA/QC Plan:

22. Sub-consultant information:

Firm Name (Name must match <u>exactly</u> as registered with Louisiana's Secretary of State (SOS): <u>including punctuation, include screenshot(s) from SOS at the end of Section 20</u>)	Address	Point of Contact and email address	Phone Number
Stantec Consulting Services Inc.	1200 Brickyard Lane, Suite 400 Baton Rouge, LA 70802	Brian Johnson, PE Brian.Johnson2@stantec.com	225-215-5130
Russo Structural Services LLC	121 Kathmere Road, Havertown, PA 19083	Francesco Russo, PhD, PE Frank.Russo@RussoStructural.com	215-266-5623

23. Location:



3850 N. Causeway Blvd, Suite 1625
Metairie, LA 70002
T: 504.962.9212
la@hardestyhanover.com