

STATEMENT OF QUALIFICATIONS

IDIQ CONTRACTS FOR BRIDGE LOAD RATING SERVICES

STATEWIDE



HDR Engineering, Inc.



CONTRACT NOS.

4400036211, 4400036212,
4400036213, AND 4400036214

/ AUGUST 25, 2026

DOTD FORM: 24-102

(Revised August 1, 2026)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

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>)	HDR Engineering, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0001231
6. Prime consultant mailing address	8545 United Plaza Boulevard, Suite 379 Baton Rouge, LA 70809-0204
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	8545 United Plaza Boulevard, Suite 379 Baton Rouge, LA 70809-0204
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Wesley Jacobs, PE – Associate Vice President (225) 465-6361, wesley.jacobs@hdrinc.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Brett L. Geesey, PE – Vice President (337) 347-5598, brett.geesey@hdrinc.com

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

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Signature above shall be the same person listed in Section 9:

Date: 08/18/2026

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):
N/A

Firm(s)' %:

12. Discipline Table:

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

The **only** disciplines to be used are listed in the drop down in each row (Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic). **Remove rows as needed.**

Discipline(s)	% of Overall Contract	HDR Engineering, Inc. (Prime)	Each Discipline must total to 100%
Bridge	100%	100%	100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.			
Percent of Contract	100%	100%	100%

13. Team Size:

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (must specify)" and include the classification title inside the parentheses. The DOTD Job Classification(s) to be used can be found at the following link: <https://bit.ly/DOTDJobClassifications>

Firm name	DOTD Job Classification	Number of personnel committed to this contract *	Total number of personnel available in this DOTD Job Classification (if needed)
HDR Engineering, Inc.	Engineer	3	15
	Engineer - Other	4	52
	Engineer Intern	1	5
	Principal	2	10
	Supervisor - Eng	7	46
	Inspector - Bridge	3	13

(Add rows as needed)

***For evaluation purposes only**, and as referenced in the Scope of Services on page 2 of IDIQ advertisements only, the consultant shall assume the number of concurrently active task orders specified in the advertisement and shall identify the number of **committed** personnel accordingly.

14. Organizational Chart



PROJECT PRINCIPAL

Brett Geesey, PE (MPR 1 & 2)

PROJECT MANAGER

Wesley Jacobs, PE (MPR 3)

TECHNICAL ADVISOR & QA/QC

Deanna Nevling, PhD, PE

TASK 1

DOCUMENT RETRIEVAL & REVIEW

Daniel Marsalone, PE (MPR 5)
Venkata Sathiraju, PE (MPR 5)
Alex Valero, EI ♦

TASK 2

SITE VISITS

Erin O'Malley, PE, SPRAT3
Peter Harrison, PE, SPRAT 1 (MPR 4)
Matt Bruno, PE ♦, SPRAT 3
Riley Boone, PE ♦, SPRAT 1
Venkata Sathiraju, PE (MPR 5)
Kedar Halbe, PhD, PE ♦

TASK 3

ANALYSIS & LOAD RATING

Daniel Marsalone, PE (MPR 5)	Ed Oliver, PE (MPR 5)
Venkata Sathiraju, PE (MPR 5)	Peter Harrison, PE, SPRAT 1 (MPR 4)
William Clementson, PE (MPR 5)	Alex Valero, EI ♦
Sarah De Moya, PE	Nirmala Suwal, PE ♦
David Knickerbocker, PhD, PE (MPR 4)	Michael Kochly, PE ♦
Akash Rao, PE (MPR 5)	Kedar Halbe, PhD, PE ♦
Ronald Sanchez, PE (MPR 4)	Grace Shen, PE ♦

TASK 4-8

4: TRAINING

David Knickerbocker, PhD, PE (MPR 4)
Deanna Nevling, PhD, PE

5: OVERWEIGHT PERMIT REVIEW

Will Clementson, PE (MPR 5)
Sarah De Moya, PE

6: REVIEW, UPATE AND CORRECT ASHTOWARE BrB FILE

Venkata Saithraju, PE (MPR 5)
Alex Valero, EI ♦

7: BRIDGE RATING REVIEW

David Knickerbocker, PhD, PE (MPR 4)
Daniel Marsalone, PE (MPR 5)

8: MISCELLANEOUS RATING WORK

Ed Oliver, PE (MPR 5)
Nirmala Suwal, PE ♦

LEGEND

♦ Licensed Professional in a US state, not Louisiana
 (MPR #) = Minimum Personnel Requirement

15. Minimum Personnel Requirements:

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	Brett Geesey	HDR Engineering, Inc.	PE # 0035172 – Civil	LA	3/31/2028
2	Brett Geesey	HDR Engineering, Inc.	PE # 0035172 – Civil	LA	3/31/2028
3	Wesley Jacobs	HDR Engineering, Inc.	PE # 0030774 – Civil	LA	9/30/2028
4	David Knickerbocker	HDR Engineering, Inc.	PE #0040004 – Civil	LA	03/31/2028
	Peter Harrison	HDR Engineering, Inc.	PE #0039771 – Civil	LA	9/30/2027
	Ronald Sanchez	HDR Engineering, Inc.	PE # 0036556 – Civil	LA	03/31/2028
5	Daniel Marsalone	HDR Engineering, Inc.	PE # 0028554 – Civil	LA	9/30/2027
	Ed Oliver	HDR Engineering, Inc.	PE #0050223 – Civil	LA	09/30/2027
	William Clementson	HDR Engineering, Inc.	PE #0047891 – Civil	LA	09/30/2027
	Venkata Sathiraju	HDR Engineering, Inc.	PE #0048436 – Civil	LA	03/31/2028
	Akash Rao	HDR Engineering, Inc.	PE #0036809 – Civil	LA	03/31/2028

16. Staff Experience:

Firm employed by HDR Engineering, Inc.				
Name	Riley Boone, PE (SPRAT 1)		Years of relevant experience with this employer	13
Title	Project Manager Engineering		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS / 2013 / Civil Engineering	
Active registration number / state / expiration date			PE.131800 / TX / 07-31-2028	
Year registered	2018	Discipline	Structural Engineering	
Contract role(s) / brief description of responsibilities			Task 2: Site Visits	
Riley’s primary focus is on maintaining the safety of bridges and related structures, including bridge inspections, load rating inspections, design of repairs, and scour evaluations. He has experience in bridge design and inspection, including routine, fracture-critical, load rating, and condition assessment inspections. Riley has been a risk-based inspection (RBI) team leader for seven years and a Nonredundant Steel Tension Member (NSTM) Team Leader for three years. Riley’s inspection experience includes various steel, concrete, and timber bridges in varied environments, from small stream crossings over county roads to large urban viaducts, and includes both on- and off-system bridges (elemental and non-elemental). He routinely collects field measurements and condition data for developing structural analyses, capacity evaluations, and LRFR load ratings. Certificates: FHWA-NHI-130056: Safety Inspection of In-Service Bridges; FHWA-NHI 130078: Fracture Critical Inspection Techniques for Steel Bridges; FHWA-NHI 135047: Stream Stability and Scour at Highway Bridges for Bridge Inspectors; SPRAT 1				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
04/23-04/23	LADOTD, Statewide In-Depth Complex Bridge Inspection Statewide LA. Bridge Inspector. Riley performed in-depth visual and hands-on inspections of fracture-critical elements and routine inspections of other bridge elements. He documented condition findings, section loss, deterioration, and damage mechanisms and collected field data used to support structural assessments, maintenance recommendations, and load rating evaluations for complex bridge structures.			
11/23-11/23	Port of New Orleans, Movable Bridge Inspection On-Call Contract Statewide LA. Bridge Inspector. Riley performed in-depth visual and hands-on inspections of fracture-critical elements and routine inspections of other bridge components for two movable rail truss bridges in the Port of New Orleans. Members were accessed and inspected using rope access techniques. He documented member conditions, measured deficiencies, and collected inspection information to support structural analyses and load-rating evaluations of critical load-carrying components.			
07/17–06/23 06/23–Ongoing	Texas Department of Transportation (TxDOT) Bridge Division, NSTM In-Depth Bridge Inspection IDIQ Statewide TX. Bridge Inspector. Riley has inspected various bridges with NSTMs throughout Texas, including large and small steel truss bridges, movable bridges, extra-dosed bridges, two-girder superstructures, steel plate caps, and steel box caps. Access methods include rope. Access, ladders, bridge inspection vehicles, bucket trucks, and man lifts. Riley conducted inspections, communicated significant findings that required immediate attention, prepared inspection reports, and developed maintenance recommendations. He documented member condition, section loss, distortion, fracture-critical concerns, and other structural deficiencies affecting bridge capacity and serviceability. Inspection findings were used to support structural analyses and load rating evaluations for critical bridge components.			
09/21–09/22	North Dakota Department of Transportation, Routine and Fracture Critical Bridge Inspection Statewide ND. Assistant Bridge Inspector. Riley inspected small truss and plate-girder bridges using ropes, access equipment, and ladders. He documented condition findings, measured deterioration and section loss, and collected field information used to support structural assessments and capacity evaluations of load-carrying members.			
02/17-06/19 06/19–Ongoing	TxDOT, Routine Bridge Inspections Statewide TX. Bridge Inspector. Riley has performed routine bridge inspections for both on- and off-system bridges and has served as team leader on more than 15 separate work authorizations, inspecting over 1,250 bridges. He reviewed previous inspection and scour documentation, documented bridge conditions, communicated critical findings requiring immediate attention, prepared inspection reports, and developed repair recommendations. Riley also collected field measurements and condition information used to support structural evaluations, load ratings , and bridge management decisions.			
10/17–Ongoing	TxDOT, On-System Condition Assessments Statewide TX. Bridge Inspector. Riley conducted condition assessment inspections, including detailed visual and hands-on examinations of bridge elements and documentation of structural defects. He collected			

	measurements and condition data used to evaluate deterioration, section loss, and structural performance. Following inspections, Riley assisted in developing repair recommendations, cost estimates, repair details, and engineering evaluations supporting capacity assessments and load rating analyses . Notable bridges include the Corpus Christi Harbor Bridge, Arroyo Colorado Lift Bridge, and several segmental bridges throughout San Antonio.
05/21–01/24	TxDOT Dallas, Scour Evaluations Dallas, TX. <i>Technical Lead/Evaluator</i>. Riley led a team of engineers in evaluating nearly 500 bridges to determine current and future vulnerability to scour and to develop repair and mitigation recommendations. His work included assessment of foundation stability, review of hydraulic and structural data, and evaluation of the potential impacts of scour conditions on bridge load-carrying capacity and load-rating assumptions. He developed recommendations to address scour risks and improve long-term bridge resilience.

Firm employed by HDR Engineering, Inc.				
Name	Matthew (Matt) Bruno, PE (SPRAT 3)		Years of relevant experience with this employer	18
Title	Transportation Industrial Rope Access Program Leader		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2008 / Civil Engineering		
Active registration number / state / expiration date		PE.51856 / CO / 10-31-2027		
Year registered	2013	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 2: Site Visits		
Matt has successfully supported numerous bridge projects involving project management, structural evaluation, load rating support, design, and bridge inspection. He has specialized training and certification in the application of rope access and advanced climbing techniques. He uses access techniques, including industrial rope. Access, under-bridge inspection cranes, manlifts, bucket trucks, and confined-space entry. He has hands-on experience with in-depth/fracture-critical (NSTM) inspections, NBIS inspections, and load rating inspections, including the Golden Gate Bridge (CA), the East Huntington Bridge (WV), the Margaret Hunt Hill Bridge (TX), and the Corpus Christi Harbor Bridge (TX). Matt is experienced in hands-on bridge inspections used to verify and update structural inventory and appraisal (SI&A) information, determine condition ratings, support structural analyses and load rating evaluations, and develop inspection reports with recommended repairs, rehabilitation, and corrective actions. Certificates: Matt has completed courses in NHI Safety Inspection of In-Service Bridges and Fracture Critical Inspection Techniques for Steel Bridges. He is certified as a SPRAT Level 3 Rope Access technician for bridge inspections. He has also completed FHWA-NHI 130053, FHWA-NHI 135047, FHWA-NHI 130110, FHWA-NHI 130125, and FHWA-NHI 130087.				
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).			
05/09-Ongoing	TxDOT Bridge Division, Fracture Critical In-Depth Inspections Statewide TX. Bridge Inspection Team Leader. HDR provided in-depth and fracture-critical inspections of several signature and complex bridges throughout Texas, including the Corpus Christi Harbor Bridge, Margaret Hunt Hill Bridge, Fred Hartman Bridge, and Rainbow Bridge. Conventional and industrial rope access techniques were utilized. Matt provided rigging and safety support as the SPRAT Level 3 lead and performed hands-on inspections of critical structural members. He documented structural conditions, section loss, fatigue-related concerns, and other deficiencies affecting bridge performance and load-carrying capacity . Inspection findings were used to support structural evaluations, maintenance decisions, and load rating assessments of critical bridge elements.			
05/08-12/21	Oregon Department of Transportation, Statewide Bridge Inspection On-Call Services Statewide OR. Bridge Inspection Team Leader and Assistant Team Lead. HDR provided in-depth fracture-critical, fatigue-prone, and routine inspections of major movable and fixed-span bridges throughout Oregon. Matt assisted with the development of field notes, fracture-critical inspection reports, bridge inspection reports, and photo documentation. He performed hands-on inspections utilizing rope access techniques and documented member conditions, deterioration, fatigue-sensitive details, and structural deficiencies. Inspection information was used to support structural assessments, maintenance planning, and load rating evaluations for critical load-carrying bridge components.			
02/15-Ongoing	Golden Gate Bridge Highway and Transportation District, Golden Gate Bridge Inspection San Francisco, CA. Bridge Inspection Team Leader, Rope Access Coordinator, Deputy PM. HDR performed fracture-critical (NSTM) inspections of the Golden Gate Bridge, including the South Approach Viaduct, Fort Point Arch, Main Span, North Approach Viaduct, floor beam system, main towers, and other critical structural elements. Matt compiled inspection field notes, coordinated inspection activities, co-led inspection teams, and performed hands-on inspections using industrial rope access techniques. He documented member conditions, corrosion, section loss, fatigue-sensitive details, and structural deficiencies affecting critical load paths. The inspection data supported structural evaluations, maintenance planning, rehabilitation prioritization, and load rating assessments of primary bridge components. Matt also coordinated daily rope access operations and safety activities as the SPRAT Level 3 lead.			

Firm employed by: HDR Engineering, Inc.			
Name	William Clementson, PE		Years of relevant experience with this employer
Title	Senior Bridge Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 2013 / Civil Engineering ME / 2013 / Civil Engineering	
Active registration number / state / expiration date		PE.0047891 / LA / 09-30-2027	
Year registered	2023	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating, Task 5: Overweight Permit Review / (Meets MPR 5)	
William's experience includes bridge structural analysis, load rating, overweight permit review, and design of bridge structures ranging from conventional crossings to major river bridges and other complex transportation infrastructure. He has more than five years of experience performing LRFR bridge load ratings using AASHTOWare Bridge Rating (BrR), including evaluating inventory, operating, legal, permit, and construction loadings for state DOT and toll authority clients. His experience includes developing and reviewing analytical bridge models, assessing load effects and structural capacity, and conducting load rating evaluations for bridge rehabilitation, bridge replacement, and in-service bridge structures. William has also performed overweight permit reviews and bridge capacity assessments to support the safe movement of permitted vehicles. He is proficient in evaluating the performance of bridge superstructure, substructure, and foundation components in accordance with AASHTO and state DOT requirements.			
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).		
11/22–07/23	LADOTD, Bridge Preservation IDIQ - LA 577 at I-20 Repair PS&E Waverly, LA. Structural Engineer. William performed structural analyses and design checks for the staged demolition and replacement of a prestressed concrete girder bridge span damaged by a vehicular impact. He evaluated temporary and permanent bridge conditions, reviewed load paths during phased construction, verified the structural adequacy of the remaining bridge elements, and performed bridge capacity evaluations and load rating analyses to determine the safe return of the structure to service. He assisted with analytical modeling and review of structural calculations supporting AASHTO compliance and restoration of traffic operations.		
02/25-04/26	Kansas Department of Transportation, Centennial Bridge Replacement Leavenworth, KS. Senior Bridge Engineer. William designed the concrete approach bridge units for the Centennial Bridge Replacement and performed LRFR bridge load ratings using LEAP Bridge Concrete and AASHTOWare Bridge Rating (BrR) . He developed analytical models, evaluated load-carrying capacity for inventory, operating, legal, and permit vehicles, reviewed controlling load-rating cases, and prepared technical documentation supporting bridge acceptance and long-term operation. He also designed approximately half of the bridge substructures and foundations, including river piers. Additionally, he evaluated the vehicle load effects on permits and bridge capacity using AASHTOWare BrR .		
09/13–09/17	Harris County Toll Road Authority (HCTRA), Houston Ship Channel Bridge Replacement Houston, TX. Bridge Engineer. William assisted with the design and analysis of substructure and foundation elements for the south approach structures of the Houston Ship Channel Bridge Replacement. During construction, he evaluated specialized loading scenarios associated with the movement and placement of heavy construction equipment; performed structural capacity checks and bridge load rating evaluations for temporary construction loading conditions; reviewed contractor loading requests; and verified structural adequacy. He also supported the review of loading scenarios similar to permit loading conditions to verify compliance with project requirements.		
03/24–Ongoing	TxDOT Houston, Pelican Island Bridge Replacement Galveston, TX. Bridge Engineer. William developed analytical models and performed structural analyses and design calculations for the superstructure, substructure, and foundation elements of a mile-long fixed bridge crossing the Galveston Channel. He analyzed the effects of coastal storms, vessel collisions, wave loading, and scour on bridge components; designed reinforced-concrete substructures and drilled-shaft foundations; performed structural capacity checks; and prepared technical documentation. He also performed bridge load rating evaluations and capacity assessments using AASHTO LRFR methodologies to verify bridge performance.		
07/18–03/22	VDOT, Hampton Roads Bridge -Tunnel Expansion Norfolk, VA. Bridge Engineer. William developed structural analysis models and performed design calculations for marine bridge structures associated with the Hampton Roads Bridge-Tunnel Expansion project. He analyzed superstructure, substructure, and foundation systems subjected to vessel collision, scour, wave loading, and other extreme events. He also performed bridge load rating analyses using LRFR methodologies to evaluate structural capacity and verify		

	compliance under legal and permit loading conditions. During the final design phase, he refined analytical models and finalized structural elements in response to evolving project requirements and design criteria.
12/20–Ongoing	TxDOT Atlanta, SH 43 at Big Cypress Bayou Marion and Harrison County, TX. <i>Bridge Lead Engineer.</i> William leads structural analysis and design efforts for a 16-span prestressed concrete bridge over Big Cypress Bayou. He developed analytical models and performed design calculations for superstructure, substructure, and foundation elements, including evaluation of staged construction conditions, scour effects, load distribution, and structural capacity. He also performs LRFR bridge load ratings , evaluates load-carrying capacity, and supports bridge acceptance and long-term operation. He coordinates technical reviews and verifies compliance with TxDOT and AASHTO requirements.
06/13–10/15	New York State Thruway Authority, Governor Mario M. Cuomo Bridge (Tappan Zee Bridge Replacement) Westchester and Rockland Counties, NY. <i>Bridge EIT.</i> William developed structural models and performed analysis and design of substructure and foundation elements for bridge approach structures on the Tappan Zee Bridge Replacement Program. He evaluated soil-structure interaction effects, performed seismic analyses, prepared structural calculations, and supported the design of curved steel girder bridge units.

Firm employed by HDR Engineering, Inc.				
Name	Sarah De Moya, PE		Years of relevant experience with this employer	13
Title	South Central Area Bridge Lead		Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization		MS / 2007 / Structural Engineering BS / 2006 / Civil Engineering		
Active registration number / state / expiration date		PE.0038011 / LA / 03-31-2027		
Year registered	2013	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating, Task 5: Overweight Permit Review		
Sarah's experience includes structural analysis, load rating, rehabilitation, and design of bridge structures for state DOTs, toll authorities, municipalities, and federal agencies. She has extensive experience evaluating bridge load-carrying capacity, developing structural analysis models, performing LRFR load ratings, assessing rehabilitation alternatives, and reviewing bridge performance under legal, permit, and construction loading conditions. Her experience includes bridge preservation projects, bridge repairs, replacement structures, complex river crossings, and transportation infrastructure subjected to scour, vessel collision, coastal loading, and staged construction requirements. Sarah has supported clients including LADOTD, TxDOT, FDOT, NYSTA, ADOT, USACE, and numerous local agencies.				
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).			
12/23-11/24	TxDOT Houston, Various Bridge Repairs Houston, TX. Senior Bridge Engineer. Sarah reviewed bridge repair designs developed in response to deficiencies identified during bridge inspections. She performed engineering evaluations of damaged structural components, reviewed repair details affecting structural capacity and serviceability, and checked plans, specifications, and estimates for rehabilitation work. Repairs included concrete deterioration, fire-damaged superstructure elements, bridge joints, railings, drainage systems, and erosion protection measures.			
11/22–07/23	LADOTD, Bridge Preservation IDIQ – LA 577 at I-20 Repair PS&E Waverly, LA. Bridge Lead/Engineer of Record. Sarah led the structural evaluation of a prestressed concrete girder bridge damaged by a truck impact. She performed LRFR load ratings using AASHTOWare BrR software to determine whether the undamaged portion of the bridge could safely remain in service and evaluated load-carrying capacity under interim traffic conditions. Sarah developed analytical models, reviewed damaged-member capacities, and prepared technical documentation supporting reopening the bridge to traffic. She also directed the development of rehabilitation and replacement plans and coordinated engineering analyses associated with phased demolition and replacement activities.			
08/22-02/24	TxDOT Dallas, Corsicana Bridge Replacements Navarro County, TX. Bridge Lead/ Engineer of Record. Sarah led the structural design of five replacement bridges, developing analytical models, performing load and scour analyses , designing superstructure and substructure components, verifying bridge capacities, and preparing calculations and engineering documents in accordance with TxDOT and AASHTO requirements.			
04/20-Ongoing	TxDOT Corpus Christi, US 77 Schematic and PS&E Sinton, TX. Bridge Lead/ Engineer of Record. Sarah led structural analysis and design for four new bridges, four bridge replacements, and six bridge rehabilitation projects. She performed comparative engineering analyses to optimize span configurations and developed structural calculations for prestressed concrete beams, concrete bents, and drilled-shaft foundations. She evaluated scour effects, collision loading, rehabilitation alternatives, and long-term service-life considerations to support preservation objectives.			
06/19-12/20	TxDOT Beaumont, Old US 90 at Baird's Bayou Bridge Replacement Orange County, TX. Deputy Project Manager/Bridge Lead. Sarah coordinated with TxDOT, subconsultants, and the internal production team to progress design and deliver this project on a tight schedule. Sarah coordinated environmental documentation, utility relocation, and retaining wall construction. She developed a scheme for end-on-end bridge demolition and construction due to the existing bridge's condition and difficult site access in a rural area. Sarah reviewed prestressed concrete pile trestle bents and slab-beam superstructure designs.			
01/18-09/19	City of Alvin, FM 528 Extension from SH 35 to SH 6 – Bridge over BNSF Railroad Brazoria County, TX. Bridge Lead Engineer. This two-lane rural bridge on the new location was designed for future widening. Sarah led the design of prestressed concrete I-girders, concrete piers, and drilled shaft foundations. She also developed Exhibit A and located bridge piers outside the BNSF railroad ROW.			
08/15–Ongoing	HCTRA, Sam Houston Tollway East – Ship Channel Bridge Replacement Harris County, TX. Bridge Lead Engineer/Deputy Project Manager/ Engineer of Record. Sarah led structural analysis and bridge design for the approach structures of replacement twin ship-channel crossings. She developed bridge layouts, directed structural modeling efforts, reviewed superstructure analyses, and designed			

	substructure and foundation systems. She evaluated complex load paths , construction constraints, utility conflicts, railroad crossings, and vessel-impact considerations affecting bridge performance and capacity.
01/14-06/15	Metropolitan Transit Authority of Harris County (METRO), Union Pacific Railroad (UPRR), Harrisburg Overpass Houston, TX. Structural Engineer. This fast-track project included bridge design services for a nine-span bridge consisting of two light rail tracks, two highway lanes, and two sidewalks over UPRR tracks. Bridge design included pre-stressed concrete I-girders, deck design, substructure design, special railing details, track plinth design, rail structure interaction model, approach slab design, cased drilled shafts due to contaminated soil, overhead catenary system (OCS) pedestal details, and OCS/light pole anchorage design. Sarah checked the design of prestressed concrete girders, substructure, foundations, OCS pedestals, and anchorage.
01/13-01/14	City of Memphis, Harahan Bridge Restoration Memphis, TN, Structural Engineer. Sarah performed structural capacity analyses for a cantilevered pedestrian system supported by an existing steel-truss bridge. She evaluated member strength, connection capacities, moment and shear demands, and loading alternatives to determine the feasibility of reusing existing structural elements while satisfying project design criteria.
01/12–11/12	Central Texas Regional Mobility Authority, US 290 Manor Expressway Manor, TX. Structural Engineer. Sarah designed and analyzed truss structures for overhead sign bridges, cantilever sign structures, DMS structures, and toll gantries, utilizing RISA and AASHTO LTS criteria. Sarah reviewed the shop drawings and approved sign structure/DMS/toll gantry trusses, sealed expansion joint assemblies, drainage structures, pedestrian railing, and prestressed concrete beams. The design includes 6.2 miles of reconstruction of a six-lane, grade-separated tollway with three general-purpose lanes in each direction. It includes a roadway, 32 bridges, retaining walls, drainage, sign structures/toll gantries, and a 10-foot shared path, in accordance with AASHTO LRFD, TxDOT, FHWA, and ADA design criteria.
06/11-10/11	City of Sugar Land, Sweetwater, Harman, and Dulles Avenue Bridge Condition Assessments and Rehabilitation Sugar Land, TX. Engineer of Record. Sarah conducted structural condition assessments and engineering evaluations of existing bridge structures to identify deficiencies affecting safety, serviceability, and load-carrying capacity. Based on inspection findings, she developed rehabilitation recommendations, repair plans, and specifications to address structural deficiencies and extend service life.
01/10-10/11	City of Sugar Land, University Boulevard South Extension, Bridges over Ditch H Sugar Land, TX. Bridge Engineer. Sarah performed structural calculations and detailed the structural elements of these twin curved bridges. Sarah designed Type IV prestressed concrete I-beams, raised sidewalks, containment rails, deck drains, heavily skewed multi-column bents and abutments with deep foundations, founded wing walls, and bridge-mounted utilities. She also reviewed shop drawings and responded to RFI's during the construction phase.

Firm employed by HDR Engineering, Inc.				
Name	Brett Geesey, PE		Years of relevant experience with this employer	20
Title	Vice President , LA/MS Area Operations Manager		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2005 / Mechanical Engineering ME / 2006 / Ocean Engineering		
Active registration number / state / expiration date		PE.0035172 / LA / 3-31-2028		
Year registered	2009	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Project Principal / Oversee project execution and resource management / (Meets MPR 1 & MPR 2)		
Brett serves as HDR's Louisiana/Mississippi Area Operations Manager, overseeing the overall operations of HDR's offices in Louisiana and Mississippi. He manages a team of engineers and scientists and has experience managing and designing various engineering projects. He has also implemented projects ranging from feasibility studies through applied design, prepared detailed plans and specifications, and provided construction administration.				
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).			
10/22-05/24	LADOTD, Bridge Preservation IDIQ – LA 577 at I-20 Repair PS&E Waverly, LA. Project Principal. HDR is providing as-needed bridge preservation services. Task orders have included repair plans for a bridge damaged during a vehicular accident and a task order to develop an optimization tool for developing layout and bridge configuration. For each task order, Brett works with the task order manager to develop the scope, schedule, and budget, and to identify the resources required to deliver it.			
08/23-Ongoing	Port of New Orleans, Movable Bridge Inspection On-Call Contract New Orleans, LA. Project Principal. HDR provides as-needed inspection and load rating services for two bridges under the Port of New Orleans' authority. Task orders have included annual inspections for the Seabrook and Almonaster bridges. For each task order, Brett works with the task order manager to develop the scope, schedule, and budget, and to identify the resources required to deliver it.			
07/19–03/24	LADOTD, Statewide In-Depth Complex Bridge Inspections Statewide LA. Project Principal. HDR is a subconsultant supporting LADOTD's in-depth inspections of complex bridge structures. Brett worked with HDR's task order managers to review the scope, schedule, and budget; coordinate the resources required to complete the task orders; and assist them in providing quality services.			
05/21-Ongoing	Sewerage and Water Board of New Orleans (SWBNO), Internal and External Communications Support New Orleans, LA. Project Principal. HDR provides SWBNO with communications support, including communications planning, protocol development, crisis communications support, content development, graphic design, website development, social media strategy, event coordination, and stakeholder management. Brett works closely with the project manager to provide project resources and support internal project controls, including contracting, cost controls, and scheduling.			
07/23–06/24	Baton Rouge Water Company, Utility Network Data Migration Baton Rouge, LA. Project Principal. HDR assisted the Baton Rouge Water Company with migrating its existing utility network data into ESRI's UN data model. Brett assisted the project manager in providing resources and overall project delivery.			
05/18-Ongoing	Lafayette Consolidated Government (LCG), LCG Drainage Initiative Project Lafayette, LA. Project Principal. HDR has provided LCG with wetland delineation services to support its overall drainage initiative program. Brett works with the project manager to provide the necessary resources to deliver the project and oversees the overall contract.			

Firm employed by HDR Engineering, Inc.				
Name	Kedar Halbe, PhD, PE		Years of relevant experience with this employer	11
Title	Bridge Engineer		Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		PhD / 2014 / Civil Engineering MS / 2010 / Structural Engineering BS / 2006 / Civil Engineering		
Active registration number / state / expiration date		PE.129548 / TX / 12-31-2026		
Year registered	2018	Discipline	Structural	
Contract role(s) / brief description of responsibilities		Task 2: Site Visits, Task 3: Analysis & Load Rating		
Kedar specializes in structural analysis, design, inspection, condition assessment, and load rating. He has developed more than 100 original load ratings for simple and complex bridges in TxDOT's inventory and has performed load ratings on approximately 20 additional bridges across several other states. His experience includes complex steel structures, curved and flared steel interchange bridges, fracture-critical and NSTM bridges, historic steel trusses, steel plate girders, segmental concrete bridges, and other complex structures. He is proficient in multiple structural analysis and load-rating programs, ranging from simplified analyses to advanced three-dimensional and nonlinear models. He has developed specialized calculations for complex geometry, member deterioration, live-load distribution, and tension-only structural elements. He has also performed routine, NSTM, and special bridge inspections; condition assessments; bridge design; and rehabilitation and retrofit work across multiple states.				
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).			
04/25-Ongoing	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. Bridge Inspector/ Bridge Load Rater. Kedar coordinated field activities and worked with district bridge engineers to perform in-depth inspections of six vertical-lift bridges. He contributed to structural inspections, condition assessments, and the preparation of inspection reports. Kedar also served as the Engineer of Record for load-rating analyses of four movable-bridge main spans, using AASHTOWare BrR and advanced engineering calculations to evaluate load-carrying capacity, verify structural adequacy, and support long-term rehabilitation planning.			
08/15-Ongoing	TxDOT Bridge Division, Routine Bridge Inspection Statewide, TX. Load Rating Team Leader. Kedar performs and leads load-rating calculations for a broad range of bridge structures, including reinforced and prestressed concrete, structural steel, timber, and concrete culvert structures. He has led load-rating efforts for multiple routine inspection work authorizations and has developed calculations beyond standard TxDOT tools for complex bridge geometry, member deterioration, nonstandard live-load distribution factors, and structural conditions requiring project-specific analytical methods. He reviews inspection findings, existing plans, material properties, and observed deterioration; develops or updates analytical models; calculates inventory and operating ratings; and provides recommendations supporting load posting and bridge management decisions. Kedar also developed automated spreadsheets to improve the efficiency and consistency of inspection photo logs, bridge inspection forms, and TxDOT bridge-posting evaluations. His TxDOT routine inspection experience has included statewide assignments in the Paris, Atlanta, Wichita Falls, Houston, Dallas, San Antonio, Laredo, Waco, Corpus Christi, and other districts			
05/17-Ongoing	TxDOT Bridge Division, Non-Redundant Steel Tension Member Inspection Statewide, TX. Assistant Inspector and Load Rating Team Lead. Kedar assists with hands-on inspections and leads load-rating evaluations for complex NSTM and fracture-critical bridge structures, including steel plate girders, trusses, floor beams, gusset plates, plate caps, pins, hangers, and other nonredundant steel components. He develops load ratings using TxDOT tools and prepares detailed analytical models and supplemental calculations when standard rating tools cannot adequately represent complex geometry, deterioration, or load paths. For Work Authorization No. 11 in San Antonio, Kedar performed load-rating calculations for three historic steel truss bridges constructed in the 1890s, incorporating observed section loss and deterioration into the analytical models. He performed a nonlinear analysis to represent tension-only cable elements and recommended load posting based on the calculated structural capacities. He also participated in the inspection and load-rating evaluation of the Corpus Christi Harbor Bridge, a major fracture-critical steel bridge, and has supported statewide NSTM inspections that included historic trusses and other complex steel structures.			
02/24-09/24	TxDOT Bridge Division, Complex Steel Structure Load Ratings, Routine Bridge Inspection Work Authorization No. 4 Statewide, TX. Load Rating Engineer. Kedar performed load-rating analyses for complex steel bridge structures under a TxDOT routine bridge inspection work authorization. His work included developing analytical models and calculations for structures whose geometry, framing, or structural behavior required analysis beyond the capabilities of standard simplified bridge-rating tools.			

01/22-02/22	TxDOT Bridge Division, Routine Bridge Inspection Added Load-Rating Assignment, Work Authorization No. 6 Houston, TX. Load Rating Team Engineer. Kedar performed load-factor ratings for five complex steel interchange bridges in the Houston District. The allowable-stress-designed bridges contained 79 unique steel units, many with curved and flared geometry that could not be adequately evaluated using standard TxDOT load-rating tools. Kedar used advanced MDX bridge-analysis software to develop analytical models that represent the structures' complex geometry and load distribution. He evaluated structural capacity using the applicable load-rating methodology and prepared calculations and technical documentation supporting the rating results.
06/19-07/21	TxDOT Bridge Division, Yield Strength Analysis Statewide, TX. Primary Investigator and Author. Kedar extracted, interpreted, and organized material data from historical steel mill certificates for bridges in TxDOT's inventory. He oversaw engineers performing data compilation and statistical analysis, authored a significant portion of the final technical report, and coordinated with TxDOT Bridge Division staff. The study evaluated historical steel yield strengths used in bridge load ratings and found that assumed nominal values may be overly conservative for some older structures. The project developed recommendations for statistically conservative yield strengths to use when original material test reports are unavailable, potentially improving load-rating accuracy and avoiding unnecessary load postings for older structural steel and reinforced concrete bridges.
11/19-11/19	TxDOT Bridge Division, JFK Memorial Causeway Condition Assessment Corpus Christi, TX. Bridge Engineer. Kedar participated in the condition assessment of the JFK Memorial Causeway over the Gulf Intracoastal Waterway. The bridge consists of prestressed concrete approach spans and a post-tensioned segmental concrete box-girder main-span unit. HDR's work included assessment of the approach-span superstructures and substructures, and the main-span substructures, while a subconsultant evaluated the post-tensioned segmental superstructure.
01/22-06/25	Harris County Toll Road Authority, Washburn Tunnel General Engineering Consultant Services Houston, TX. Structural/Load Rating Engineer. Kedar supported the independent facility condition assessment and structural evaluation of the approximately 3,800-foot-long Washburn Tunnel, the only submerged vehicular tunnel in Texas. The work included an invert-slab load rating , condition assessment, concrete repair planning, prioritized repair recommendations, and life-cycle cost analysis. The multidisciplinary team evaluated the tunnel's structural, mechanical, electrical, and civil systems in accordance with applicable national tunnel inspection guidance to identify maintenance, repair, and improvement needs.
10/17-08/18	Federal Highway Administration, Synthesis Report on Concrete Bridge Shear Load Rating Washington, DC. Structural/Load Rating Researcher. Kedar supported the development of an FHWA synthesis report addressing the shear load rating of concrete bridges . The effort compiled and evaluated practices, analytical considerations, and technical issues associated with determining the shear capacity of existing concrete bridge members.

Firm employed by HDR Engineering, Inc.				
Name	Peter Harrison, PE (SPRAT 1)		Years of relevant experience with this employer	12
Title	Bridge Inspection Section Lead		Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization			BS / 1998 / Civil Engineering	
Active registration number / state / expiration date			PE.0039771 / LA / 09-30-27	
Year registered	2015	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Task 2: Site Visits, Task 3: Analysis & Load rating (Meets MPR 4)	
Peter has over two decades of experience in bridge design, inspection, and project management. He has experience with inspections and repairs involving steel, concrete, and timber. He has worked on a diverse range of structural types, including segmental concrete, truss, cable-stayed, tied-arch, and movable bridges. Training Certificates: FHWA/NHI #130055 - Safety Inspection of In-Service Bridges, (2008); FHWA/NHI #130053 - Bridge Inspection Refresher Training, (2022); FHWA/NHI #130078 - Fracture Critical Inspection Techniques for Steel Bridges (2003); FHWA/NHI #130110 – Tunnel Safety Inspection, (2016); FHWA/NHI #130124 - Tunnel Safety Inspection Refresher, (2021); SPRAT Rope access Technician – Level I.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
04/25-Ongoing	LADOTD, Contract 5 for Movable Bridges (6) Lafayette, Calcasieu, Cameron, Saint Martin, & Vermillion Parish, LA. QA/QC. Peter conducted in-depth quality reviews of NBIS inspections, routine inspections, LRFR load ratings , and inspection report development for six complex movable vertical-lift bridges. He reviewed bridge inspection reports, structural evaluation documentation, load rating calculations, and rating reports to verify technical accuracy, consistency, and compliance with NBIS and LADOTD requirements. Peter coordinated with inspection team leads and discipline specialists to resolve technical comments and verify final deliverables accurately reflected observed bridge conditions and load-carrying capacity assessments, including rope-access inspections of critical structural members.			
01/14-10/22	TxDOT Bridge Division, Fracture Critical In-Depth Inspection IDIQ Statewide TX. Bridge Inspector/Team Leader. Peter managed and led field inspection and report preparation. This contract has inspected 1,560 bridges to date, comprising 6,248 fracture-critical components. Peter served as on-site team leader for approximately 25% of the bridges and performed LRFR load ratings for complex bridge structures, including the Corpus Christi Harbor Bridge (through-truss/cantilever structure), Rainbow Bridge (steel cantilever truss), Margaret Hunt Hill Bridge (cable-stayed bridge), Arroyo Colorado Lift Bridge (vertical-lift movable bridge), and other fracture-critical truss and movable bridges statewide. He developed rating models, analyzed member capacities, calculated inventory and operating ratings, and prepared load-rating reports for complex bridge structures. He also served as on-site team leader for the Corpus Christi Harbor Bridge fracture-critical inspections in 2021 and 2023.			
05/20-04/21	TxDOT Bridge Division, JFK Causeway over Gulf Coast Intracoastal Waterway Rehabilitation Corpus Christi, TX. Inspection Team Lead. Peter coordinated logistics for two field teams and led inspections of this complex bridge, consisting of prestressed-concrete approach spans and a post-tensioned segmental box-girder main span. He managed the development of the condition assessment report and conducted structural evaluations and load-rating analyses of the segmental box-girder structure to support rehabilitation planning and capacity assessment.			
01/14-Ongoing	TxDOT Bridge Division, Non-Redundant Steel Tension Member (NSTM) (Fracture-Critical) Inspection IDIQ Statewide TX. Bridge Inspector/Team Leader. Peter manages and leads field inspections and report preparation for fracture-critical bridge inspections statewide. To date, the team has inspected approximately 2,000 bridges, with Peter serving as on-site team leader for about 25% of those inspections. He performs hands-on inspections, documents member condition, section loss, fatigue-sensitive details, and structural deficiencies, and prepares findings used to support structural evaluations, LRFR load ratings , and bridge capacity assessments. Notable structures include complex cable-stayed, truss, movable, bascule, and major river-crossing bridges, including the Corpus Christi Harbor Bridge, Margaret Hunt Hill Bridge, Rainbow Bridge, Fred Hartman Bridge, Pennybacker Bridge, West 7th Street Bridge, and the Pelican Island Bascule Bridge.			
10/23-03/24	Port of New Orleans, Movable Bridge Inspection On-Call Contract New Orleans, LA. Structural QA/QC. HDR performed annual in-depth inspections of the Seabrook and Almonaster single-leaf truss bascule bridges crossing the Inner Harbor Navigation Canal. Peter reviewed proposed inspection methodologies, inspection findings, and final reports for these historic movable truss bridges. His quality			

	reviews included verification of condition assessments, documentation of structural deficiencies, and inspection findings supporting future structural evaluations and bridge maintenance decisions.
08/15-Ongoing	TxDOT Bridge Division, Routine Bridge Inspection Statewide TX. <i>Project Manager/Inspection Team Leader.</i> Peter manages and leads routine bridge inspections and report preparation statewide, coordinating multiple inspection teams and verifying compliance with TxDOT and FHWA requirements. This contract includes the inspection of approximately 15,000 bridges throughout Texas. Peter reviews structural conditions and deterioration findings and develops recommendations used to support load ratings, load rating updates, bridge posting determinations, and structural capacity evaluations. His experience includes evaluation of complex bridge structures such as the Corpus Christi Harbor Bridge, Fred Hartman Bridge, Rainbow Bridge, Pennybacker Bridge, and numerous movable, truss, segmental, steel, and concrete bridges statewide.
12/19, 11/22, 11/26	TxDOT Bridge Division, Arroyo Colorado Lift Bridge Routine Bridge Inspection Rio Hondo, TX. <i>Bridge Inspector.</i> Peter led the fracture-critical inspection of this vertical-lift movable bridge, including rope-access inspection of critical NSTM members inaccessible by conventional means. He documented structural conditions, fatigue-sensitive details, and member deterioration used to support structural evaluations, rehabilitation planning, and load rating assessments of the bridge's movable-span components.
02/14-08/15	LADOTD, LA 12 Sabine River Bridge Stage 0 Bridge Evaluation Calcasieu, LA. <i>QA/QC Reviewer.</i> HDR evaluated rehabilitation and replacement alternatives for this historic movable swing-span bridge spanning the Texas-Louisiana border. Peter performed load-rating evaluations for the existing movable steel swing-span bridge and reviewed load-rating calculations and technical reports to verify structural capacities, rehabilitation assumptions, and engineering recommendations. His work included structural analysis and load-rating evaluation of this complex movable bridge to support alternative development and future use recommendations.
11/17-04/26	Golden Gate Bridge Highway and Transportation District, Golden Gate Bridge Fracture Critical Bridge Inspection San Francisco, CA. <i>Bridge Inspector.</i> Peter is part of a team performing fracture-critical inspections of the complex suspension bridge using industrial rope-access methods to access critical structural members. He documented the member condition, identified structural deficiencies, and collected field data to support structural assessments, maintenance planning, and future capacity evaluations of fracture-critical bridge components.
06/09-12/09	Nebraska Department of Roads (NDOR), Fracture Critical Inspection and Rating Statewide NE. <i>Inspection Team Leader.</i> Peter led the inspection and load rating of 108 fracture-critical steel truss bridges throughout Nebraska. He directed field inspections, performed load ratings, developed and reviewed load-rating calculations, and determined inventory and operating capacities in accordance with NDOR requirements using LARS rating software. Peter prepared load-rating reports and documentation to support bridge management decisions regarding structural capacity and continued serviceability. The bridge inventory included complex fracture-critical pony truss, through-truss, and other steel truss bridge configurations requiring detailed structural analysis and load-rating evaluations.

Firm employed by HDR Engineering, Inc.				
Name	Wesley Jacobs, PE		Years of relevant experience with this employer	11
Title	Transportation Group Manager/Associate Vice President		Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization		BS / 1998 / Civil Engineering		
Active registration number / state / expiration date		PE.30774 / LA / 9-30-2028		
Year registered	2003	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Project Manager (Meets MPR 3)		
Wes has over 28 years of experience in bridge engineering, including bridge analysis, structural modeling, LRFR load ratings, bridge rehabilitation, movable bridge design, NBIS inspections, and development of plans and specifications for complex bridge projects. His experience includes application of LADOTD bridge design criteria, AASHTO LRFD Bridge Design Specifications, the AASHTO Manual for Bridge Evaluation, and AASHTOWare Bridge Rating (BrR) for load rating and structural assessment of fixed and movable bridges. Wes has led multidisciplinary teams performing bridge inspections, load capacity evaluations, rehabilitation design, and structural analysis for high-level river crossings, movable bridges, railroad overpasses, steel plate girder bridges, and prestressed concrete structures.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
11/22-05/24	LADOTD, Bridge Preservation IDIQ - LA 577 at I-20 Repair PS&E Waverly, LA. Project Manager & Engineering Lead. Wes led the emergency inspection and structural assessment of a prestressed concrete bridge damaged by a dump truck. He developed LRFR load ratings, performed structural analysis and bridge modeling, and evaluated load-carrying capacity for both interim and permanent bridge conditions. Wes developed and calibrated rating models to quantify the effects of the impact damage on the girders and determine safe operating capacities during repairs. He performed load rating analyses for legal and permit vehicles, evaluated posting requirements, and documented rating results to support LADOTD's operational decisions. Wes directed the preparation of PS&E documents for the demolition and replacement of the damaged span and led the redesign of the AASHTO Type III prestressed concrete girder replacement span in accordance with LADOTD requirements, the Louisiana Standard Specifications for Roads and Bridges, the LADOTD Bridge Design and Evaluation Manual (BDEM), and AASHTO requirements.			
04/25-Ongoing	LADOTD, Contract 5 for Movable Bridges (6) Lafayette, Calcasieu, Cameron, Saint Martin, & Vermillion Parish, LA. Project Manager. Wes leads a multidisciplinary team performing NBIS inspections, bridge analysis, LRFR load ratings, structural modeling, and rehabilitation planning for six vertical-lift bridges. He directs development of AASHTOWare Bridge Rating (BrR) models, reviews load rating calculations and reports, and evaluates load-carrying capacity for steel superstructures, movable bridge components, floor systems, and supporting substructures. He directed the determination of rating factors for inventory, operating, legal, and permit vehicles; the evaluation of posting requirements; the identification of controlling structural members; and the development of recommendations to maintain regulatory compliance and safe bridge operations. Wes also prepares rehabilitation strategies based on inspection findings and load rating results in accordance with LADOTD requirements, the Louisiana Standard Specifications for Roads and Bridges, the LADOTD Bridge Design and Evaluation Manual (BDEM), and the AASHTO Manual for Bridge Evaluation.			
11/19-03/24	LADOTD, Statewide In-Depth Complex Bridge Inspections IDIQ Statewide, LA. HDR Project Manager. Wes led inspection teams performing detailed evaluations of movable, steel, and concrete bridges throughout Louisiana. He directed inspection planning, structural assessments, and development of engineering recommendations for complex bridge structures, including movable bridge systems and major river crossings, in accordance with LADOTD inspection requirements. In support of the inspection findings, Wes oversaw structural analyses and load rating evaluations to assess the effects of deterioration, section loss, fatigue-related concerns, and damage on the bridge's load-carrying capacity. He reviewed rating methodologies, coordinated development of analytical models, and used load rating results to prioritize repairs, establish maintenance recommendations, and support bridge management decisions.			
10/23-05/25	Port of New Orleans, Movable Bridge Inspection On-Call Contract New Orleans, LA. Project Manager. Wes led annual in-depth inspections of the Seabrook and Almonaster bascule bridges, managed multidisciplinary inspection teams, reviewed structural findings, and developed repair recommendations and inspection reports for historic movable bridge structures. He also directed structural analyses and load rating evaluations of critical bridge components, including trusses, floor systems, counterweight-support elements, and movable-span framing. Wes reviewed load rating calculations and assessed load-carrying capacity impacts associated with observed			

	deterioration, fatigue-sensitive details, and operational demands to support maintenance planning and long-term asset management decisions.
01/11-01/12	Valero Port Arthur Refinery, Taylor Bayou (Joint Outfall Canal) Movable Bridge - Steel Swing Span Port Arthur, TX. <i>Project Manager & Engineer of Record.</i> For this river crossing, Wes developed the preliminary structural design, bridge layout, span configuration, foundation concepts, and plans for an unequal-arm steel swing-span movable bridge (129 ft) supported by a pivot pier on steel-pipe pile foundations, with PPC girder approach spans. Due to its close similarity to recent projects in Louisiana, the project was designed in accordance with LADOTD requirements, the Louisiana Standard Specifications for Roads and Bridges, the LADOTD Bridge Design and Evaluation Manual (BDEM), and the AASHTO Manual for Bridge Evaluation.
01/10-10/11	LADOTD, Chef Menteur Pass Bridge Replacement EA, S.P. No. 700-36-0125 Orleans Parish, LA. <i>Structural Lead.</i> Wes developed the preliminary bridge alternatives, structural layouts, span arrangements, and substructure concepts for the replacement of the historic swing-span bridge crossing, including high-level fixed bridge alternatives providing 75 feet of vertical clearance. He developed conceptual designs for AASHTO Type III and BT-78 prestressed concrete girder approach spans, steel-composite main spans, and deep-water river piers supported by large-diameter prestressed concrete cylinder piles. Wes also performed preliminary structural analyses and comparative load-capacity evaluations of the bridge alternatives, assessing live-load demands, member sizing requirements, and anticipated load rating performance to support the selection of alternatives and environmental documentation. His evaluations helped identify viable bridge configurations that met LADOTD requirements, the Louisiana Standard Specifications for Roads and Bridges, the LADOTD Bridge Design and Evaluation Manual (BDEM), AASHTO requirements, navigation clearance criteria, and long-term load-carrying requirements.
01/11-12/12	USACE New Orleans District, LPV 145 – Bayou Bienvenue Movable Steel Swing Span Bridge New Orleans, LA. <i>Project Manager & Engineering Lead.</i> Wes developed the preliminary and final designs, plans, and specifications for a 135-foot unequal-arm steel swing-span structure. The swing span is supported by a reinforced-concrete pivot pier with prestressed-concrete pile foundations. The approach spans consisted of reinforced concrete slabs tied into an existing limestone access road. The bridge was designed to provide vehicular access to LPV 145, a six-mile-long isolated levee reach in Chalmette, Louisiana. The bridge was designed and constructed on the protected side of the existing sector gate structure on an offset alignment. The timber guidewall/fender system for the new bridge was designed to tie into the existing system at the sector gate. Wes completed the bridge design in accordance with the Louisiana Standard Specifications for Roads and Bridges, the LADOTD Bridge Design and Evaluation Manual (BDEM), the LADOTD Bridge Design Manual, and AASHTO LRFD Bridge Design Specifications.
10/12-05/15	TxDOT/LADOTD, US 84 Sabine River Bridge Logansport, LA. <i>Engineer of Record.</i> Wes developed the final bridge design, structural calculations, plans, and specifications for the twin bridge structures in accordance with LADOTD and AASHTO LRFD requirements. The bridges were comprised the new Tx shapes (Tx62's and Tx70's), with span lengths ranging from 120 ft to 160 ft. The substructure consisted of multi-column reinforced-concrete bents with strutted columns at the main-channel locations, supported on drilled-shaft foundations. Although not a navigable channel at this location, the bridges were designed with adequate geometry to provide the necessary freeboard above the 100-year flood levels and superelevation rotation on the eastbound structure.
06/03-05/05	LADOTD, US 171 South Railroad Overpass Mansfield, LA. <i>Engineer of Record.</i> Wes designed the bridge superstructure and substructure systems, developed structural calculations, and prepared final plans and specifications for the twin railroad overpass structures with concentric curves, bobtail spans, and skewed spans crossing the KCS railroad main line. Each bridge was approximately 700 feet long. The spans consisted of precast prestressed concrete girders supported by precast prestressed concrete pile bent substructures. Wes completed the design in accordance with LADOTD requirements, the Louisiana Standard Specifications for Roads and Bridges, the LADOTD Bridge Design and Evaluation Manual (BDEM), and the AASHTO LRFD Bridge Design Specifications.
02/10-12/11	TxDOT Dallas, Collin County US 75 Bridge Layouts Dallas, TX. <i>Engineer of Record.</i> Wes developed the preliminary and final bridge layouts for five bridges, including three highway underpass structures carrying US 75 over local roadways and two ramp overpass bridges. He established bridge geometry, span arrangements, girder layouts, and framing plans using TxDOT prestressed concrete girder sections (Tx46, Tx54, and Tx62). Wes designed the multi-column bent configurations and drilled-shaft foundation layouts, developed phased construction layouts for one underpass bridge, and resolved the curved and skewed geometry requirements for the ramp structures.

Firm employed by HDR Engineering, Inc.				
Name	David Knickerbocker, PhD, PE		Years of relevant experience with this employer	11
Title	Movable Bridge Practice Lead/Program Manager		Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization			PhD / 2005 / Structural Engineering MS / 2001 / Structural Engineering BS / 1998 / Civil Engineering	
Active registration number / state / expiration date			PE.40004 / LA / 03-31-2028	
Year registered	2015	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Task 3: Analysis & Load Rating, Task 4: Training, Task 7: Bridge Rating Review / (Meets MPR 4)	
David has over 29 years of experience performing structural analysis, bridge load ratings, independent load rating reviews, movable bridge inspections, rehabilitation design, and complex bridge engineering evaluations. Certifications: FHWA-NHI-130055 Safety Inspection of In-Service Bridges (2011; Refresher Course 2022)				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
05/25–10/25; 05/26–08/26	SCDOT, Old Ashley River Bridge Rehabilitation and Bascule Span Replacement Charleston, SC. Deputy PM & Movable Bridge Lead. David performed alternatives analysis, preliminary design, and final design for the retrofit of bascule pier and foundations, and replacement bascule span and bascule pier spans. He also performed AASHTOware BrR load rating.			
01/26–04/26	NCDOT, Aurora-Bayview Ferry Ramp Replacement Aurora-Bayview, NC. Movable Bridge Lead. David performed design and AASHTOware BrR load rating for the replacement ramp structures, including counterweighted two-girder rotating-actuated ramps with steel deck plate and a steel-pile lift-bent supporting ramp, counterweight, and operating machinery.			
06/23–12/23	CSX Transportation, Schuylkill River Swing Bridge Aerial Cable Philadelphia, PA. Structural Engineer-of-Record. David designed and detailed the aerial messenger cable power supply support system. He developed structural calculations, designed support components and connections, and prepared the final construction documents for the system to accommodate bridge movement and operational loading associated with the swing span.			
10/22–03/23	Norfolk Southern Railroad, Elizabeth River Bridge 5 Norfolk, VA. Project Manager. David performed structural analyses and developed Cooper E load ratings for each span (one Rolling lift thru-truss, one Scherzer track thru-girder, and five thru-girder approaches) of Bridge 5. He evaluated the bridge’s load-carrying capacity under freight rail loading and identified capacity limitations and deterioration-related impacts.			
01/22–04/22	Norfolk Southern Railroad, Elizabeth River Bridge 7 Norfolk, VA. Project Manager. David performed structural analyses and developed Cooper E load ratings for two movable railroad bridges spanning the Elizabeth River. He evaluated the bridge’s load-carrying capacity under freight-rail loading and the span-balance condition. He identified capacity limitations and deterioration-related impacts and prepared repair and rehabilitation recommendations and plans to improve span balance and strength.			
01/22–09/22	City of Charleston, Ashley River Crossing – Pedestrian/Bicycle Bridge Charleston, SC. Movable Bridge Lead. As Engineer-of-Record in design-build preparation, David developed the structural design, including movable span type selection, preliminary (30%) design plans and estimates for the selected cable-stayed bobtail swing span type, cost and risk analysis coordination, RFP production including design criteria and special provisions, comprehensive design reviews, and construction engineering/inspection services.			
05/21–11/21	SCDOT, Wappoo Creek Bascule Bridge Rehabilitation Charleston, SC. Structural Engineer-of-Record. David performed structural analysis and developed rehabilitation designs for this complex movable bascule bridge. He analyzed span-lock systems, floor beams, live-load-bearing stiffeners, grid-deck connections, and counterweight balance conditions. His engineering evaluations were used to determine member adequacy, rehabilitation requirements, and long-term structural performance.			
01/21–05/21	Seattle DOT, University Bridge Load Rating Seattle, WA. Movable Bridge Advisor. David performed the load rating of a complex double-leaf deck-truss bascule bridge in accordance with the AASHTO LFR methodology. He developed and reviewed structural analyses for movable-span boundary conditions, span locks, live-load shoes, floor systems, and supporting structural members. David evaluated gusset plates, cross-frame trusses, splice plates, and members subjected to combined axial and flexural loading and prepared recommendations supporting final rating determinations.			
09/20–12/20	Canadian National Railroad, Black Rock Swing Bridge Buffalo, NY. Load Rating Lead. David performed and coordinated the load rating of a complex rim-bearing through-truss multi-modal (freight rail, vehicular, mixed-use/pedestrian path) swing bridge in			

	accordance with AREMA and AASHTO. David reviewed inspection reports, performed detailed load-rating calculations (floor system members, truss members, main truss gusset plates, and the radial rim-bearing structural system), and produced the load-rating results.
09/19–02/20	Michigan DOT, Houghton-Hancock Vertical Lift Bridge Rehabilitation Hancock, MI. Senior Structural Engineer. David designed the vertical-lift span rehabilitation from conceptualization through final design, including span guides, rocker bearings, structural steel repairs, plug welds for fracture/fatigue considerations, and roadway joint replacement, with associated staging.
12/18–08/19	Port Authority of New York/New Jersey, Cross-Harbor Freight Program – 65th Street Transfer Movable Bridge Rehabilitation Brooklyn, NY. Inspection Team Leader / Structural Engineer-of-Record. David conducted a structural evaluation, including inspection, load rating , and a summary report, of the existing 100-foot-long, 2-track freight car transfer bridge between the transport barge and the grade track. He also designed the rehabilitation , including analysis of material-loss-induced capacity reductions, comparison of criteria, fatigue assessment, and development of a structural steel repair contract drawing package.
02/19–5/19	FDOT, Davie Boulevard and SR 84 Load Ratings Fort Lauderdale, FL. Structural Lead. David performed load rating of two movable bridges and produced the associated reports for one double-leaf Scherzer rolling lift bascule (Davie Blvd Bridge), and one single-leaf trunnion bascule (SR-84 Bridge) span, along with their flanking spans.
09/18–02/19 and 05/20–08/20	Virginia Department of Transportation (VDOT), Route 156 over the James River, Benjamin Harrison Lift Bridge Hopewell, VA. Task Manager / Structural Engineer. David performed the load rating of the complex vertical-lift truss bridge , including analysis of lift-span truss members, gusset plates, floor systems, and flanking tower spans. He developed structural analysis models, calculated demand-to-capacity ratios, evaluated member capacities, prepared load-rating documentation, and coordinated technical reviews. In addition, he designed the aerial cable system and developed associated structural analyses and detailed design calculations.
12/16–05/17	CSX Transportation, Spottsville (Green River) Draw Bridge Rehabilitation Spottsville, KY. Structural Engineer-of-Record. The project consisted of the rehabilitation of a single-track rail through-truss (260-foot) swing span and a 153-foot approach span. David developed final design plans and estimates. He coordinated superstructure jacking operations, prepared a fully detailed structural steel end floorbeam strengthening design, and staged demolition and rehabilitation of the reinforced concrete cap.
06/17–03/18	CSX Transportation, Bayou Sara Swing Bridge Replacement Mobile, AL. Project Engineer. David was responsible for the replacement of the two-track, through girder swing bridge design . The new bridge design features a metalized through-girder superstructure with a gantry-mounted operating machinery house, conventional center bearing with hydraulic operating machinery, and an automated control system. David designed a center pier steel skid institute to reduce track downtime in the replacement procedure from the originally allotted 40-hour track outage, down to 14 hours. David also oversaw the float-in procedure on-site.
09/14–04/15	New York City DOT, Unionport Bridge New York, NY. Lead Structural Engineer. This project replaced a double-leaf bascule span with twin single-leaf bascule spans. David designed the bascule span , including a half-filled grid deck, roadway details (joints, barriers, walkways, etc.), steel stringers, floor beams, and bascule girders.
02/13–08/14	City of Victoria, Johnson Street Bridge Replacement Victoria, BC. Structural Engineer. Design of an architecture-driven roller-nest bearing bascule span . David produced a detailed 3D structural analysis model to determine design forces for structural and mechanical components under load combinations, including seismic effects from a detailed time-history analysis. David designed the structural roller ring and supporting roller-nest frames , seismic fuse tail lock, counterweight details, rest pier bearing, drilled shaft foundations (including seismic detailing), end floorbeam, shared-use path support outriggers, and counterweight/balance systems.
02/09–11/09	New Jersey Turnpike Authority (NJTA), Newark Bay Bridge, Newark, NJ. Project Engineer. David performed verification inspection, load rating , and rehabilitation design for the Newark Bay Bridge, a three-span continuous tied through-arch truss structure . He developed an extensive 3D structural model and conducted parametric studies to evaluate tie chord redundancy and the feasibility of eliminating roadway joints. David performed load ratings of the truss , including gusset plates and the floor system, and identified steel repairs based on the analysis. He designed the existing non-composite deck replacement with a composite precast deck panel system.

Firm employed by HDR Engineering, Inc.				
Name	Michael Kochly, PE		Years of relevant experience with this employer	18
Title	Bridges & Structures Section Manager		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		MS / 2006 / Civil Engineering BS / 2003 / Civil Engineering		
Active registration number / state / expiration date		PE.74571 / CA / 12-31-2027		
Year registered	2009	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating		
Mike has nearly 20 years of experience in bridge load rating, structural analysis, bridge inspection, and bridge design for highway and railroad structures. His expertise includes LRFR load ratings, refined finite element modeling, structural capacity evaluations, load posting assessments, permit vehicle analysis, and QA/QC review of complex bridge rating assignments. Mike has performed and managed ratings of steel and concrete bridge components in accordance with the AASHTO Manual for Bridge Evaluation, using advanced analytical tools such as CSiBridge. His experience includes evaluating existing structures for legal, permit, emergency-vehicle, and specialized-hauling-vehicle loads, as well as developing rehabilitation recommendations and repair solutions based on load-rating analyses. Certifications: FHWA-NHI 130053, FHWA-NHI 130055, FHWA-NHI 130078.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
09/20–04/23	Caltrans, Statewide Bridge Load Rating Statewide, CA. Task Order Manager / Project Engineer. Mike managed and quality-controlled LRFR load rating evaluations for bridges and tunnels statewide in accordance with the AASHTO Manual for Bridge Evaluation and the Caltrans Bridge Load Rating Manual. He led refined 3D finite element analyses using CSiBridge for steel and concrete bridge components, including superstructures, cross frames, lateral bracing, hammerhead bent caps, anchor bolt assemblies, pin-and-hanger systems, reinforced concrete slabs, and transverse floor beams. Mike reviewed ratings for HL-93, AASHTO Legal Loads, Specialized Hauling Vehicles (SHVs), Emergency Vehicles (EVs), and Caltrans permit vehicles, verified rating factors and structural capacities, performed detailed FEM model reviews, supervised technical staff, and prepared Caltrans Load Rating Summary Sheets supporting load posting, permit review, and rehabilitation decisions.			
05/15–Ongoing	Golden Gate Bridge District, Bridge Inspection Services San Francisco, CA. Project Engineer / Inspector / QA/QC. Mike performed structural evaluations and load rating assessments of fracture-critical bridge components, including truss members, floor beams, and other primary load-carrying elements identified during in-depth inspections of the Golden Gate Bridge. He reviewed and updated controlling load ratings for AASHTO Legal Loads, Specialized Hauling Vehicles (SHVs), and Emergency Vehicles (EVs) based on Condition State 4 findings and refined structural analyses. Mike evaluated member capacities, identified controlling rating elements, verified structural adequacy, and developed or quality-controlled repair recommendations and associated plan sheets resulting from load rating determinations.			
12/22–Ongoing	Bay Area Toll Authority (BATA), Life Cycle Asset Planning and Bridge Deterioration Models San Francisco, CA. Project Manager / Senior Bridge Engineer. Mike evaluated structural condition, deterioration trends, and bridge performance data for major long-span toll bridges to support structural assessment, rehabilitation planning, and bridge evaluation activities. He assessed preservation and rehabilitation alternatives, reviewed factors affecting load-carrying capacity and service life, and developed life-cycle cost analyses supporting long-term bridge management and investment decisions.			
10/25–Ongoing	Michigan DOT, I-94 Asset Management Plan Wayne County, MI. Asset Management Lead. Mike led bridge evaluation and asset management activities supporting a major interstate modernization program, reviewing inspection data, bridge condition information, and structural performance metrics. He evaluated deterioration trends, assessed rehabilitation alternatives, and supported prioritization of bridge improvements based on structural condition, long-term performance, and future bridge evaluation needs.			
05/26–Ongoing	New York State Thruway Authority (NYSTA), Statewide Needs Assessment Statewide, NY. Bridge Engineer SME / Asset Management Advisor. Mike reviewed condition and performance information for more than 800 bridge structures statewide, including several major long-span bridges. He evaluated bridge performance trends, assessed future rehabilitation and replacement needs, reviewed bridge asset management practices, and provided recommendations supporting bridge evaluation strategies and long-range infrastructure planning.			

Firm employed by HDR Engineering, Inc.				
Name	Daniel Marsalone, PE		Years of relevant experience with this employer	1
Title	Bridge Engineering Leader		Years of relevant experience with other employer(s)	31
Degree(s) / Years / Specialization			BS / 1994 / Civil Engineering	
Active registration number / state / expiration date			PE.0028554 / LA / 09-30-2027	
Year registered	1999	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Task 1: Document Retrieval & Review, Task 3: Analysis & Load Rating, Task 7: Bridge Rating Review / (Meets MPR 5)	
Daniel has more than 30 years of bridge engineering experience, including serving as Project Manager, Engineer of Record, and Engineer in Responsible Charge for bridge inspection, evaluation, load rating, rehabilitation, and design projects performed in accordance with LADOTD Specifications, the LADOTD Bridge Design and Evaluation Manual (BDEM), and the AASHTO Manual for Bridge Evaluation (MBE). He has extensive experience performing LRFR load ratings, bridge rating reviews, structural analyses, bridge evaluations, and rehabilitation assessments for LADOTD bridge 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).			
04/25-Ongoing	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. <i>Lead Bridge Engineer & Engineer of Record.</i> Daniel performs quality reviews of inspection findings, structural analyses, AASHTOWare BrR LRFR load ratings, and load-rating reports for six movable bridges in southern Louisiana. He reviews analytical models, verifies load-rating calculations , evaluates bridge load-carrying capacity, reviews bridge inspection reports, and develops prioritized rehabilitation recommendations based on inspection and load-rating findings. He also reviews rating assumptions, critical load paths, controlling members, and engineering recommendations to confirm consistency with bridge conditions identified during inspection activities. Work is performed in accordance with LADOTD Specifications, LADOTD BDEM, and AASHTO MBE.			
08/21-10/22	LADOTD, Causeway and Earhart Boulevard Interchange Jefferson Parish, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel designed two elevated ramp structures consisting of prestressed concrete girder spans and curved steel girder spans. He performed structural analyses of the superstructure, designed substructure and foundation elements, performed the LRFR load rating for the bridge using AASHTOWare BrR , and verified the bridge's load-carrying capacity in accordance with LADOTD Specifications, LADOTD BDEM, and AASHTO MBE. He performed engineering evaluations of both permanent and construction loading conditions and documented compliance with applicable rating and design requirements.			
08/17-04/18	LADOTD, I-10: LA 73 to LA 30, Route I-10, Ascension Parish, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel used AASHTOWare BrR to perform load rating of the existing I-10 EB and WB bridges over LA 429. The existing EB structure was a four-span, 294'-6", Type III girder bridge. The existing WB structure was a four-span, 259'-2¼", AASHTO Type III prestressed concrete girder bridge. Substructure for both EB and WB structures consisted of pile bents.			
11/16-10/17	LADOTD, Sauve Rd. Bridge over Soniat Canal, Jefferson Parish, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel designed the new 60-foot, single-span bridge. The bridge consisted of a single AASHTO Type II prestressed concrete girder span and was designed in accordance with LADOTD Specifications and LADOTD BDEM. The substructure consisted of pile bents. He also performed the as-designed bridge rating utilizing AASHTOWare BrR .			
02/16-12/16	LADOTD, LA 45: Goose Bayou Bridge and Approaches, Jefferson Parish, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel designed a new 405-foot, 19-span bridge. The bridge, consisting of one 45-foot AASHTO Type II prestressed concrete girder span and 18 20-foot cast-in-place slab spans, was designed in accordance with LADOTD Specifications and LADOTD BDEM. The substructure consisted of pile bents. Daniel also performed the as-designed bridge rating utilizing AASHTOWare's BrR .			
09/16–11/16	LADOTD, US 190 Mississippi River Bridge Repairs Baton Rouge, LA. <i>Lead Bridge Engineer & Engineer of Record.</i> Daniel conducted an in-depth bridge pier inspection, in accordance with LADOTD standard specifications and BDEM, after severe deterioration was identified during routine inspection activities. He evaluated distress near the bearing assemblies, determined the cause of the damage, performed structural analyses of repair alternatives, and prepared an inspection, analysis, and rehabilitation report supporting bridge preservation and continued service. His evaluation included assessment of the effects of deterioration on structural performance and development of rehabilitation recommendations to restore capacity and serviceability.			

04/16–10/16	LADOTD, US 190 Phase II, Mississippi River Railroad Bridge Maintenance and Rehabilitation Baton Rouge, LA. <i>Lead Bridge Engineer & Project Manager.</i> Daniel designed replacement rocker bearings, anchor bolts, and bent-post-angle repairs for the bridge rehabilitation project. He performed structural analyses of replacement components, developed design calculations, evaluated field conditions, and prepared design revisions addressing structural deficiencies encountered during construction. Work was performed in accordance with LADOTD Specifications and LADOTD BDEM. He also evaluated load transfer mechanisms and member demands to confirm the adequacy of the rehabilitation measures.
04/15-04/16	LADOTD, Wisner Boulevard Bridge over I-610/Norfolk Southern Replacement New Orleans, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel performed structural analysis and design of the bridge superstructure, substructure, and foundations. He developed the as-designed LRFR load-rating calculations utilizing AASHTOWare BrR and evaluated bridge load-carrying capacity in accordance with LADOTD Specifications, LADOTD BDEM, and AASHTO MBE. He developed analytical models, evaluated controlling rating conditions, and prepared documentation supporting final bridge acceptance.
04/15-05/16	LADOTD, Route LA 705 over Bayou Queue de Tortue, Vermillion & Acadia Parishes, LA. <i>Lead Bridge Engineer.</i> Daniel performed structural analysis and design of the bridge superstructure, substructure, and foundations. He developed the as-designed LRFR load-rating calculations utilizing AASHTOWare BrR and evaluated bridge load-carrying capacity in accordance with LADOTD Specifications, LADOTD BDEM, and AASHTO MBE. He developed analytical models, evaluated controlling rating conditions, and prepared documentation supporting final bridge acceptance.
05/14-11/14	Jefferson Parish Department of Public Works, Bridge Inspection and Load Rating Report for Causeway Boulevard/Airline Drive Interchange Metairie, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel was the team leader conducting bridge inspections, performing field assessments, developing structural evaluation models, calculating load ratings, and preparing load-rating reports for multiple bridges within the interchange. He evaluated load-carrying capacity , identified structurally deficient elements, developed repair recommendations, and prepared temporary traffic control plans to support inspection activities.
11/05-06/07	Arizona DOT, US Hwy 91, Beaver Dam Wash Bridge Replacement, Mohave County, AZ. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel inspected the flood-damaged bridge, performed the load rating of the compromised structure utilizing Virtis, and prepared the Structural Selection Report recommending the replacement bridge for the Beaver Dam Wash Bridge, whose approaches were washed out during a severe storm event. He was also responsible for the preliminary and final design of the four-span 410-foot replacement bridge over Beaver Dam Wash. The project featured phased construction to maintain traffic during the new bridge's construction. The bridge consisted of Type IV AASHTO girders on drilled shaft foundations and featured extensive scour protection. In addition, he performed the as-designed bridge rating for the new structure utilizing Virtis.
11/04–08/05	LADOTD, Church Street Bridge Over Cane River Natchitoches, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel led the bridge inspection in accordance with the AASHTO MBE. He performed the load-rating analysis of the historic bridge utilizing Virtis , assessed load-carrying capacity, evaluated rehabilitation alternatives, and developed bridge preservation recommendations in accordance with LADOTD Specifications and the LADOTD Bridge Design Manual.
07/03-04/04	LADOTD, Florida Avenue Bridge Design New Orleans, LA. <i>Lead Bridge Engineer / Project Manager / Engineer of Record.</i> Daniel designed approximately one mile of elevated bridge approaches utilizing AASHTO Type III, Type IV, and bulb-tee prestressed concrete girders. He performed structural analyses of bridge superstructure and substructure elements, developed bridge design calculations, and evaluated load effects in accordance with LADOTD Specifications and LADOTD bridge design requirements. His work included girder analysis, foundation evaluation, and coordination of structural design deliverables.
01/95-06/96	LADOTD, Rehabilitation of Sunshine Bridge Over the Mississippi River Gonzales, LA. <i>Bridge Engineer.</i> Daniel designed structural modifications to the bridge deck support system and steel truss structure, performed truss analyses to evaluate increased loading from the replacement deck, designed fatigue-related repairs, and completed geometric realignment of the approach structures. Work was completed in accordance with applicable LADOTD bridge design requirements.

Firm employed by HDR Engineering, Inc.				
Name	Deanna Nevling, PhD, PE		Years of relevant experience with this employer	5
Title	Senior Bridge Engineer		Years of relevant experience with other employer(s)	22
Degree(s) / Years / Specialization		PhD / 2008 / Civil Engineering MS / 2003 / Civil Engineering BS / 2000 / Civil Engineering		
Active registration number / state / expiration date		PE.0046974 / LA / 03-31-2027		
Year registered	2022	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Technical Advisor & QA/QC, Task 4: Training		
Deanna is a Senior Bridge Engineer with over 24 years of experience in bridge load rating, structural analysis, bridge evaluation, and engineering training. She specializes in routine and complex load ratings for fixed and movable bridges and has performed load ratings for more than 1,000 bridges using AASHTOWare BrR, including prestressed concrete, steel girder, steel truss, reinforced concrete, and movable bridge structures. She has developed and implemented load-rating procedures for large DOT programs, performed quality reviews of hundreds of load ratings, and provided technical leadership for thousands of bridge rating evaluations. As HDR's Load Rating Technology Center Chair and NHI instructor, she develops and delivers bridge load-rating training, mentors bridge engineers nationwide, and provides technical guidance on complex bridge rating and structural analysis issues.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
01/24-Ongoing	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. Quality Reviewer. Deanna performs quality-control reviews of approach-span and movable-span load ratings for six vertical-lift bridges. She reviews rating methodologies, analytical models, rating assumptions, and load-rating reports to verify compliance with LADOTD requirements and AASHTO provisions. She provides technical guidance on movable-bridge load-rating procedures , quality assurance practices, and resolution of complex rating issues. Her reviews support consistent and defensible bridge load-rating results.			
04/19-Ongoing	South Carolina Department of Transportation (SCDOT), Bridge Load Rating and Evaluation Engineering Services Statewide SC. Task Manager and Technical Advisor. Deanna developed and implemented load-rating procedures and processes for a team of more than 30 bridge engineers who load-rated over 1,800 bridges in 18 months. She performed QA/QC reviews on more than 400 load ratings and provided technical guidance to the load rating team and five other consultants performing more than 92,300 load ratings. Deanna developed technical notes, standardized rating procedures, and training resources, and answered help desk questions to support consistent application of load rating methodologies across multiple consultant teams. She also established a load-rating procedure for reinforced-concrete channel-arch beam bridges based on test results and continues to mentor bridge-rating engineers. Deanna also developed training materials, mentoring programs, technical guidance documents, and standardized rating workflows for bridge engineers performing routine and complex load ratings across the statewide program.			
04/19–Ongoing	SCDOT, Bridge Load Rating Guidance Document and Bridge Inspection Guidance Document Statewide SC. Technical Advisor. As part of SCDOT’s first On-Call Bridge Inspection/Evaluation Contract, Deanna provided technical advisory support for the development of SCDOT’s Bridge Load Rating Guidance Document and Bridge Inspection Guidance Document , both formally reviewed and approved by FHWA. She contributed to the parametric study of over 9,000 bridges to determine rating vehicle requirements and prioritization order and provided guidance on load rating policies and procedures for steel, timber, and concrete bridges. These documents are now used by SCDOT staff and consultants for future live load capacity ratings and bridge inspections statewide.			
01/23-Ongoing	Missouri Department of Transportation (MoDOT), Large/Unusual Load Ratings Statewide MO. Quality Control Engineer. Deanna performed quality-control reviews of complex load ratings for major bridge structures , including floor beam, stringer, and girder systems, on a 3,000+-foot viaduct that has been widened multiple times. She provided technical guidance on load-rating procedures , engineering judgment, and quality-assurance practices to support accurate and defensible rating results. Deanna reviewed complex structural analysis models, evaluated engineering assumptions, and advised rating engineers on the development of defensible load-rating methodologies for unique bridge configurations.			
08/21-Ongoing	Virginia Department of Transportation (VDOT), Jamestown Ferry Hydraulic System Replacement Surry, VA. Lead Structural Engineer. Deanna reviewed design calculations, plans, and cost estimates for structural components associated with the replacement of the lift bridge's hydraulic system, including movable-span load-rating analyses. She assisted in developing bid documents, responded to contractors' questions, and provided technical guidance on structural design and load-rating requirements. She reviewed movable-span			

	load-rating analyses and provided technical guidance regarding rating assumptions, structural behavior, and integration of rehabilitation work with existing bridge load-rating requirements.
11/21-10/23	VDOT, High Rise Bridge Grid Deck Replacement and Steel Repairs Norfolk, VA. <i>Project Manager</i>. Deanna led the development of repair designs and construction documents for the rehabilitation of a bascule bridge span. She performed quality-control reviews of calculations, plans, estimates, shop drawings, and contractor submittals, and reviewed existing load ratings to verify that the bridge was not overstressed during construction. Deanna provided technical oversight to verify compliance with load-rating requirements and to verify safe construction staging. She reviewed existing load ratings, evaluated construction-stage loading effects, and verified that rehabilitation activities and construction staging did not adversely affect bridge load-carrying capacity.
01/20-Ongoing	National Highway Institute (NHI) Bridge Design and Load Rating Courses Nationwide US. <i>Instructor</i>. Deanna develops and delivers bridge load rating and bridge engineering training courses to transportation agencies and consulting engineering professionals nationwide. She provides instruction on load rating methodologies, structural analysis, AASHTO requirements, quality assurance practices, and best practices for routine and complex bridge rating applications. Course topics include AASHTO load-rating methodologies, AASHTOWare BrR implementation , structural analysis techniques, quality assurance procedures, rating of complex bridge systems, evaluation of load-carrying capacity, and engineering judgment in load-rating practice. She provides both classroom instruction and technical mentoring to bridge engineers responsible for routine and complex load-rating programs.
02/18– 04/22	Tennessee Department of Transportation (TDOT), Bridge Load Rating Statewide TN. <i>Technical Advisor</i>. Deanna provided technical advisory support for the under TDOT's Bridge Repair contract. She used AASHTOWare BrR and multiple finite-element and bridge-design software platforms, along with in-house spreadsheets for verification. Ratings addressed damage, deterioration, and defects across a wide range of superstructure types in accordance with the AASHTO Manual for Condition Evaluation of Bridges.

Firm employed by HDR Engineering, Inc.				
Name	Erin O'Malley, PE (SPRAT 3)		Years of relevant experience with this employer	15
Title	Senior Bridge Engineer		Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization		MS / 2010 / Structural Engineering BS / 2008 / Architectural Engineering		
Active registration number / state / expiration date		PE.0043899 / LA / 03-31-2028		
Year registered	2019	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 2: Site Visits		
Erin is a Senior Bridge Engineer with 16 years of experience in bridge inspection, structural evaluation, load rating, and rope-access engineering. She specializes in the inspection of complex bridge structures, including movable bridges, trusses, nonredundant steel tension member (NSTM) bridges, cable-supported structures, and major river crossings. As a SPRAT Level 3 Rope access Technician, Erin leads inspection planning, rope-access operations, safety oversight, field investigations, and report development for bridge inspection programs throughout Louisiana and Texas. Her experience includes NBIS inspections, fracture-critical inspections, condition assessments, load rating support, and management of multidisciplinary inspection teams working in active rail, highway, and marine environments. Training: FHWA-NHI Course No. 130055, Safety Inspection of In-Service Bridges; FHWA-NHI Course No. 130053, Bridge Inspection Refresher Training; FHWA-NHI Course No. 130078, Fracture Critical Inspection Techniques for Steel Bridges; NHI Course No. 130078A, Bridge Inspection Techniques for Nonredundant Steel Tension Members (NSTM) Refresher; SPRAT Level 3 Rope access Technician, No. 131089 Expires: 02/02/2027				
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).			
05/25-06/25	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. Bridge Inspection Team Leader. Erin led rope-access inspections of lifting towers and associated structural components on six movable bridges in southern Louisiana. She assembled and supervised the rope-access inspection team, developed work plans and safety procedures, coordinated bridge access and marine traffic operations, and performed hands-on inspections of structural steel members. Erin documented structural conditions, identified deficiencies, collected field data supporting structural evaluations and load rating activities , and prepared or reviewed tower inspection reports for each bridge.			
02/20, 12/20, 04/23	LADOTD, Statewide In-Depth Complex Bridge Inspections Statewide LA. Bridge Inspection/Rope access Site Supervisor. Erin performed rope-access inspections of lift towers, truss members, floor systems, and other difficult-to-access structural components on the Red River Lift Bridge, Teche Bayou Lift Bridge, and Pearl River Swing Bridge. She developed work plans and safety procedures for SPRAT-certified inspectors, designed and rigged rope-access systems, and supervised field operations. Erin coordinated inspection activities with mechanical and electrical inspection teams and accommodated bridge openings required for marine traffic. She documented structural deficiencies, collected inspection data supporting bridge evaluations and load rating analyses , and prepared and reviewed structural inspection reports.			
11/23, 10/24	Port of New Orleans, Movable Bridge Inspections On-Call Contract New Orleans, LA. Bridge Inspection Team Leader. Using rope-access techniques, Erin led a five-person inspection team for two movable railroad bascule bridges carrying Class I rail traffic across the Inner Harbor Navigation Canal. She coordinated inspection activities with railroad operators, bridge personnel, and marine traffic representatives to safely maintain active operations throughout the inspection. Erin performed hands-on inspection of bascule trusses and counterweight structures, documented structural conditions, developed recommendations for maintenance and repair, prepared the above-deck structural inspection reports, and reviewed structural, mechanical, and electrical findings.			
10/20–11/20	TxDOT Bridge Division, Movable Bridges Asset Maintenance Rio Hondo, TX. Bridge Inspection/Rope access Site Supervisor. Erin supervised rope-access inspection of the Rio Hondo Lift Bridge towers, lift-span framing, and approach-span components located beyond the reach of conventional inspection equipment. She developed work plans, safety procedures, and access systems for SPRAT-certified inspectors and coordinated field activities with bridge operations personnel. The inspection included both general condition assessment and detailed evaluation of structural elements requiring repair or maintenance. Erin documented inspection findings, collected field measurements supporting rehabilitation planning and structural evaluations, and prepared tower inspection reports.			
05/12-09/21 and 07/24-Ongoing	TxDOT, Non-Redundant Steel Tension Members (NSTM) (formerly Fracture Critical) and Complex Bridge Inspection Contract Statewide TX. Bridge Inspection Team Leader. Erin has supported six contract cycles of TxDOT's statewide NSTM and complex bridge inspection program, progressing from Assistant Inspector to Team Leader and statewide Rope access Leader. She leads inspection			

	planning, field operations, report preparation, and rope-access activities for complex bridge structures, including trusses, plate girder bridges, box-girder bridges, tub-girder bridges, cable-supported bridges, floor systems, railroad bridges, and signature structures. Erin coordinates inspections from mobilization through final reporting and documents structural deficiencies affecting bridge performance and serviceability. In support of the program's load rating activities, she also performs load ratings of steel I-girder, plate-girder, truss, floorbeam, gusset-plate, and small rural bridge structures and provides technical review of inspection findings used in structural evaluation and load rating analyses.
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Firm employed by HDR Engineering, Inc.				
Name	Ed Oliver, PE		Years of relevant experience with this employer	9
Title	Senior Bridge Engineer		Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization		BS / 1997 / Civil / Structural Engineering		
Active registration number/state / expiration date		PE.0050223 / LA / 09-30-2027		
Year registered	2025	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating, Task 8: Miscellaneous Rating Work / (Meets MPR 5)		
Ed has over 29 years of bridge engineering experience, including bridge inspection, structural analysis, bridge load rating, rehabilitation design, and construction engineering for fixed and movable bridges. He has more than five years of experience performing LRFR, LRFD, LFR, and LFD bridge load ratings using AASHTOWare Bridge Rating (BrR) for state DOT, municipal, and railroad clients. His experience includes structural modeling, bridge load-carrying capacity evaluations, legal-load and permit-load assessments, preparation of load rating reports, rehabilitation scoping based on load rating findings, and miscellaneous bridge rating support services for complex fixed and movable bridge structures. He is proficient in AASHTOWare BrR modeling, rating factor development, load path evaluation, and capacity assessments for truss, girder, bascule, vertical-lift, and swing-span bridge systems.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
02/22-08/22	Norfolk Southern, RR Bridge M.P. No. 5 Chesapeake, VA. Load Rating Engineer. Ed performed a detailed bridge load rating of a complex two-track, single-leaf Scherzer rolling-lift through-truss bascule bridge, including the movable-span truss members, floor system, through girders, and approach-span components. He developed structural models for live- and dead-load conditions, calculated member capacities and rating factors, evaluated demand-to-capacity relationships using Cooper E-80 loading, identified rating-critical members and controlling load paths, and prepared the final load rating report documenting assumptions, methodology, analyses, and results. A key aspect of the assignment involved evaluating load transfer through the movable-span truss and bascule structure to verify the railroad bridge’s load-carrying capacity. Ed used AASHTOWare Bridge Rating (BrR) load rating software to develop rating models, evaluate member capacities, determine controlling bridge ratings, and document final load rating results.			
06/22-10/22	Norfolk Southern, RR Bridge No. 7 M.P. 6.66 Chesapeake, VA. Load Rating Engineer. Ed performed a detailed bridge load rating of a complex two-track, single-leaf Scherzer rolling-lift through-truss bascule bridge, including the movable-span truss members, floor system, through girders, and approach-span components. He developed structural models for live- and dead-load conditions, calculated member capacities and rating factors, evaluated demand-to-capacity relationships using Cooper E-80 loading, and prepared the final load rating report documenting assumptions, methodology, analyses, and results. This effort included a detailed evaluation of the approach spans, floor system, rating-critical members, and load transfer through the movable structure to confirm safe operation under railroad loading and support future maintenance planning. Ed utilized AASHTOWare Bridge Rating (BrR) load rating software to develop rating models, evaluate member capacities, determine controlling bridge load-carrying capacity, and prepare load rating recommendations.			
10/22-01/23	Norfolk Southern, Bridge 5 and Bridge 7 Load Rating Chesapeake, VA. Load Rating Engineer. Ed performed detailed bridge load ratings for Bridge 5 and Bridge 7, including the movable-span truss, floor system, through girders, and approach spans. Bridge 5 is a complex two-track single-leaf Scherzer rolling-lift through-truss bascule bridge crossing the Eastern Elizabeth River. He developed live- and dead-load rating models, calculated member capacities and rating factors, evaluated demand-to-capacity relationships for Cooper E-80 and Norfolk Southern freight-car loadings, and identified rating-critical members. Ed prepared the final load-rating report documenting assumptions, methodologies, analyses, calculations, and load-rating results to verify bridge load-carrying capacity for continued railroad operations.			
02/21-05/21	MDOT, US-31 over the Manistee River Load Rating Manistee, MI. Load Rating Engineer. Ed is leading the rehabilitation of the double-leaf Scherzer rolling-lift bascule bridge, including structural steel strengthening repairs, deck rehabilitation, bearing replacement, strike plate adjustments, and accelerated construction staging. Ed performed LRFR bridge load ratings using AASHTOWare Bridge Rating (BrR) for the movable and approach spans to evaluate load-carrying capacity, identify rating-critical members, and determine rehabilitation needs. He developed and updated rating models, evaluated member capacities and rating factors, assessed structural deficiencies affecting bridge capacity, and prepared load-rating calculations and supporting documentation. Based on the load-rating results, Ed developed strengthening strategies, evaluated repair alternatives to restore load-carrying capacity, and verified the effectiveness of proposed rehabilitation measures.			

07/21-04/22	City of South Haven, M-43 (Dyckman Avenue) Bascule Bridge over the Black River South Haven, MI. Load Rating Engineer. Ed performed an LFR bridge load rating update for the Dyckman Avenue Bascule Bridge in accordance with AASHTO and MDOT requirements. He developed load-rating models, evaluated federal and Michigan legal loads, calculated member capacities and rating factors, assessed field-observed deficiencies, identified controlling members, and prepared the final load-rating report. Ed utilized AASHTOWare Bridge Rating (BrR) to evaluate bridge load-carrying capacity and determine allowable vehicle ratings.
03/19-08/19	FDOT, SR84 & Davie Boulevard over South Fork New River Fort Lauderdale, FL. Load Rating Engineer. Ed performed LRFR bridge load ratings for two bascule bridges and their approach spans in accordance with the FDOT Load Rating Manual. He modeled HL-93, legal, emergency-vehicle, and permit loads; calculated distribution factors, member capacities, and rating factors; identified controlling members; and prepared rating documentation. Ed utilized AASHTOWare Bridge Rating (BrR) with supplemental analysis tools to determine design, legal, emergency-vehicle, and permit load ratings.
03/25-05/25	FDOT, Sunrise Boulevard S.R. 838 Bridge No. 860466 over Intracoastal Waterway Fort Lauderdale, FL. Load Rating Engineer. Ed performed LRFD bridge load ratings for twin trunnion bascule bridges, including the movable and flanking spans. He developed live- and dead-load models, incorporated field-documented deficiencies into the structural evaluations, calculated member capacities and rating factors, identified rating-critical members and controlling load locations, and prepared final load rating summaries and narrative reports in accordance with FDOT load rating requirements. Ed utilized AASHTOWare Bridge Rating (BrR) load rating software to model the bridge components, evaluate movable-span and approach-span load-carrying capacity, and document controlling bridge ratings.
09/24-12/24	FDOT, Dixie Highway Trunnion Bridge No. 890003 over St. Lucie River Stuart, FL. Load Rating Engineer. Ed performed an LFD bridge load rating of a double-leaf trunnion bascule bridge. He developed structural models for design, legal, and emergency-vehicle loadings; calculated member capacities and rating factors; incorporated field-reported deficiencies into the capacity evaluations; identified rating-critical members and controlling load locations; and prepared final load rating summaries and supporting technical documentation. Ed utilized AASHTOWare Bridge Rating (BrR) load rating software to perform the structural load rating analyses, evaluate bridge load-carrying capacity, and document controlling bridge ratings.
11/24-04/25	FDOT, Las Olas Boulevard Trunnion Bridge No. 860018 over Intracoastal Waterway Fort Lauderdale, FL. Load Rating Engineer. Ed performed LRFD load ratings of a double-leaf trunnion bascule bridge and associated flanking spans. He developed live- and dead-load models, calculated member capacities and rating factors, evaluated posting-avoidance strategies, and prepared final load rating reports documenting assumptions, analyses, and controlling rating locations. Ed used AASHTOWare BrB load rating software to evaluate bridge capacity and develop load ratings for movable and approach spans.
08/20-12/20	FDOT, West Venetian Causeway Bascule Bridge over Biscayne Bay (Trunnion Bridge) Miami Beach, FL. Load Rating Engineer. Ed performed the load rating of a complex 41-span bridge system consisting of concrete approach spans, steel fixed spans, and a double-leaf trunnion bascule span. He developed live- and dead-load models, evaluated member capacities and rating factors for design, legal, and emergency vehicles, identified controlling ratings, and prepared the final load rating report in accordance with FDOT and AASHTO requirements. Ed utilized AASHTOWare BrR and supplemental analysis tools to determine controlling bridge load ratings and load-carrying capacity.
01/25-06/26	MDOT, M-25 Veterans Memorial Bridge Rehabilitation. Bay City, MI. Lead Bridge Engineer. Ed is leading the rehabilitation of the double-leaf Scherzer rolling-lift bascule bridge, including structural steel strengthening repairs, deck rehabilitation, bearing replacement, strike plate adjustments, and accelerated construction staging. He performed project scoping, coordinated structural and mechanical repairs, and developed strengthening strategies based on AASHTOWare Bridge Rating (BrR) load rating evaluations . Ed assessed member capacity deficiencies identified through bridge load rating analyses , evaluated repair alternatives to restore load-carrying capacity, and verified the effectiveness of proposed rehabilitation measures.

Firm employed by HDR Engineering, Inc.				
Name	Akash Rao, SE, PE		Years of relevant experience with this employer	1
Title	Senior Project Manager		Years of relevant experience with other employer(s)	19
Degree(s) / Years / Specialization		MS / 2007 / Structural Engineering BS / 2002 / Civil Engineering		
Active registration number / state / expiration date		PE.0036809 / LA / 03-31-2028		
Year registered	2011	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating (Meets MPR 5)		
Akash has more than 20 years of experience delivering bridge, movable bridge, tunnel, and transportation infrastructure projects for DOTs, toll authorities, rail agencies, and transportation owners across the U.S. and Canada. He has served as Engineer of Record, Project Manager, Independent Design Quality Manager, and Technical Reviewer on complex assignments involving bridge inspections, load ratings, structural evaluations, rehabilitation, repairs, replacement design, quality assurance, and construction support. Akash is an NHI-certified Bridge Inspection Team Leader, Tunnel Inspection Team Leader, FHWA NHI bridge inspection instructor, and provider of bridge inspection training nationwide. Certifications: NHI Instructor of Excellence (2024); NHI 130055 Safety Inspection of In-Service Bridges; 130053 Bridge Inspection Refresher; 130078 Bridge Inspection Techniques for NSTMs; 130110 Tunnel Safety Inspection; and 130092 Load and Resistance Factor Rating of Highway Bridges.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
07/24-Ongoing	Maryland State Highway Administration (MDOT SHA), On-Call Bridge Condition Inspections and Evaluation Services Statewide MD. Senior Project Manager, Senior Bridge Engineer. Akash managed statewide bridge inspection and evaluation assignments involving more than 400 bridges. He retrieved plans and historical documents, performed hands-on and NSTM inspections, responded to emergency inspection needs, and completed load ratings for prestressed concrete girder, steel girder, movable, truss, and load-posted bridges. He evaluated bridge conditions, reviewed and updated load ratings as necessary, and recommended follow-up actions, including posting revisions, increased inspection frequencies, and repair or retrofit measures in accordance with AASHTO MBE and MDOT SHA Guidelines and Procedures Memorandums (GPM) requirements.			
07/24-Ongoing	Maryland Transportation Authority (MDTA), Comprehensive Preliminary Engineering and Final Design Services Statewide MD. Senior Project Manager, Senior Bridge Engineer. Akash provided load rating services for signature bridges and tunnels throughout Maryland. He retrieved plans and supporting documentation, evaluated structural conditions, and performed load ratings for prestressed concrete girder bridges, steel girder bridges, double-leaf bascule bridges, deck and through truss structures, steel box girder bridges, and tunnels. Using AASHTO BrR, he verified and updated load ratings, assessed posting requirements, and supported recommendations for inspections, repairs, and retrofits in accordance with AASHTO MBE and MDOT SHA GPM requirements.			
01/20-05/21	LADOTD, Load Rating of 354 Off-System Bridges Statewide LA. Senior Bridge Engineer. Akash conducted plan and document retrieval, structural analysis, and load ratings for 354 off-system bridges throughout Louisiana. He evaluated slab spans, prestressed concrete girder bridges, steel stringer and beam bridges, reinforced concrete beam bridges, steel plate girder bridges, and timber-supported structures. He developed a systematic methodology for calculating dead and live load effects and used AASHTO BrR to model AASHTO and LADOTD design vehicles, legal vehicles, SHVs, and EVs. He completed analyses in accordance with the AASHTO MBE, LADOTD Bridge Design Manual, and AASHTO LRFD Specifications, and performed QA/QC reviews of the load ratings for more than 100 bridges.			
01/20-06/21	LADOTD, Load Rating of 14 Complex Bridges Statewide LA. Senior Bridge Engineer. Akash completed plan and document retrieval, structural analysis, and load rating for 14 complex bridge structures, including swing, bascule, and truss bridges, as well as curved steel spans. He developed analytical models using AASHTO BrR and performed load rating evaluations in accordance with the AASHTO MBE, LADOTD Bridge Design Manual, and AASHTO LRFD Specifications.			
03/17-12/19	North Carolina DOT, Hertford Swing Bridge Replacement Design-Build Hertford, NC. Project Manager. Akash managed the structural analysis, design, and load rating of the replacement bridge across the Perquimans River, including prestressed concrete girder approach spans and a Pratt-truss swing span. He developed a CSiBridge model to evaluate dead, live, thermal, machinery, and wind loads and created Mathcad and Excel tools to process analytical results for truss members, gusset plates, stringers, and floorbeams. He completed design and load rating evaluations in accordance with AASHTO LRFD Bridge Design Specifications, the NCDOT Structures Management Unit Design Manual, and AASHTO LRFD Movable Bridge Design Specifications.			

04/15-04/17	North Carolina DOT, Alligator River Swing Bridge Rehabilitation Tyrrell and Dare Counties, NC. Senior Bridge Engineer. Akash performed plan and document retrieval, structural analysis, and load ratings for a girder-Type swing bridge spanning the Alligator River. He developed a CSiBridge model to evaluate dead, live, thermal, machinery, and wind loading effects and completed load ratings of stringers, floorbeams, and main girders in accordance with AASHTO LRFD Bridge Design Specifications, the NCDOT SMU Design Manual, and AASHTO LRFD Movable Bridge Design Specifications. He also designed steel plate retrofits that restored load-carrying capacity for SHV and EV vehicles.
09/16-10/19	MDTA, Chesapeake Bay Bridge Deck Truss Spans Load Rating Chesapeake Bay, MD. Senior Bridge. Akash analyzed and load rated floorbeams, truss members, and gusset plates on multiple deck truss spans as part of the Chesapeake Bay Bridge deck replacement study and 60% design. He evaluated HL-93 loading, Maryland legal and permit vehicles, EVs, and multiple deck replacement alternatives, including steel battle deck, grid deck systems, Exodermic deck, precast concrete deck, cast-in-place concrete deck, and orthotropic deck systems. He developed CSiBridge and LARSA models to assess dead loads, live loads, and construction staging effects and evaluated strengthening requirements for floorbeams, gusset plates, and truss members.
06/15-06/16	St. Lawrence Seaway Management Corporation, Load Rating and Seismic Evaluation of Vertical Lift Bridge 11. Senior Bridge Engineer. Akash performed inspections, load ratings , and seismic evaluations for vertical lift bridge 11. He conducted site visits and audit inspections, reviewed plans and historical records, and evaluated the floor system, lift-span truss members, and lift towers. He developed separate 3D CSI Bridge models for live-load and seismic analyses, evaluated wind and seismic effects on the structure, and completed load ratings for legal, permit, and overweight vehicles in accordance with the Canadian Bridge Code. He documented the modeling methodology, analysis, and evaluation results in a comprehensive technical report.
08/21-08/23	FHWA National Highway Institute, Training IDIQ Nationwide US. Certified NHI Instructor. Akash instructed FHWA National Highway Institute bridge inspection courses throughout the United States, including NHI 130055 Safety Inspection of In-Service Bridges, NHI 130056 Safety Inspection of In-Service Bridges for Professional Engineers, and NHI 130053/130053A Bridge Inspection Refresher courses. He trained DOT personnel, bridge owners, and consultants on bridge inspection procedures, documentation and coding requirements, identification of critical findings, condition rating practices, and visual and advanced inspection techniques in accordance with AASHTO MBE and FHWA requirements.
01/15-01/19	Delaware DOT, Condition Inspection, Repairs, and Rehabilitation of Two Bascule Bridges . Senior Bridge Engineer. Akash completed inspections, structural analyses, rehabilitation design, and load ratings for two movable bridges , including the Rehoboth Avenue single-leaf bascule bridge and the Savannah Road double-leaf bascule bridge. He designed floorbeam and bascule girder retrofits that restored load ratings for AASHTO legal, Delaware legal, SHV, and EV vehicles. He also developed repairs for grid decks, sidewalks, joints, bearings, substructure elements, and control houses and coordinated with mechanical and electrical disciplines to design structural modifications needed for bridge balancing and counterweight improvements.

Firm employed by HDR Engineering, Inc.				
Name	Ronald Sanchez, PE		Years of relevant experience with this employer	6
Title	SE Movable Bridge Program Lead		Years of relevant experience with other employer(s)	24
Degree(s) / Years / Specialization		MS / 2019 / Structural Engineering Bachelor of Technology / 2016 / Civil Engineering		
Active registration number / state / expiration date		PE.0036556 / LA / 03-31-2028		
Year registered	2011	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load rating / (Meets MPR 4)		
Ronald is a structural engineer and project manager with more than 30 years of experience in the analysis, inspection, evaluation, load rating, rehabilitation, and design of complex bridge structures. His experience includes movable, bascule, swing, vertical-lift, segmental, and long-span transportation structures. Ronald has performed structural analyses, bridge evaluations, rehabilitation designs, load rating support, and quality-control reviews for bridge owners throughout the United States. As Engineer of Record on numerous complex bridge projects, he has developed structural designs, performed engineering evaluations, prepared calculations and specifications, and led multidisciplinary teams responsible for bridge inspection, rehabilitation, and project delivery.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
05/25–06/26	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. Lead Structural Engineer. Ronald is leading rehabilitation scoping and structural evaluations for six complex movable bridges throughout Louisiana. He develops design plans , structural calculations, specifications, and rehabilitation concepts; reviews NBIS inspection reports; evaluates structural deficiencies affecting bridge performance; and supports engineering assessments and load rating recommendations for bridge preservation and rehabilitation.			
04/23–03/25	CSX, Pearl River Bridge Pearlton, LA. Project Manager & Engineer of Record. Ronald designed the movable bridge equipment replacement , prepared engineering calculations and contract documents. He developed plans and specifications for upgrades to remote bridge operation, machinery repairs, and access improvements to support the continued safe operation of this movable bridge.			
05/23–03/25	FDOT District 4, Sunrise Boulevard Bridge over the ICWW Fort Lauderdale, FL. Project Manager & Engineer of Record. Ronald designed rehabilitation improvements for the movable bridge systems . He developed rehabilitation plans for bridge equipment replacement, MSE wall improvements, movable-span aluminum deck replacement, and fender-system upgrades, and supported the project's bridge load rating evaluation and structural assessment following rehabilitation.			
03/20–05/24	Martin County, Hobe Sound Bascule Bridge over the ICWW Martin County, FL. Project Manager & Engineer of Record. Ronald developed the structural rehabilitation design for this movable bascule bridge . He prepared contract plans, designed replacement structural components, coordinated utility relocations and permitting activities, and developed rehabilitation solutions for the electrical system, submarine cable, live-load shoes, and bumper blocks.			
02/13–02/15	FDOT, Sunny Isles Boulevard Bascule Bridge over ICWW Miami, FL. Engineer of Record. Ronald was responsible for the structural rehabilitation design of the twin Sunny Isles movable bridges , including preparation of the Bridge Development Report and rehabilitation plans. He designed deck grating, steel cantilever deck support brackets, and span-lock installation procedures .			
03/16–02/19	FDOT, North Causeway Bridge over ICWW Fort Pierce, FL. Project Manager. Ronald designed the replacement of the SR A1A North Causeway Movable Bridge , including alignment studies, structural analyses, segmental bridge superstructure design, and reinforced-concrete substructure design supported on prestressed concrete piles. He led the development of this complex movable bridge replacement from planning through design.			
08/25–07/26	CSX RR, Rigolets Swing Bridge Rehabilitation and Automation Project Orleans Parish/St. Tammany Parish, LA. Project Manager. Ronald led a multidisciplinary team to rehabilitate and automate the Rigolets Swing Bridge. He directed structural, mechanical, electrical, controls, and environmental engineering efforts supporting remote-operation upgrades, rehabilitation of critical bridge systems, constructability reviews, and permitting activities for this complex movable bridge.			
06/24–02/26	FDOT District 4, Bridge Rehabilitation for SR 707/Dixie Highway #890003 Martin County, FL. Project Manager & Engineer of Record. Ronald developed contract plans and rehabilitation designs for the movable bridge's mechanical and electrical systems, and coordinated structural repairs, fender improvements, access modifications, and cathodic protection measures. He also supported bridge load rating evaluations , structural assessments, traffic control planning, and permitting activities.			

07/24–06/26	FDOT District 4, Bridge Rehabilitation of Las Olas Boulevard Over the ICWW Broward County, FL. <i>Project Engineer.</i> Ronald developed the structural rehabilitation design for Las Olas Boulevard over the Intracoastal Waterway, including movable-span deck replacement, fender replacement, coating rehabilitation, tender-house improvements, electrical-control upgrades, and mechanical repairs. He also supported bridge load rating evaluations and structural assessments associated with the rehabilitation of the movable bridge.
02/12–03/13	Miami Dade County, Port Miami/FEC Railroad Rolling Lift Bridge over Biscayne Bay Miami, FL. <i>Project Engineer.</i> The scope for this fast-track \$6 million DB contract included the rehabilitation of structural and mechanical systems and the replacement of the entire electrical system. This railroad bridge consists of a through-girder Hopkins trunnion single-leaf/single-track 152-ft bascule span. Ronald designed the movable bridge , provided calculations, plan preparation, and post-design of the bridge's structural systems.
08/10-12/12	FDOT, CSX Railroad Rolling Lift Bridge over the New River Broward, FL. <i>Project Engineer.</i> Ronald oversaw the complete rehabilitation of a movable bridge, including a preliminary PD&E study and the final design for the off-line replacement of a single-leaf heavy-rail bridge. Ronald designed the bascule and approach piers. Design challenges included vessel impact, deep mudlines, and a narrow construction site.
06/04-04/10	FDOT, SR 7 NW 5th Street Bascule Bridge Replacement over the Miami River Miami, FL. <i>Project Engineer.</i> Ronald designed the entire new \$50 million double-leaf bascule bridge , including the bascule pier and footing system, prestressed pile foundations, steel trunnion towers, access platforms, stairs, doors, and hatches. He performed structural analyses and developed design calculations in accordance with AASHTO LRFD requirements for vessel collision, live loads, and operational demands.

Firm employed by HDR Engineering, Inc.				
Name	Venkata Sathiraju, PE		Years of relevant experience with this employer	2
Title	Bridge Engineer		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization		MS / 2019 / Structural Engineering Bachelor of Technology / 2016 / Civil Engineering		
Active registration number / state / expiration date		PE.0048436 / LA / 03-31-2028		
Year registered	2023	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Task 1: Document Retrieval & Review, Task 2: Site Visits, Task 3: Analysis & Load rating, Task 6: Review/Update BrR Files / (Meets MPR 5)		
Venkata has over seven years of experience in bridge load ratings, structural analysis, bridge inspections, bridge design, and bridge rehabilitation projects. He has performed bridge load ratings using AASHTOWare BrR, developed analytical bridge models, evaluated bridge load-carrying capacity, conducted bridge inspections, and prepared engineering calculations for fixed and movable bridge structures. His experience includes projects for LADOTD, TDOT, TxDOT, FDOT, INDOT, and local agencies involving load rating evaluations, bridge preservation, rehabilitation, and inspection programs.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
04/25-Ongoing	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. Bridge Inspector/Bridge Load Rater. Venkata served as site coordinator and worked with district bridge engineers to conduct in-depth inspections of six vertical-lift bridges. He participated in structural inspections and the preparation of six in-depth inspection reports. He also signed and stamped the load rating reports for four out of the six movable-bridge main spans using AASHTOWare BrR and internally developed spreadsheets, evaluating bridge load-carrying capacity, reviewing the structural behavior of vertical-lift spans, and supporting rehabilitation planning.			
04/23-06/24	Tennessee Department of Transportation, Complex and Standard Bridge Load rating Statewide TN. Bridge Load Rater. Venkata rated approximately 10 bridges, using AASHTOWare BrR software to perform the load ratings . Bridges included SR 311 over Candies Creek in Candies Creek, I-65 over SR 273 in Giles County, and I-81 over Pitt Road in Greene County. Bridge types include reinforced-concrete slab bridges, T-beam bridges, prestressed-concrete I-beam bridges, and prestressed-concrete box-beam bridges.			
08/19-09/22	INDOT, Countywide Bridge Inspections Statewide using AASHTOWare BrR software IN. Bridge Inspector/Bridge Load Rater. Venkata was part of countywide bridge inspections of small to medium-sized bridges for Wells, Jackson, Martin, and Crawford Counties. The bridge types inspected included prestressed I-beam, prestressed box-beam, steel girder, and timber bridges. Venkata used AASHTOWare BrR and internally developed Excel spreadsheets to perform bridge load rating updates following bridge inspections. He evaluated the load-carrying capacity of bridges and documented rating results for county-owned bridges across the counties served.			
08/23–01/24	Florida Department of Environmental Protection, Lover's Key State Park Rehabilitation Fort Myers, FL. Bridge Load Rater. Rehabilitation of various parts of the Lover's Key State Park is underway after the destruction caused by Hurricane Ian. The project scope included load rating checks on the Tram bridge connecting parts of the park to the beach. Venkata performed load rating calculations and structural capacity checks on the 725-foot-long tram bridge in accordance with the FDOT Bridge Load Rating Manual. He evaluated prestressed-concrete box-beam spans and verified the bridge's load-carrying capacity.			
01/25-Ongoing	Port of New Orleans (PONO), Independent Structural Design Review (ISDR), ESB Highway Bridge St. Bernard Parish, LA. Bridge Designer. Venkata conducted independent calculations to verify the bridge geometry, prestressed girder, and substructure designs based on the 60% and 95% plans and participated in the comment-resolution meeting with the designers. He also developed a draft review report and a comment-resolution matrix, which were used to address potential conflicts noted in the original design.			
02/25-Ongoing	CSX, Rigolets Project Rigolets, LA. Bridge Designer. Venkata performed structural repairs and upgrades to the swing-span bridge at Rigolets, LA. The upgrades included extending the access platforms around the piers, adding stairs to them, and installing a new over-track platform. Venkata has also helped develop plan sheets for 60% and 90% submissions.			
10/24-12/24	PONO, Movable Bridge Inspection On-call Contract New Orleans, LA. Bridge Inspector. Venkata assisted with the structural portion of the inspection for Seabrook and Almonaster Bridges over the Inner Harbor Navigational Canal. He also provided a 30-day memo with preliminary findings, along with draft inspection reports for both bridges.			
8/24-Ongoing	TxDOT Houston, Seawolf Parkway at Pelican Island Channel Bridge Replacement Galveston, TX. Bridge Designer. The proposed project will replace the existing lift bridge with a new fixed bridge. Venkata designed prestressed girders and abutments for the project at			

	60% phase. Using PGSuper software, Venkata analyzed and designed Tx40 and Tx70 girders for two representative span units. For the abutment design, he used CAP18 software and internally developed spreadsheets to complete the analysis and design.
06/24-11/24	LADOTD, Bridge Preservation 2022 Contract, Bridge Optimization Study Statewide LA. Bridge Engineer. HDR provided design aids that will be used by the bridge design engineers to determine a preliminary optimal layout through analysis incorporating variables such as bridge super- and substructure types, girder spacing, girder concrete strength, span length, super- and substructure material costs, and project size/location. Venkata reviewed the analysis in this optimization tool and developed a unit price estimate tool for the items used in the analysis, using cost-estimating tools available on the LADOTD website.
04/23-06/24	LADOTD, Statewide Complex Bridge Inspection Statewide LA. NHI Certified Bridge Inspector. Venkata assisted with inspections and completed bridge inspection reports. The inspected bridges include the Old US 51 bridge over Pass Manchac near Akers, and the US 11 bridge over Norfolk Southern railroad in Slidell.
12/22-03/23	LADOTD, H.014465 - Rehabilitation of Vertical Lift Bridge Perry, LA. Bridge Designer/Load Rater. LADOTD proposed to rehabilitate the Perry vertical lift bridge over the Vermilion River on State Hwy 82 by replacing the existing superstructure on approach spans and lift span, and making necessary adjustments to towers. The 383-ft, 11-span bridge consists of 10 approach spans, a 30-ft span, and 1 lift span. Venkata designed the approach-span steel beams and reviewed load rating calculations for the movable vertical-lift span as part of the 60% submission. He evaluated structural demands, reviewed bridge capacity information, and supported the development of rehabilitation design.
11/22-12/22	PONO, Inner Harbor Navigational Canal, Seabrook Bridge Load rating New Orleans, LA. Bridge Load Rater. The Seabrook Railroad Bridge consists of the east and west approach spans, a tower span, and a bascule span for navigational access. Venkata reviewed internally developed spreadsheets that are used to perform load rating checks for the east and west approach spans in accordance with AREMA requirements. He reviewed member capacities, evaluated bridge load-carrying capacity, and verified the load rating calculations.
05/20-09/21	Miami County, Wayne Street Bridge 501 Rehabilitation Miami County, IN. Bridge Designer. The project included a complete superstructure replacement with pedestrian improvements on the Wayne 501 bridge. Venkata designed the deck and plate girders for the superstructure. Plate girder design was performed using Merlin-Dash software. Venkata also conducted design checks, including splice design, top-of-splice elevation calculations, bearing pad selection, bearing stiffener and weld design, and camber calculations.
03/21-05/22	INDOT, North Split Project Indianapolis, IN. Bridge Designer. The project involved the design of multiple bridge reconstructions at the I-65/I-70 split near downtown Indianapolis. Venkata developed bridge ratings using AASHTOWare BrR and performed bridge design using Merlin-Dash and RC Pier software. He designed superstructure and substructure elements and completed rating evaluations for prestressed-concrete bridge structures.
07/20-08/22	Vigo County, New Bridge over Railroad Crossing Terre Haute, IN. Bridge Designer. There are existing at-grade railroad crossings at 8th Avenue and North 13th Avenue. The project scope is the replacement of these at-grade crossings with a bridge with two roundabouts to access 8th Avenue and North 13th Avenue. Venkata designed the bridge superstructure and substructure. Prestressed concrete girders were used for the superstructure. Bridge cross-section geometry was flared to accommodate the sight distance restrictions from the bridge to the roundabout. LEAP Bridge concrete and RC Pier software were used during the design phase.
08/19-06/20	INDOT, I-69 Finish Line Project Johnson County, IN. Bridge Designer. Six bridges were designed and constructed at the SR 37/SR 144 interchange using prestressed girders and integral end bents. Venkata designed the girders, deck, and substructure units, utilizing LEAP Bridge Concrete/RC Pier software.

Firm employed by HDR Engineering, Inc.				
Name	Grace Shen, PE		Years of relevant experience with this employer	3
Title	Bridge Engineer		Years of relevant experience with other employer(s)	28
Degree(s) / Years / Specialization		MS / 2001 / Civil Engineering BS / 1995 / Civil Engineering		
Active registration number / state / expiration date		PE.0402038076 / VA / 06-30-2027		
Year registered	2003	Discipline	Civil and Structural	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating		
Grace Shen has more than 31 years of structural engineering experience, with specialized expertise in bridge analysis and load rating for state and local transportation agencies. She has successfully completed load rating evaluations for routine and complex bridge structures, reinforced concrete culverts, buried structures, and rehabilitation projects throughout the United States. Her experience includes the development of BrR and CSiBridge analytical models, the evaluation of legal and permit vehicle load effects, the assessment of structural deterioration, and the preparation of load rating documentation in compliance with AASHTO and FHWA requirements. In addition to load rating, Grace has extensive experience in bridge inspection, structural assessment, rehabilitation design, and bridge replacement projects for highway and railroad crossings.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
08/23-09/23	City of Hopewell, Bridge Inspections and Load Ratings Statewide, Virginia. <i>Bridge Engineer.</i> Grace Shen performed structural analysis and load rating evaluations of multiple city-owned bridges, including River Road over Cabin Creek, East Broadway Avenue over Associated Asphalt Spur Track, and 6th Avenue over Norfolk Southern Railroad. She reviewed bridge inspection data, evaluated structural capacity, developed load rating models, and prepared load rating calculations and reports in accordance with current AASHTO and FHWA requirements. Her work supported the City's bridge safety and asset management program by providing reliable load-carrying capacities and recommendations for continued service.			
12/23-04/24	Nevada DOT, Load Rating Task Order 3 Statewide, Nevada. <i>Bridge Engineer.</i> Grace performed structural analyses and load ratings for 41 reinforced-concrete box culverts and 2 buried arch/frame structures throughout Nevada. She developed analytical models using BrR and CANDE software, evaluated the load effects of emergency vehicles and specialized hauling vehicles, and verified structural capacities in accordance with the NDOT Structures Load Rating Manual. Grace reviewed existing bridge inventory data, completed structural calculations, and documented rating results used by NDOT for bridge management and permitting decisions.			
01/24-Present	MoDOT, FY2024 Complex Structures Load Rating Program Jefferson City, Missouri. <i>Bridge Engineer.</i> Grace serves as a key structural engineer supporting MoDOT's statewide complex bridge load rating program. She performs detailed structural analyses of complex bridge systems, develops and updates analytical models, evaluates load-carrying capacities for legal loads, permit vehicles, and emergency vehicles, and prepares technical reports supporting FHWA compliance. Her responsibilities include reviewing bridge inspection findings, assessing the impacts of deterioration on structural performance, and recommending actions to support the safe operation of critical transportation infrastructure.			
09/24-11/24	Idaho Transportation Department FY23 Bridge Load Ratings Statewide, Idaho. <i>Bridge Engineer.</i> Grace performed load rating analyses for fifteen highway bridges located throughout Idaho. She developed structural models, calculated inventory and operating ratings, evaluated legal and permit vehicles, and completed emergency vehicle load ratings required by the FHWA FAST Act. Grace prepared rating calculations and technical documentation used by ITD to establish bridge load capacities and support long-term bridge asset management decisions.			
03/25-07/26	MoDOT, FY2024 Routine Structures Load Rating Program Statewide, Missouri. <i>Bridge Engineer.</i> Grace provided load rating services for a statewide bundle of county-owned bridge structures. She reviewed bridge plans and inspection reports, performed LRFR analyses, determined inventory and operating ratings, and evaluated legal and permit vehicle loads in accordance with AASHTO requirements. Her work helped MoDOT maintain compliance with federal bridge safety regulations while supporting bridge posting and permitting decisions for local agencies.			
08/25-12/25	Tennessee DOT, Permit Support Services Statewide, Tennessee. <i>Bridge Engineer.</i> Grace provided engineering support for the Tennessee DOT's overweight and over-dimensional permitting program. She evaluated bridge capacities under permit vehicle loadings, reviewed structural adequacy for proposed hauls, and developed engineering recommendations that supported safe routing decisions.			

	throughout the statewide transportation network. Her work required a detailed understanding of bridge load rating principles and permit vehicle analysis.
10/23-09/25	South Carolina DOT, Statewide Bridge Inspections Statewide, South Carolina. <i>Bridge Engineer.</i> Grace participated in the inspection and evaluation of on-system and off-system bridges throughout South Carolina. She assessed structural conditions, documented deterioration, reviewed bridge deficiencies, and conducted engineering evaluations to support maintenance, rehabilitation, and load rating efforts . Her inspection experience provided valuable insight into the relationship between bridge condition and load-carrying capacity assessments.
05/26-08/26	Tennessee DOT, Traditional Program Bridge Load Ratings (E2474 WO26) Statewide, Tennessee. <i>Bridge Engineer.</i> Grace updated complex bridge rating models using CSiBridge and incorporated structural deterioration identified during recent inspections. She evaluated bridge behavior under current legal and permit vehicle loadings, recalculated load ratings using updated vehicle libraries, and prepared technical reports documenting bridge capacities. Her work verified that bridge ratings accurately reflected current conditions and complied with state and federal requirements.
07/23-01/25	VDOT, I-95 Northbound and Southbound over CSX Railroad Bridge Rehabilitation Virginia. <i>Bridge Engineer.</i> Grace provided structural engineering support for the rehabilitation of interstate bridges carrying I-95 over active CSX railroad corridors. She performed structural evaluations, reviewed existing bridge conditions, supported repair design development, and completed engineering analyses used to extend service life and improve long-term structural performance. Her work included assessment of bridge condition, repair strategies, and constructability considerations.

Firm employed by HDR Engineering, Inc.				
Name	Nirmala Suwal, PE		Years of relevant experience with this employer	3
Title	Bridge Engineer		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		MS / 2023 / Civil and Environmental Engineering BS / 2016 / Civil Engineering		
Active registration number / state / expiration date		PE.6201317196 / MI / 07-13-2028		
Year registered	2026	Discipline	Civil and Structural Engineering	
Contract role(s) / brief description of responsibilities		Task 3: Analysis & Load Rating, Task 8: Miscellaneous Rating Work		
Nirmala has experience in bridge load rating, structural analysis, finite element modeling, bridge inspection, bridge design, and rehabilitation engineering. She has developed AASHTOWare BrR models, performed LRFR load rating evaluations, completed bridge capacity assessments, prepared load rating reports, and conducted finite element analyses of bridge components. Her experience includes fixed and movable bridges for LADOTD, FDOT, MoDOT, TxDOT, INDOT, and local agencies. She also has experience performing in-depth bridge inspections, structural evaluations, report preparation, quantity estimation, and CAD development.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
05/25–06/26	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, Statewide LA. Bridge EIT. Nirmala performed load ratings of the superstructure, substructure, and connection elements, developed finite element models of damaged bridge components, evaluated the bridge's load-carrying capacity, and determined rating factors for damaged structural members.			
02/25–06/25	FDOT District 4, SR 838/Sunrise Boulevard Rehabilitation Fort Lauderdale, FL. Bridge EIT. HDR performed rehabilitation design for the Sunrise Boulevard movable bascule bridge over the Intracoastal Waterway. Nirmala developed dead load calculations for the bascule span superstructure, including girders, floor beams, stringers, sidewalks, railings, and miscellaneous structural components, supporting bridge load rating and rehabilitation analyses			
08/24–09/24	FDOT District 6, Bridge Inspection and Load Rating Continuing Services Contract Miami-Dade and Monroe Counties, FL. Bridge EIT. Nirmala developed AASHTOWare BrR analytical models, performed LRFR load rating evaluations of floor beams and stringers, validated rating models against previous analyses, and prepared final load rating reports for deteriorated bridge components.			
10/25–06/26	Missouri DOT, FY2024 Routine Structures Load Rating Program, Jefferson City, MO Bridge EIT. Nirmala performed load rating evaluations and structural analysis calculations for approximately 50 bridge structures, supporting FHWA compliance and statewide bridge-rating requirements .			
04/24–11/24	Michigan DOT, I-196 Ramp F over I-196 EB Rehabilitation. Lansing, MI. Bridge EIT. Nirmala performed bridge inspections, designed temporary support systems, prepared structural details and CAD plans, and provided construction phase inspection support for bridge rehabilitation activities.			
10/24–03/25	Michigan DOT, US-12 and Rawsonville Road over I-94 Rehabilitation Washtenaw County, MI. Bridge EIT. Nirmala designed temporary support systems for bridge rehabilitation projects and prepared structural drawings, CAD development, and construction details for substructure repair work.			
08/23–06/25	TxDOT Abilene, Bridge Maintenance Program Abilene, TX. Bridge EIT. Following detailed bridge inspections, Nirmala prepared repair photolog reports, quantified structural deficiencies, developed quantity estimates, created CAD plans, and prepared repair details for bridge maintenance and rehabilitation projects involving critical bridge components.			
08/23–08/23	Michigan DOT, Mackinac Bridge Annual Inspection Program Mackinaw City, MI. Bridge EIT. Nirmala participated in hands-on bridge inspections and condition assessments of major bridge components, including superstructure, substructure, suspension elements, and fracture-critical members, supporting documentation and evaluation of structural conditions.			

Firm employed by HDR Engineering, Inc.				
Name	Alex Valero, EI		Years of relevant experience with this employer	<1
Title	Bridge EIT		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization			BS / 2024 / Civil Engineering	
Active registration number / state / expiration date			EIT 83100 / TX / 02-04-2033	
Year registered	2025	Discipline	Civil	
Contract role(s) / brief description of responsibilities			Task 1: Document Retrieval & Review, Task 3: Analysis & Load Rating, Task 6: Review/Update BrR Files	
Alex has experience supporting bridge inspection, bridge preservation, and structural engineering projects. He has contributed to movable bridge inspections, bridge rehabilitation planning, emergency repair design, and transportation infrastructure projects for LADOTD, TxDOT, Norfolk Southern, and Multnomah County. Alex's experience includes structural evaluations, field inspections, engineering calculations, and development of technical documentation supporting the maintenance and long-term performance of bridge assets.				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).			
10/25–06/26	LADOTD, Contract 5 for Movable Bridges (6) Vermillion, Lafayette, St. Martin, and Calcasieu Parishes, LA. Bridge Inspector. Alex assisted with routine and in-depth inspections of Louisiana movable bridges, including supporting field investigations, documenting structural deficiencies, conducting condition assessments, and developing inspection reports. He evaluated bridge superstructure and substructure components, documented deterioration, collected field measurements, and supported compliance with National Bridge Inspection Standards (NBIS) and LADOTD inspection requirements. Alex also supported LRFR load ratings by collecting and verifying field data, documenting member conditions that affect load-carrying capacity, and assisting with structural evaluations for load rating analyses and bridge capacity assessments.			
04/26–Ongoing	LADOTD, Bridge Preservation Task Order 6 Statewide LA. Bridge Engineer. Alex supported LADOTD's bridge preservation initiatives by developing engineering design aids and preliminary bridge layout tools to evaluate bridge alternatives during planning and design. He assisted with structural analyses, evaluated bridge geometry and span configurations, developed calculation tools for bridge designers, and supported cost-effective strategies for bridge preservation and replacement.			
04/26–05/26	Multnomah County, Earthquake Ready Burnside Bridge Final Design Portland, OR. Bridge Engineer. Alex contributed to the final design of the Earthquake Ready Burnside Bridge replacement project, a major river crossing designed to meet modern seismic performance requirements. He supported structural design development, prepared design deliverables, coordinated bridge engineering tasks, and developed bridge components for a resilient replacement structure intended to withstand significant seismic events			
01/26–01/26	Norfolk Southern, Old Pearl River Railroad Bridge Emergency Repair Design Pearl River, LA. Bridge Engineer. Alex supported the emergency repair design for the Old Pearl River Railroad Bridge, assisting in the evaluation of damaged bridge components and the development of structural repair concepts to restore safe rail operations. He supported structural assessments, reviewed repair alternatives, prepared engineering documentation, and coordinated emergency response design activities			
02/26–05/26	TxDOT Bridge Division, 2025-2027 Routine Bridge Inspection Program Statewide TX. Bridge Inspector. Alex participated in routine bridge inspections for TxDOT transportation structures, supporting field inspections, condition assessments, defect documentation, and inspection reporting. He evaluated bridge components for deterioration, collected inspection data, photographed deficiencies, and prepared records to support bridge maintenance and preservation decisions.			
07/26–08/26	TxDOT Corpus Christi, Routine Bridge Inspections Corpus Christi, TX. Bridge Inspector. Alex provided inspection support services for bridge assets, assisting with hands-on bridge inspections, condition evaluations, field documentation, and the development of inspection findings. He documented structural deficiencies, collected field data, prepared inspection records, and supported recommendations for future maintenance and rehabilitation activities.			

17. Firm Experience:

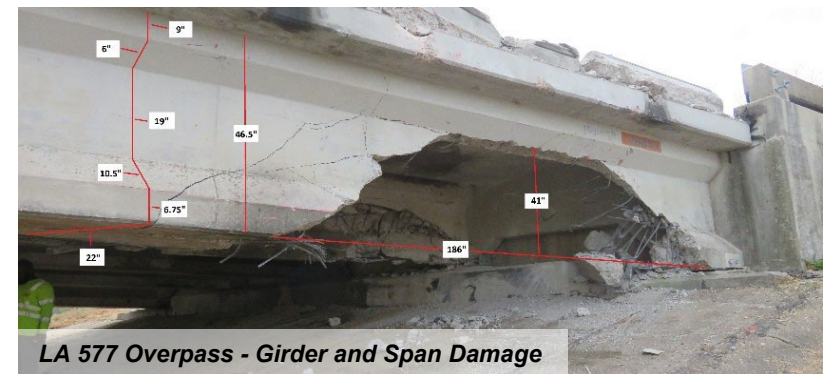
Project 1

Firm name	HDR Engineering, Inc.		Discipline(s)*	Bridge	
Project name	Bridge Preservation IDIQ - LA 577 at I-20 Repair PS&E			Firm responsibility (prime or sub?)	Prime
Project number	H.015472	Owner's name	State of Louisiana Department of Transportation & Development (LADOTD)		
Project location	Waverly, LA			Owner's Project Manager	Phillip Grasso
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 225.379.1412 phillip.grasso@la.gov				
Services commenced by this firm (mm/yy)	11/22	Total consultant contract cost (\$1,000's)			\$241.4
Services completed by this firm (mm/yy)	07/23	Cost of consultant services provided by this firm (\$1,000's)			\$241.4

LADOTD engaged HDR under its Bridge Preservation IDIQ contract to perform an **emergency structural evaluation of the LA 577 Overpass** after a dump truck strike caused severe damage to a prestressed concrete girder span crossing I-20. Two girders were damaged beyond repair, while an adjacent girder and the abutment cap sustained secondary damage. HDR rapidly assessed the extent of the damage and performed LRFR load-rating analyses to determine the bridge's load-carrying capacity and support decisions regarding traffic operations and emergency response.

As part of the emergency stabilization effort, HDR developed load-rating models for the interim bridge configuration following partial demolition of the damaged span. The analyses evaluated the capacity of the remaining structure, which was supported by two undamaged girders and one partially damaged girder, and established safe operating limits, allowing a portion of the bridge to be reopened to traffic. HDR's **load-rating evaluations were critical in validating the temporary condition and supporting the phased repair strategy.**

For the permanent replacement, HDR performed additional LRFR load ratings for the revised superstructure configuration, which incorporated AASHTO Type III girders and an additional girder to accommodate phased construction. The team also evaluated the modified substructure under the new loading arrangement and prepared load ratings for both the interim and final bridge conditions. **RELEVANCE: Demonstrates HDR's experience performing load ratings of damaged bridge structures, evaluating temporary and permanent load-carrying capacity, and supporting emergency bridge repair and replacement decisions through LRFR analysis. This experience directly aligns with LADOTD's need for bridge load-rating services involving structural assessment, analytical modeling, and load-capacity evaluation of existing bridges.**



KEY PROJECT ELEMENTS:

- LRFR Load Rating
- Emergency Bridge Load Capacity Evaluation
- Load Rating for Damaged Structures
- Interim and Final Condition Load Ratings
- AASHTO Load Rating Methodology
- Structural Modeling of Modified Bridge Systems

HDR MEMBERS INVOLVED: Wesley Jacobs, Sarah De Moya, William Clementson, and Brett Geesey

Project 2

Firm name	HDR Engineering, Inc.		Discipline(s)*		Bridge	
Project name	Contract 5 for Movable Bridges (6)				Firm responsibility (prime or sub?)	Prime
Project number	Multiple	Owner's name	State of Louisiana Department of Transportation & Development (LADOTD)			
Project location	Vermillion, Lafayette, St. Martin and Calcasieu Parishes			Owner's Project Manager	T.J. Dunlevy	
Owner's address, phone, email		1201 Capitol Access Road, Baton Rouge, LA 70802 225.379.1083 tj.dunlevy@la.gov				
Services commenced by this firm (mm/yy)		03/25	Total consultant contract cost (\$1,000's)			\$2,651
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$2,058

HDR performed **Stage 3 design services for six vertical-lift bridges in Vermilion, Lafayette, St. Martin, and Calcasieu Parishes**, with a primary focus on NBIS inspections, structural evaluation, and LRFR load ratings to support rehabilitation planning. The project included document review, coordination with LADOTD district and design staff, field inspections, load rating analyses, and development of rehabilitation scope-of-work recommendations. The six movable bridges evaluated under this contract included the Old Abbeville, Abbeville Bypass, Parks, Milton, Ellender, and West Fork Bridges. HDR performed comprehensive inspections and collected the field data necessary to develop accurate load-rating models for both movable and approach-span elements. The team coordinated traffic control and access requirements with LADOTD and the U.S. Coast Guard to efficiently complete inspections while minimizing impacts to the traveling public.

HDR developed **LRFR load ratings using AASHTOWare Bridge Rating (BrR)** for the main spans and approach spans of six structures. Load-rating analyses evaluated the load-carrying capacity of critical structural components and provided the basis for identifying rehabilitation priorities and determining future maintenance needs. The results were incorporated into bridge-specific reports and used to support the development of rehabilitation scopes of work for each structure.

As part of the evaluation process, HDR also conducted mechanical, electrical, coatings, and operator-house inspections to assess conditions that could affect the long-term functionality and serviceability of these movable bridges. Multiple field crews completed inspections within a compressed schedule, enabling LADOTD to advance rehabilitation planning prior to hurricane season.

RELEVANCE: Demonstrates extensive experience performing LRFR load ratings of movable bridges using AASHTOWare BrR, integrating inspection findings into load-rating analyses, evaluating complex bridge systems, and developing rehabilitation recommendations based on bridge load-carrying capacity. This experience directly supports LADOTD's need for bridge load-rating services, structural evaluations, and data-driven rehabilitation planning.

KEY PROJECT ELEMENTS:

- LRFR Load Ratings
- AASHTOWare Bridge Rating (BrR) Modeling
- Movable Bridge Structural Evaluation
- NBIS and In-Depth Inspections
- Load Capacity Assessment of Main and Approach Spans

HDR MEMBERS INVOLVED: Wesley Jacobs, Daniel Marsalone, Venkata Sathiraju, Erin O'Malley, Peter Harrison, Deanna Nevling, Ronald Sanchez, and Alex Valero

In-depth inspection of Milton, Ellender, and West Fork Bridges



Project 3

Firm name	HDR Engineering, Inc.		Discipline(s)*	Bridge	
Project name	MoDOT Large/Unusual Load Ratings			Firm responsibility (prime or sub?)	Prime
Project number	Task Orders 1, 2 & 3	Owner's name	Missouri Department of Transportation (MoDOT)		
Project location	Statewide, Missouri			Owner's Project Manager	David Koenig
Owner's address, phone, email	105 W. Capitol Avenue, P.O. Box 270, Jefferson City, MO 65102 573.526.0556 David.Koenig@modot.mo.gov				
Services commenced by this firm (mm/yy)	011/23	Total consultant contract cost (\$1,000's)			\$1,843
Services completed by this firm (mm/yy)	11/26	Cost of consultant services provided by this firm (\$1,000's)			\$1,843

HDR performed a **statewide large and unusual load rating program for the Missouri Department of Transportation (MoDOT) from 2024 through 2026**, evaluating several of Missouri's most complex interstate bridge structures. The work included load ratings for major steel viaducts and ramp bridges carrying I-35, I-670, and I-64 through Kansas City and St. Louis. HDR reviewed extensive as-built plans and developed detailed AASHTOWare Bridge Rating (BrR) models to evaluate plate girders, floorbeams, straddle bents, slab systems, and composite steel members. The analyses incorporated complex structural features, including skewed and curved alignments, hinge connections, multi-span continuity, and ramp gore locations, to accurately capture bridge behavior under legal and permitted vehicle loading.

Across the program, **HDR loaded more than 100,000 linear feet of bridge girders, over 130 floorbeams and crossbeams, and numerous straddle bents using both Load Factor Rating (LFR) and Load and Resistance Factor Rating (LRFR) methodologies.** The projects required advanced modeling techniques to evaluate long-span steel bridges crossing railroads, major highways, and urban infrastructure, and to determine safe capacities for routine traffic and oversized loads. HDR delivered comprehensive rating models and documentation that enabled MoDOT to make informed decisions on permits, maintenance, and asset management.

The program also demonstrated HDR's ability to manage large-scale bridge rating assignments involving multiple structures, diverse bridge types, and accelerated delivery schedules. HDR's bridge engineers applied extensive experience with **AASHTO load rating requirements and AASHTOWare BrR modeling** to assess unique structural systems and develop defensible load rating results for critical transportation corridors. This experience is directly relevant to bridge load rating contracts requiring advanced structural analysis, permit load evaluations, and the efficient execution of statewide bridge assessment programs for transportation agencies.

Many of the structures included unique geometric and structural characteristics that required detailed engineering evaluation beyond typical bridge rating assignments. HDR performed load path assessments, modeled complex load distribution effects, and evaluated nonredundant steel components to verify accurate load rating results. Through close coordination with MoDOT and the application of current AASHTO rating procedures, **HDR successfully provided reliable ratings for critical transportation corridors, supporting safe freight movement and efficient permit load review throughout the state.**

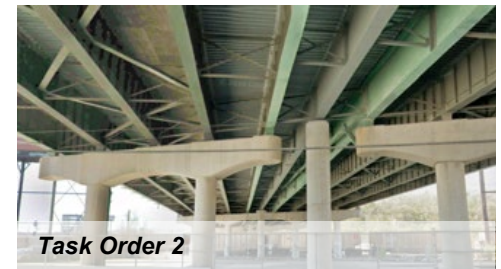
KEY PROJECT ELEMENTS:

- LRFR/LFR Load Ratings
- AASHTOWare BrR Modeling
- Permit Load Analysis
- Load Rating Reports and Documentation

HDR MEMBERS INVOLVED: Deanna Nevling, Grace Shen



Task Order 1



Task Order 2



Task Order 3

Project 4

Firm name	HDR Engineering, Inc.			Discipline(s)*		Bridge	
Project name	Caltrans Bridge Load Rating On-Call Contract				Firm responsibility (prime or sub?)		Prime
Project number	56A0653		Owner's name		California Department of Transportation (Caltrans)		
Project location	Statewide, California		Owner's Project Manager		Dave Ward		
Owner's address, phone, email		1727 30th Street, Sacramento, CA 95816 (916) 639-5844 dave.ward@dot.ca.gov					
Services commenced by this firm (mm/yy)			08/20		Total consultant contract cost (\$1,000's)		\$2.5M
Services completed by this firm (mm/yy)			01/23		Cost of consultant services provided by this firm (\$1,000's)		\$2.3M

HDR provided bridge load rating services on a task-order basis, with six task orders completed. **LRFR ratings** were performed in accordance with the AASHTO Manual for Bridge Evaluation, 3rd Ed, and the Caltrans Bridge Load Rating Manual. Most analyses were performed using **3D FEM refined analysis in CSiBridge**. Elements rated include steel girders, CIP/RC box girders, **CIP/PT box girders**, PC/PS I girders, cross frames, lateral bracing, steel hammerhead bent caps, anchor bolts at bent cap-to-column connection, pin and hanger assemblies, pins connecting girders to bent caps, reinforced concrete slabs, and reinforced concrete transverse floorbeams.

We provided ratings for HL93 (Inventory and Operating), AASHTO Legal Loads, SHVs, EVs, and Caltrans permit vehicles (P5 Annual, P5-P15 Split, P15 Dual, and P15 Design). For EV and permit ratings, a secondary vehicle was included in the analysis, and secondary vehicle demands were subtracted from the capacity (numerator) in the load rating equation. This added complexity to the modeling of the refined analysis models. In addition, many of the structures had been widened or previously repaired, which had to be accounted for in the load rating.

A brief summary of each task order follows:

Task Order 1: Load rating of eight highly curved steel girder bridges (I-girders and box girders)

Task Order 2: Load rating of two steel girder bridges, two reinforced concrete box girder bridges (including one post-tensioned span), and one concrete T-beam bridge

Task Order 3: Load rating of gusset plates using AASHTOWare BrR and an independently generated Excel template. Gusset plate load rating was performed in accordance with the AASHTO Manual for Bridge Evaluation, with refinements based on the Illinois DOT Gusset Plate Evaluation Guide – Refined Analysis Methods.

Task Order 4: Load rating of four curved and highly skewed concrete box girder bridges (including both CIP/RC and CIP/PS).

Task Order 5: Tunnel load rating services. Caltrans has an inventory of 50 tunnels, and our team produced reports that provide an overview of each tunnel, including whether a load rating is required, components that need to be rated, the required analysis method, and geotechnical considerations.

Task Order 6: Ongoing work on load rating of eight concrete box girder bridges (including both CIP/RC and CIP/PS). Many of these bridges involve multiple widenings and/or complex framing. As part of the scope, **concrete integral bent caps will be load-rated** for two of these structures.

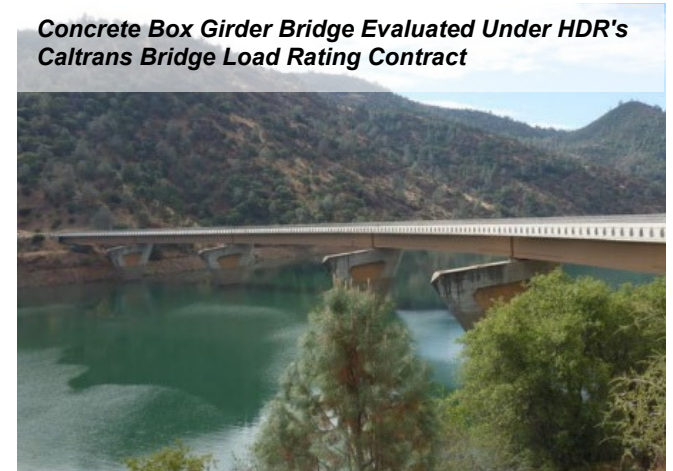
Collaborating with Caltrans, our team has worked through several challenges common when load rating old bridges designed to outdated codes. Additional refinements and multiple analyses were needed to obtain reasonable load ratings and to prevent the need for posting/strengthening.

KEY PROJECT ELEMENTS:

- Bridge load rating of eight bridge structures
- Technical review and validation of Caltrans BLRM 2nd Edition
- AASHTO MBE and LRFD code application and interpretation
- Permit, legal load, and emergency vehicle rating analyses

HDR MEMBERS INVOLVED: Michael Kochly

Concrete Box Girder Bridge Evaluated Under HDR's Caltrans Bridge Load Rating Contract



Project 5

Firm name	HDR Engineering, Inc.			Discipline(s)*		Bridge	
Project name	South Carolina Department of Transportation (SCDOT) Load Rating and Evaluation Services				Firm responsibility (prime or sub?)		Prime
Project number	N/A	Owner's name	South Carolina Department of Transportation (SCDOT)				
Project location	Statewide, SC				Owner's Project Manager		Emily Berry
Owner's address, phone, email		955 Park Street, Columbia, SC 29201 803.737.1053 berrye@scdot.org					
Services commenced by this firm (mm/yy)		02/17	Total consultant contract cost (\$1,000's)				\$2,375
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)				\$2,019

HDR has served as SCDOT's bridge load-rating consultant since 2017, providing comprehensive load-rating services for a diverse inventory of more than 9,300 bridges statewide. The program was developed to satisfy Federal Highway Administration (FHWA) requirements and establish a consistent, technically sound process for evaluating bridge live-load capacity throughout South Carolina. HDR performed a statewide vehicle parametric study to evaluate AASHTO and South Carolina legal vehicles, developed controlling vehicle loadings, and created the SCDOT Bridge Load Rating Guidance Manual used to support rating activities across the state.

HDR has completed bridge load ratings for a wide range of structure types, including steel rolled beam bridges, steel plate girders, curved steel girders, steel trusses, prestressed concrete girders, reinforced concrete tee beams, slabs, box culverts, and timber bridges. HDR performed ratings using **AASHTOWare Bridge Rating (BrR)** and the **Load and Resistance Factor Rating (LRFR)** methodology, incorporating field-observed deterioration, maintenance history, and rehabilitation records into the analyses to accurately reflect existing bridge conditions. Where necessary, Load Factor Rating (LFR) evaluations were also completed to support posting determinations.

A significant component of the program involved load rating complex and critical transportation structures, including the **I-526 Wando River Bridge**, one of South Carolina's longest segmental bridge structures. HDR developed advanced analytical models using **LARSA 4D** to evaluate **legal and permit vehicle load effects** on the bridge's **long-span, post-tensioned segmental superstructure**. The analyses incorporated original design documents, shop drawings, repair plans, and field investigations to accurately assess structural capacity and operational loading demands.

HDR also developed standardized load rating procedures, reporting templates, and prioritization methodologies that enabled SCDOT to efficiently manage its statewide bridge inventory. Through close coordination with SCDOT and FHWA, the team implemented consistent rating practices, improved compliance with federal bridge inspection requirements, and established a sustainable framework for ongoing bridge evaluation and asset management.

KEY PROJECT ELEMENTS:

- Statewide bridge load rating program development
- Load ratings for more than 9,300 bridges
- AASHTOWare BrR and LRFR evaluations
- Development of SCDOT Bridge Load Rating Guidance Manual

HDR MEMBERS INVOLVED: Deanna Nevling, David Knickerbocker



18. Approach and Methodology

CONTRACT UNDERSTANDING

HDR understands that this IDIQ contract will provide LADOTD with **statewide bridge load-rating services for both routine and complex structures**. Bridge load rating is a critical component of bridge asset management that directly influences posting decisions, permitting operations, rehabilitation priorities, maintenance planning, and ultimately public safety. Because these evaluations often have significant impacts on transportation networks, freight movement, emergency response, and agency investment decisions, HDR approaches load rating assignments with a commitment to technical rigor, accuracy, and sound engineering judgment. HDR will use **AASHTOWare BrR as the primary tool**, supplemented by refined analysis methods when appropriate, including influence-line analysis, 3D finite element modeling, refined distribution analysis, and independent calculations. HDR will apply the appropriate level of analysis to help LADOTD avoid overly conservative postings while maintaining compliance with the LADOTD BDEM, AASHTO MBE, and applicable BDTMs. HDR has structured its project team and resource allocation approach to **efficiently support multiple concurrent task orders while maintaining schedule commitments and quality standards**.

HDR understands that the scope extends beyond individual load ratings to include overweight permit reviews, automated permitting support, schematic recommendations to improve or eliminate postings, policy support, and formal training for LADOTD staff. HDR will perform 100% of the contracted work as the prime consultant.

HDR brings **nationwide experience with routine and complex bridge load ratings for agencies, including MoDOT, Caltrans, and VDOT, along with recent Louisiana experience on an LADOTD movable bridge contract (No. 4400021517)** involving load rating of six movable bridges. This work required detailed bridge inspections, development of AASHTOWare BrR rating models, assessment of existing bridge conditions, and close coordination with LADOTD personnel, providing HDR with firsthand familiarity with LADOTD procedures, expectations, and project delivery requirements for project efficiencies. HDR's experienced bridge rating staff, advanced analytical capabilities, and rigorous QA/QC processes will help LADOTD improve rating consistency, strengthen readiness for automated permitting, reduce unnecessary load restrictions and postings, and maintain reliable bridge rating information for future permitting, maintenance, rehabilitation, and asset management decisions.

PROJECT APPROACH AND METHODOLOGY

Task 1: Plan and Document Retrieval and Review

HDR will use a focused records retrieval process to collect and review the information needed to support accurate load ratings. Our team will search available asset management and document management systems, including AssetWise,

InspectX, and ProjectWise, for records related to each bridge included in the task order. If additional information is needed, HDR will expand the search to other available sources, including the FileNet Manager System, Inspection Documents File Server, Section 51 (Bridge Maintenance), Section 25 (Bridge Design), LADOTD district offices, local agencies, and historical project archives. Records reviewed may include inspection reports, as-built bridge plans, shop drawings, repair and rehabilitation records, previous load rating reports, field measurements, and load testing data necessary to support the load rating analysis.

When complete plans are not available, HDR will use partial records, standard plan references, photographs, prior ratings, repair history, and other available documentation to establish the most complete basis available for analysis. In addition, we will identify information gaps and determine what needs to be collected or verified during our site visit to improve the accuracy of load ratings.

During HDR's recent LADOTD movable bridge load ratings, portions of the available as-built plans were difficult to interpret due to the quality and age of the original documents. HDR identified that the plans were developed using historical standard plans and obtained more legible versions through LADOTD's Public Access Resource Center (PARC). These records were used to verify bridge details and reconstruct missing information contained within the original plan set, reducing uncertainty in the bridge model and supporting a more accurate load rating.

Task 2: Site Visits

HDR will perform site visits to support load rating decisions, determine the current condition of structural elements, and collect measurements and dimensions needed if there are gaps in the record drawings or plans, to produce the most accurate load rating for the bridge.

Before each visit, HDR's load rating engineers will review available plans, inspection reports, and rating files to identify critical information gaps that require field verification. Site visits will focus on confirming framing details, member continuity, support conditions, rehabilitation modifications, and other structural characteristics that influence load rating results. HDR will document deterioration that affects capacity, such as section loss, cracking, corrosion, and impact damage, while collecting field measurements and photographs necessary to support load rating development and record recovery.

Because HDR inspectors routinely perform load ratings, they understand the information needed to develop accurate AASHTOWare BrR models and avoid unnecessary assumptions that can lead to overly conservative ratings. Field reviews will be conducted by NBIS-trained inspectors and experienced load rating engineers under the supervision of licensed professional engineers, as appropriate.

HDR has extensive experience using snoopers trucks, MEWPs, rope access, boats, and other specialized access methods to monitor critical bridge components. HDR

can employ nondestructive evaluation techniques, including ultrasonic thickness measurements, magnetic particle testing, dye penetrant testing, and direct section measurements when warranted to support load rating decisions. We will conduct site visits in accordance with the AASHTO Manual for Bridge Evaluation, LADOTD requirements, and HDR's site-specific Job Hazard Analysis process. ☆ **INNOVATIVE:** HDR uses drone technology to support site visit confirmation, providing high-resolution imagery, improved access to hard-to-reach areas, and enhanced field verification with reduced safety risks and traffic impacts.

Task 3: Analysis and Load Rating

Modeling & Analysis

Analysis and load rating are the core of this contract. HDR will develop **AASHTOWare BrR models** using available plans, inspection reports, field measurements, rehabilitation records, and current bridge conditions to determine dead and live load effects in load-carrying members. Ratings will include HL-93, LADOTD legal loads, specialized hauling vehicles, emergency vehicles, and other LADOTD-required loads in accordance with the current AASHTO Manual for Bridge Evaluation, LADOTD BDEM, BDTM 90, BDTM 111, and applicable LADOTD guidance.

HDR's modeling process begins with validating geometry, load paths, boundary conditions, member properties, deterioration assumptions, and previous repairs. For routine bridges, HDR will develop efficient BrR models that are transparent and usable by LADOTD. ☆ **INNOVATIVE:** For complex structures, HDR can perform refined 2D or 3D analyses to capture secondary effects, temperature effects, unusual framing, staged construction, complex supports, or nonstandard load paths. HDR brings proven experience with **movable bridges, trusses, segmental post-tensioned structures, cable-stayed bridges, long-span steel bridges, and major viaducts.**

Movable Bridge Load Rating

HDR will perform load ratings based on present-condition capacity and current loading, using AASHTOWare BrR as the primary rating platform whenever practical. HDR does not treat rating software as a black box. Our engineers review model inputs, specification checks, load distribution, material properties, deterioration assumptions, governing limit states, and output results to confirm ratings are accurate and defensible. When BrR results indicate a posting condition, HDR completes a refined evaluation before recommending restrictions. This includes verifying geometry, section loss, controlling members, assumptions, and software outputs through independent calculations or supplemental analyses.

HDR has successfully applied this approach on complex bridge rating assignments. 🔍 **PROJECT EXAMPLE:** On the **LADOTD Milton Bridge** in Lafayette Parish (Recall No. 006520), HDR identified that the BrR analysis approach for a built-up member with cover plates warranted additional evaluation. Working with the BrR support team, HDR developed an appropriate modeling workaround that better represented member behavior and improved the resulting rating. On the **LADOTD Ellender Bridge** in Calcasieu Parish (Recall No. 031751), HDR used LARSA to evaluate

distorted truss bottom chords, section loss, eccentricities, and altered load paths while maintaining BrR as the final rating platform.

For structures or members that cannot be accurately rated in BrR, HDR can use LARSA, SAP2000, LEAP, Mathcad, spreadsheets, finite-element analysis, hand calculations, and influence-line methods. We will develop influence lines for critical members, including substructure components, when required by LADOTD using the COMPSTIL2 spreadsheet. For any analytical software used beyond AASHTOWare BrR, HDR will provide the required analysis synopsis and developer certification demonstrating compliance with AASHTO LRFR specifications.

🔍 **PROJECT EXAMPLE:** HDR has performed load ratings on more than 100 movable bridges nationwide, including four movable bridges in VDOT's inventory, as well as more than 200 additional VDOT bridge load ratings. These projects included straight, skewed, curved, and truss steel bridges, along with prestressed and cast-in-place concrete structures. HDR's experience demonstrates our ability to apply agency-specific criteria, software requirements, and rating procedures, directly applicable to LADOTD's BDEM and BDTM framework.

HDR's approach to movable bridge load rating prioritizes AASHTOWare BrR whenever practical to promote consistency with agency standards and long-term usability of rating files. Because many movable bridge components experience little or no live-load effect, HDR's engineers will identify and document those components that do not require rating, allowing effort to be focused on critical load-carrying elements. 🔍 **PROJECT EXAMPLE:** This approach has been successfully applied on the **VDOT'S Gwynn's Island Bridge** over Milford Haven, where HDR performed

BRIDGE LOAD RATING AND POSTING EVALUATION PROCESS

Notice to Proceed
Task 1: Document Retrieval
Task 2: Site Visits
Task 3: Load Rating

DECISION POINT: Is a Posting Update Required?

- | If NO: | If YES: |
|--|--|
| <ul style="list-style-type: none"> Detailed Check & QA/QC Submit Report to LADOTD for Comments | <ul style="list-style-type: none"> Refined Analysis |

DECISION POINT: Is a Posting Still Required?

- | If NO: | If YES: |
|---|--|
| <ul style="list-style-type: none"> Detailed Check & QC Submit Report to LADOTD for Comments | <ul style="list-style-type: none"> Prepare Options Form |

FOR THE OPTIONS FORM, LADOTD MAY PURSUE ONE OR MORE OF THE FOLLOWING:

- | | |
|---|--|
| Option 1: Replacement or Rehabilitation <ul style="list-style-type: none"> Re-rate Structure Detailed Check & QC Submit Report to LADOTD for Comments | Option 2: Load Testing <ul style="list-style-type: none"> Re-rate Structure Detailed Check & QC |
|---|--|

field inspections, incorporated measured deterioration into BrR models, developed ratings for as-built, existing, and repaired conditions, and finalized ratings following construction. HDR also completed load ratings for the **VDOT's Benjamin Harrison Bridge** over the James River, evaluating the south tower truss, north tower truss, and movable span using LARSA and hand calculations, including FHWA-recommended gusset plate evaluations and future loading scenarios.

HDR's nationwide bridge practice provides access to experienced bridge design and load rating professionals who routinely work on complex structures and specialized analyses. This depth of expertise allows HDR to efficiently engage subject-matter specialists when unusual conditions require additional review. As illustrated in the accompanying load-rating workflow, HDR follows a structured process that integrates document retrieval, field verification, engineering analysis, refined evaluations, and posting assessments to deliver accurate, defensible, and practical load-rating recommendations for LADOTD.

Schematic Recommendations to Improve Posting

HDR's approach is to maintain public safety while avoiding unnecessary or overly conservative postings. Because postings can affect freight movement, emergency response, local commerce, and agency budgets, HDR will verify the basis for restriction and evaluate whether refined analysis, improved field data, targeted monitoring, NDT, or material verification could better define actual capacity.

Where posting is required, HDR will provide practical schematic recommendations to improve or eliminate the restriction where feasible. Recommendations may include member repairs, strengthening concepts, connection modifications, localized rehabilitation, operational restrictions, additional testing, or targeted monitoring. When needed, HDR can develop schematic details or plan sheets to help LADOTD evaluate constructability, cost, traffic impacts, and implementation priorities.

Update Rating Files

HDR routinely reviews, updates, troubleshoots, and corrects existing BrR models and related rating files. For files provided by LADOTD, HDR will verify geometry, member definitions, material properties, load cases, deterioration inputs, rating methods, specification settings, and results against current structure conditions and DOTD/FHWA SNBI requirements. BrR models will be structured to support SNBI data fields, reinforcing LADOTD's readiness for automated permitting and long-term bridge management.

When files contain errors, outdated assumptions, incomplete data, or software-related issues, HDR will identify the source, make corrections, and clearly document revisions. Updated files will be structured for future LADOTD use, including rating updates, permit review, automated permitting, and future condition changes.

Task 4: Training

HDR will develop and deliver a formal load rating training program tailored to LADOTD's needs and focused on analyzing complex bridge structures. Training can be provided virtually, in person, or through a hybrid format and will

emphasize practical workflows that LADOTD staff can apply directly to future rating and permitting assignments. HDR will prioritize AASHTOWare BrR where appropriate, including model development, input verification, interpretation of results, use of overrides, troubleshooting of unusual outputs, and recognition of software limitations.

For structures or elements that cannot be effectively rated in BrR, HDR will provide training on refined analysis methods and LADOTD-approved software, including finite-element modeling, influence-line development, and supplemental calculations.

Training topics may include movable bridges, trusses, segmental bridges, cable-stayed bridges, curved and skewed steel girders, substructure ratings, permit vehicle evaluations, deterioration modeling, and QA/QC procedures.

HDR staff includes instructors for the FHWA/National Highway Institute's Load and Resistance Factor Rating for Highway Bridges (Course 130092), notably Deanna Nevling.

By combining national load-rating training experience with practical complex-bridge rating proficiency, HDR will help LADOTD build internal technical capacity, improve consistency in rating decisions, and support the long-term implementation of reliable load-rating and permitting practices.

Task 5: Overweight Permit Review

HDR has the capacity, resources, and experienced bridge engineering staff available to respond quickly to overweight permit review requests, expediting reviews when time-sensitive decisions are required. We will use BrR, influence-line methods, and refined analyses as needed to perform permit reviews that address legal loads, SHV loading, emergency vehicles, and permit vehicles in accordance with LADOTD guidance. HDR will coordinate closely with LADOTD to complete reviews quickly, protecting highway infrastructure from damage without impeding the permit load-hauling schedule.

Task 6: Review, Update, and Correct AASHTOWare BrR File

HDR will review LADOTD-provided AASHTOWare BrR files for completeness, coding accuracy, condition updates, rating methodology, and compatibility with current bridge conditions. We will compare the existing models against available plans, inspection reports, previous ratings, and LADOTD guidance to confirm that the bridge geometry, member properties, material data, load definitions, boundary conditions, distribution assumptions, condition factors, and rating results are appropriate.

Our bridge rating staff will investigate existing BrR models that exhibit operational issues, inconsistencies, incomplete inputs, unsupported assumptions, or outdated conditions and correct them as needed. HDR will document the updates made to each file and apply a quality control review before final delivery. This approach will produce robust, reliable BrR files that support automated permitting, future load ratings, and the long-term management of LADOTD bridge information.

Task 7: Bridge Rating Review

HDR's experienced bridge rating engineers can provide LADOTD with independent, qualified reviews of load ratings prepared by other consultants, allowing DOTD staff to focus on emergency response, critical bridge issues, and other high-priority responsibilities.

HDR will serve as an extension of LADOTD's quality assurance process by performing thorough, objective reviews of rating assumptions, calculations, models, and documentation. Reviews will verify bridge geometry, framing assumptions, material properties, field data, condition assumptions, dead and live load applications, BrR implementation, governing limit states, deterioration considerations, posting recommendations, and overall report completeness. HDR will evaluate the reasonableness of analytical methods, modeling assumptions, and supporting documentation to verify compliance with LADOTD requirements, the AASHTO Manual for Bridge Evaluation, and applicable BDTMs.

HDR will use the BDEM flowchart and associated 16-step process as a consistent framework for evaluating rating quality, completeness, and compliance. When discrepancies, unsupported assumptions, modeling issues, or documentation gaps are identified, HDR will clearly document the issue, explain its potential impact, and provide practical recommendations for resolution. This approach will help LADOTD improve consistency across consultant-prepared ratings, reduce the burden on DOTD reviewers, and maintain confidence in the accuracy of load ratings.

PROJECT EXAMPLE: HDR recently served as an Independent Design Reviewer for a bridge project in St. Bernard Parish for the Port of New Orleans East St. Bernard Hwy Bridge. Working independently from the designer, HDR performed geometry reviews, superstructure and substructure checks, design verification, calculation reviews, and comment tracking through a formal comment-resolution matrix. That same disciplined, independent review philosophy will be applied to bridge ratings prepared by others on behalf of LADOTD.

Task 8: Miscellaneous Rating Work

INNOVATIVE: HDR will support LADOTD with rating and permitting tasks that arise during the implementation of the automated permitting system, including policy development, procedure refinement, BrR model readiness reviews, troubleshooting analytical issues, and evaluation of unusual bridge conditions.

We will assist LADOTD in developing clear and practical guidance for load rating, permit vehicle evaluation, documentation requirements, QA/QC expectations, and maintenance of rating files used for automated permitting. HDR understands that successful automated permitting depends on accurate bridge models, consistent rating assumptions, reliable data, and clear procedures for handling exceptions. On previous statewide programs, HDR has helped agencies identify gaps in rating methodology documentation, develop standardized exception-handling workflows, and establish clear criteria for when manual review is required, the same practical approach we will bring to LADOTD.

We will help LADOTD identify gaps in existing rating information, resolve model or methodology issues, and establish workflows that improve consistency across the statewide bridge inventory. By combining bridge load-rating proficiency with experience supporting statewide programs, HDR will provide practical recommendations that improve efficiency, reduce manual review effort, support timely permit decisions, and enhance the long-term usability of LADOTD's rating and permitting information.

PROJECT DELIVERY, PROJECT MANAGEMENT, AND ELECTRONIC DELIVERABLES

For each task order, HDR will establish a clear delivery plan that defines scope, schedule, staffing, milestones, QA/QC reviews, and required electronic deliverables. HDR will coordinate regularly with the LADOTD Project Manager to confirm priorities, resolve data gaps, discuss rating assumptions, and track progress through completion. This proactive communication allows HDR to identify issues early, maintain schedule certainty, and confirm each task order is delivered in a format that supports LADOTD review, future updates, and bridge management decisions.

HDR understands that the final rating package must be complete, organized, and readily usable by LADOTD. Electronic deliverables will include retrieved documentation used for the rating, rating reports, current-condition documentation, photographs, assumptions influencing the rating, BrR models, supporting calculations, editable analysis files, District Response forms, posting option forms, and other required Attachment A materials. HDR is familiar with ProjectWise, AssetWise archives, InspectX records, and DOTD electronic delivery expectations, and will organize files logically so LADOTD can efficiently review, archive, update, and reuse the information for future rating, permitting, monitoring, and asset management needs.

While individual task-order schedules will vary based on bridge complexity and available records, HDR follows a proven project delivery approach that provides a clear path from document retrieval through final review and comment resolution.

ESTIMATED DURATION OF TYPICAL LOAD RATING TASK ORDER												
Task	Months	0	1	2	3	4	5	6	7	8	9	10
Document Retrieval		■										
Coordination for Site Visits			■									
Site Visit			■									
Post Visit - Inspection Report			■	■								
Analysis and Rating				■	■	■	■	■				
Detailed Check							■	■	■	■		
QA/QC Checks									■	■	■	
LADOTD Review									■	■	■	
Comment Review											■	■

19. Workload:

For all contracts where a firm on the team is a prime consultant or sub-consultant and where **a)** the consultant selection was made by DOTD, and **b)** a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

- 1) one of the team's firms is responsible for the performance of the work;
- 2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;
- 3) the work has not yet been performed and invoiced;
- 4) the work is not currently suspended for an indefinite period of time; and
- 5) only the Work Type Discipline(s) represented in Section 12 of this document are the Work Type Discipline(s) that need to be represented on this table for each applicable firm. Workload associated with any other discipline(s), even if active and otherwise meeting the criteria above, need not be reported in this table.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.
List only the portion of the fees attributable to firms on the team.

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
HDR Engineering, Inc.	Bridge	4400024186/H.015472	LADOTD Br Preservation TO4	\$106,185
	Bridge	4400021517	Contract 5 for Movable Bridges (6)	\$2,427,514
	Bridge	4400024186	LADOTD LA301 Priest Canal TO#5	\$40,072
	Bridge	4400024186	LADOTD Br Preservation TO6	\$82,082

(Add rows as needed)

DO NOT SUM

*** The only disciplines to be used are: Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic.** If a firm has more than one discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per discipline.

**** Round to the nearest dollar. Do not round to the nearest thousands.** If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. **NOTE: ALL FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.**

20. Certifications/Licenses:

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
HDR ENGINEERING, INC.	Business Corporation (Non-Louisiana)	OMAHA	Active

Previous Names

HDR INFRASTRUCTURE, INC. (Changed: 12/3/1987)

Business: HDR ENGINEERING, INC.

Charter Number: 34178558F

Registration Date: 6/17/1985

Domicile Address

1917 S. 67TH STREET

OMAHA, NE 68106

Mailing Address

1917 S. 67TH STREET

OMAHA, NE 68106

Principal Business Office

1917 S. 67TH STREET

OMAHA, NE 68106

Registered Office in Louisiana

201 RUE BEAUREGARD, STE. 202

LAFAYETTE, LA 70508

Principal Business Establishment in Louisiana

5750 JOHNSTON STREET

SUITE 105

LAFAYETTE, LA 70503

Status

Status: Active

Annual Report Status: In Good Standing

Qualified: 6/17/1985

Last Report Filed: 6/15/2026

Type: Business Corporation (Non-Louisiana)

Registered Agent(s)

Agent:	REGISTERED AGENTS INC
Address 1:	201 RUE BEAUREGARD, STE. 202
City, State, Zip:	LAFAYETTE, LA 70508

21. QA/QC Plan:

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

22. Sub-consultant information:

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

Firm Name (Name must match <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

23. Location:

If location is an evaluation criterion for this advertisement (see page 2) and the prime consultant intends to establish a local presence, describe the plan for doing so. **Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the Evaluation Criteria section of the advertisement.**



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225.465.6361

hdrinc.com

We practice increased use of sustainable materials
and reduction of material use.

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