LADOTD

US 11 Norfolk Southern RR Overpass (HBI)

Engineering and Related Services

CONTRACT NO.
4400032800

DATE
September 9, 2025

HNTB

HNTB Corporation
The HNTB Companies
Infrastructure Solutions

450 Laurel Street, Suite 1200
Baton Rouge, LA 70801

Telephone (225) 368-2800
www.hntb.com

September 9, 2025

Louisiana Department of Transportation and Development (LADOTD)
Attn: Ryan Morvant
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

Re: Contract No. 4400032800 - US 11 Norfolk Southern RR Overpass (HBI)

Dear members of the project evaluation team:

For decades, HNTB Corporation (HNTB) has proudly partnered with LADOTD to deliver transformative infrastructure solutions across the state. We are excited to continue this partnership by submitting our qualifications for the US 11 Norfolk Southern Railroad (RR) Overpass project in St. Tammany Parish.

Our team is strategically assembled to combine deep local knowledge with national expertise in bridge, roadway, geotechnical design, and complex project delivery. We understand the importance of this corridor not only as a vital transportation link but also as a designated secondary hurricane evacuation route and we are committed to delivering a solution that is safe, efficient, and constructable. HNTB brings the following strengths to LADOTD for this project:

Proven Complex Project Delivery Expertise: Led by project manager **Josh Porter, PE** and supported by senior project advisor **Manab Medhi, PE**, our team has successfully delivered complex bridge replacements over major corridors and/or railroads, such as I-44 over UPRR/Black Gold Drive, I-20 Eastbound Bridge over I-55 South/Illinois Central RR, and US 80 over CPKC RR. Additional project history such as LA 1 Phase 2 and I-10 Calcasieu River Bridge Replacement Early Works Package display HNTB's success in delivering projects critical to Louisiana's transportation network. These projects required innovative structural solutions, accelerated construction techniques, and seamless stakeholder coordination, all of which align with the scope and challenges of this US 11 overpass project.

Integrated Team with Specialized Capabilities: We have partnered with Stanley Consultants and Ardaman & Associates to enhance our project delivery. Stanley brings unmatched roadway design experience in Louisiana and specifically along the US 11 corridor, while Ardaman contributes critical geotechnical expertise in Louisiana soil including experience in PDA testing, CAPWAP analysis, and interpretation of non-destructive testing. Together, our team offers LADOTD a collaborative, experienced, and technically robust approach to project delivery.

Environmental Compliance and EA Integration: Our approach is rooted in full compliance with the existing Environmental Assessment (EA). We understand the EA has been completed and is not to be revisited but rather implemented. With this in mind, we have structured our organizational chart with a plan review and compliance group to ensure all design elements from line and grade studies to construction sequencing align with the EA's conclusions.

Our EA compliance reviewer, **Lynn Maloney-Mujica, AICP** was a technical reviewer in the preparation of the current US 11 Norfolk Southern Railroad EA. Her prior involvement and deep understanding of the environmental process bring critical insight and continuity to our team.

Unique Approach to Innovative Solutions: To provide LADOTD with the best possible bridge alternatives, HNTB will host a bridge alternatives conference that brings together experienced subject matter experts from HNTB in complex bridge design, construction and phasing. This collaborative session will encourage open exploration of all possible structure types. Throughout the process, we will carefully consider factors such as construction access, crane placement, girder sizing and transport logistics, and coordination with the railroad to ensure each alternative is both feasible and practical.

We are excited to submit our qualifications and look forward to the opportunity to partner with LADOTD to bring this vital infrastructure improvement to life.

Sincerely,
HNTB Corporation

Dusty Bastion, PE
Gulf Coast Office Leader
(225) 368-2810
dbastion@HNTB.com

Josh Porter, PE
Project Manager
(225) 368-2808
jmporter@HNTB.com

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Sections 1-11

DOTD FORM: 24-102
PROPOSAL TO PROVIDE CONSULTANT SERVICES

(Revised August 11, 2025)

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.

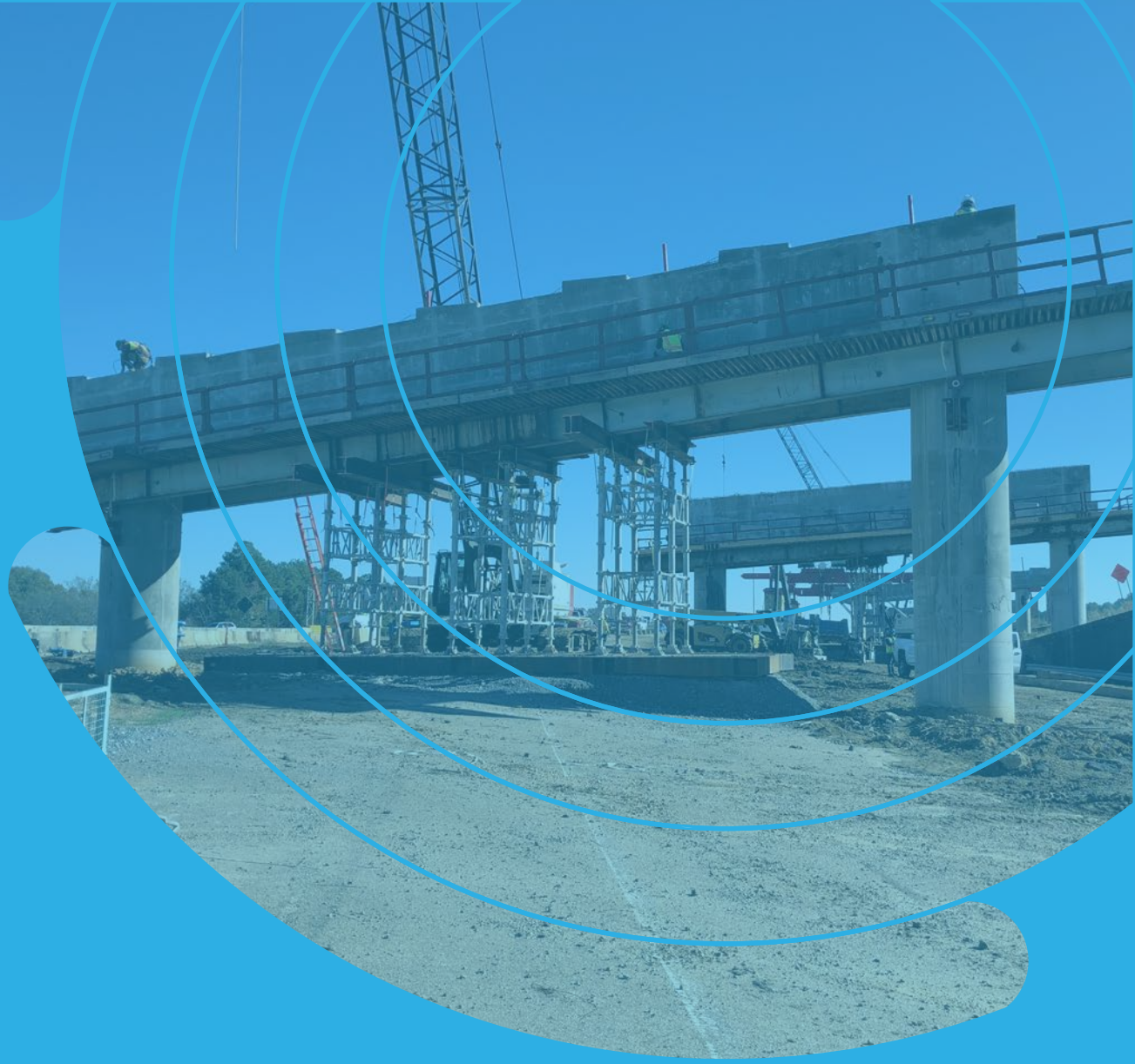
1. Contract Name as shown in the advertisement	US 11 Norfolk Southern RR Overpass (HBI)
2. Contract Number(s) as shown in the advertisement	4400032800
3. State Project Number(s), if shown in the advertisement	H.000688.5
4. Prime consultant name (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)	HNTB Corporation
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.0001775
6. Prime consultant mailing address	450 Laurel Street, Suite 1200, Baton Rouge, LA 70801
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	450 Laurel Street, Suite 1200, Baton Rouge, LA 70801
8. Name, title, phone number, and email address of the prime consultant's contract point of contact	Todd "Dusty" Bastion, Vice President | (225) 368-2810 | dbastion@HNTB.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Todd "Dusty" Bastion, Vice President | (225) 368-2810 | dbastion@HNTB.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response. 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.	 _____ Signature above shall be the same person listed in Section 9: Date: September 8, 2025
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.	N/A

Section 12: Discipline Table

12. DISCIPLINE TABLE

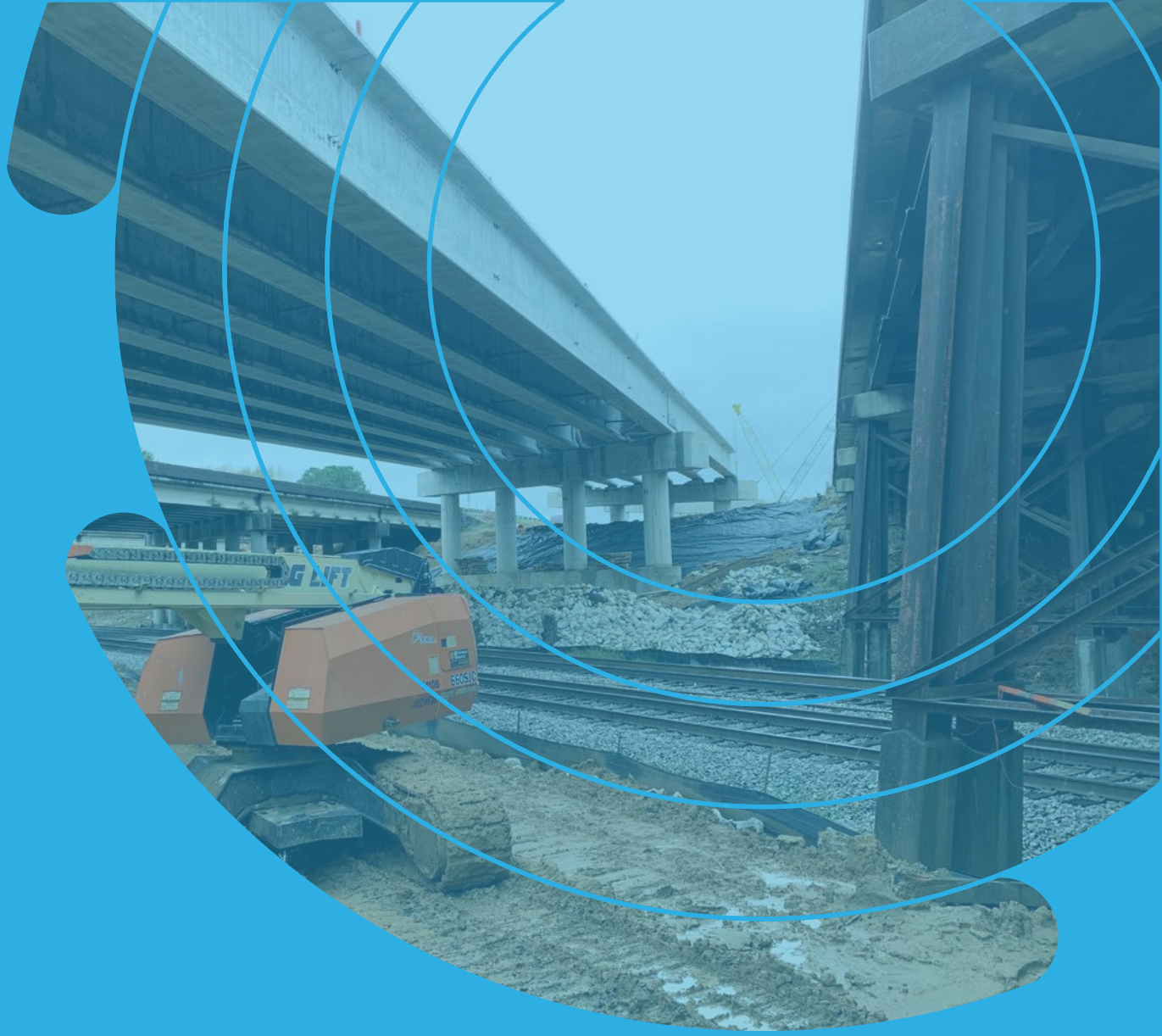
Discipline	% of Overall Contract	HNTB Corporation (Prime)	Ardaman & Associates, Inc.	Stanley Consultants, Inc.	Each Discipline must total to 100%
Bridge	47%	100%			100%
Road	38%	10%		90%	100%
Geotech	15%	50%	50%		100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each subconsultant.					
Percent of Contract	100%	58.3%	7.5%	34.2%	



Section 13: Team Size

13. TEAM SIZE

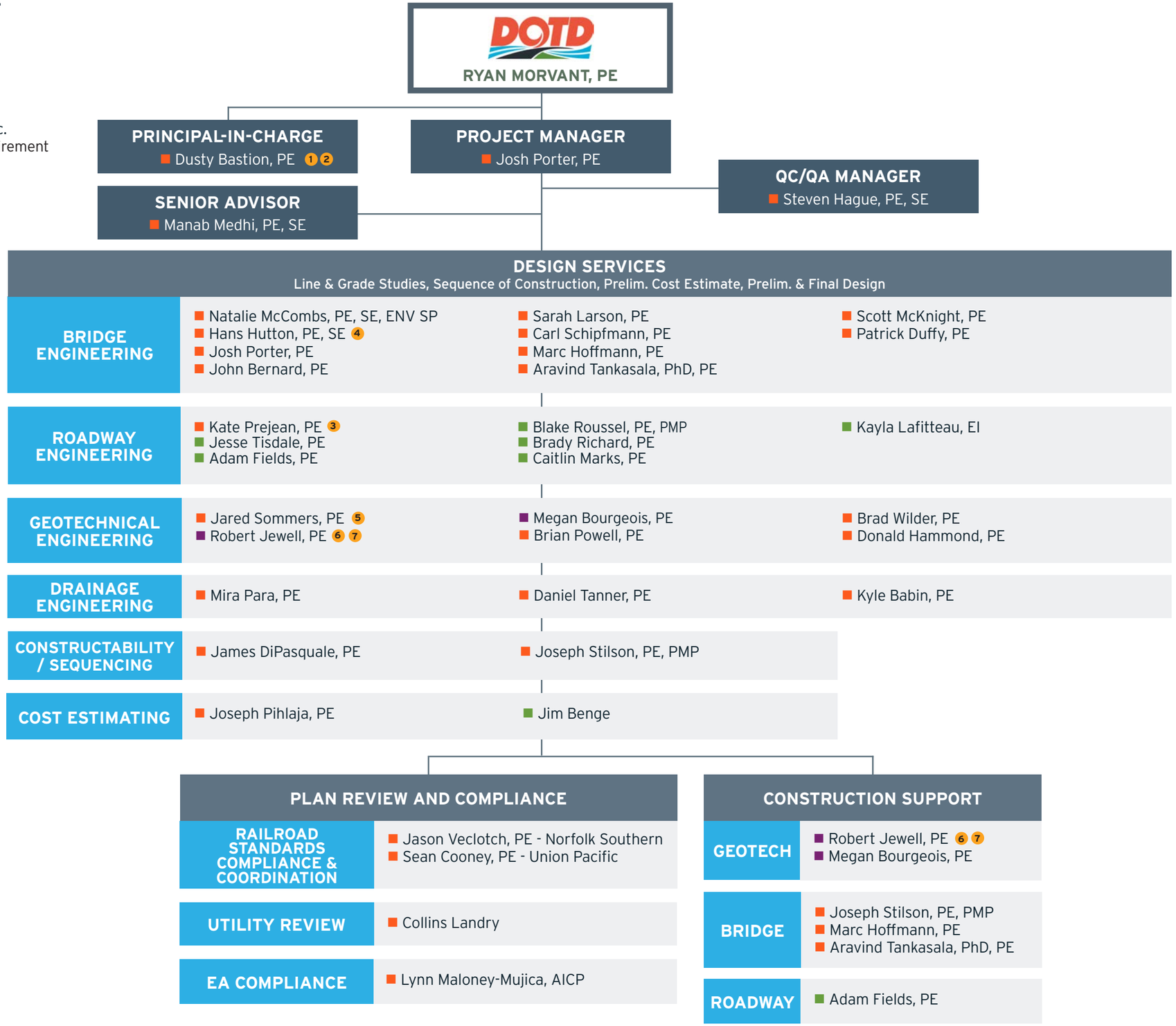
Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
HNTB Corporation	Administrative	1	2
	Clerical	1	3
	CADD Technician	2	8
	Engineer	11	24
	Engineer Intern	4	9
	Principal	1	2
	Senior Technician	2	7
	Supervisor - Engineer	7	21
	Supervisor - Other	9	14
Ardaman & Associates, Inc.	Administrative	1	1
	Clerical	1	2
	CADD Technician	2	2
	Engineer	1	6
	Engineer Intern	1	6
	Principal	1	3
	Senior Technician	4	9
	Supervisor - Engineer	1	3
	Supervisor - Other	1	4
	Technician	3	15
Stanley Consultants, Inc.	Supervisor - Engineer	4	6
	Engineer	7	15
	Engineer Intern	3	5
	Senior Technician	1	2
	CADD Technician	1	3
	Administrative	1	2



Section 14: Organizational Chart

14. ORGANIZATIONAL CHART

LEGEND
- HNTB Corporation
- Stanley Consultants, Inc.
- Ardaman & Associates, Inc.
- (#) Minimum Personnel Requirement



Section 15: Minimum Personnel Requirements

15. MINIMUM PERSONNEL REQUIREMENTS

MPR No.	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 and number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	Dusty Bastion, PE	HNTB Corporation	PE / #36719 - Civil	LA	03-31-2026
2	Dusty Bastion, PE	HNTB Corporation	PE / #36719 - Civil	LA	03-31-2026
3	Kate Prejean, PE	HNTB Corporation	PE / #35036 - Civil	LA	03-31-2026
4	Hans Hutton, PE, SE	HNTB Corporation	PE / #38204 - Civil	LA	03-31-2026
5	Jared Sommers, PE	HNTB Corporation	PE / #40978 - Civil	LA	03-31-2027
6	Robert Jewell, PE	Ardaman & Associates, Inc.	PE / #38579 - Civil	LA	09-30-2026
7	Robert Jewell, PE	Ardaman & Associates, Inc.	PE / #38579 - Civil	LA	09-30-2026

Section 16: Staff Experience

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Todd "Dusty" Bastion, PE** ① ②	Years of relevant experience with this employer	12
Title	Gulf Coast Office Leader	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	BS / 2007 / Civil Engineering		
Active registration number / state / expiration date	36719 / LA / 03-31-2026 | 21004 / MS / 12-31-2026		
Year registered	LA; 2011 | MS; 2012	Discipline	Civil
Contract role(s) / brief description of responsibilities	(MPR 1 and 2); Principal-in-Charge		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).

Dusty brings **18 years of multi-disciplined engineering** and management experience, with a strong emphasis on **bridge design** and alternative delivery methods. He has served as the engineer of record on numerous bridge projects, including complex multi-level interchanges and off-system replacements, and has led multidisciplinary teams through all phases of **PS&E development, cost estimating, quality control, and construction support**. His expertise includes the development of technical procurement documents for P3 and Design-Build projects, spanning state highway bridge replacements and interstate interchange reconstructions. Dusty has authored performance specifications and technical provisions across structural, roadway, geotechnical, traffic, electrical, and mechanical disciplines, and has led owner verification design reviews to ensure compliance with DOTD and AASHTO standards.

Dusty's relevant experience includes bridge design QA/QC planning, cost-efficient structure selection and coordination with railroad requirements. He has prepared construction cost estimates and duration schedules. His work routinely integrates input from topographic and SUE surveys, and he has overseen the detailing, inspection, and load rating of **steel plate girder bridges**–meeting the minimum personnel requirements for this contract. Dusty is a licensed professional engineer in the State of Louisiana and has completed all required DOTD training certifications, including work zone safety and cybersecurity compliance.

06/12-02/25	**I-10 Calcasieu River Brdge EIS, Calcasieu Parish, Louisiana:** Bridge lead whose responsibilities included line and grade investigations to determine lengths, widths, and structure type of all bridge structures to be replaced within the study limits. Particular focus was on layout of an elevated interchanges and developing structural design solutions to minimize or eliminate negative impacts from hazardous chemicals present in the soil. Current efforts include determining structure layouts which interface with at-grade infrastructure to ensure the final solution ensure traffic and safety improvements.
04/20-4/25	**LADOTD IDIQ Contract of Bridge Preservation, Statewide, Louisiana:** PM who was in responsible charge for this task-order-based IDIQ contract focused on bridge preservation. Over the duration of this contract, he has directly managed the contracting and execution of more than 20 task orders. Task orders have consisted of interstate median barrier design and detailing (I-20 in Bossier and I-110 in Baton Rouge), bridge replacements using phased construction (LA 1 over Caddo Lake in Mooringsport) and girder replacements/repairs due to overheight vehicle impacts (Orange Street over I-20 in Monroe, LA 3250 over I-49 in Alexandria, I-12 over LA 1032 in Denham Springs). He has provided direct oversight of production staff, including plan development guidance, sequence of construction input, construction support oversight, internal coordination and coordination directly with LADOTD personnel. Due to time-sensitive project delivery needs, many projects required accelerated project delivery.
08/15-04/22	**LADOTD Retainer Contract for Bridge Preservation, Statewide, Louisiana:** PM who was in responsible charge for this task-order-based retainer contract focused on bridge preservation. Over the nearly 6.5 years this contract was active, he directly managed the contracting and execution of 32 task orders. Task orders consisted of bridge rehabs/replacements using accelerated bridge construction (ABC) techniques (I-20 Rehab in Bossier, US 80 over I-20 in Calhoun, US 90 over LDRR and LA 329 in New Iberia, US 90 over LA 14 in New Iberia, I-10 Slab Spans over Veterans Boulevard in New Orleans), bridge replacements using conventional construction techniques (LA 442 over Tangipahoa River in Hammond, LA 532 over I-20 near Minden) and analysis/rehabilitation of thru-truss structures (LA 182 Bridge in Charenton, US 90 Atchafalaya Bridge in Morgan City). He provided direct oversight of production staff, including plan development guidance, sequence of construction input, construction support oversight internal coordination and coordination directly with LADOTD personnel.

Todd "Dusty" Bastion (cont.)	
04/13-Ongoing	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** PM who was in responsible charge for this bridge project, which will eventually connect at-grade LA 1 to the existing Phase 1 structure. His duties include coordination with LADOTD personnel, superstructure development, substructure development and geometric\ alignment development. His additional project coordination responsibilities include subconsultants, permits, utilities, electrical/lighting design, ITS design and tolling system design. This project is multi-faceted, including a phased design and construction approach, a tolling facility, levee, flood wall and pipeline crossings, unique accelerated bridge construction methods, and environmental regulations. This project is currently under construction.
5/17-04/24	**US 90 Atchafalaya River Bridge Repairs, Morgan City, Louisiana:** PM who was in responsible charge for this steel through-truss structure, which crosses the Atchafalaya River in Morgan City, LA. This project consists of numerous structural repairs to the steel superstructure and painting work which will allow the bridge to function for the foreseeable future. Dusty has managed distribution of all work assignments to date, including both internal assignments and workshare with other offices. This project development phase was accelerated to allow the client to start construction work as early as possible. Currently this project is near the end of construction and construction support services are nearly complete. Prior to bridge rehabilitation work, he participated as a lead inspector in the in-depth inspection of this structure. All bridge repairs were developed based off of this in-depth inspection.
02/17-04/22	**I-20 Eastbound Bridge over I-55 South/Illinois Central RR, Jackson, Mississippi:** PM who was in responsible charge for this large bridge and roadway realignment project located in the heart of the Jackson, Mississippi, Dusty participated in the preliminary line and grade development of this new corridor and during final plans, he helped manage design activities and resources to ensure the project development schedule was met. This project was executed on a condensed project development schedule and used complex design elements, such as post-tensioned cap beams and straddle bents to ensure the I-20 eastbound mainline could be replaced while minimizing traffic impacts and construction dollars. Construction of this project was completed in 2022.
08/17-06/20	**MDOT Bridge Services IDIQ Master Contract, Statewide, Mississippi:** PM who was in responsible charge for this IDIQ bridge services contract, which has generated 10 work assignments over the past three years. Within this contract, Phases A, B and C assignments have been successfully completed, as well as NBIS bridge inspection of movable structures. Of the 10 work assignments, Dusty has managed six of them, but has been intimately involved in all work assignments issued as part of this very successful IDIQ contract.
11/17-06/20	**I-55 Widening over I-220, Jackson, Mississippi:** Principal-in-Charge for this complex structural analysis and design project. The existing concrete box girder structure had a 9.4% cross slope and a low vertical clearance, and the client was told that this must be replaced to provide the adequate traffic capacity. HNTB proposed a way to widen the structure with multiple shallow steel plate girders to carry the load and meet the required vertical clearances. Additional work for construction services included RFI reviews, shop drawing reviews, and additional contractor's submittal reviews.
02/19-07/20	**I-10 & I-12 College Drive Flyover Ramp Design-Build, East Baton Rouge Parish, Louisiana:** Technical procurement team lead for this traffic congestion relief and safety enhancement project. Dusty's roles included the development of performance specification documents, response to Design-Builder questions, participation in public meetings, oversight for the development of permit drawings and conceptual renderings, construction cost estimating and schedule development, utility and stakeholder involvement, RFQ evaluation participation, and very close coordination with LADOTD leadership. This D-B project will construct one bridge overpass over I-12 and controlled access ramps to eliminate the dangerous weaving movements required for westbound traveling traffic to exit at College Drive.
02/13-06/17	**US 90 over LA 14, New Iberia, Louisiana:** Project manager for this bridge replacement project consisting of twin steel plate girder bridges crossing a busy highway with insufficient vertical clearance. His duties include overseeing substructure and superstructure design, planning development coordination, cost estimating, specification development, and sequence of construction development. This project will utilize accelerated bridge construction to mitigate traffic impacts and reduce construction duration. Each two-span structure will be constructed off-site and moved into place using self-propelled modular transporters (SPMT) to ensure that traffic flow will be minimally interrupted. This highway corridor will eventually become Interstate 49, and the new alignment layout will not affect the existing interchange or the underlying roadway.
09/17-06/18	**I-10 EB Pascagoula River Bridge Bent and Crack Repairs, Pascagoula, Mississippi:** PM who was in responsible charge for both of these repair projects focused on the I-10 EB Pascagoula River Bridge. The first project was focused on mitigating fatigue cracks located in the steel box girder main span. The second project was focused on correcting an apparent substructure settlement issue at two bent locations. On both projects, Dusty's efforts included performing a condition assessment inspection, obtaining detailed measurements for plan development, developing repair concepts and plans, developing the costs estimate, and then managing the Phase C once a contractor was selected.

16. STAFF EXPERIENCE

Firm employed by: HNTB Corporation			
Name	**Josh Porter, PE**	Years of relevant experience with this employer	9
Title	Bridge Project Manager	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	BS / 2010 / Civil Engineering		
Active registration number / state / expiration date	#39513 / Louisiana / 09-30-2027		
Year registered	2015	Discipline	Civil
Contract role(s) / brief description of responsibilities	Project Manager, Bridge Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).

Josh has extensive experience in project management and delivery of LADOTD projects which include many simple and complex bridge projects, rehabilitation, roadway and drainage work, railroad relocation and coordination, sequencing and traffic control, geotechnical exploration and design, electrical and signal design, and survey. He has substantial experience leading the development of preliminary and final design and plans on multi-discipline projects following all applicable LADOTD manuals, policies, directives, and standards. He regularly serves as the point of contact for construction-related engineering services, answering contractor questions and RFIs, developing cost estimates for a wide variety of projects, participating in value engineering studies, and leading various evaluation studies. He brings extensive experience in working with LADOTD in developing task orders for IDIQ contracts including Alternative Delivery IDIQ, Bridge Preservation IDIQ, Bridge Inspection IDIQ, and Bridge Load Rating IDIQ.

*Work completed with previous employer

02/22-Ongoing	**I-10 Calcasieu (HBI) Early Works Package, Calcasieu Parish, Louisiana:** PM on an accelerated, multi-disciplined project to develop an early works package to facilitate the construction of the replacement of the existing I-10 bridge over the Calcasieu River. During the environmental and procurement process of the Public Private Partnership (P3) for the replacement structure, several obstacles and constraints were identified that would need to be addressed outside of the approved scope of the P3. To ensure no delays in the overall P3 construction, this project included rehabilitation of the existing bridge to extend the service life of the existing bridge until the replacement was complete, the relocation of a railroad spur shared by CPKC Railroad (formerly Kansas City Southern) and Union Pacific Railroad, the addition of a temporary structure to facilitate the relocation of an existing pipe rack, the addition of a temporary access road to divert traffic during construction of the temporary structure, and multiple intersection modifications to accommodate increased traffic volumes on the project detour route. As the PM, Josh was responsible for coordinating all efforts between task leads including the structures design team, railroad design team, roadway design team, drainage study and design team, traffic study team, survey subconsultant, geotechnical testing subconsultant. Additionally, Josh was responsible for all agency coordination including the LADOTD District, LADOTD Headquarters, pipeline owner, and railroad owner. He is currently leading all construction support effort.
11/21-Ongoing	**I-10 Calcasieu River Bridge Rehabilitation, Calcasieu Parish, Louisiana:** PM responsible for rehabilitating the existing structure to extend its life and serviceability until its expected replacement can be completed. Worked with the bridge maintenance and design staff to develop a list of necessary repair items. The basis of the repairs was the inspection reports developed by a separate inspection task order.
06/18-06/22	**LA 15 over Boeuf River Bridge, Richland Parish, Louisiana:** PM for an off-alignment bridge replacement along LA 15 over the Boeuf River in Alto, Louisiana. The bridge was designed with LG-54 girders on pile caps. The team was tasked with the design of the superstructure, substructure, and foundations. The team coordinated with the DOTD district roadway group that designed the new alignment. Engineering support was provided during construction, along with PDA monitoring and assessment of results.

Josh Porter (cont.)	
06/19-06/21	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Task leader for the design and plan development of the slab span portion of the structure from grade to over the levee. This task included 81 slab spans of varying widths and geometries to accommodate the T-intersection at the beginning of the bridge. The T-intersection was laid out to accommodate the tolling system that would be required for the structure. Responsibilities included preliminary alignment and layout, superstructure design and details of the slab spans, substructure analysis and plan production, preliminary and final plan development, checking plans and design calculations, and developing quantity and cost estimates.
12/16-05/19	**US 80 over I-20, Ouachita Parish, Louisiana:** Project task manager for the demolition and replacement of a deficient bridge in northwest Louisiana crossing I-20. Tasked with design checking of the steel girder spans, design of the intermediate bent, design check of the end bents. Also utilized accelerated bridge construction techniques to develop a construction phasing plan limiting the closure of I-20.
06/19-06/21	**Gramercy Rehabilitation, Gramercy, Louisiana:** PM for a bridge painting and rehabilitation project of the LA 3213 Gramercy truss bridge over the Mississippi River. Project included inspection of the bridge and subsequent repair recommendation report, bridge rehabilitation of the approach spans and main truss spans, and painting of the steel approach spans and main truss spans. Developed the construction cost estimate capturing the cost of the unique nature of the repairs as well as the painting of all steel members on the bridge. Participated in the Value Engineering Study initiated by the DOTD.
03/19-10/21	**LA 532 over I-20, Minden, Louisiana:** PM for an off-alignment bridge replacement of the LA 532 bridge crossing I-20. The structure utilized LG-36 girders at tight spacings to limit the structure depth without using steel girders. The team was tasked with the preliminary and final design of the superstructure, substructure and foundations. The team coordinated with the LaDOTD district roadway group that designed the new alignment. Engineering support was provided during construction.
05/20-06/22	**LA 3250: I-49/UPRR Overpass Repair, Alexandria, Louisiana:** PM for a repair of a precast prestressed girder bridge crossing I-49 and the UPRR. Assessed the damaged structure to determine repair needs and developed the replacement concept utilizing accelerated bridge construction techniques. Led the design team in the analysis of the new segment. Oversaw the detailing of the new segment and the outlining of the removal section to allow for seamless placement of the new segment within the footprint of the removed segment.
11/19-09/20	**Off-System Bridge Rating (53 Bridges), Statewide, Louisiana:** PM and lead load rating engineer for a large off-system load rating task. Many structures require load rating to comply with FHWA NBIS Metric #13. Led the effort overseeing the team to rate the various structures, which included pre-stressed girder bridges, rolled I-beam bridges, steel plate girders, and reinforced concrete slab spans. Many structures had poor quality, incomplete, or completely missing plans. Utilized engineering judgment and coordination efforts with the LaDOTD load rating group to develop the load ratings of structures with missing or incomplete plans.
10/16-3/18	**Bridge Load Rating Retainer, Statewide, Louisiana:** PM for the load rating of complex bridge structures in Louisiana. Bridge elements evaluated under this contract include: Vertical Lift Spans, Pontoons, Swing Spans, Continuous Steel Plate Girders, Prestressed Girders, Reinforced Concrete Beams, Slab Spans, Pile Bents, Slab Spans, and Steel Grid Decks.
06/20-02/22	**I-20 Overpass Rehabilitation, Bossier City, Louisiana:** Task manager overseeing the load rating of 14 structures, including complex structures, along the I-20 corridor in Bossier City. The ratings were performed using BrR, RC Pier, and 3D FEA software LARSA. Structure types included curved steel structures, haunched concrete girders, and straight steel continuous girders with kinked connections to allow for the roadway curvature. The overall project was to develop median barrier replacement to coincide with the replacement of the existing pavement. Approach slabs and backwalls were replaced on several of the structures.
03/13-09/14	**LA 1 over I-49 Bridge Rehabilitation, Rapids Parish, Louisiana*:** Designer, load rating and plan developer who assisted in the design of the new steel spans and reinforced concrete substructures, the development of construction plans, and the as-designed load rating. The project was rehabilitating an existing bridge subjected to settlement at the abutments, causing twisting of the existing continuous steel girder spans and failure of bearings. Plans were developed to remove the existing embankment and add spans to each side of the bridge. The existing structure would be temporarily shored while the existing abutments were replaced with a new intermediate bent. New abutments were placed, and new spans were installed. The existing spans were then jacked to allow for the replacement of their bearings and risers.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Steven Hague, PE, SE**	Years of relevant experience with this employer	38
Title	Senior Project Director	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization	ME / 1982 / Civil Engineering; BS / 1981 / Civil Engineering		
Active registration number / state / expiration date	28414 / LA / 09-30-2025		
Year registered	1999	Discipline	Civil, Structural
Contract role(s) / brief description of responsibilities	QC/QA Manager		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	As one of HNTB's leading bridge engineers, Steve brings 40 years of nationwide experience in complex bridge design and construction over major river crossings. His bridge experience includes roadway, rail and pedestrian structures constructed in both steel and concrete. He is responsible for managing multiple office/multiple-firm design assignments, which include specialists for tasks as diverse as wind tunnel studies, site-specific seismology, and geotechnical soil and rock remediation. He has developed the ability to review and coordinate a wide variety of disciplines to ensure that all the necessary pieces of complex design come together to successfully complete each bridge project.
06/23-06/24	**America's River Crossing (I-55) over the Mississippi River, Memphis, Tennessee to West Memphis, Arkansas:** Bridge task lead for the planning and NEPA document for the replacement of the I-55 bridge. The existing structure was built in 1949, prior to the interstate system and current seismic design provisions. Responsible for coordination with the USCG, TDOT and ARDOT for the bridge type, pier placement and span configuration for this new crossing. The new bridge will feature a 4-lane (plus two axilliary lanes) cable-stayed bridge with a main span length of 1350 feet.
07/22-Ongoing	**US 17 / SR 404 Spur Bridge (Eugene Talmadge Memorial Bridge) Major Maintenance Project, Georgia DOT, Savannah, Georgia:** Senior structural engineer who performed the proof of concept engineering to demonstrate feasibility and independent design reviewer for this $160 million major maintenance project. This first-of-its-kind project includes replacing 144 grouted stay cables with a state-of-the-art ungrouted stay system. Stay cable replacement will be followed by modifying the bridge profile to provide an additional 20 feet of underclearance for safe passage of larger vessels into the Port of Savannah. The work included structural analyses for stay cable replacement, adjustment of stay cables for the profile change to increase the clearance over the navigation channel, wind tunnel studies to determine the wind effects on the structure at the revised profile and an assessment of structural demand under the revised wind loads.
12/13-09/15	**US 84 Mississippi River Bridge Pin and Link Replacement, Natchez, Mississippi:** Senior technical advisor for replacing the pins and link on the cantilever truss bridge. Steven was responsible for developing the concept to temporarily restrain the bridge supports during the pin and link replacement.
06/07-06/10	**Huey P. Long Bridge Widening, New Orleans, Louisiana:** Project engineer overseeing the erection engineering and existing bridge analyses for the widening of the 1934 rail and roadway bridge over the Mississippi River. This bridge included a three-span continuous cantilever truss of 1,850 feet and a simple span truss of 531 feet. The bridge was widened with two additional trusses 50.5 feet outboard of the existing trusses, the extension of the roadway floor beams and new portals and sway frames.
03/01-06/11	**Great River Bridge over the Mississippi River, Desha County, Arkansas to Bolivar County, Mississippi:** Project manager for new $360 million, 22,000-foot crossing of the Mississippi River just north of Greenville, Mississippi. The bridge includes a cable-stayed navigation span of 1,520 feet and approach spans of up to 420 feet over the Mississippi River levees. Work included the management of five subconsultants, geotechnical investigation, site-specific seismology and seismic analyses, permitting including the USCG, USACE, and FAA.
08/14-04/16	**Minnesota Route 43 over the Mississippi River, Winona, Minnesota:** Provided peer review for substructure and foundation design for this historic truss bridge over the Mississippi River.

Steven Hague (cont.)	
06/07–06/10	**Stan Musial Veterans Memorial Bridge (I-70) over the Mississippi River, St. Louis, Missouri:** Project manager for the design of a new four-lane crossing of the Mississippi River near downtown St. Louis. This project was the first new bridge constructed connecting downtown St. Louis and southwestern Illinois in more than 40 years and was planned to relieve congestion on the Poplar Street Bridge. This $265 million project was part of the overall $640 million program and included a 1,500-foot main-span cable-stayed bridge and approaches on either side. The bridge was designed to initially carry four lanes of traffic; however, if future demands require it, the bridge may be re-striped to carry six lanes while MoDOT plans a parallel structure immediately downstream. The bridge was designed for a 2,500-year return period earthquake event in the New Madrid Seismic Zone for AASHTO Site Class F soils and for vessel allision forces in the Mississippi River. His responsibilities included managing a design team comprised of 15 consulting firms located in three different locations, as well as coordination between MoDOT and two additional consultants for adjoining projects. He was also responsible for the final technical review and approval for all aspects of the project from the design criteria document to final plan submittal, recommendations for foundation, substructure and superstructure types; key decisions with respect to structural design; review and approval of contractor-submitted design-phase alternative technical concepts (ATCs); USCG, USACE and FAA permits; geotechnical investigation plan and engineering; site-specific seismology; and seismic hazard assessment. The project was designed for HL-93 loads in accordance with AASHTO LRFD Bridge Design Specifications and the first edition of the AASHTO Guide Specifications for LRFD Seismic Bridge Design.
01/16-09/16	**SH 249 Direct Connector at Sam Houston Tollway, Houston, Texas:** During construction, this 1-mile long direct connector that links the southbound SH 249 with westbound Sam Houston Tollway, was found to have experienced girder rotation and loss of superelevation following deck placement. As a senior technical advisor, Steve was responsible for determining the cause of the problem and developing a plan to restore super elevation to the bridge.
02/01-03/04	**Old Mississippi River Bridge at Vicksburg, Mississippi:** Performed field investigation and evaluation of slope stability and its impact on the east substructure units for the only railroad crossing of the Mississippi River between Memphis, Tennessee, and Baton Rouge, Louisiana.
07/99-07/00	**Great River Bridge over the Mississippi River, Desha County, Arkansas to Bolivar County, Mississippi:** Responsible for conceptual design, plans, and cost estimates for Mississippi River crossings of five alignment alternatives during the environmental phase of the project, and Project Manager for the final design. The various alternatives include navigation span lengths from 1,000 to 1,400 feet and both roadway and railroad crossings, as well as combined highway/rail options.
06/98-06/10	**US 82 over the Mississippi River, Greenville, Mississippi:** Responsible for conceptual, preliminary and final design, preparation of cost estimates, the preliminary design report, which was required in the early stages of design, and the final design for this new Mississippi River crossing. Design tasks included wind and seismic analyses; erection analysis, including time dependent effects; vessel collision analysis; and superstructure and substructure member design. Also project manager and SME for the construction inspection including review and approval of the Contractor's bridge design manual. The existing bridge, which was struck by more barge traffic than any other structure on the Mississippi River, was replaced with this former U.S. record 1,378-foot main span cable-stayed bridge in 2010.
06/05-10/06	**US 90 Bridge over St. Louis Bay, Mississippi:** Project design quality control manager for this $275 million design-build replacement structure over St. Louis Bay. The project featured a 250-foot navigation span over the main channel. This emergency replacement project, as a result of Hurricane Katrina, required opening two lanes over the channel within 18 months..
06/92-06/03	**Bill Emerson Memorial Bridge over the Mississippi River, Cape Girardeau, Missouri and Alexander County, Illinois:** Project engineer and plan coordinator for this 1,150-foot main span cable-stayed bridge over the Mississippi River. This bridge, located in the New Madrid Fault region, was designed to withstand an earthquake of an approximate magnitude equal to 8.5. Also was assigned to perform wind and time history seismic analyses of the main-span unit and Illinois approaches. The navigation unit is supported on a spread footing-type foundation at Pier 2 and dredged caissons at Piers 3 and 4, while the approach bridge is supported on 106 large-diameter shafts drilled through up to 90 feet of alluvial deposits into limestone. Because of the variable water surface elevation of the Mississippi River, it was necessary to construct a causeway and cofferdam for each of the 10 approach span piers located inside the Illinois levee.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Manab Medhi, PE, SE**	Years of relevant experience with this employer	17
Title	Department Manager	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization	MBA / 2014 | MS / 2008 / Civil Engineering BS | 2004 / Civil Engineering		
Active registration number / state / expiration date	45083 / LA / 03-31-2027		
Year registered	2012	Discipline	Civil, Structural
Contract role(s) / brief description of responsibilities	Senior Bridge Advisor		

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).
	Manab is a bridge department manager with more than 18 years of experience in bridge design. His area of focus is in delivering rail projects to rail and DOT clients. He has the experience of delivering projects using DBB, DB and CMGC delivery methods. His experience primarily includes project management, structural design of movable and fixed bridges, development of bridge layout, developing construction sequence, reviewing temporary work and construction methods developed by contractors, responding to RFI's for rail projects. He is a registered professional and structural engineer across several states in USA. Manab is an active member of AREMA Committee 15 for steel structures
02/24-09/24	**BNSF Bridge Through Plate Girder Standards** Project manager who worked with BNSF to develop the design and plans for a TPG Standard with specific design considerations that would allow it to be modified for use in any bridge superstructure replacement project. Though this standard was developed to be used in an emergency, HNTB made the design efficient for a 150-foot-long span that has the ability to adapt to any span lengths less than that. The design and details for this standard span allow it to fit any span length between 75 feet and 150 feet with minimal modification. The TPG Standard was designed and detailed with the understanding that major components of a span could be fabricated without consideration of a specific location and placed into storage. If an emergency bridge replacement is necessary, this significantly complete fabrication could then be modified to fit a variety of span length and skew configurations. A unique feature of this design is the ability to adapt the standard to variable skew angles, ranging from no-skew up to a maximum skew of 60 degrees.
07/24-12/24	**Flood Impacted BNSF Bridge 2001-518.9 replacement over the Bog Soux River, Soux City, Iowa:** Project manager for the collapse of the BNSF bridge on June 23, 2024, due to extreme flooding near Sioux City, Iowa, a significant incident with serious consequences for local businesses and transportation networks. As part of the project, HNTB provided construction support during the demolition of the existing bridge, conceptual evaluation of the replacement alternative and final design of the replacement of the existing bridge. The main span of the new bridge, a 175-foot long through plate girder, stands as the longest such span in BNSF's system. To meet the aggressive schedule, HNTB delivered the steel design early as a separate package, allowing construction to proceed without delay. The new pier foundation rests on large diameter drilled shafts, providing the necessary structural support for the replacement bridge.
06/19-Ongoing	**BNSF Bridge 1750.9 over Skykomish River near Gold Bar, Washington:** Project manager and engineer of record for the project. The project involved evaluation of two alternatives: Alternative 1 - the existing foundation for reuse, replace more than 100 years old superstructure reap clement with a 252-ft through truss and 100-ft deck plate girder spans. Alternative 2 – replace the existing bridge in an offline alignment. HNTB serves as the prime consultant to provide project management, structural design, H&H engineering, survey, develop construction sequence to minimize track outages and assist in USACE permit.
07/22-Ongoing	**Robert Street Bridge Replacement Independent Design:** Project manager and structural lead for this project involving independent design of a 215-foot single track rolling bascule span in an online alignment. The M&M is the engineer of record. As part of this independent design, HNTB is scoped to perform review of the plans and specifications at each milestone, to perform independent design of the bascule truss, track girder, bascule and rest piers and to review the construction sequence.

Manab Medhi (cont.)	
02/19-Ongoing	**Armourdale and Central Industrial District (CID) Levees Raise, Kansas City, Kansas and Missouri:** Bridge lead for the task that involves conceptual evaluation and final design of the potential influence of the Levee raise may have on the UPRR Bridge 3 (UPRR #3) and the Missouri Pacific Bridge (MOPAC) located just upstream of the confluence of the Kansas and the Missouri Rivers in Kansas City, Missouri. The task involves multiple disciplines including bridge, H&H, mechanical, electrical, geotechnical and utility. Following the 1993 flood, the seven levees were studied under Section 216 of the 1970 Flood Control Act. The behavior of the existing bridges was analyses under hydraulic and debris loadings based on AREMA, ASCE and FHWA guidelines.
08/19-Ongoing	**BNSF Br. 72.8 White Salmon River near Underwood, Washington:** Project manager and engineer of record for the project, which involves conceptual engineering and development of initial schemes that includes different foundation types like drilled shafts, micropiles, driven piles and superstructure types like plate girders, through plate girders and through trusses. After the selection of the alternative, HNTB serves as the prime consultant to provide final design, H&H engineering, survey, geotechnical investigation, develop construction sequence to minimize track outages and assist in USACE and USCG permit.
03/18-09/18	**UPRR Bridge 1.96 over Roosevelt Road, Chicago, Illinois:** Project manager and engineer of record for the project that consists of replacement for bridge 1.96 over Roosevelt Road on the Rockwell Subdivision. Developed the bridge layout and construction sequence that minimizes track outage and directly supervised the design and plan development of the bridge plans. The proposed replacement structure is a through plate girder bridge carrying the existing track on its current horizontal alignment, with a provision of addition of a new track in the future. He also developed the work plan per the project budget and schedule.
10/13-08/20	**BNSF West Coast Bridges, Vader and Stephenson, Washington:** Engineer of record for BNSF Bridge 814. and 53.5 who served as the structural lead for the three bridges over Rock Creek 81.4, Little White Salmon River 53.5 and the Cowlitz River 66.4 during existing substructure evaluation, construction sequence, span layout study and preliminary design phase. He performed the bridge layout for the three bridges. Span types include trusses, deck plate girders and prestress spans. Foundation type consists of cap with drilled shafts and piles.
01/13-04/13	**BNSF Mainline Underpass Fort Worth Sub, MP 220.33, LS 7500, Texas:** Independent peer reviewer who was responsible for the bridge plans and calculations. The bridge consists of prestressed and steel plate girder ballasted deck spans founded on drilled shaft foundations. An independent design was performed for the plate girder spans.
06/10-05/13	**CN Bridge 173.20 over the Fox River, Oshkosh, Wisconsin:** One of the lead design engineers and project engineer during construction for the project that involved the replacement of an existing swing span with a new single leaf rolling bascule through truss. Superstructure includes six deck plate girders, one track girder and a 147-foot single leaf rolling bascule span. During conceptual phase of the project, Manab performed the rating of the existing 178-foot swing span and 148-foot through trusses as a part of the replacement concept report. The bridge was open to traffic (train and navigation) in the fall of 2013.
02/10-08/10	**BNSF Bridge No. 204.66 over the Mississippi River, Burlington, Iowa:** Truss designer who assisted in preparing the final design plans and cost estimates of the approach spans, which consisted of six fixed trusses of 245-foot spans and two ballast deck plate girders. Also involved with the construction phase of the vertical lift span of the project and was on site to assist in drilled shaft construction. The new bridge is 2,146 feet long and replaces the old railroad bridge's swing span and approach spans, which were originally constructed in 1868. The existing superstructure was reconstructed in 1912. The new vertical-lift span increases capacity for rail and clearances for maritime traffic. HNTB completed an alternatives analysis, design coordination, permitting, geotechnical, hydraulic studies and construction documents for the replacement of six existing truss spans with new superstructure spans and foundations for BNSF.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Natalie McCombs, PE, SE, ENV SP**	Years of relevant experience with this employer	29
Title	Senior Technical Advisor	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	MS / 2007 / Civil Engineering; BS / 2001 / Civil Engineering		
Active registration number / state / expiration date	PE: 28632 / MS / 12-31-2025; 135439 / TX / 06-30-2026; 18629 / KS / 04-30-2026 SE: 31244 / OK / 12-31-2025 | ENV SP: 2013		
Year registered	2005	Discipline	Structural
Contract role(s) / brief description of responsibilities	Bridge Engineer		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		

Natalie is a senior technical advisor with over 29 years of experience, including five years as a bridge engineering technician. Recognized as an HNTB Associate Fellow in 2019, she is celebrated for her deep technical expertise and regional experience. Known for her collaborative leadership style, Natalie integrates her strengths in positivity, inclusiveness, learning, empathy, and development. Her extensive project portfolio includes the analysis and design of various structures, with a focus on arch bridges such as tied-arch and deck-arch bridges, cable-stayed bridges, straddle bents, unique structures, curved girder bridges and conventional I-girder bridges. She has also contributed significantly to projects involving vessel collision and river navigation. Additionally, Natalie is dedicated to industry advancement, volunteering since 2012 with the National Steel Bridge Alliance (NSBA), Vice-Chair of the NSBA Collaboration since 2025 and serving on the NSBA National Technical Committee since 2024. The collaboration brings together steel industry professionals—including designers, erectors, fabricators, and researchers—to develop guidelines that improve project efficiency across the U.S. Natalie contributes by writing, editing, and reviewing documents for several task groups, including Erection, Design, Constructability, Analysis, and Repair and Retrofits. She has worked on both published and in-development documents and also serves on the NSBA National Technical Committee, which advises NSBA on industry priorities. She has been active in planning the World Steel Bridge Symposium and has contributed her expertise to designing footbridges for Bridging the Gap Africa since 2016.

02/19-4/25	**US 80 over CPKC Railroad, Brandon, Mississippi:** Senior technical advisor for the bridge type study for US80 over Kansas City Southern railroad. The client requested a study to determine a shallow structure that could be constructed while maintaining traffic and would fit within the railroad closure windows. The type study included an ABC technique to build a precast concrete arch superstructure with short railroad closures. Shallow steel plate girders and adjacent concrete box beams were also considered in the report. The client selected the precast adjacent box beam bridge and preliminary plans were prepared. The project continued into final design. The bridge crossed over the Canadian Pacific Kansas City (CPKC) (formerly KCS) railroad and spanned the railroad right away. The railroad corridor was improved by regrading the slopes and satisfy the railroad requirements. HNTB was also contracted to produce Phase B bridge plans. This design utilized the layout and PPC box beams from the Phase A plans. Every effort was made to stay out of the railroad ROW below the bridge, so a unique span configuration was used utilizing a 26-foot jump span and a 117-foot main span. Due to the length of the main span and the structure type, additional prestressing strands and haunch was required. The team is currently working toward draft final plans.
06/19-Ongoing	**I-44 over UPRR/Black Gold Drive, Oklahoma City, Oklahoma:** Senior technical advisor and engineer of record on the study phase, preliminary and final design of an accelerated bridge project. The study included evaluations to determine the most cost-effective bridge construction method to erect the bridge while minimizing the impact to traffic. The study included options for traditional bridge construction, accelerated bridge construction (ABC) using self-propelled modular transporters and prefabricated bridge element systems. The design solution consisted of new prefabricated bridge element superstructure on top of rehabilitated and widened piers. Each superstructure prefabricated bridge element consists of two steel I-girders and a slab and used Ultra-High-Performance Concrete (UHPC) between the segments. The bridge spans over the UPRR and has piers in the railroad right of way. HNTB worked with the UPRR to satisfy their requirements by limiting impact to the railroad by using prefabricated superstructure elements, adding a crashwall, adding MSE Walls to remove the existing embankment from RR ROW and coordination meetings with the railroad and working towards a resolution to proceed with the project.

Natalie McCombs (cont.)	
02/17-04/22	**I-20 Eastbound Bridge over I-55 South/Illinois Central Railroad, Jackson, Mississippi:** Value Engineering Report: Technical lead for the value engineering study of a four span, 12-foot-deep curved structural steel plate girder bridge. The value engineering study resulted in the proposition of 150-foot prestressed concrete beams with post-tensioned straddle capbeams, which simplified the construction process and reduced the road closure from weeks to occasional nightly closures. This approach ultimately improved traffic flow and saved $19 million. Final Design: Project manager, engineer of record and technical bridge lead for the final design of a 15-span prestressed concrete beam bridge, with varying skews and post-tensioned capbeams that resulted from a value engineering study. The bridge crossed over the Illinois Central Railroad and piers were located in the railroad right of way. Innovations were implemented that included the longest prestressed beams in the state to span over the railroad clear zone, slope stability piles, regrading and underdrains were installs in the embankments adjacent to the railroad to improve the railroad corridor. The bridge included concrete post-tensioned concrete straddle capbeams to span over the roadways while limiting the vertical profile above. Duties performed include project coordination with the client, coordinating the disciplines and leading the technical decisions and design of the project. Additional work for construction services including RFI reviews, shop drawing reviews and additional contractor's submittal reviews.
11/17-06/20	**I-55 Widening over I-220, Jackson, Mississippi:** Project manager, engineer of record and technical bridge lead for the complex structural analysis and design project. The existing concrete box girder structure had a 9.4% cross slope and a low vertical clearance, and the client was told that this must be replaced to provide the adequate traffic capacity. HNTB proposed a way to widen the structure with multiple shallow steel plate girders to carry the load and meet the required vertical clearances. Additional work for construction services included RFI reviews, shop drawing reviews, and additional contractor's submittal reviews.
10/24-Ongoing	**I-49 over the Arkansas River, Ft. Smith, Arkansas:** Bridge technical lead and engineer of record for preliminary and final bridge design. The project includes 17 bridges, 33,100 LF of bridge, 202 spans and is the equivalent to 78 two-, three- or four-span units. The main span unit of the river bridge consists of a four span steel I-girder bridge with a maximum span of 440 feet over the McClellan-Kerr Arkansas River Navigation System, a navigable waterway. The project includes two-, three- or four-span bridge units with primarily steel I-girder bridges with a prestressed beam alternate for three of the bridges. Efforts included proposing a river navigation study to the USCG to right size the navigation channel. The study involved coordinating and working closely with the USCG to determine the criteria and parameters. Additionally, she organized, monitored the study of the subconsultant, the Seamen's Church Institute, a mariner navigation training and simulation organization. She performed the vessel collision calculations and lead the design of the river piers that included the vessel impact. The river bridge also carried a 36-inch diameter waterline across the bridge, and she led the coordination of the structural details for the Arkansas Department of Transportation (ARDOT).
06/22-10/22	**BNSF Bridge 81.4 over the Cowlitz River, Olequa, Washington:** HNTB designed the replacement of Bridge 81.4 as part of BNSF's Heavy Bridge Replacement Program. The replacement design consisted of 140- to 200-foot deck plate girders, prestressed double-cell box spans supported by piers with drilled shaft and pile in an offline alignment. HNTB's key staff performed preliminary and final design and coordinated with subconsultants for geotechnical investigations, underwater inspection, survey, and with BDI for the in-service deflection monitoring of the bridge. BNSF wanted to measure live load deflections as trains passed over the newly constructed bridge. HNTB needed firm measurements and, BDI was able to deploy laser displacement sensors in an effective manner that met the needs of both HNTB and BNSF. These sensors turned out to be particularly useful for this application where a frame of reference was difficult to implement. A live load deflection monitoring program was developed for the project to measure the displacement in the vertical and horizontal direction. The field results were compared to the design model to determine live load deflections for passing BNSF trains at various speeds. Field deflection readings were collected by BDI via multiple bridge accelerometers for multiple trains covering a variety of train speeds and weights. Natalie served as the analyst of data obtained by BDI. Natalie was the model checker of the dynamic model that was used to verify the vibrations for the bridges due to live load displacement. A live load displacement monitoring system was developed and collected by BDI. It included laser displacement sensors and accelerometers. The data collected included various speeds and train loading conditions and was used to compare to the structural models.
03/17-09/17	**Bent 22 Capbeam, Austin, Texas:** Technical lead for the structural analysis and design of a steel box girder straddle capbeam replacement. During construction, the contractor elected to use a steel box girder in place of the concrete post-tensioned box girder straddle capbeam. The box girder was redesigned in a short time frame to meet the clients' needs.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Hans Hutton, PE, SE** ④	Years of relevant experience with this employer	28
Title	Practice Consultant	Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization	MS / 1997 / Civil Engineering; BS / 1990 / Civil Engineering		
Active registration number / state / expiration date	38204 / LA / 03-31-2026 | 17198 / MS / 12-31-2025		
Year registered	2013	Discipline	Civil
Contract role(s) / brief description of responsibilities	(MPR 4); Bridge Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Hans is a practice consultant and chief engineer in HNTB's bridge section. He has worked with various bridges, including suspension, cable-stayed, arches, trusses, segmental, girder and rigid frames. He has worked with fixed and movable bridges and roadways, railway and pedestrian bridges. He also has experience with **steel plate girder design** and various foundations and temporary structures, as well as experience in erection engineering. He has designed bridges over major rivers and other navigable waterways, including the Mississippi, Missouri and Ohio rivers and intercoastal waterways. His prior experience with Union Pacific Railroad equips him with a deep understanding of railroad operations and expectations, which is critical when planning and executing work in active rail environments. He brings strong technical expertise in both designing and constructing railroad bridges, including those that span over rail corridors. This insight supports the use of accelerated bridge construction techniques to minimize disruptions to rail traffic and ensure efficient project delivery.
06/23-06/24	**I-55 over the Mississippi River, Memphis, Tennessee:** Preliminary design of the cable-stayed unit across the Mississippi River. The cable-stayed unit consisted of a 1,350-ft main span with two 540-ft backspans.
01/21-12/21	**I-40 over the Mississippi River, Memphis, Tennessee:** Structural analysis of the main spans of the 1,800-foot, two-span trussed arch bridge across the Mississippi River. After a significant fracture in one of the tie-girders was found during a routine inspection, the ARDOT retained HNTB to inspect and evaluate the bridge. This was an emergency assignment as the State closed the bridge to vehicular traffic and the river to marine traffic. Hans built a 3-D FE model of the bridge and evaluated it in its fractured state for progressive collapse.
06/20-06/21	**US 169 over the Missouri River, Kansas City, Missouri:** Lead bridge engineer for this major interchange and Missouri River crossing that included ten bridges. Two bridges crossing the Missouri River are over 1800 feet long and comprise a series of steel plate girder spans and prestressed concrete girder spans. This is a navigable waterway, and its navigation spans are over 450 feet. The piers were designed for vessel impact. Two bridges are curved flyovers about 1500 feet in length that directly connect I-35 with US 169 and are comprised of steel plate girder and prestressed concrete girder spans. The remainder of the bridges are approaches or smaller flyover bridges that are a combination of curved steel plate girder and prestressed concrete spans. The project employed a variety of reinforced concrete substructures founded on drilled shafts. This MoDOT design build project had a value of $220 million. The project involved crossing four active railroad tracks, and close coordination with the railroad was critical to the successful delivery of the bridges and overall project.
03/17-11/19	**UPRR Mississippi River Bridge, Clinton, Iowa:** Engineer of record for the design of the main navigation channel unit, including a 388-foot, triple-track ballast deck through truss supported on cast-in-place concrete piers socketed into the underlying bedrock. The project extends over 18,600 feet of track, including over 5,000 feet of bridge. Most approach bridge spans are steel, ballast deck, and plate girder spans supported on cast-in-place concrete piers. The bridge was modeled in CSi Bridge with a 3D finite element model including frame and shell elements. The model was used for the evaluation of all forces and load combinations as well as erection and dynamic analyses.

Hans Hutton (cont.)	
02/15-04/16	**BNSF Bridge over the Missouri River, Sibley, Missouri:** Engineer of record responsible for developing the railroad bridge concept and performing the final design of the truss spans and the associated substructure for this bridge that extends more than 4,000 feet across the Missouri River. It is composed of 2,000 feet of precast prestressed spans, 400 feet of deck plate girder spans and over 1,400 feet of truss spans, including three 400-foot through truss spans.
01/09-11/09	**Canadian Pacific Railway Vertical Lift Bridge over the Mississippi River La Crescent, Minnesota:** Project engineer who assisted in the final design of this new 400-ft. vertical lift railroad span that will replace an existing swing span under the Truman-Hobbs Act.
06/08-06/14	**I-70 Stan Musial Veterans Memorial Bridge over the Mississippi River, St. Louis, Missouri:** Engineer-of-record leading the design of this 2,700-foot cable-stayed bridge. The three-span, steel, cable-stayed unit incorporated a 1,500-foot main span over the Mississippi River. This bridge incorporated a composite of steel edge girders with a post-tensioned concrete deck. The concrete pylons utilized steel anchor boxes for the anchorage of the stay-cables. This bridge spans a navigable waterway. Structural analyses included detailed erection analyses and nonlinear seismic time history analyses. The project involved crossing 5 active railroad tracks, and close coordination with the railroad was critical to the successful delivery of the bridges and overall project.
02/15-12/15	**I-70 Manchester Bridge, Kansas City, Missouri:** Construction engineering/innovation manager responsible for directing the project team through an investigation of alternative construction methods to determine the most cost-effective methods to design and construct the bridges on this project. This design-build project replaced the twin, 2,500-foot I-70 bridges across the Manchester Trafficway, several railroads and the Blue River. It also replaced the US 40 bridge over the Blue River and rehabilitated the I-70 bridges over US 40. The improvements to the Manchester Trafficway include maximizing the weave/merge lane between the I-70 and I-435 interchange. The project replaced the I-70 bridges without the closure of the I-70, improving safety and one year ahead of MoDOT's schedule. The project involved crossing 6 active railroad tracks, and close coordination with the railroad was critical to the successful delivery of the bridges and overall project.
06/07-06/08	**Huey P. Long Bridge over the Mississippi River, New Orleans, Louisiana:** Project engineer responsible for the erection engineering of this project, which involved the addition of eight 528-foot truss panels to the four-span cantilever truss unit over the Mississippi River by employing an innovative truss erection technique. He developed the erection concept and performed the erection analysis and structural design of the stability frame for the erection scheme. He also evaluated the truss spans, strengthening them when required for the temporary conditions.
06/96-06/06	**US 82 Mississippi River Bridge, Greenville, Mississippi:** Design engineer responsible for the erection analysis and assisting in the design of the main spans of this 783-meter steel, cable-stayed bridge.
07/99-06/02	**Great River Bridge over the Mississippi River, Arkansas City, Arkansas:** Design engineer responsible for conceptualizing a 22,500-foot parallel railroad bridge over the Mississippi River. Work included the design of the superstructure of the 1,520-foot cable-stayed highway bridge. This bridge included a deck plate girder and through truss, with approach spans of 1,520 feet cable-stayed, the main span being composed of a through truss. Substructure ranged from T-piers on piling to deep dredged caissons.
01/17-12/17	**Hale Boggs Memorial Bridge over the Mississippi River, Luling, Louisiana:** Subject matter expert and field inspector for the in-depth inspection of this cable-stayed bridge. This is a three-span, cable-stayed bridge with a 1,220-foot main span across the Mississippi River. Fieldwork included structural inspection of the cable-stayed unit and the disassembly and reassembly of the stay-cable friction damping devices.
01/16-12/16	**John James Audubon Bridge over the Mississippi River, St. Francisville, Louisiana :** Subject matter expert and field inspector for the in-depth inspection of this cable-stayed bridge. This is a three-span, 3,185-foot cable-stayed bridge across the Mississippi River. Fieldwork included structural inspection of the cable-stayed unit and the disassembly and reassembly of the stay-cable friction damping devices.
06/05-06/06	**US 90 Bridge over St. Louis Bay, St. Louis, Mississippi:** Project engineer who assisted in the design of this 11,200-foot bridge. This was a design-build project in the wake of Hurricane Katrina. This $267-million 11,200-foot bridge rises 85 feet above the water and comprises 76 spans, typically 155 feet each. The substructure consists of concrete bents and hammer-head piers supported by concrete displacement piles. The typical superstructure consists of prestressed 78-inch bulb tees, with the main unit consisting of spliced, post-tensioned, 78-inch haunched bulb tees.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**John Bernard, PE**	Years of relevant experience with this employer	27
Title	Technical Advisor	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 1998 / Civil Engineering		
Active registration number / state / expiration date	31026 / LA / 03-31-2026		
Year registered	2015	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	John has extensive experience in bridge design including superstructure and substructrure design, **steel plate girder design**, widening, repair, rating, inspection, construction support, and plan preparation, as applicable for steel trusses, movable bridges, curved and straight plate girders, pre-stressed girders, and timber structures. He has been involved in bridge projects from preliminary design through construction phases. He also has experience with various bridge inspections including many Mississippi River crossings. He has experience using LADOTD manuals and construction specifications.
02/22-05/25	**I-10 Calcasieu (HBI) Early Works Package, Calcasieu Parish, Louisiana:** Lead design engineer responsible for the footing and straddle bent design of a staddle bent that ties into the existing I-10 Calcasieu River Bridge in order to span over a relocated railroad spur. Also lead designer for the 70'-0" steel girder temporary bridge that spans over a relocated gas piperack trench on the I-10 on/off ramp near Sampson Street. Both the railroad spur and gas pipelines were required to be relocated in order to not interfere with the new P3 Calcasieu River Bridge. The temporary bridge utilized accelerated bridge construction (ABC) techniques by utilizing preconstructed steel girder and concrete deck segments with ultra high performance concrete closure pours.
04/13-Ongoing	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Lead design engineer for this 8-mile bridge project, which will eventually connect at-grade LA 1 to the existing Phase 1 structure. His duties included steel plate girder design, concrete prestressed girder superstructure design, concrete substructure design, and geometric alignment development. His substructure design efforts included providing two (2) substructure alternatives for the contractor to bid the most cost-effective solution. His additional design efforts included designing a USACE approved concrete floodwall in Golden Meadow. This project is multi-faceted, including a phased design and construction approach, a tolling facility, levee, flood wall and pipeline crossings, unique accelerated bridge construction methods, and environmental regulations. This project is currently in construction and John has provided construction related engineering support by reviewing shop drawings and answering applicable RFIs.
09/20-04/21	**Caddo Lake Bridge (HBI), Caddo, Louisiana:** Lead design engineer for the superstructure, substructure, and non-standard approach slabs for the 2,000'-0" new prestressed girder bridge over Caddo Lake. The project required the bridge to be constructed in phases, and John was responsible for identifying the phasing locations and layout for the bridge portion of the project. John also was the lead in developing all the bridge plans.
09/21-Ongoing	**US 90: LDRR and LA 329 Overpass Rehab, Iberia Parish, Louisiana:** Lead design engineer responsible for developing repair plans for accelerated bridge construction using precast end bent backwall replacements under phase construction. Other repairs included approach slab, concrete patching, anchor bolts, joint seals, and bearing pads.

John Bernard (cont.)	
09/24-Ongoing	**I-12 over Hog Branch, Livingston, Louisiana:** Lead design engineer for the superstructure, substructure and non-standard approach slabs for the new I-12 bridge over Hog Branch. The project requires the bridge to be constructed in phases, and John is responsible for identifying the phasing locations and layout for the bridge portion of the project. The new bridge is 125ft wide with a median barrier and also utilizes link slab spans on precast concrete girders
02/24-Ongoing	**LA 47: Bayou Bienvenue Bridge Replacement, St. Bernard Parish, Louisiana:** Lead design engineer of the superstructure and substructure for the new 320'-0" slab span bridge near Chalmette, LA. Due to the rapidly deteriorating nature of the bridge, John incorporated accelerated bridge construction (ABC) techniques into the final plans by utilizing precast concrete bent caps that were the exact same dimensions for both Phase 1 and Phase 2 construction. The project requires the bridge to be constructed in phases, and John was responsible for identifying the phasing locations and layout for the bridge portion of the project. The project is currently in construction.
08/18-08/23	**LA 15 over Boeuf River Bridge, Richland Parish, Louisiana:** Lead design engineer for the superstructure and substructure of the new LA 15 bridge over Boeuf River. The new bridge utilized precast concrete girders and concrete bent caps. Girders were designed utilizing LEAP Bridge Concrete, and the substructures were designed using RC Pier. John also oversaw the plan production for the project.
03/06-07/08	**I-49 Connector Phase II Functional Plan, Lafayette, Louisiana:** Performed preliminary bridge layout and assisted with preliminary cost estimates for the future 5-mile corridor of I-49 from I-10 to the Lafayette Regional Airport. The project includes mainline freeway structures at 3.1 miles elevated; one 3-level directional interchange at 1.5 miles elevated; mainline ramp structures at 1.4 miles elevated; and associated railroad structures at 0.1 miles elevated
03/07-05/07	**I-10 Calcasieu River Bridge EIS, Lake Charles, Louisiana:** Developed preliminary bridge layouts for various vertical clearances of the main channel span and provided cost estimates.
02/16-05/17	**US 90 over LA 14, Iberia Parish, Louisiana:** Designed and developed final plans for a 49 degree skewed, steel plate girder superstructure (2-spans at 120-ft). Plans showed phased construction and accelerated bridge construction method with staging area. Steel beams designed with CSi Bridge.
05/16-06/18	**US 84 Mississippi River Bridge Pin and Link Replacement, Natchez, Mississippi:** Designed and developed repair plans to replace truss links at 6-locations (U19 and U69 upstream and downstream, U29 Upstream, and U49 Downstream) of a primary link system that supports suspended spans. Repairs required modification of the existing truss, the design of temporary post-tensioning restraining systems, and design of new links and pins. Plans include repainting the structural steel and navigation gauge. Performed design and construction inspections.
01/17-04/17	**I-10 from SR 57 to the Alabama State Line, Jackson County, Mississippi:** Developed concept plans for interstate widening, including three alternates, phase construction, PPC girder spans, voided slab spans, and replacement of a 2-beam, steel box girder span with new steel plate girders.

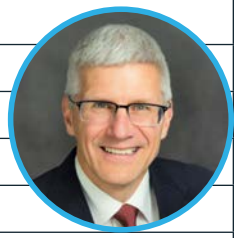
16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Sarah Larson, PE**	Years of relevant experience with this employer	17
Title	Senior Project Engineer	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization	MS / 2008 / Civil Engineering; BS / 2006 / Civil Engineering		
Active registration number / state / expiration date	32778 / MS / 12-31-2026; 22656 / AR / 12-31-2026		
Year registered	2012	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Sarah is a senior project engineer for HNTB's Kansas City office and brings over 16 years of experience to her role. Her master's degree research entailed evaluating lightweight concrete mixtures for bridge deck applications. Her work experience includes structural analysis and detailing of bridges. She also serves as a project quality manager.
08/24-03/25	**Austin Transit Partnership, Austin, Texas:** Involved with several superstructure and substructure layouts and designs. This project consisted of preliminary design for a new light rail transit project in Austin. Preliminary design was advanced to the 30% design stage. Sarah acted as the Bridge task lead and was also heavily involved in design and coordination. Superstructures primarily consisted of prestressed girders for both vehicular, pedestrian, and light rail traffic. Steel plate girders were utilized at locations were structure depth needed to be minimized. Number of girders and structure depth required for span was determined. Coordination was required with the hydraulic and roadway teams to minimize structure depths at some locations.
07/22-01/23	**US 80 over CPKC Railroad, Brandon, Mississippi:** Bridge task lead who was in charge of organizing and coordinating with the team. She was also the designer of the girders, checker of the abutments, and was involved with many design details and checking plans. This project was the final design phase for a two-span prestressed box girder bridge. The challenge of this bridge was to minimize the structure depth due to limiting geometry constraints. The innovative and economical solution was to use shallow-depth prestressed girders with a modified built-up top flange.
02/21-06/22	**Blue Line Project, Austin, Texas:** Involved with several superstructure and substructure layouts and designs. This project consisted of preliminary design for a new light rail transit project in Austin. Preliminary design was advanced to the 30% design stage to provide the necessary information for the NEPA process. Superstructures primarily consisted of prestressed girders for both vehicular, pedestrian, and light rail traffic. Longer spans of more than 200' consisted of steel plate girders. Number of girders and structure depth required for span was determined. Coordination was required with the hydraulic and roadway teams to minimize structure depths at some locations. Coordination was required with the utility team for substructure layout.
01/18-06/18	**I-20 Eastbound Bridge over I-55/Illinois Central RR, Jackson, Mississippi:** Responsible for the design of two post-tensioned cap beam straddle bents. The I-20 fly-over bridge is composed of 14 prestressed girder spans. Of the two bents she worked on, one was a conventional rectangular post-tensioned cap and the other was an inverted-T to achieve acceptable roadway clearance below the structure. Sarah oversaw the structural model for the bents, loads, post-tensioned cap beam design, anchorage zone design, and plan checking. She also devised the straddle bent erection scheme and post-tensioning notes.
11/14-08/15	**Gateway Bridge, Iowa City, Iowa:** Primarily responsible for the design of the partially post-tensioned Tie Girders of the Iowa City Gateway Bridge, a 110-by-250-by-100-foot concrete partial through deck tied arch with back-spandrels in the approach spans. This iconic bridge is located on Park Road and connects Dubuque Street to the University of Iowa campus. The tie girder design was especially challenging due to the restrained nature of the structure type and the need to consider several different key design stages throughout the erection and in-service life of the bridge. Each design stage required a unique set of design forces, post-tensioning, and the appropriate section properties to check stringent service limit stresses. In addition, since the tie girder was post-tensioned, the strength limit state was checked using an interaction diagram, considering both axial and bending effects, at each node. Furthermore, there was a significant detailing effort to ensure post-tensioning and mild steel reinforcement would fit and meet clearance requirements in the severely congested approach knuckle and main-span knuckle regions. She was also involved with the erection analysis, checking the columns, checking plans, and she performed the rating calculations for all main design members.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Carl Schipfmann, PE**	Years of relevant experience with this employer	33
Title	Senior Project Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	MS / 2000 / Civil Engineering; BS / 1992 / Civil Engineering		
Active registration number / state / expiration date	14469 / KS / 4-30-2027 1999137718 / MO / 12-31-2025		
Year registered	1997	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer		



Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Carl is a bridge project manager in HNTB's Kansas City Metro office. His experience includes management, design and inspection of a variety of bridge types and miscellaneous structures in locations across the nation, including Iowa, Kansas, Mississippi, Missouri, Nebraska, New York, Oklahoma, Texas, Virginia, Washington, California, Wisconsin, Louisiana and Connecticut. Prior to joining HNTB, Carl worked for the Iowa Department of Transportation (Iowa DOT) as an intern surveyor and asphalt inspector for bridge and road projects. In addition, he worked as an intern bridge inspector for a Chicago-based consulting firm.
06/20-06/24	**BNSF Br. 53.5 Construction, Stevenson, Washington:** Deputy project manager responsible for the construction management of a 300-foot railroad bridge during the three-year construction schedule. Scope of work consisted of replacing existing 258-foot bridge comprised of 50-foot DPG approach spans and 150-foot through truss main span. New foundations consisted of micropiles and driven piles. New superstructure consisted of a 207-foot deck plate girder main span and 46-foot box beam approach spans. Existing bridge was replaced in a 24-hour and 30-hour track closure windows.
02/19-03/23	**BNSF Br. 81.4 Construction, Vader, Washington:** Deputy project manager responsible for the construction management of a 1098-foot railroad bridge during the three-year construction schedule. Foundations consist of large diameter drilled shafts with rock sockets and drilled and driven piles. Superstructure consists of deck plate girder spans ranging in length from 143-ft to 208-ft and precast concrete double cell box beams.
04/21-11/21	**West Davis Corridor Design Build, Davis County, Utah:** Engineer responsible for the plan development of a 162-foot continuous two span, steel girder superstructure for Bridge 650 West over SR-77.
07/16-10/20	**Council Bluffs Interstate System Segment 4 I-29/I-480 Preliminary & Final Design, Council Bluffs, Iowa:** Senior technical review for preliminary design (B1 Plans) of the reconstruction of the I-29/I-480 system to system interchange. The $200 million project includes 14 bridges and 13 retaining walls. Final design consists of three steel girder bridges, two of which are horizontally curved flyovers.
03/11-06/13	**Canadian National Railway Bridge 173.20 over the Fox River, Neenah Subdivision, Oshkosh, Wisconsin:** Performed final design and plan preparation for the $25 million reconstruction of the existing movable span and fixed approach spans. Construction of the new rolling bascule truss span and fixed approach spans on new foundations, all constructed on the existing alignment, was completed in 2013.
09/18-05/24	**USACE Comite River Diversion: Kansas City Southern (KCS) Railway Bridges, Baton Rouge, Louisiana:** Structures task lead responsible for design and construction resolution for a five span prestressed concrete railroad bridge over the Comite River Diversion. The Comite Diversion is a USACE project and a critical flood control structure to alleviate flood water from the Comite River to the Mississippi River.
02/19-Ongoing	**USACE Kansas City Levees, Armourdale and CID Unit Levee Raises and Seepage Controls Design, Kansas City, Kansas and Missouri:** Structures task lead for preliminary and final design, plan preparation and specifications of a variety of structures for a 4- to 6-foot raise of the level of protection along the Kansas River for the Argentine, Armourdale, and Central Industrial District (CID) levee units. Structural elements include gatewells, floodwalls and closure structures for this $450 million project protecting over $9.5B in infrastructure. Responsibilities also included coordinating with an integrated team of USACE staff and local sponsors.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Marc Hoffmann, PE**	Years of relevant experience with this employer	7
Title	Bridge Project Manager	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization	MS / 2018 / Civil Engineering; BS / 2015 / Civil Engineering		
Active registration number / state / expiration date	44342 / LA / 09-30-2026		
Year registered	2020	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer, Bridge Construction Support		

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).
	Marc serves as a bridge engineer in HNTB's Baton Rouge office. He brings over 10 years of experience in bridge design, inspection, evaluation and rehabilitation. In his tenure, he has gained extensive knowledge of the AASHTO manuals for bridge design, evaluation and element inspection.
02/21-12/21	**LA 1 Leeville to Golden Meadow Phase 2 Design, Leeville, Louisiana:** Technical engineer and designer for new two-lane bridge connecting Golden Meadow to Leeville, (approximately 8 miles of bridge). The project consisted of precast prestressed concrete girder spans, slab spans, and reinforced concrete substructures and consisted of three different phases: 2A, 2B, and 2C. As a technical task lead and designer on the project, he designed the substructures for Phase 2C as well as produced plan sheets. He also provided guidance on the superstructure design of the slab spans for Phase II C. Models were created for the superstructure and substructure of the bridge using Leap Bridge Concrete, and plan sheets were created using MicroStation. Once final plans were submitted, Marc assisted in the letting support phase by answering contractor questions and providing any necessary plan revisions.
01/22-Ongoing	**LA 1 Leeville to Golden Meadow Phase 2 Construction Support, Leeville, Louisiana:** Technical engineer and deputy project manager for the construction support services of the two-lane bridge connecting Golden Meadow to Leeville (approximately 8 miles of bridge). As a technical engineer on the project, he has been reviewing structural shop drawings including but not limited to girder shop drawings, precast cap shop drawings, and pile shop drawings. As deputy project manager for the project, Marc has been distributing shop drawings for review to different disciplines. Marc has also been answering RFIs including but not limited to pile misalignment, material substitutions, and construction joint placements. When required, Marc has been putting together any required change orders using MicroStation.
02/22-05/25	**I-10 Calcasieu (HBI) Early Works Package, Lake Charles, Louisiana:** Bridge engineer participating in the designs of the superstructure and substructure for the new 70'-0" steel girder temporary bridge over a piperack trench. Due to the new P3 Calcasieu River Bridge Replacement project, the local gas pipeline owner was required to re-locate its gas pipelines to a new location that did not conflict with the new P3 bridge piers. The final gas pipeline configuration was a piperack trench that conflicted with the existing I-10 on/off ramp new Sampson Street. This required a temporary bridge to be constructed to span the piperack trench on the I-10 on/off ramp until the new P3 bridge is built. Marc served as designer on the project as well as overseeing the final bridge plan production for the project. The project utilized accelerated bridge construction (ABC) techniques by utilizing preconstructed girder and concrete deck segments with ultra high performance concrete closure pours.
09/18-11/19	**LA 532 over I-20 Bridge Design, Minden, Louisiana:** Technical engineer and designer for the new LA 532 bridge over I-20. The new bridge design utilized precast prestressed concrete beams on reinforced concrete bent caps with reinforced concrete columns. As a technical engineer for the project, he was tasked with designing the major portions of the bridge, including the girders, deck, and substructure. Models were created for the superstructure and substructure of the bridge using Leap Bridge Concrete, and the models were used for the design. Once the design was finalized, MicroStation sheets were created to convey the design and construction intent, and the sheets were submitted to LADOTD. Once final plans were submitted, Marc assisted in the letting support phase by answering contractor questions.

Marc Hoffmann (cont.)	
01/20-10/21	**LA 532 over I-20 Construction Support, Monroe, Louisiana:** Technical engineer for the construction support services for the new LA 532 bridge over I-20. As a technical engineer on the project, he reviewed structural shop drawings including but not limited to girder shop drawings, bearing pad shop drawings, and joint shop drawings. Marc also answered RFIs including but not limited to pier protection and drilled shaft questions.
02/18-06/18	**LA 15 over Boeuf River Bridge Design, Richland Parish, Louisiana:** Technical engineer and designer for the new LA 15 bridge over Boeuf River. The new bridge design utilized precast prestressed concrete beams on reinforced concrete bent caps. As a technical engineer for the project, he was tasked with designing the major portions of the bridge, including the deck and concrete bent caps. Models were created for the design of the superstructure and substructure using Leap Bridge Concrete. Once the design was finalized, MicroStation sheets were created to convey the design and construction intent, and the sheets were submitted to LADOTD. Once final plans were submitted, Marc assisted in the letting support phase by answering contractor questions.
08/18-08/23	**LA 15 over Boeuf River Construction Support, Richland Parish, Louisiana:** Technical engineer for the construction support services for the new LA 15 bridge over Boeuf River. As a technical engineer on the project, he reviewed structural shop drawings including but not limited to girder shop drawings, bearing pad shop drawings, and joint shop drawings.
02/24-07/24	**LA 47 Bayou Bienvenue Bridge Replacement Design, St. Bernard Parish, Louisiana:** Deputy project manager and bridge engineer overseeing the designs of the superstructure and substructure for the new 320'-0" slab span bridge near Chalmette, LA. Due to the rapidly deteriorating nature of the bridge, accelerated bridge construction (ABC) techniques were incorporated into the final plans by utilizing precast concrete bent caps that were the exact same dimensions for both Phase 1 and Phase 2 construction. Due to the proximity of the low chord to corrosive brackish water, stainless steel reinforcing bars as well as discrete galvanic anodes were also incorporated into the final plans. The project required an extremely condensed schedule with final plans required within 6 months of the start of the project.
12/24-Ongoing	**LA 47 Bayou Bienvenue Bridge Replacement Construction Support, St. Bernard Parish, Louisiana:** Project manager for the construction support services for the new 320'-0" slab span bridge near Chalmette, LA. As project manager and bridge design engineer overseeing junior bridge engineers, he has been distributing and overseeing structural shop drawings including but not limited to precast concrete bent caps, piles, and metal bridge railing shop drawings. Marc has also been distributing and overseeing RFI reviews as needed.
10/20-03/22	**LA 3250: I-49/UPRR Overpass Repair, Alexandria, Louisiana:** Technical engineer for the project, which partially replaced a 95-foot concrete prestressed girder span hit by an over-height vehicle. To ensure minimal impact on traffic, the new portion of the span was constructed off-site and moved into place using a Self-Propelled Modular Transporter (SPMT). He was tasked with designing the new girders to replace the damaged girders and ensuring the newly constructed portion of the span would fit into place once it was moved with SPMT. He used computer-aided software (LEAP Bridge Concrete) to calculate superstructure girder capacities and loads. Marc also used Bentley MicroStation to produce drawings for the plan set, and Marc also performed quality control on the MicroStation sheets.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Aravind Tankasala, PhD, PE**	Years of relevant experience with this employer	7
Title	Project Engineer	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization	PhD / 2017 / Civil Engineering; MS / 2013 / Civil Engineering; BS / 2011 / Civil Engineering		
Active registration number / state / expiration date	46286 / LA / 03-31-2026		
Year registered	2021	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer, Bridge Construction Support		

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).
	Aravind is a professional bridge engineer in HNTB's New Orleans office. He is a registered member of the American Concrete Institute (ACI). He possesses a working knowledge of bridge design, structural analysis, drafting in MicroStation and national codes/standards such as AASHTO, ASTM, ASCE and ACI. He has worked on multidisciplinary projects in the laboratory and on the field and with multiple teams to develop strong interpersonal and communication skills. Dr. Tankasala has drafted reports and possesses strong design and drafting skills, including STAAD experience.Pro, LEAP Bridge, MicroStation, AASHTO BrR, and MS Excel. His strong programming skills include experience with MATLAB, MATHCAD, FORTRAN, ABAQUS, STAAD.Pro, SAP2000, LEAP Bridge, MicroStation, and AutoCAD.
07/22-01/23	**US 80 over CPKC Railroad, Brandon, Mississippi:** Bridge design engineer responsible for design calculation quality control for the superstructure of a two-span precast prestressed spread box-beam bridge over Canadian Pacific Kansas City Limited Railroad in Rankin County, Mississippi. Additional responsibilities included coordinating plan updates for box-beam details, girder tables, and framing plans, as well as performing as-designed bridge load ratings.
12/23-03/24	**Complex Bridge Rating, Jackson, Mississippi:** Rated a seven-span curved reinforced concrete girder bridge using finite element analysis modeled in LARSA 4D. The bridge had fixed and simple supports with varying cross sections over the bridge length and unequal spans. Coordinated with different offices on a tight deadline.
10/20-08/21	**LA 1 Leeville to Golden Meadow Bridge Phase 2, Leeville, Louisiana:** Designed and drafted the substructure for multiple prestressed girder spans. Checked the prestressed girder, bearing seat elevations, bearing pad, and deck designs. Rated the superstructure and substructure for both the girder and slab spans. Put together rating reports and performed quality control checks.
03/24-Ongoing	**Bridge Load Rating Retainer, Statewide, Louisiana:** Bridge load rater. This project involves the load rating of complex bridge structures, using the LRFR. Bridge elements evaluated under this contract include Vertical Lift Spans, Pontoons, Swing Spans, Continuous Steel Plate Girders, Prestressed Girders, Reinforced Concrete Beams, Slab Spans, Pile Bents, Slab Spans, and Steel Grid Decks.
01/22-Ongoing	**LA 1 Leeville to Golden Meadow Bridge Construction Support, Leeville, Louisiana:** Review of shop drawings of girders, bearing pads, precast caps, pile splices, light pole construction, and girder on deck storage plans.
12/18-04/19	**LA 532 over I-20 Bridge, Minden, Louisiana:** Bridge engineer for this design-build contract to construct a pre-stressed concrete girder bridge superstructure and substructure over I-20. Assisted with the design and detailed drafting of both the super and substructure. He developed custom Excel spreadsheets to check for column and prestressed girder designs. He performed quality control checks on the final plans, including the super and sub-structure.
06/20-02/22	**I-20 Overpass Rehabilitation, Bossier City, Louisiana:** Bridge designer for this project that included completing an in-depth condition inspection, preparing an inspection report with findings and recommendations, and preparing preliminary and final plans for seven overpasses (14 bridge structures) on I-20 between Westerfield Drive and Industrial Boulevard.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Scott McKnight, PE**	Years of relevant experience with this employer	4
Title	Senior Project Engineer	Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization	BS / 2012 / Civil Engineering		
Active registration number / state / expiration date	117981 / TN / 05-31-2026 | 047639 / GA / 12-31-25		
Year registered	2016	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).

Scott is a civil engineer specializing in railroad, highway, and pedestrian bridge design, **including pier and crash wall design**, and geotechnical engineering analysis and design for class I, regional and short-line railroads in addition to bringing extensive experience using advanced software such as RISA-3D, RISA-Section, LEAP Bridge Concrete, LEAP Bridge Steel, RC-Pier, WinRECOL, RetainPro, Shoring Suite, All-Pile, L-Pile and MathCAD. He is well versed in railroad, highway and pedestrian bridge design and is an organized professional with a tremendous work ethic able to support multiple project streams, mentoring junior and mid-level engineers and computer aided design and drafting technicians. Scott brings over 14 years of experience in structural and civil engineering responsible for analysis, design and preparation of contract plans for bridges, both new transportation-related structures as well as the rehabilitation and modification of existing bridges. He is well versed in bridge inspection, load rating, design, and construction management. He has designed several railway and highway bridges as well as inspected and load rated thousands of existing railway bridges including timber, steel, and concrete bridges. Additionally, Scott has obtained specialized computer skills in several advanced software programs for analyzing and designing 3D structural models as well as skilled in drafting using AutoCAD and MicroStation. Moreover, he has led survey crews in the field when necessary to complete topographic surveys for railroad clients ranging in length from one mile to 10 miles.

*Work completed with previous employer

04/15-07/16	**VDOT & Norfolk Southern RR Roanoke Passenger Platform, Roanoke, Virginia*:** Assistant engineer who provided design calculations and detailed plans for new 850-ft long high-level Amtrak passenger platform for Amtrak service on NS track. The platform was reinforced cast-in-place concrete which included ramps for both Americans with Disabilities Act (ADA) and emergency use as well as a canopy. Also produced design calculations and drawings for a temporary sheet pile wall, a permanent t-wall to support the roadway and a crash wall on HWY 220 pier.
08/14-09/15	**Norfolk Southern RR Alta Vista Overpass, Green to Smothers, Virginia*:** Produced design calculations and detailed plans for one 6-foot-tall headwall extension, a 1,530-foot-long steel soldier pile with concrete lagging wall using W-section soldier piles, three reinforced concrete culvert extensions ranging from 10 feet to 75 feet in length, a 70-foot-long steel soldier pile with concrete lagging wall using H-pile soldier piles and three crash walls required for the new NS siding track under three highway bridges. Designed helical screw soil nail walls to retain the existing soil behind the proposed crash walls for abutment soil stabilization.
01/12-02/13	**Norfolk Southern RR Pitman Creek Track Design, Somerset, Kentucky*:** Engineer for the design of the proposed five span steel deck plate girder bridge to support the new siding track as well as assisted in modifications to the existing steel tower and concrete pier substructures. Produced design calculations and detailed plans for new crash walls for two piers on HWY 914 due to the placement of the new siding track. Designs were performed per ACI, Kentucky Transportation Cabinet (KYTC) Design Manual, NS Design Manual and AREMA Manual.
10/11-07/12	**Norfolk Southern RR Overpass, Petersburg, Virginia*:** Assisted Engineer in design of new 185 foot long, three span rolled beam bridge superstructure spanning over NS tracks with reinforced concrete abutments and reinforced concrete piers consisting of four columns per pier resting on a spread footing supported by steel H-piles. Design was performed per ACI, NS Design Manual, American Institute of Steel Construction (AISC) Manual, VDOT Design Manual, the American Association of State Highway and Transportation Officials (AASHTO) and AREMA Manual.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Patrick Duffy, PE**	Years of relevant experience with this employer	4
Title	Project Manager	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	MS / 2020 / Civil Engineering; BS / 2016 / Civil Engineering		
Active registration number / state / expiration date	45363 / LA / 09-30-2027		
Year registered	2021	Discipline	Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Patrick has experience working in traditional bridge engineering services of design, rehabilitation, and load rating. Having worked on both simple and complex bridges throughout the state of Louisiana for the LaDOTD, he is familiar with the proper requirements and standards that the LaDOTD expects.
05/24-07/25	**US 80 over CPKC Railroad, Brandon, Mississippi:** Project engineer who served as task manager responsible for updating bridge plan sheets in response to technical comments from Canadian Pacific Kansas City Limited (CPKC). Coordinated design revisions and ensured compliance with stakeholder requirements and standards. This project was commissioned by the Mississippi Department of Transportation (MDOT) and involved close collaboration with railroad representatives to address structural and operational considerations.
02/22-Ongoing	**I-10 Calcasieu (HBI) Early Works Package, Calcasieu Parish, Louisiana:** Project engineer who served as task manager for the Calcasieu River Bridge substructure modifications and existing bridge repairs. Several obstacles needed to be overcome to allow for the replacement bridge to be constructed within the proposed limits set out by the P3 procurement and the environmental documents. To allow for the new railroad alignment, modifications were required to the substructure of the existing bridge. A complex system involving temporarily supporting the structure and transferring the load to the new structure was designed. Complex Finite Element Analysis was required to design the straddles and jacking connection. Repair plans were developed based on the agreed to repairs from the inspection performed. The scope of the repairs included those necessary to extend the life of the structure for the duration of the replacement schedule and to minimize the maintenance required on the existing structure until it can be retired from service.
04/25-Ongoing	**I-10 Calcasieu River Bridge (HBI) Owner's Verification, Calcasieu Parish, Louisiana:** Bridge plan review group manager for the design review team of the $2.3 billion I-10 corridor replacement project. This project is being delivered through a Private Public Partnership (P3) delivery mechanism, where HNTB operates as the Owner's Verifier. In this role, Patrick serves as a subject matter expert and leads a team reviewing bridge plan design packages, ensuring a quality plan set is delivered for the Louisiana Department of Transportation and Development (LADOTD). Plans are reviewed for contract compliance as well as compliance with LADOTD, FHWA, and AREMA standards.
04/21-12/24	**LADOTD IDIQ Contract for Bridge Preservation, Statewide, Louisiana:** Project engineer who performed design and analysis services for the LaDOTD IDIQ Contract for Bridge Preservation. Projects under this contract include assessing bridge existing conditions and designing bridge repairs for bridge impact, and designing bridge rehabilitation plans including heat straightening, CFRP repairs, concrete deck patching, joint replacement, and bearing replacement. Additional tasks performed under this contract include QC/QA for multiple task orders through final plan development.
04/21-12/21	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Bridge engineer on the substructure design team for the elevated bridge intersection connecting relocated LA 1 with the existing road and Phase 2B substructures designed with alternatives for utility considerations. Task leader for load rating of new superstructure and substructure of Phase II C. The project involved elevating an 8.3-mile stretch of two-lane, at-grade, rural State Highway 1 to 22 feet above the rising Gulf of Mexico and surrounding marsh to eliminate frequent inundation and consequential energy production impacts. The construction cost for this project is $436 million.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Kate Prejean, PE** 3	Years of relevant experience with this employer	25
Title	Senior Project Manager - Transportation Engineering	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2000 / Civil Engineering		
Active registration number / state / expiration date	35036 / LA / 03-31-2026 | 19264 / MS / 12-31-2025		
Year registered	2009	Discipline	Civil
Contract role(s) / brief description of responsibilities	(MPR 3); Roadway Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).

Kate is a senior project manager for HNTB's transportation section in the Gulf Coast office. She has been **responsible for highway design on numerous roadway projects** for planning studies, including NEPA process studies, public involvement activities, corridor studies and bicycle-pedestrian feasibility studies. Kate has specialized in roadway, planning, NEPA, design and construction projects for our public clients since she started with HNTB in 2000. Her projects have ranged in complexity and size, from $50,000 to $800 million. She has been the deputy program manager, project manager, engineer, and quality manager on a multitude projects. Kate's ability to manage a team of experienced staff from a variety of different backgrounds and disciplines highlights her exceptional project management and teamwork skills. She works daily with her clients to ensure that their vision for the project is being met, that projects are within budget and on schedule.

07/19-Ongoing	**MOVEBR Infrastructure Program, Baton Rouge, Louisiana:** Director of preconstruction for the $1.2B program of projects that was separated into a list of capacity and enhancement projects. HNTB, as a sub for the CSRS team, is responsible for the $800M in capacity infrastructure projects on 40 roadways throughout the parish of East Baton Rouge. As director of preconstruction, she is responsible for ensuring delivery of the projects from conceptual development, selection of design consultants, completion of design study and final design plans, permitting, cost estimating, ROW acquisition, budget tracking, quality assurance and control, coordination with city staff and other stakeholders. The activities include services provided by design consultants and specialty service consultants. She also monitors and coordinates schedule activities, burn rates, invoice review and approvals, and other project control activities. As part of the program, Kate supported the development of two grant applications for projects in the program. The City was awarded an INFRA grant for The North Baton Rouge Infrastructure Mobility projects, a group of three projects with a significant regional impact. The award amount was $59 million.
05/17-04/21	**Orleans Parish Urban Systems Program, Martin Luther King Jr. Blvd, New Orleans, Louisiana:** Project engineer for the $6.5M roadway rehabilitation project extending on MLK from St Charles Ave to S Claiborne Ave through the Central City Historic District, responsible for supervising and reviewing the project roadway alignment and engineering final design. Tasks include horizontal geometry submittals for accuracy and compliance with the LADOTD General Specifications and Standard Plans, Roadway Design Guide, the LADOTD Complete Streets Policy, and the City of New Orleans Complete Streets Policy and general construction practices. Coordinates with DOTD and Parish staff for non-standard accessible ramp design and utility-related issues. Design of roadway transit pedestrian islands for transit access, permanent striping including dedicated bike lanes, and lane reduction as justified.
07/09-02/23	**Lafayette Regional Xpressway, Lafayette, Louisiana:** Project manager for the delivery of this Tier 1 EIS for a future 30-mile toll loop around the Lafayette metropolitan area. Kate was responsible for finalizing the draft of the EIS document, coordinating with stakeholders, and preparing the public hearing. She managed the quality control efforts on the project documentation as it went to final production. Also, she was responsible for the development of construction cost estimates and coordination among disciplines for the financial feasibility study for additional segments that the commission is studying. Initiated in September 2005, the project was proposed as a tolled loop around the Lafayette region in Louisiana. It considered corridor alternatives for a four-lane roadway connecting I-49, I-10 and the New Iberia airport near I-49 in the south.

Kate Prejean (cont.)	
01/18-05/20	**I-20 Eastbound Bridge over I-55 South/Illinois Central Railroad, Jackson, Mississippi:** Engineer of record and technical roadway lead for the final roadway approach design for a 15-span prestressed concrete beam bridge. Duties performed include project coordination with the client, coordinating with disciplines and leading the roadway technical decisions, design, and plan development. This project was executed on a condensed project development schedule and used complex design elements, such as post-tensioned cap beams and straddle bents to ensure the I-20 eastbound mainline could be replaced while minimizing traffic impacts and construction dollars. Construction of this project was completed in 2022.
05/17-04/21	**Orleans Parish Urban Systems Program, Marconi Drive, MLK Boulevard, Morrison Road I and II Rehabilitation Projects, New Orleans, Louisiana:** Lead traffic engineer responsible for analyzing traffic operations of various alternative Build configurations using VISSIM for the US-169 bridge over the Missouri River. Alternatives were evaluated compared to owner's concept to determine a cost-effective solution that met Project goals. An Addendum to the Access Justification Report (AJR) was developed based on the Preferred Alternative.
10/08-12/19	**I-10 Calcasieu River Bridge NEPA Re-Start, Lake Charles, Louisiana:** Project manager responsible for documentation, permit coordination, analysis, stakeholder coordination, quality assurance and control and overall management. This project studied the environmental impacts of widening the existing interstate and bridge over the Calcasieu River through an EIS.
10/08-01/24	**I-10 Calcasieu River Bridge EIS, Calcasieu Parish, Louisiana:** Project manager responsible for overall delivery of the project, public involvement and stakeholder coordination, drafting of project documentation, cost estimating, design decisions, schedule and cost management. This project studied the environmental impacts of widening the existing interstate and bridge over the Calcasieu River through an environmental impact statement (EIS). After passing the project manager position to Lynn Maloney-Mujica in December 2019, Kate continued to work on the project as a technical advisor, providing background and history of decision-making, engineering and environmental guidance. The FHWA issued a Record of Decision (ROD) in 2023. The project was initiated in 2013 (put on hold until 2016 re-start). It was delayed due to traffic and safety issues; extensive EJ outreach; and floodplain issues.
01/19-12/19	**I-10 over Veterans Boulevard Fire Damage Repairs, New Orleans, Louisiana:** Traffic control task lead for emergency repairs to the I-10 EB bridge over Veterans Boulevard following a truck fire. The project involved rapid mobilization, damage assessment, and implementation of an ABC solution using precast panels to minimize traffic disruption, with all major span repairs completed over a single weekend closure. Additional barrier repairs were incorporated during a second closure, streamlining future maintenance needs for LaDOTD.
11/17-06/20	**I-55 Widening over I-220, Jackson, Mississippi:** Project engineer and technical roadway lead for the design project for the complex bridge system, approaches and roadway modifications necessary to widen I-55. The existing box girder structure has a 9.4 percent cross slope and a low vertical clearance. Although the site constraints were very limiting, HNTB designed a way to widen the structure with multiple shallow steel plate girders to carry the load and meet the vertical clearances required. Additional work for construction services, including RFI reviews, shop drawing reviews, and additional contractors' submittal reviews.
11/08-04/16	**Biloxi Infrastructure Repair Program, Biloxi, Mississippi:** Project engineer on this project, reconciling FEMA project worksheets (PWs), assisting with proposed versioning of PWs, coordination with design engineering consultants, review of design plan phase submittals and project controls efforts. She assisted in updating project schedules, coordinating cost-tracking efforts and coordinating among team members. HNTB worked with the City of Biloxi, FEMA, Mississippi Emergency Management Agency (MEMA) and MSDOT as the program manager for infrastructure improvements to sewer, water and drainage facilities damaged as a result of Hurricane Katrina.
08/06-10/07	**Pedestrian Bridge Feasibility Study, Orange County, Florida:** Project engineer responsible for assessment, cost estimating, determining layout and identifying feasibility constraints for 11 Feasibility Studies for pedestrian bridges throughout Orange County under this project. The project required the completion of field reviews of the 11 sites, pedestrian and vehicle traffic counts, identification of ADA requirements for the sites, production of site layout diagrams, an analysis of feasibility, and preparation of conceptual bridge layouts to be included in the report compiled for each bridge. Recommendations were provided that ranked the bridges against each other based on need, feasibility and cost.

16. STAFF EXPERIENCE

Firm employed by: **Stanley Consultants, Inc.**			
Name	**Jesse Tisdale, PE**	Years of relevant experience with this employer	7
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization	BS / 2012 / Civil Engineering		
Active registration number / state / expiration date	40972 / Louisiana / 03-31-2027		
Year registered	2016	Discipline	Civil
Contract role(s) / brief description of responsibilities	Roadway Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Jesse has been responsible for the design and/or project management of roadway projects such as: roadway reconstruction, intersection safety projects, turn lane additions, corridor safety projects, and roundabout projects throughout Louisiana. He has completed 14 projects for DOTD. Jesse is proficient in both design and management and is capable of fulfilling both roles simultaneously as projects warrant. His design expertise is with roadway/highway design, drainage, environmental permitting, construction sequencing, earthworks and estimating. Jesse has his TCT and TCS certifications.
11/18–04/22	**LA 30 Roundabouts at Tanger & I-10, Ascension Parish, Louisiana:** PM/Lead Design Engineer responsible for providing oversight for all necessary engineering and related services required for the design of four multi-lane roundabouts along LA 30 at the heavily traversed commercial interchange at I-10 in Gonzales, LA. Jesse also provided QA of typical sections, pedestrian and bicycle design, roadway geometrics, roundabout geometrics, drainage design, and driveway details for this project.
11/23–Ongoing	**LA 1088 Forest Brook Blvd Roundabout, St. Tammany Parish, Louisiana:** As the QA/QC controller on this IDIQ, Jesse is responsible for the quality and completeness of the design and construction plans. Additionally, he is assisting in managing the project as the overall IDIQ PM, while others manage the individual projects.
08/24–Ongoing	**LA 44: I-10 Roundabouts, Ascension Parish, Louisiana:** PM responsible for providing oversight for all necessary engineering and related services required for the design of three multi-lane roundabouts along the LA 44 corridor at the heavily traversed I-10 interchanges in Gonzales, Louisiana.
01/23–Ongoing	**Roundabouts, Livingston Parish, Louisiana:** Working as a subconsultant, Jesse served as the Stanley Consultants project manager responsible for overall project oversight, adherence to scope of work, budget, and schedule requirements, as well as QC/QA activities.
12/17–03/23	**I-12 LA 21 to US 190, St. Tammany Parish, Louisiana:** Serving as PM, Jesse was responsible for assisting and overseeing the horizontal and vertical alignment design, drainage design, and sequence of construction with minimum temporary traffic control layout and striping according to DOTD specifications, standards and design criteria. His additional responsibilities include standard PM duties including coordination, QC of plans and design, project coordination and scheduling. Design tools used for this project included MicroStation, InRoads, CADConform, Bentley InRoads, DOTD HydrWIN and Microsoft Project.

Jesse Tisdale (cont.)	
05/24–Ongoing	**Inter. Imp. on LA 92 @ LA 733 & Gallet Rd., Lafayette Parish, Louisiana:** QA/QC lead engineer responsible for reviewing work products for technical adequacy and completeness, verifying preparation and checking procedures have been followed, reviewing Quality Control Checklists as a discipline approver at each designated quality "checkpoint", and reviewing design criteria documents for compliance with LA DOTD and AASHTO standards. Also responsible for providing design guidance to the project team as a subject matter expert.
04/17–11/22	**US 171 at Boone St. Roundabout, Vernon Parish, Louisiana:** Serving as PM, Jesse was responsible for assisting design of a three-legged multi-lane roundabout and multiple intersection improvements along US 171. Tasks also include, budgeting, project cost estimation, utility coordination, and QA for the design and construction plans. This project involves engineering and related services to develop construction plans for a multi-lane (Hybrid) roundabout at the intersection of US 171 and Boone Street to allow for improvements to safety and efficiency, while utilizing best access management practices along the corridor.
04/23–Ongoing	**LA 724: Roundabout at Landry Rd, Lafayette Parish, Louisiana: A**s the QA/QC controller on this IDIQ Jesse is responsible for the quality and completeness of the design and construction plans. Additionally, he is the PM for this project providing overall project oversight, budget controls, and coordination with LADOTD.
01/23–Ongoing	**I-20: Widening/Overlay (Vancil Rd-LA 34), Ouachita Parish, Louisiana:** PM responsible for adherence to scope of work, budget, and schedule requirements. Additional responsibilities include QC/QA and subconsultant coordination.
10/13–04/15	**US 11 @ Cleo Road Roundabout, St. Tammany Parish, Louisiana:** Lead designer responsible for the design and plan development of a single lane roundabout at US 11 and Cleo Rd. This roundabout design included special design details for the WB-67 design vehicle due to two distribution warehouses located on Cleo Rd. This project additionally involved the design of a 4th leg that is to be built at a later date when private development north of the roundabout is complete.
02/21–03/23	**Lee Drive Widening, East Baton Rouge Parish, Louisiana:** Stanley Consultants' PM and lead designer. Stanley Consultants is a sub-consultant on this project responsible for all road design between Highland Road and the Bayou Duplantier Bridge. Jesse is responsible for the oversight of all roadway design for the portion the project that has been assigned to Stanley Consultants. This project involves developing the limited Lee Drive corridor into a widened footprint with a divided roadway, bike lanes, and pedestrian facilities.
9/19–03/23	**Stone Road to Powell Drive Extension, St. Tammany Parish, Louisiana:** PM for engineering design services for a new greenfield connector roadway between Ben Thomas Road and Powell Drive as well as widening and drainage improvements to an existing section of Powell Drive. The purpose of this project is to accommodate industrial traffic accessing and egressing Interstate 12 to the north by providing improved system linkage with a new north-south connector roadway and improving an existing roadway within the project limits.
4/16–01/18	**Dijon Drive Extension Phase I & II, Confidential Client, East Baton Rouge Parish, LA:** PM/Lead Designer responsible for a proposed four-lane divided highway project between Essen Lane and Bluebonnet Boulevard. Project management responsibilities included budget coordination with local, city, and state agencies, design and construction scheduling coordination to prevent conflict from major construction in the surrounding areas, coordination with several private entities and other public departments working on designing or constructing projects in the vicinity of the roadway, and coordinating subsurface drainage to combine roadway drainage and drainage from private properties adjacent to the new roadway. Design responsibilities included the geometric roadway design, roadway modeling, and overseeing drainage design. This was a greenfield project along new alignment.

16. STAFF EXPERIENCE

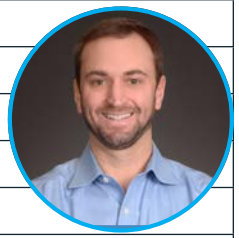
Firm employed by: **Stanley Consultants, Inc.**			
Name	**Adam Fields, PE**	Years of relevant experience with this employer	7
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization	BS / 2005 / Civil Engineering		
Active registration number / state / expiration date	35614 / Louisiana / 09-30-2026		
Year registered	2010	Discipline	Civil
Contract role(s) / brief description of responsibilities	Roadway Engineer; Roadway Construction Support		

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).
	Adam is experienced in design for local roads, highways and roundabouts in accordance with DOTD standards and specifications. His experience has included project/task management, roadway alignment studies; development of horizontal and vertical geometrics; typical sections; intersection details; roadway drainage calculations, earthwork design; development of traffic control and staging plans, roadside safety features and development of quantities, technical specifications, and construction cost estimates. He is skilled in development of three-dimensional roadway models and roadway design utilizing MicroStation, AutoCAD, Civil 3D, InRoads and OpenRoads software. Adam has his TCT and TCS certifications.
10/18–04/22	**LA 30 Roundabouts at Tanger & I-10, Ascension Parish, Louisiana:** Civil engineer responsible for providing oversight for all necessary engineering and related services required for the design of four multi-lane roundabouts along LA 30 at the heavily traversed commercial interchange at I-10 in Gonzales, LA. Adam also provided quality assurance (QA) of typical sections, pedestrian and bicycle design, roadway geometrics, roundabout geometrics, drainage design, and driveway details for this project.
10/18–02/20	**LA 1: Iberville P/L - Port Allen Canal B, West Baton Rouge Parish, Louisiana:** Engineer responsible for a patch, mill and overlay pavement preservation project along LA 1 in West Baton Rouge and Iberville Parishes, LA. Duties include generating typical sections, superelevation correction tables, quantity tables for the patching, milling and overlay of asphalt pavement, concrete patching, pavement markings, guard rail design, ADA ramp design.
10/18–01/21	**US 61: Bluebonnet Blvd to S. End US 190, East Baton Rouge Parish, Louisiana:** Engineer responsible for a patch, mill and overlay pavement preservation project along US 61 in East Baton Rouge Parish, LA. Duties include generating typical sections, superelevation correction tables, quantity tables for the patching, milling and overlay of asphalt pavement, concrete patching, pavement markings, guard rail design, ADA ramp design.
10/18–04/22	**I-12: LA 1077 to LA 21, St. Tammany Parish, Louisiana:** Design lead responsible for horizontal and vertical alignment, typical sections, sequence of construction with minimum temporary traffic control layout and striping according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.
03/19–03/20	**I-12: LA 21 to US 190, St. Tammany Parish, Louisiana:** Design lead responsible for horizontal and vertical alignment, typical sections, sequence of construction with minimum temporary traffic control layout and striping according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.

Adam Fields (cont.)	
10/18–03/22	**LA 675 and LA 87 Improvements in New Iberia Pavement Preservation Program, Iberia Parish, Louisiana:** Design lead responsible for plan development, drainage design, determining quantities and pay items according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads, HYDRWIN drainage modeling software and Microsoft Excel.
05/24–Ongoing	**Inter. Imp. on LA 92 @ LA 733 & Gallet Rd., Lafayette Parish, Louisiana:** Project manager for the overall IDIQ contract for parishes in LADOTD's District 03. Task Order duties for a roundabout intersection improvement project on LA 92 at LA 733 and realignment of curves on LA 92 at Gallet Road include conducting a pre-design ride of the proposed project, leading manhour proposals and fee estimation for design, holding kickoff meetings and conducting overall coordination between District staff and subconsultants. Tasks are design oversight and QAQC, scheduling, invoicing, and ensuring timely submittal milestone deliveries.
10/18–11/22	**US 171 at Boone St. Roundabout, Vernon Parish, Louisiana:** Civil engineer responsible for providing oversight for all necessary engineering and related services required for the design of a multi-lane roundabout along US 171. This project involves engineering and related services to develop construction plans for a multi-lane (Hybrid) roundabout at the intersection of US 171 and Boone Street to allow for improvements to safety and efficiency, while utilizing best access management practices along the corridor. Adam also provided quality assurance (QA) of typical sections, roadway geometrics, roundabout geometrics, drainage design, and driveway details for this project.
10/18–03/20	**LCG Road Overlay Program, Lafayette Parish, Louisiana:** Design lead responsible for field surveying and capturing topographic features and measuring CL stationing. Duties also include plan development, determining quantities and pay items according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.
09/20–06/22	**Cypress Island Highway Pavement Preservation, Lafayette, Louisiana:** Project engineer for the pavement preservation task order to mill, overlay and patch Cypress Island Highway from LA 353 to LA 31 in St. Martinville, LA. Task Order duties include walking pavement preservation-style survey, design of typical sections including superelevation correction, quantities, striping, guard rail design and ensuring timely submittal milestone deliverables.
10/18–12/19	**Prejean Road Pavement Preservation, Lafayette Parish, Louisiana:** Design lead responsible for field surveying and capturing topographic features and measuring CL stationing. Duties also include plan development, determining quantities and pay items according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.
01/14–11/17	**LA 442 Tangipahoa River Bridge Replacement, Tangipahoa Parish, Louisiana:** Design lead responsible for horizontal and vertical alignment, typical sections, sequence of construction with minimum temporary traffic control layout and striping according to DOTD specifications, standards and design criteria for emergency replacement of the LA 44 bridge over the Tangipahoa River. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.
01/12–02/14	**I-49 N, Segment K – Phase 1, Caddo Parish, Louisiana:** Project engineer responsible for developing sequence of construction plans, temporary pavement marking layouts for maintenance of traffic during construction, joint layouts and graphical grades, retaining wall layout, and quantities and cost estimates. Design tools used for this project included MicroStation with, Bentley InRoads and Microsoft Excel.

16. STAFF EXPERIENCE

Firm employed by: **Stanley Consultants, Inc.**			
Name	**Blake Roussel, PE, PMP**	Years of relevant experience with this employer	18
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	BS / 2003 / Civil Engineering		
Active registration number / state / expiration date	PE 33279 / Louisiana / 09/30/2025 | PMP 2018301 / 03-23-2026		
Year registered	2007	Discipline	Civil
Contract role(s) / brief description of responsibilities	Roadway Engineer		



Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).

Blake specializes in managing design teams for the development of transportation infrastructure projects. Over his two-decade career in Louisiana, he has designed or managed 20+ projects for LADOTD. His professional experience encompasses project management and construction plan preparation for complete streets, and road design projects, in accordance with DOTD plan preparation guidelines including both full-size and letter sized pavement preservation projects. Prior to joining Stanley Consultants, Blake gained valuable transportation experience employed by DOTD. Blake is a certified Project Management Professional (PMP), which is recognized across the world as the gold standard in project management.

Blake will work closely with HNTB and assist our project PMs in leading individual task order contracts through our internal approval process. Blake will also ensure that we meet the resourcing needs for all work assigned. Blake is ultimately responsible for ensuring adherence to diligent scope, schedule, and quality project workflows for all projects led by the office.

06/18-02/20	**LA 1: Iberville P/L - Port Allen Canal B, West Baton Rouge Parish, Louisiana:** PM responsible for the overall supervision of engineers performing the survey, road design and plan preparation; coordination with the owner; reviewing the plans; checking compliance with the design criteria; and completing all required forms and documents in support of the plan package. Design tools used for this project included MicroStation.
06/18-01/21	**US 61: Bluebonnet Blvd to S. End US 190, East Baton Rouge Parish, Louisiana:** PM responsible for the overall supervision of engineers performing the survey, road design and plan preparation; coordination with the owner; reviewing the plans; checking compliance with the design criteria; and completing all required forms and documents in support of the plan package. Design tools used for this project included MicroStation.
03/17-08/19	**LA 67: EBR P/L to 8 Miles North of EB, East Feliciana Parish, Louisiana:** PM responsible for the overall supervision of engineers performing the survey, road design and plan preparation; coordination with the owner; reviewing the plans; checking compliance with the design criteria; and completing all required forms and documents in support of the plan package. Design tools used for this project included MicroStation.
11/18–04/22	**I-12 LA 21 to US 190, St. Tammany Parish, Louisiana:** Project Principal responsible for assisting and overseeing portions of the horizontal and vertical alignment design, drainage design, and sequence of construction with minimum temporary traffic control layout and striping according to DOTD specifications, standards and design criteria. Additional responsibilities include standard PM duties including coordination, QC of plans and design, project coordination, and scheduling.

Blake Roussel (cont.)	
06/15–09/23	**LA 675 & LA 87 Improvements, Iberia Parish, Louisiana:** PM responsible for the overall supervision of engineers performing the survey, road design and plan preparation; coordination with the owner; reviewing the plans; checking compliance with the design criteria; and completing all required forms and documents in support of the plan package. Design tools used for this project included MicroStation, Excel, and HYDRWIN.
10/18–03/20	**LCG Road Overlay Program, Lafayette Parish, Louisiana:** PM responsible for field surveying and capturing topographic features and measuring CL stationing. Duties also include plan development, determining quantities and pay items according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.
10/18–12/19	**Prejean Road, Lafayette Parish, Louisiana:** PM responsible for field surveying and capturing topographic features and measuring CL stationing. Duties also include plan development, determining quantities and pay items according to DOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.
01/23–Ongoing	**I-20: Widening/Ovrly (Vancil Rd-LA 34), Ouachita Parish, Louisiana:** Project Principal responsible for ensuring the project is receiving adequate resources to maintain project schedules and ensuring proper QA/QC procedures are being followed.
10/16–09/18	**LA 2: Caney Creek Bridge to Webster P/L - Pavement Preservation Program, Bossier Parish, Louisiana:** PM responsible for the overall supervision of engineers performing the survey, road design and plan preparation; coordination with the owner; reviewing the plans; checking compliance with the design criteria; and completing all required forms and documents in support of the plan package. Design tools used for this project included MicroStation.
06/13–04/19	**Village De L'est Neighborhood, City of New Orleans, New Orleans, Louisiana:** PM responsible for the roadway scoping, pavement rehabilitation design, plan preparation, construction administration, and construction resident inspection for urban local roadways. The scoping phase includes a Project Scope Report based on the results of pavement damage inspection review and assessment and its applicable rehabilitation recommendations. The scoping report includes scoping plans, pavement rehabilitation quantities, pavement damage inspection photos, as well as a written scoping report. Preliminary plan scope of work includes Milling and Asphaltic Concrete (AC) Overlay, AC patching, Portland Cement Concrete Patching, Composite Pavement Patching, driveway repairs, sidewalk repairs, waterline repairs, utility adjustments, and sanitary sewer repairs.
01/17-06/18	**Bootlegger Road Mill and Overlay and Bootlegger Road Bridge Design, St. Tammany Parish Government, St. Tammany Parish, Louisiana:** Project Principal responsible for the right of way mapping, soil analysis, traffic data inventory, feasibility study, conceptual engineering design, opinion of construction cost, preliminary wetland assessment, and Corps of Engineers (USACE) jurisdictional determination for the mill & overlay and bridge design along a 3-mile segment of Bootlegger Road located in Covington.

16. STAFF EXPERIENCE

Firm employed by: **Stanley Consultants, Inc.**			
Name	**Brady Richard, PE**	Years of relevant experience with this employer	14
Title	Principal Transportation Engineer	Years of relevant experience with other employer(s)	23
Degree(s) / Years / Specialization	BS / 2002 / Civil Engineering		
Active registration number / state / expiration date	35600 / Louisiana / 09-30-2026		
Year registered	2010	Discipline	Civil
Contract role(s) / brief description of responsibilities	Roadway Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Brady has over 20 years of experience as a professional engineer and has established a strong track record of delivering complex projects across the water and transportation sectors. Throughout his career, he has demonstrated exceptional skills in project management, design, and project delivery, ensuring timely and within-budget completion of diverse projects. Brady's expertise spans various aspects of transportation engineering, and he has successfully managed multidisciplinary teams to achieve project goals. By combining technical expertise with strong leadership and communication skills, Brady has consistently driven successful project outcomes and contributed to the advancement of transportation infrastructure.
03/08–12/10	**Elysian Fields, New Orleans, Louisiana:** Civil Engineer responsible for the assessment of the condition of the existing roadway section including roadway, drainage, and sidewalks. Tasks included evaluating condition of both asphalt and Portland cement concrete pavement condition, documenting visible utilities, designing required drainage improvements, and ensuring the roadway is restored to its original condition to relevant standards and regulations. Oversaw the preparation of construction documents, including plans, specifications, and cost estimates, to guide the rehabilitation work.
04/17–01/25	**LA 171 at Boone, Leesville, Louisiana:** Civil Engineer responsible for designing the circular intersection to ensure safe and efficient traffic flow, which includes size, layout, and traffic attenuation features. Designed the drainage system to handle stormwater runoff, ensuring the roundabout does not become a flooding hazard during design period rain events according to LA DOTD's HYDRWIN software. Coordinated with other stakeholders to implement the design, addressing concerns such as safety, landscaping, and signage.
03/08-12/10	**Leon Simon Road, New Orleans, Louisiana:** Civil Engineer responsible for overseeing surveys, design, and plan preparation for the repair of 7.5 miles of overlays to urban roadways. Tasks include verification of project damage reports, design of various types of repair activities including milling, asphalt overlay, asphalt patching, concrete repairs, striping, ADA ramps, sidewalk repairs, catch basins, utility manholes, as well as preparing construction plans and specifications.
06/13–03/19	**New Orleans Village De L'est Neighborhood, City of New Orleans, Louisiana:** Civil Engineer responsible for roadway scoping and pavement rehabilitation design, preparing construction documents, cost estimation, and administering construction for urban local roadways. Tasks include assessing pavement damage, developing rehabilitation recommendations, and creating a comprehensive Project Scope Report with detailed plans and quantities. Scope of work for the project included various repairs such as milling and asphaltic concrete overlay, patching, driveway and sidewalk repairs, and utility adjustments.

16. STAFF EXPERIENCE

Firm employed by: **Stanley Consultants, Inc.**			
Name	**Caitlin Marks, PE**	Years of relevant experience with this employer	1
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization	BS / 2015 / Electrical Engineering		
Active registration number / state / expiration date	44794 / Louisiana / 03-31-2027		
Year registered	2020	Discipline	Civil
Contract role(s) / brief description of responsibilities	Roadway Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Caitlin is experienced in the technical design of state and local highways in accordance with DOTD standards and specifications. Her experience has included development of horizontal and vertical geometrics; typical sections; intersection geometrics; roadway drainage design; pavement marking design, sequence of construction design; pavement preservation design, quantity estimates; and construction estimates. She is skilled in the development of three-dimensional roadway models and roadway design utilizing MicroStation, Inroads, and OpenRoads software.
04/25-Ongoing	**US 167 Median Improvements, Lafayette, Louisiana:** Lead Design Engineer responsible for designing horizontal and vertical geometry, typical sections, summary tables, drainage calculations, and suggested sequence of construction. She modeled and created cross sections, budgeted the cost estimate, and produced construction plans in accordance with LADOTD standards.
09/24-Ongoing	**US 190 R-CUT at LA 741, Port Barre, Louisiana:** Lead Design Engineer responsible for designing horizontal and vertical geometry, typical sections, summary tables, drainage calculations, and suggested sequence of construction. She modeled and created cross sections, budgeted the cost estimate, and produced construction plans in accordance with LADOTD standards.
05/22-02/25	**Harveston Bluebonnet Improvements, East Baton Rouge Parish, Baton Rouge, Louisiana:** Transportation Engineer responsible for the design of the sub-surface drainage for the proposed roundabouts in accordance with EBR standards. This included production of drainage plans and profile sheets, drainage maps, drainage calculations and the drainage report. She also aided in the fastest path reviews and provided QA/QC support. This project consisted of the design of two roundabouts along Bluebonnet Boulevard.
12/18–04/19	**University Avenue Phase 1:100' S RR–500' S I-10 EB RMP, Lafayette Consolidated Government, Lafayette, LA:** Transportation Engineer responsible for the preliminary design and layout of a roundabout. In the design phase, she was responsible for designing typical sections, roadway and sidewalk geometry, roadway lighting and suggested sequence of construction. She also computed quantities and generated a cost estimate. She aided in the production of the technical specifications and provided guidance throughout the QA/QC process. During construction, she performed construction administration by responding to RFIs and completing change orders. This project consisted of diamond grinding, asphalt overlay, widening, installation of a center median/access management, drainage improvements, water relocation, sidewalk improvements, landscaping and lighting.
05/23–08/24	**US 61 J-turns at Thomas Road, Baton Rouge, LA:** Transportation Engineer responsible for performing construction support by completing change orders. This included the redesign of the J-turns and the adjustment of quantities and cost estimates. This project consisted of adding access management on US 61 by constructing a directional crossover with median U-turns at Thomas Road.
12/22–02/25	**Left Turn Lane at Arbors, Lake Charles, LA:** Transportation Engineer responsible for the production and design of typical sections, summary tables, plan sheets, drainage plan sheets, drainage maps, pavement marking and signage sheets, cross sections and a final cost estimate. This project consisted of the design for the addition of a left turn lane for a development in accordance with LADOTD standards.

16. STAFF EXPERIENCE

Firm employed by: **Stanley Consultants, Inc.**			
Name	**Kayla Lafitteau, EI**	Years of relevant experience with this employer	7
Title	Engineer Intern	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization	BS / 2019 / Civil Engineering		
Active registration number / state / expiration date	EI 34158 / Louisiana / 03-31-2026		
Year registered	n/a	Discipline	n/a
Contract role(s) / brief description of responsibilities	Engineer Intern		

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).
	Kayla has professional experience since 2019. She has worked on DOTD and City of New Orleans projects with the oversight of several professional engineers. Kayla has been responsible for detour signing, permanent pavement markings, geometric layout, and guard rail design. She prepares quantity calculations, cost estimates, and is proficient in MicroStation and AutoCAD. Kayla is often responsible for detailed corrections and adjustments to plan sets to ensure they are compliant with LADOTD specifications and standards. Kayla has her TCT, TCS, and Flagger certifications.
09/18-04/22	**LA 30 Roundabouts at Tanger I-10, Ascension Parish, Louisiana:** Engineer Intern responsible for assisting with topographic field work. Assisted with quantity calculations, guard rail design, and additional detail sheets. Also assisted with developing the cost estimate and summary sheets.
11/18–02/20	**LA 1: Iberville P/L - Port Allen Canal B, DOTD, West Baton Rouge Parish, Louisiana:** Engineer Intern responsible for assisting with topographic field work. Assisted with quantity calculations, guard rail design, and additional detail sheets. Also assisted with developing the cost estimate and summary sheets.
09/18–01/21	**US 61: Bluebonnet Blvd to S. End US 190, DOTD, East Baton Rouge Parish, Louisiana:** Engineer Intern responsible for addressing comments and reviewing cost estimate and quantities.
11/23–Ongoing	**LA 1088 Forest Brook Blvd Roundabout; DOTD, St. Tammany Parish, Louisiana:** Engineer Intern responsible for quantity calculations and creating geometric layout sheets.
09/18–04/22	**US 171 at Boone St. Roundabout, Vernon Parish, Louisiana:** Engineer Intern responsible for developing engineering construction plan sheets and design for horizontal and vertical alignment, geometric details, permanent pavement markings, permanent signing, suggested sequence of construction, summary tables and typical sections of a three-leg roundabout in Vernon Parish, LA. Duties also included drainage calculations, quantity take-offs and cost estimation.
04/23-Ongoing	**LA 724: Roundabout at Landry Rd, Lafayette Parish, Louisiana:** Engineer Intern responsible for developing engineering construction plan sheets and design for horizontal and vertical alignment, geometric details, permanent pavement markings, permanent signing, suggested sequence of construction, summary tables and typical sections of a three-leg roundabout in Lafayette Parish, LA. Duties also included drainage calculations, quantity take-offs and cost estimation.
10/18–03/20	**LCG Road Overlay Program, Lafayette Parish, Louisiana**: Engineer Intern responsible for assisting with field surveying and capturing topographic features and measuring CL stationing. Assisted with plan development, determining quantities and pay items according to LaDOTD specifications, standards and design criteria. Design tools used for this project included MicroStation with CadConform, Bentley InRoads and Microsoft Excel.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Jared Sommers, PE** 5	Years of relevant experience with this employer	14
Title	Project Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2012 / Civil Engineering; BS / 2007 / Mathematics		
Active registration number / state / expiration date	40978 / LA / 03-31-2027		
Year registered	2016	Discipline	Civil
Contract role(s) / brief description of responsibilities	(MPR 5); Geotechnical Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).

Jared is a geotechnical engineer experienced in developing work scopes, managing subsurface investigations, design, plans, and preparing specifications for geotechnical aspects of transportation, bridge, railway, aviation, architectural, environmental and water infrastructure projects for private sector, municipal, state and federal clients. He has engineering experience in Louisiana, Mississippi, Texas, Arkansas, Missouri, Illinois, Utah and Iowa. His expertise includes levees bridge foundations, driven piles, drilled shafts, embankments, floodwalls, settlement, slope stability, seepage, and other deep foundations.

Having worked with LADOTD, USACE, and SLFPA-E for nearly **13 years**, Jared is familiar with all applicable bridge design standards and has extensive experience with **geotechnical design of bridge foundations in Louisiana soils**.

02/19-Ongoing	**US 80 over CPKC Railroad, Brandon, Mississippi:** Geotechnical engineer tasked with quality control of the deep foundation shaft analyses and recommendations including bi-directional load test plans, temporary shoring design, settlement analysis and slope stability analysis. The project consisted of the replacement of a two-lane northwest bound bridge and a two lane southeast bound bridge northwest of I-20. The proposed bridges were designed to be founded on drilled shafts in unique soil conditions.
08/15-06/16	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Geotechnical engineer tasked with T-wall design and seepage analysis for the bridge levee crossing. Tasks included determining the depth of sheet pile to prevent any heave or uplift on the levee in a storm event and designing the T-wall under the bridge to prevent future levee lifts from causing downdrag on the bridge piles resulting in unwanted settlement.
07/18-04/19	**US 90 over LA-14 Bridge Reconstruction, Iberia Parish, Louisiana:** Geotechnical engineer on the replacement of US 90 over LA-14 that included drilled shaft foundation design and MSE wall external stability analysis.
04/19-04/21	**LA 532 over I-20 Bridge Replacement, Webster Parish, Louisiana:** Geotechnical engineer for an off-alignment bridge replacement with an accelerated design and plan development schedule. Geotechnical tasks included the design for drilled shaft foundations and the development of bi-directional load tests. Performed review of bi-directional load test during construction support phase.
10/24-Ongoing	**I-10 Calcasieu (HBI) Owner's Verification, Calcasieu Parish, Louisiana:** Geotechnical subject matter expert for the I-10 Calcasieu River Bridge Replacement project. Geotechnical engineer led a team of engineers to review reports, plans, and specifications relating to the bridge replacement project through all phases of the project.
01/18-10/18	**I-20 Eastbound Bridge over I-55 South/Illinois Central RR, Jackson, Mississippi:** Geotechnical engineer responsible for review of original design and geotechnical investigation, additional drilling program as well as the design the of the bridge foundation, temporary and permanent shoring, embankment settlement analysis, slope stability including H-Pile stabilization.

Jared Sommers (cont.)	
07/17-10/18	**I-55 Bridge Widening over I-220, Jackson, Mississippi:** Geotechnical engineer tasked with the review of the recent geotechnical exploration report, development of geotechnical design parameters, deep foundation shaft analyses and recommendations including bi-directional load test plans and temporary shoring design and slope stability analyses. HNTB was scoped by MDOT to design and develop plans and specifications for the I-55 Northbound widening over I-220 Ramp in Madison County. The bridge abutment widening was designed to be founded on existing 14-inch cast-in-place piles and newly cast 30-inch drilled shafts for the anticipated loading.
03/24-Ongoing	**LADOTD Off-System Bridge Program, Statewide, Louisiana:** Geotechnical engineer responsible for the design of 13 off system bridges across East Baton Rouge Parish. Responsibilities consisted of pile tip determination, required nominal pile resistance, slope stability, settlement and bearing capacity as well as sheet pile wall design.
09/20-03/21	**LA 1 over Caddo Lake Bridge Replacement, Caddo Parish, Louisiana:** Geotechnical engineer for an off-alignment bridge replacement. Geotechnical tasks included foundation design using precast, prestressed concrete piles, drivability, approach embankment settlement calculations, and slope stability as well as engineering during construction.
10/12-05/13	**I-10 Calcasieu River Bridge (A/E IDIQ W912P8-07-D-0021), Westlake, Louisiana:** Geotechnical engineer responsible for preliminary foundation design, analyzing Cone Penetration Test (CPT) data and laboratory boring data for pile capacities, and construction considerations. He provided quality assurance and field logging for two CPTs and two 100-foot soil borings. This investigation was tasked under State Project No. H.003931.5 Supplemental Agreement No. 6 I-10 Calcasieu NEPA Re-Start. Due to identification of hazardous material contamination within the project footprint, a more detailed level of geotechnical and structural engineering investigation is required to define site and project impacts through this portion of the project.
10/18-07/22	**LA 15 over Boeuf River Bridge Replacement, Richland Parish, Louisiana:** Geotechnical engineer for an off-alignment bridge replacement. Geotechnical tasks included foundation design using precast, prestressed concrete piles, drivability, seismic evaluation, approach embankment settlement calculations and slope stability. Provided geotechnical construction support during pile driving.
07/18-06/20	**Comite River Diversion US 61 and KCS Railway Bridges and Shoofly Design, East Baton Rouge Parish, Louisiana:** Geotechnical engineer responsible for the Comite River Diversion drilling program, stability design and bridge foundations for the new KCS Railway and US 61 bridges over the Comite river diversion project. Foundations included PPC piles, steel pipe piles and drilled shafts up to 12 feet in diameter.
12/22-Ongoing	**LA 327-S Bayou Fountain Bridge, East Baton Rouge Parish, Louisiana:** Geotechnical engineer responsible for the foundation design of the new bridge over the Bayou Fountain.
03/20-Ongoing	**West Shore Lake Pontchartrain 109 Levee and Floodwall Design, St. John the Baptist Parish, Louisiana:** Geotechnical engineer for the 1 mile of levee and floodwall. HNTB's design includes the development of strength and consolidation parameters, levee embankment design including stability, settlement and seepage, T-Wall design, T-Wall tie in analyses including preloading and wick drains. Responsibilities during construction include submittal reviews, responding to RFIs, monitoring of geotechnical instrumentation, monthly site visits, and modifications to the plans and specifications.
06/20-10/21	**Southeast Louisiana Flood Protection Authority-East (SLFPA-E) Engineering IDIQ, Lake Ponchartrain and Vicinity, Louisiana:** Geotechnical Engineer responsible for quality control on analysis for a tripping dolphin pier protection replacement structure. The project is located in the Orleans Levee District and involves the replacement of a total of ten tripping dolphins within the Gulf Intracoastal Waterway (GIWW). Geotechnical analysis included shear strength evaluation and behavior of pile groups under both axial and lateral loading using a model created with GROUP software. HNTB provided engineering design services for final design, permitting, and bid phase services.

16. STAFF EXPERIENCE

Firm employed by: Ardaman & Associates, Inc.			
Name	**Robert Jewell, PE** 6 7	Years of relevant experience with this employer	18
Title	Project Engineer / Branch Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2009 / Civil Engineering		
Active registration number / state / expiration date	38579 / LA / 09-30-2026 Traffic Control Supervisor / LA / 08-23-2028		
Year registered	2013	Discipline	Civil
Contract role(s) / brief description of responsibilities	(MPR 6 and 7) Geotechnical Engineer; Geotech Construction Support		
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).		

Robert serves as the manager of our Baton Rouge office and and has **over 15 years** of experience with **design and analyses of countless types of foundations** including shallow, embankment settlement analysis, deep foundations (pile and drilled shafts), LRFD design, FHWA & GEC design, slope stability (embankment and excavation) and earth retaining structures. He has managed and coordinated many geotechnical field investigations, including shallow and deep borings, CPT soundings, and performed analyses and prepares design recommendation reports for LADOTD projects. Robert has extensive experience in construction phase testing and oversight **including dynamic and static testing**, pile integrity testing, cross hole sonic logging, settlement monitoring, and geotechnical instrumentation. In particular, he has **over 15 years of experience performing, analyzing, and reporting for PDA testing, including CAPWAP.**

10/09-Ongoing	**I-20 Mississippi River Bridge Review, Vicksburg, Mississippi:** Project Engineer. Robert assisted in several aspects of engineering for this multi-million-dollar, high risk, high technical needs, high visibility project consisting of investigating movement of the I-20 Bridge in Vicksburg, Mississippi. This project consisted of a comprehensive laboratory testing program and refinement of the geotechnical site characterization for the bank/bluff where there was evidence of shifting creating movement in the bridge structure. The specialized testing included x-ray diffraction, x-ray scanning of unextruded samples and stress-reversal direct shear tests to determine true residual angles of critical strata. This project also included an extensive geotechnical instrumentation program including vibrating wire piezometers, Casagrande type piezometers, In-place inclinometers, SAA inclinometers, and traditional inclinometers. In addition, seepage and drawdown analyses, slope stability analyses, evaluation of remedial measures including design and evaluation of large foundation structures and developed technically feasible solutions to mitigate ground movement were completed.
09/22-Ongoing	**Evangeline & CN Railroad Culvert, St. Charles Parish, Louisiana:** Project Manager. Robert completed subsurface exploration and geotechnical engineering evaluation. The project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, Louisiana in St. Charles Parish. Ardaman performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
10/18-11/21	**I-220 / I-20 Interchange Improvement and Barksdale AIr Force Base Access Road, Bossier Parish, Louisiana:** Project Manager. Prepared the preliminary design and planning report for this Design Build project which provides direct access to Interstate I-20 from the Barksdale Air Force Base and constructing an interchange and access road from Interstate 20 in Bossier City. He oversaw the field construction services consisting of PDA monitoring, bi-directional load cell load tests, and settlement monitoring.
07/23-Ongoing	**US 371 CPKC Railroad Overpasses HBI, Webster Parish, Louisiana:** Project Manager. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.

Robert Jewell (cont.)	
10/15-Ongoing	**Pecue Lane I-10 Interchange, East Baton Rouge Parish, Louisiana:** Project Engineer. This project consists of twin bridges with MSE wall abutments for both bridges crossing Interstate I-10, a bridge crossing Ward's Creek, and on/off-ramps in south Baton Rouge. Robert helped perform analyses including settlement estimates with recommendations for monitoring, driven pile and drilled shaft design including down drag considerations, MSE Wall design, slope stability and pavement section recommendations; all completed according to DOTD standards. Robert is currently overseeing the construction phase which includes PDA monitoring, static load testing, and settlement monitoring.
07/21-Ongoing	**I-10: LA 415 to Essen Lane on I-10 & I-12 (CMAR), Baton Rouge Parish, Louisiana:** Project Manager. Leads all aspects of engineering analyses pertaining to selection of design reaches, geotechnical design of deep foundations, earth retaining structures, slope stability, soil-structure interaction with existing structures and load testing recommendations. This is a Construction Management at Risk (CMAR) project which includes widening of the east and westbound lanes, elevated structures, interchanges, and ramps along I-10 from LA 415 in West Baton Rouge Parish to Essen Lane on I-10 and I-12 in East Baton Rouge Parish spanning approximately 2.5 miles.
04/21-Ongoing	**Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, Louisiana:** Project Manager. Leads all aspects of engineering analyses pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses and construction testing program recommendations. This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast Louisiana which generally ranged in length from 100 to 400 feet, mainly over small rivers, and creeks.
07/21-01/22	**I-10 Calcasieu River Bridge, Calcasieu Parish, Louisiana:** Project Engineer. Led technical review of all aspects of this project pertaining to coordination of fieldwork including 37 deep soil borings, 39 ECPTs and 13 electrical resistivity (ER) geophysical survey transects. A majority of the soil borings were completed from a barge, some over a considerable amount of water. Some soil borings were completed from a marsh buggy over shallow water and thick marsh grass. Robert also assisted with review of the laboratory testing program, processing and analyzing of the ECPT and ER data. He also assisted with development of a geotechnical database and preparation and submittal of a geotechnical data report. This project consisted of obtaining preliminary geotechnical data under an extremely strict deadline to be used in the design phase of a project that will consist of replacing the existing I-10 Calcasieu River Bridge with a new structure and improvements to I-10 near the I-210 interchange and various other interchanges including entrances, exits and service roads.
07/15-Ongoing	**I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange), Lafayette Parish, Louisiana:** Project Manager. Manages the Phase I geotechnical investigation, which included 116 deep and shallow soil boring, and 15 CPT soundings. The design was for the construction of 5 miles of freeway consisting of a 3.5-mile elevated structure that will include pile supported approach slabs, pile foundations, slope stability, embankment settlement, advanced load test programs, and earth retaining structures. He will be the co-principal for developing the Geotechnical Investigation and Design Report to be developed for this project. In addition, he will also oversee and coordinate the Phase 2 field and laboratory program which will include a total of more than 400 borings including deep borings, shallow borings, and CPT soundings.
04/14-05/23	**I-12 to Bush Segment 2, LA 3241 (LA 36-LA435), St. Tammany Parish, Louisiana:** Project Manager. Oversaw and coordinated the geotechnical investigation which included drilling 32 deep soil borings, 10 culvert borings, and 88 shallow roadway borings, sampling, and laboratory testing along the alignment which includes two bridges: LA 435 over Bayou Lacombe Tributary and LA 36 over Bayou Lacombe Tributary 2. Assisted in developing the geotechnical analyses and design recommendation report which included pile foundations for the bridge structures and shallow foundation design for the culverts. Robert oversaw the construction phase which included dynamic testing and settlement monitoring.
07/23-Ongoing	**MRB SOUTH GBRL, LA 1 TO LA 30 Connector, Multiple Parishes, Louisiana:** Project Engineer. The project consisted of an Enhanced Planning investigation into S.P. No. H.013284, MRB South GBR: LA 1 to LA 30 Connector, with the objective of constructing a new Mississippi River crossing located between the I-10 and LA 70 River crossings from three proposed alignments. Engineering services include supervision of the field program, development of the laboratory testing program, quality control review, and development of an interactive geotechnical database to compile all the soil borings and ECPT. The preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations. A data report and preliminary geotechnical assessment report were submitted.

16. STAFF EXPERIENCE

Firm employed by: Ardaman & Associates, Inc.			
Name	**Megan Bourgeois, PE**	Years of relevant experience with this employer	19
Title	Project Engineer / Assistant Branch Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	BS / 2006 / Civil Engineering Traffic Control Supervisor / LA / 6-21-2028, DOTD Flagger / LA / 8-14-2028 Certified NHI Drilled Shaft Inspector		
Active registration number / state / expiration date	0036725 / LA / 03-31-2026		
Year registered	2011	Discipline	Civil
Contract role(s) / brief description of responsibilities	Geotechnical Engineer, Geotech Construction Support		

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).
	Megan has more than 19 years of experience with design and analyses of countless types of foundations including shallow, embankment settlement analysis, deep foundations (pile and drilled shafts), LRFD design, FHWA & GEC design, slope stability (embankment and excavation) and earth retaining structures. She also has extensive experience with geotechnical instrumentation, installation and monitoring, and construction phase testing and laboratory management. She has served as Ardaman's project manager for many LADOTD projects for bridges and roadways throughout Louisiana and completed numerous geotechnical investigations, engineering, and reporting in accordance with LADOTD standards. She has successfully overseen several major contracts for LADOTD and other clients. Megan also serves as the director of Ardaman's geotechnical engineering and CMT laboratories in Baton Rouge and has overseen the laboratory testing programs in accordance with LADOTD standards. In this role, she supervises the laboratory managers, oversees testing, provides guidance to laboratory staff, and ensures appropriate protocol is followed and deadlines are met in addition to providing training material and maintaining all laboratory certifications, including AMRL, CCRL, DEQ & USACE.
10/09-Ongoing	**I-20 Mississippi River Bridge Review: Vicksburg, Mississippi:** Project Manager. Megan manages this multi-million-dollar, high risk, high technical needs, high visibility project consisting of investigating movement of the I-20 Bridge in Vicksburg, Mississippi. She managed a highly technical team including academia, experts, including internationally recognized geotechnical engineers, geohydrologists, instrumentation specialists, and 3-D geotechnical modeling experts. She managed and personally oversaw a comprehensive laboratory testing program and was involved in refining the geotechnical site characterization for the bank/bluff where there was evidence of shifting creating movement in the bridge structure. The specialized testing, she personally performed or managed included x-ray diffraction, x-ray scanning of unextruded samples to identify existing shearing planes and stress-reversal direct shear tests to determine true residual angles of critical strata. She was instrumental in designing the geotechnical instrumentation program for this project including vibrating wire piezometers, Casagrande type piezometers, In-place inclinometers, SAA inclinometers, and traditional inclinometers. In addition, Megan performed seepage and drawdown analyses, slope stability analyses, evaluation of remedial measures including design and evaluation of large foundation structures and developed technically feasible solutions to mitigate ground movement. She co-authored the geotechnical analysis and design report.
09/22-Ongoing	**Evangeline & CN Railroad Culvert, St. Charles Parish, Louisiana:** Project Manager. Robert completed subsurface exploration and geotechnical engineering evaluation. The project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, Louisiana in St. Charles Parish. Ardaman performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.

Megan Bourgeois (cont.)	
04/21-Ongoing	**Rural Bridge Initiative Phase II: West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, Louisiana:** Project Engineer. Leads technical reviews pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses and construction testing program recommendations. This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast Louisiana which generally ranged in length from 100 to 400 feet, over various size rivers and creeks.
10/15-Ongoing	**Pecue Lane I-10 Interchange, East Baton Rouge Parish, Louisiana:** Project Manager. This project consists of twin bridges with MSE wall abutments for both bridges crossing Interstate I-10, a bridge crossing Ward's Creek, and on/off-ramps in south Baton Rouge. Megan managed all aspects of the project that included field investigations, laboratory testing, and engineering design. She performed analyses including settlement estimates with recommendations for monitoring, driven pile design including down drag considerations, MSE Wall design, slope stability and pavement section recommendations; all completed according to DOTD standards. She is currently assisting with the field construction monitoring.
07/21-01/22	**I-10 Calcasieu River Bridge: Calcasieu Parish, Louisiana:** Project Manager. Managed all aspects of this project pertaining to coordination of fieldwork including 37 deep soil borings, 39 ECPTs and 13 geophysical survey transects. A majority of the soil borings were completed from a barge over deep water, some from a marsh buggy over shallow water and thick marsh grass. Megan also managed and oversaw the laboratory testing program and processing and analyzing of the ECPT and ER data. She assisted with development of a geotechnical database and preparation and submittal of a geotechnical data report. This project consisted of obtaining preliminary geotechnical data under an extremely strict deadline to be used in the design phase of a project that will consist of replacing the existing I-10 Calcasieu River Bridge with a new structure and improvements to various other interchanges.
09/22-Ongoing	**Evangeline Road & CN Railroad Culvert, St. Charles Parish, Louisiana:** Project Engineer. Ardaman completed subsurface exploration and geotechnical engineering evaluation. The project consists of the installation of two reinforced concrete box culverts (RCBCs) on the north and south sides of the CN Railroad as it crosses over Evangeline Road near Montz, Louisiana in St. Charles Parish. Ardaman performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
05/06-12/11	**LA 1 – Phases 1 & 2: Lafourche Parish, Louisiana:** Assistant Project Engineer. This project is the second phase of the 17-mile elevated highway spanning from Golden Meadow to Fourchon. Megan directed the laboratory testing program to ensure strict adherence to LADOTD standards and managed the drilling operations which included deep borings and CPT soundings in the coastal marshes via airboat-mounted equipment. She oversaw the completion of over 70 soil boring logs and evaluated and presented approximately 300 CPT sounding logs for use in design of pile foundations.
01/23-Ongoing	**MRB South GBRL: LA 1 to LA 30 Connector, Multiple Parishes, Louisiana:** Project Engineer. The project consists of an Enhanced Planning investigation into S.P. No. H.013284, MRB South GBR: LA 1 to LA 30 Connector, with the objective of constructing a new Mississippi River crossing located between the I-10 and LA 70 River crossings from three proposed alignments. Megan helped oversee supervision of the field program, development of the laboratory testing program, quality control review, and development of an interactive geotechnical database to compile all the soil borings and ECPT. The preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations.
02/20-Ongoing	**Design Support Services LA 23, Belle Chasse Bridge & Tunnel: Plaquemine Parish, Louisiana:** Project Engineer/Laboratory Director. Ardaman's scope consists of review and acceptance of all geotechnical services including technical design reports, field documentation, drawings, and RFIs. In addition, Ardaman performs acceptance verification sampling and testing during the construction for soils and concrete. Megan assisted in review and acceptance of geotechnical services as well served as quality control and review of all acceptance verification sampling and testing during construction.
07/23-Ongoing	**US 371 CPKC Railroad Overpasses HBI, Webster Parish, Louisiana:** Project Engineer. The project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Ardaman performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Brian Powell, PE**	Years of relevant experience with this employer	23
Title	Senior Geotechnical Project Manager	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization	MS / 2007 / Civil Engineering | BS / 2002 / Civil Engineering		
Active registration number / state / expiration date	30040 / LA / 09-30-2026 | 29116 / MS / 12-31-2026		
Year registered	LA 2017; MS 2018	Discipline	Civil
Contract role(s) / brief description of responsibilities	Geotechnical Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Brian has over 24 years of experience in the geotechnical engineering profession and is a licensed engineer in Louisiana and Mississippi with over 10 years of experience in geotechnical design of bridge foundation elements in both states. He holds a master's degree in geotechnical engineering and has extensive expertise in geotechnical investigations and design for roads, railways, bridges, cut and fill retaining walls, embankments, slopes, cofferdams and cells, levees, floodwalls, navigation structures, and river revetments. His experience includes landslide and riverbank instability characterization and mitigation. He has planned and coordinated geotechnical subsurface and laboratory investigations, analyses and testing of driven and cast-in-place piles, embankment stability and settlement evaluations, lightweight and reinforced slopes and embankment, geotechnical instrumentation installation and interpretation. He has designed landslide mitigation measures including shear keys, terracing, buttressing, drainage improvements, and ground anchor, pile, and geosynthetic reinforced slopes. He is highly knowledgeable about U.S. Army Corps of Engineers (USACE) pre-application processes and permitting requirements and has developed modifications for federal flood risk management and navigation improvement projects. His contributions include teaching slope stability concepts, preparing design criteria, and developing standard operating procedures for USACE.
08/15-Ongoing	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Senior geotechnical task lead who oversaw design for Phase 2 reinforced concrete pile supported T-wall flood wall design and construction phase pile driving oversight. The overall project includes the construction of nine miles of over water bridge supported on precast prestressed square 18", 24" and 30" concrete piles from Leeville to Golden Meadow and 300-foot floodwall at the Larose to Golden Meadow levee system that required a 408-permit with the USACE. Geotechnical tasks included T-wall-type floodwall design and H-pile foundation, seepage cutoff, and global stability analyses according to USACE Hurricane Storm Damage and Risk Reduction System design guidelines with a 3D settlement analysis to estimate floodwall subsidence. He is currently overseeing construction phase foundation static and dynamic load testing for phases 2A, 2B, 2C, and 2E that includes nearly 600 load tests.
02/22-05/25	**I-10 Calcasieu (HBI) Early Works Package, Calcasieu Parish, Louisiana:** Senior geotechnical engineer for the Calcasieu River Bridge substructure modifications and existing bridge repairs. Several obstacles needed to be overcome to allow for the replacement bridge to be constructed within the proposed limits set out by the P3 procurement and the environmental documents. To allow for the new railroad alignment, modifications were required to the substructure of the existing bridge. The scope of the repairs included those necessary to extend the life of the structure for the duration of the replacement schedule and to minimize the maintenance required on the existing structure until it can be retired from service.
01/18-06/19	**LA 23 Belle Chasse Bridge and Tunnel Replacement P3, Belle Chasse, Louisiana:** Senior geotechnical technical procurement team member on this alternative delivery bridge and tunnel replacement project, tasked with the development of technical procurement documents. This P3 project, the first of its kind in Louisiana, will replace two obsolete highway facilities with one new fixed-span bridge over the Algiers Canal/GIWW.
07/18-Ongoing	**Comite River Diversion US 61 and CPKC Railway Bridges, East Baton Rouge Parish, Louisiana:** Senior geotechnical engineer responsible for preparing the construction documents for consistency with current LADOTD, Parish, KCS, AREMA and USACE design requirements. Brian was responsible for managing the subsurface exploration and testing program, updating the plans and specifications, preparing a geotechnical and design documentation reports. Design include verification of pavement design parameters for Louisiana State highway US-61, pavement design parameters for local Barnett Road, driven pile and drilled shaft foundation for the US 61 bridges and KCS bridge, and Comite Channel stability and dewatering recommendations.

Brian Powell (cont.)	
06/12-3/25	**I-10 Calcasieu River Bridge EIS, I-10 Calcasieu NEPA Re-Start, Calcasieu Parish, Louisiana:** Senior geotechnical task lead responsible for oversight of geotechnical subsurface investigation and laboratory testing for the I-10 Calcasieu River bridge foundations, approach retaining structures and construction considerations as part of EIS alternative alignment evaluations. Due to hazardous subsurface contamination within the project, focus was placed on geotechnical evaluations to reduce negative impacts to existing and proposed facilities. His responsibilities included evaluating alternative structure deep foundations, intermediate depth deep foundations, shallow compensated or floating foundations, timber pile reuse, and pile supported load platforms with lightweight fill approaches.
07/18-4/19	**LA 532 over I-20 Bridge, Minden, Louisiana:** Senior geotechnical task lead for off-alignment bridge replacement with accelerated design/plan development. Geotechnical tasks included the design for drilled shaft foundations and developing bi-directional load tests.
10/18-05/19	**LA 15 Over Boeuf River Bridge, Richland Parish, Louisiana:** Geotechnical task lead for this off-alignment bridge replacement. His geotechnical tasks included foundation design using precast, pre-stressed concrete piles, scour, driveability, seismic evaluation, approach embankment settlement calculations, and slope stability for the Boeuf River bridge crossing.
01/18-10/18	**I-20 Eastbound Bridge over I-55 South/Illinois Central Railroad, Jackson, Mississippi:** Geotechnical task lead responsible for flyover bridge replacement over I-55 and the CPKC Railroad, including landslide stabilization. He was responsible for review of historic design and subsurface information, development of a new subsurface investigation and instrumentation program to monitor slope movement and groundwater, design of 54" to 72" diameter drilled shaft bridge foundations with bi-directional load testing, temporary tied back soldier pile and lagging shoring, permanent sheet pile retaining wall, approach embankment settlement, landslide stabilization using H-piles, slope grading, groundwater and surface water management through ditching, paving, and subsurface drain tiles.
02/19-4/25	**US 80 over CPKC Railroad, Brandon, Mississippi:** Geotechnical senior technical reviewer for the replacement of two US 80 two-lane bridges that were structurally deficient and obsolete over the CPKC railroad. The bridges consist of both steel girder and precast hollow-core. The steel girder bridge was exhibiting distress from a rotating abutment and out of plum shallow bearing piers. The predominant geologic units encountered are associated with the Vicksburg Group and the Forest Hill formation within the Oligocene Series with Glendon limestone embedded within the project stratigraphy. The proposed bridges were designed to be founded on 36" to 48" diameter drilled shaft foundations to inhibit future movement. His tasks included quality control of the deep foundation shaft analyses and recommendations including bi-directional load test plans, temporary sheet pile shoring design, cast-in-place cantilevered retaining wall design, approach settlement analyses, and reinforced slope stability analyses.
11/17-06/20	**I-55 Widening over I-220, Jackson, Mississippi:** Senior geotechnical task lead for this complex widening project. The bridge abutment widening was designed to be founded on existing 14-inch cast-in-place piles and newly cast 30-inch drilled shafts for the anticipated loading. Geotechnical engineering tasks included the review of the recent geotechnical exploration report, development of geotechnical design parameters, deep foundation shaft analyses and recommendations including bi-directional load test plans and temporary shoring design and slope stability analyses.
07/06-12/13	**USACE New Orleans District, Hero Canal and Floodwall, WBV-09.a - West Bank and Vicinity, New Orleans, LA Hurricane Protection Project, East of Algiers Canal, Hero to Oakville, Phase II, First Lift Levee Enlargement & Pumping Station, Plaquemines Parish, Louisiana:** Geotechnical engineering task lead for 5,600 linear feet of new earthen levee, T-wall, sluice gated gravity drainage structure, pump station, and Mississippi River levee and bank stability analyses. This project consisted of preparing s geotechnical exploration and design report, plans and specifications, design documentation report, engineering during advertisement, and engineering during construction. He was responsible for coordinating with discipline design leads, overseeing and performing unreinforced and reinforced levee slope stability analyses, settlement analyses, soil-bentonite slurry trench cutoff wall design, I-wall analyses, and deep foundation support for a T-wall and pump station. The project also included deep soil mixing.
07/18-04/19	**US 90 over LA 14 Bridge Reconstruction, Iberia Parish, Louisiana:** Geotechnical engineer on the replacement of US 90 over LA-14 that included drilled shaft construction and MSE walls. The proposed two span bridge will carry US 90 traffic and is designed to be supported on drilled shaft foundations with Mechanically Stabilized Earth (MSE) walls at the approach embankments. Brian's geotechnical engineering tasks included substructure design of deep foundations for the new bridge over LA 14 including drilled shafts and steel H-piles as well as the MSE wall design and settlement calculations.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Brad Wilder, PE**	Years of relevant experience with this employer	13
Title	Senior Geotechnical Engineer	Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization	MS / 2007 / Geotechnical Engineering | BS / 1999 / Geotechnical Engineering		
Active registration number / state / expiration date	40735 / LA / 09-30-2026		
Year registered	2016	Discipline	Civil
Contract role(s) / brief description of responsibilities	Geotechnical Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Brad is a geotechnical engineer in HNTB's New Orleans office with more than 20 years of experience. His experience includes multiple complex infrastructure design projects including residential, industrial, municipal, government and commercial projects. His geotechnical experience includes a variety of subsurface explorations, geophysical explorations, analysis and foundation design for buildings, roadways, bridges, embankments and retaining walls. He has design and construction experience with deep foundations, retaining walls and ground improvement methods for stability and settlement mitigation. He is experienced using MicroStation V8i, gINT, GRLWEAP, PDA-S, CAPWAP, LPILE, APILE, GROUP, SHAFT, Slope/W, Seep/W, Sigma/W, DEEPEX and Settle3.
03/20-Ongoing	**I-10/Loyola Interchange DB OV, Jefferson Parish, Louisiana:** Senior geotechnical engineer for the DB owner's verifier CEI support services contract. Responsibilities include review of design reports, design criteria, adherence to the performance-based specifications and constructability of design-builder's progress submittals. Senior technical reviews include verifying pavement design reports, deep foundation support and load tests for new roadway flyover and canal bridges, embankment settlement and preload evaluations, slope stability, and sound wall stability meet LADOTD design standards.
02/19-06/19	**I-10 Calcasieu River Bridge EIS, Calcasieu Parish, Louisiana:** Geotechnical engineer involved with evaluation of existing timber pile deep foundations. Provided an evaluation framework detailing risks and data gaps for the possible reuse of timber pile foundations. Due to identification of hazardous material contamination within the project footprint, a more detailed level of geotechnical and structural engineering investigation is required to define site and project impacts in this portion of the project.
02/19-06/19	**I-10 Calcasieu (HBI) Owner's Verification, Calcasieu Parish, Louisiana:** Geotechnical engineer and subject matter expert responsible for reviewing reports, plans, and specifications relating to the bridge replacement project through all phases of the project.
10/23-Ongoing	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Senior geotechnical engineer responsible for assisting with review of pile driving data and construction engineering support. Responsible for deep foundation testing analyses including CAPWAP signal matching software. HNTB coordinated with the Louisiana Department of Transportation and Development to provide preliminary and final design services for Phase 2 of the Louisiana Highway 1 Bridge project–an 8-mile elevated span currently under construction. The bridge is replacing a long section of at-grade roadway that frequently requires closures and maintenance due to hurricane storm surge events.
01/16/Ongoing	**Louisiana Coastal Protection and Restoration Authority (CPRA) Houma Navigation Canal Lock Complex Salinity and Flood Control Project Owner's Verification Review, Terrebonne Parish, Louisiana:** Senior geotechnical engineer responsible for performing geotechnical inspection test report. The HNC lock complex is a major component of the Morganza to the Gulf of Mexico Hurricane & Storm Damage Risk Reduction System and is a salinity and flood control project. The geotechnical review consisted of technical design, constructability and operability review for the project. Major components of the project include a pile-supported lock with two sector gates, pile-supported floodgate with slice gates, closure wall consisting of pile-supported T-walls and braced sheet pile floodwall, earthen levee transitions, pile-supported maintenance and operations structures, and marine structures including guidewalls, nose piers and protection barriers. As part of the project, axial and lateral pile load tests were also performed and reviewed.

Brad Wilder (cont.)	
02/19-4/25	**US 80 over CPKC Railroad, Brandon, Mississippi:** Geotechnical senior technical reviewer for the replacement of two US 80 two-lane bridges that were structurally deficient and obsolete over the CPKC railroad. The bridges consist of both steel girder and precast hollow-core. The steel girder bridge was exhibiting distress from a rotating abutment and out of plum shallow bearing piers. The predominant geologic units encountered are associated with the Vicksburg Group and the Forest Hill formation within the Oligocene Series with Glendon limestone embedded within the project stratigraphy. The proposed bridges were designed to be founded on 36" to 48" diameter drilled shaft foundations to inhibit future movement. His tasks included quality control of the deep foundation shaft analyses and recommendations including bi-directional load test plans, temporary sheet pile shoring design, cast-in-place cantilevered retaining wall design, approach settlement analyses, and reinforced slope stability analyses.
02/12-06/12	**I-30/I-35E (Dallas Horseshoe) Interchange, Dallas, Texas:** Geotechnical engineer who was responsible for performing levee seepage and global stability, drilled shaft foundation, and MSE retaining wall stability analyses that including rammed aggregate pier foundation design due to the significant wall heights that are proposed. A geotechnical report was prepared detailing the analyses and design recommendations for the I-35 proposed bridges, retaining walls, and for the USACE Forth Worth District 408 permit. This project involved reconstruction of the most complex, urban multi-level interchange in the Dallas Metroplex, estimated at $700M. HNTB completed the 30% PS&E, compiled schematics, conceptual TCPs, bridge layouts and estimates to support the development of DB procurement documents.
01/18-Ongoing	**I-20 Eastbound Bridge over I-55/Illinois Central RR, Jackson, Mississippi:** HNTB was scoped by Mississippi DOT to design and develop plans and specifications for the I-20 Eastbound Flyover at I-55 in Hinds County, Mississippi. The proposed bridge consisted of approximately 1800 feet including a span over the Illinois Central Railroad (ICRR) corridor. He provided oversight and technical quality control for the geotechnical subsurface exploration drilling plan, management and findings, estimated geotechnical design soil parameters, deep foundation shaft analyses and recommendations including bi-directional load test plans, settlement analysis at proposed embankment fill locations, slope stability analyses of existing fill slopes requiring H-pile reinforcement, permanent cantilevered sheet pile retaining wall analysis, temporary shoring and construction recommendations.
05/20-12/21	**Southeast Louisiana Flood Protection Authority-East (SLFPA-E) Engineering IDIQ, Lake Ponchartrain and Vicinity, Louisiana:** Geotechnical engineer responsible for performing an analysis for a tripping dolphin pier protection replacement structure. The project is in the Orleans Levee District and involves the replacement of a total of ten tripping dolphins within the Gulf Intracoastal Waterway. Geotechnical analysis included shear strength evaluation and behavior of pile groups under both axial and lateral loading using a model created with GROUP software. HNTB provided engineering design services for final design, permitting and bid phase services.
01/19-12/20	**St. Tammany Parish FEMA DFIRM Appeal, St. Tammany Parish, Louisiana:** St. Tammany Parish asked the help of HNTB to help negotiate an active appeal to FEMA regarding the coastal analysis utilized for the current preliminary DFIRMs. The project includes collecting and providing the documentation to support the use of an updated coastal analysis. It also includes evaluating the Levee Analysis Mapping Process (LAMP) approach that was utilized in generating the Base Flood Elevations in the levied areas based on the older coastal data and providing recommendations to the Parish. Brad was responsible for the LAMP review, collection of St. Tammany Parish flood control project documentation and a preliminary levee implementation plan including cost estimates. He worked in close coordination with the local St. Tammany Parish government to help with technical guidance, data collection, report reviews and FEMA coordination.
05/19-Ongoing	**USACE Kansas City Flood Risk Management Project, Kansas City, Missouri and Kansas City, Kansas:** Senior geotechnical engineer for the 17 miles of levee and floodwall raise providing construction documents for the Armourdale and Central Industrial District levee units within the $453M levee raise project protecting over $9.5B in infrastructure. HNTB design includes new or modifications to levee, floodwall, gatewells, utility relocations, stoplog closures, sandbag closures, and pump station abandonments. He is a senior geotechnical team member responsible for development of geotechnical design criteria for the project, overall technical quality control for geotechnical design and preparation of project design documentation.
12/20-Ongoing	**MOVEBR New Capacity Improvements Projects, East Baton Rouge Parish, Louisiana:** Senior geotechnical engineer who is responsible for reviewing reports and plans for roadway improvement projects in East Baton Rouge Parish. He is also responsible for reviewing project geotechnical and pavement design guidelines in accordance with LADOTD requirements and review of technical geotechnical and pavement submittals for conformance with program design criteria for development of construction documents.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Donald Hammond, PE**	Years of relevant experience with this employer	24
Title	Senior Technical Advisor	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization	MS / 1994 / Civil Engineering; BS / 1993 / Civil Engineering		
Active registration number / state / expiration date	106465 / TX / 03-31-2026		
Year registered	2010	Discipline	Civil
Contract role(s) / brief description of responsibilities	Geotechnical Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Don is a senior technical advisor and geotechnical engineer in the firm's Kansas City Metro office with 24 years of experience on various projects. He first joined HNTB in 1999 and returned to the firm in 2006 after working for two years as a dam safety inspector with the Federal Energy Regulatory Commission. Don has provided foundation designs for major river crossings, movable bridges and complex interchanges. He has developed and managed exploration programs for these structures in various subsurface conditions. He also has experience in the analysis of retaining wall and slope stability, selection and design of ground improvement, evaluation of site soils and borrow materials, design of levees and earthen dams, addressing vibration and scour concerns, pavement design, analysis of settlement and swell potential, temporary shoring design, and construction monitoring. In addition, he has managed load test programs for drilled shafts and driven piles.
05/18-11/19	**BNSF Bridge 0050-0006.3 Ballard Bridge Replacement over the Lake Washington Ship Canal, Seattle, Washington:** Senior technical advisor for design of drilled shaft foundations for a new double track vertical lift span. Included interpretation and use of a full scale drilled shaft load test.
09/15-11/16 12/23-03/24	**BNSF Railway Bridge No. 425.2B Over the Missouri River, Sibley, Missouri:** Geotechnical engineer of record for this off-line, single-track crossing of the Missouri River, located downstream of the existing bridge. The proposed bridge consisted of three 400-foot through trusses, one 250-foot through truss, and 20 precast concrete beam deck girder spans for a total length of 4,130 feet. The east approach embankment, which extends nearly 60 feet above the Missouri River floodplain, needed to be widened. A geophysical investigation from bank to bank was used to identify anomalous features that might impact construction. He analyzed and designed drilled shafts for support of the river piers and drove steel H-piles for the approach piers, and designed stone column ground improvements to aid slope stability and control settlement at the east abutment.
06/19-Ongoing	**I-44 over UPRR/Black Gold Drive, Oklahoma City, Oklahoma:** Senior technical advisor on the study phase, preliminary and final design of an accelerated bridge project. Guided development of an innovative solution that minimizes traffic disruption. The solution employs micropiles to strengthen the existing foundations while the existing bridge remains in service. Reviewed in-house design of a soil nail wall that will be installed below the existing abutments prior to construction of the replacement bridges.
01/10-11/10	**BNSF Railway Reconstruction of Movable BNSF Railway Bridge over Mississippi River, Burlington, Iowa:** Worked side-by-side with a lead project geotechnical engineer to redesign foundations for a new vertical lift span, six approach piers and the new abutments, all within a compressed design schedule triggered by post-award relocation of the lift span. Deep shale bedrock and high axial and lateral loads required drilled shafts up to 12 feet in diameter and 205 feet in length. He also provided support during construction.
05/16-03/19	**MoDOT US 54 Champ Clark Bridge, US 54 Over the Mississippi River, Louisiana, Missouri:** Geotechnical engineer of record responsible for managing all geotechnical aspects of bridge, embankment and retaining wall design plus related construction inspection. The new 2,288-foot bridge has foundation types, including a footing on rock, steel H-piles driven to rock, rock-socketed drilled shafts, and an innovative use of 48-inch pipe piles driven to rock. The project also included a long 20-foot approach embankment over soft clay soils. This bridge crossed over both the Mississippi River and a BNSF railroad track.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Mira Para, PE**	Years of relevant experience with this employer	1
Title	Senior Project Manager	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	BS / 1992 / Civil Engineering		
Active registration number / state / expiration date	34990 / LA / 03-31-2027; 148242 / TX / 03-31-2026		
Year registered	1997	Discipline	Civil
Contract role(s) / brief description of responsibilities	Drainage Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Mira is a project manager with over 32 years of experience in water, wastewater and storm drainage analysis and design, project management, and construction administration. He is a member of American Public Works Association (APWA), Water Environment Federation (WEF), Louisiana Water Environment Association (LWEA), and Society of American Military Engineers (SAME). He has served as President of the APWA Baton Rouge Branch Executive Board, President of the APWA Louisiana Chapter Executive Board, Secretary of the LWEA Collections Systems Committee and as a member of the national APWA Water Resources Management Committee. His positive reputation for creating high-quality designs complements his continued track record of project completion on schedule and within budget. Mira brings extensive experience in project management, hydrologic and hydraulic (H&H) modeling, storm drainage design, drainage pump stations, flood control structures, detention basin design, ponds and lakes design, dams and levees design, erosion control design, stream bank stabilization, wastewater collection, wastewater lift stations, wastewater treatment, water distribution systems, residential development and commercial development.
12/23-Ongoing	**LADOTD IIJA Off-System Bridge Program, East Baton Rouge Parish, Louisiana:** Engineer responsible for oversight and quality control of hydrologic and hydraulic analysis for this $38.5M off-system bridge replacement program, replacing 13 bridges separated into 10 projects located throughout East Baton Rouge Parish.
09/19-09/23	**LADOTD I-10/Loyola Interchange Improvement, New Orleans, Louisiana:** Engineer responsible for independent technical review of the drainage design on this alternative delivery project. This DB project is providing a new interchange to allow direct access from I-10 to the new airport terminal at Louis Armstrong New Orleans International Airport (LANOIA) located near Loyola Boulevard. A DB team was selected in mid-2019 and construction began in early 2020.
03/21-11/21	**TXDOT Gordon Country Club Dam, Paris, Texas:** Task manager and Engineer for feasibility study and remediation plan for the Gordon Country Club Dam including inspection and hydraulic and geotechnical evaluation. The feasibility study included hydraulic analysis and recomendations for improvments and allowed TXDOT to submit for grant funding under FEMA's Rehabilitation of High Hazard Potential Dams program.
01/20-08-21	**Mississippi DOT Stream Bank Stabilization and Countermeasures for US 61 over Buffalo River (Bridge Nos. 17.7A & B), Wilkinson County, Mississippi:** Engineer responsible for design oversight and quality control review of final design plans. Design included longitudinal fill stone toe protection (LFSTP) to protect the riverbank. A site visit identified an area of scour concern along Sandy Creek, a tributary to Buffalo River at the Hwy. 61 crossing. Channelization and stabilization measures were designed to address the area of concern. Bentley's GeoPak and MicroStation programs were utilized in producing the 3D model needed to facilitate quantity calculations and plan production. The project includes Sandy Creek channelization and LFSTP installation along the south bank of Buffalo River.
05/20-12/22	**Mississippi DOT Scour Countermeasures for SR 28 over Boles Creek (Bridge Nos. 2.4 & 2.7), Jefferson County, Mississippi:** Engineer responsible for deisgn oversight and quality control review of final design plans. The project includes a box culvert replacement and a bridge replacement for SR 28 over Boles Creek. SRH2D was used to perform a 2D hydraulic analysis of the study area encompassing both crossings to establish the baseline condition and to simulate the "with-project" condition. The 2D analysis capability provided overland flow connectivity between crossings and spatial velocity variation to better estimate channel stability with the proposed bridge. Bentley's GeoPak and MicroStation programs were utilized in producing the 3D model needed to facilitate quantity calculations and plan production.

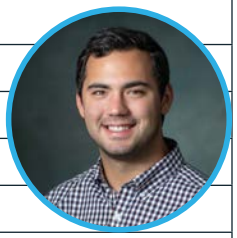
16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Daniel Tanner, PE**	Years of relevant experience with this employer	6
Title	Project Manager	Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization	BA / 2014 / Civil Engineering		
Active registration number / state / expiration date	42793 / LA / 03-31-2027		
Year registered	2018	Discipline	Civil
Contract role(s) / brief description of responsibilities	Drainage Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
Daniel has experience with design and management of numerous civil works infrastructure projects throughout Louisiana, with a focus in water resources. This includes hydrologic and hydraulic modeling, detention pond analysis, storm drainage design, benefit-cost analysis, plan production, and construction administrative services. He has assembled multiple drainage studies and plan sets, and has design experience using the following software: GeoHEC-RAS, HEC-RAS, HEC-HMS, HEC-SSP, HEC-FDA, Aquaveo's SMS, LADOTD's Hydrwin, Bentley PondPack, StormCad, Autodesk Civil 3D and Sanitary and Storm Analysis.	
03/19-08/19	**USACE Modeling of Jones Creek Watershed, East Baton Rouge, Louisiana:** Engineer responsible for development of the hydrologic and hydraulic modeling of the Jones Creek watershed located in East Baton Rouge Parish. This included using hydrologic methodology outlined in Urban Hydrology for Small Watersheds TR-55 to develop a model using the USACE's HEC-HMS software. In addition to this hydrologic model, an unsteady state 1D/2D HEC-RAS model was developed that was linked to HMS runoff hydrographs and hyetographs. This 1D/2D interface provided additional detail in the 2D overbank regions, while effectively representing the immediate channel within the 1D cross sections.
07/16-02/19	**Buddy Ellis Road Bridge Replacement (Overlay Project), Livingston Parish, Louisiana:** Engineer responsible for performing drainage analysis of Taylor Bayou at the proposed bridge replacement at Buddy Ellis Road. Tasks included completing a hydrologic analysis of the Taylor Bayou watershed and developing a HEC-RAS hydraulic model for the channel at the proposed bridge replacement location. A LADOTD Bridge Replacement Hydraulic Report was created, which compared the existing and proposed project scenarios.
12/16-02/19	**Cook Road Project, Livingston Parish, Louisiana:** Engineer responsible for performing drainage analysis of Grays Creek at the proposed bridge replacement at the proposed Cook Road. Tasks included completing a hydrologic analysis of the Grays Creek watershed and developing a HEC-RAS hydraulic model for the channel at the proposed bridge replacement location. A LADOTD Bridge Replacement Hydraulic Report was created, which compared the existing and proposed project scenarios.
07/19-06/22	**Ascension Parish Floodplain Management Plan, Louisiana:** Project engineer for $2.6M Floodplain Management Plan development. Responsibilities included management of subconsultant progress for a parish-wide survey of the existing open channel system, H&H modeling, documentation of known flooding problems, and developing mitigation strategies and proposed projects. His everyday tasks included coordination of design criteria document, H&H modeling support of Bayou Manchac, Henderson Bayou and Bayou Conway basins, flood hazard identification, modeling proposed mitigation strategies, benefit costs analysis, coordination with the Parish and report write-up documenting all findings. This project will provide Ascension Parish with a plan that will transition smoothly into the implementation effort.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Kyle Babin, PE**	Years of relevant experience with this employer	4
Title	Engineer	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization	BS / 2021 / Civil Engineering		
Active registration number / state / expiration date	50290 / LA / 09-30-2025		
Year registered	2025	Discipline	Civil
Contract role(s) / brief description of responsibilities	Drainage Engineer		



Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
	Kyle has experience focusing on stormwater and flood protection projects. He is strong in using HECRAS 2D modeling software to develop watershed models depicting stormwater runoff and watershed behavior. He is also proficient in GeoHECRAS, HEC-FIA, ArcGIS, HEC-SSP, and Excel.
11/23-Ongoing	**IIJA Off-System Bridge Replacement Program, East Baton Rouge Parish, Louisiana:** Engineer responsible for hydrologic and hydraulic analysis for this $38.5M off-system bridge replacement program, replacing 13 bridges separated into 10 projects located throughout East Baton Rouge Parish. Analysis was performed utilizing HECRAS 1D modeling software. Draft and Final Hydraulics Report in accordance with the Off-System Bridge Design Manual were completed for each bridge including site history, data collection and calculations, as well as proposed crossing type, size, and location.
06/21-01/23	**Ascension Parish Floodplain Management Plan (FMP), Ascension Parish, Louisiana:** H&H modeler responsible for building three watershed models covering most Ascension Parish. This included modeling stormwater runoff for an array of events and analyzing the results from these models to develop projects to mitigate flooding and reduce risk. He assisted with running Cost/Benefit analysis of projects with project write-ups, developing the FMP and writing the FMP Report.
11/22-Ongoing	**Ascension Parish Drainage Program, Ascension Parish, Louisiana:** Heavily involved with grant management and grant writing. Experience writing grant applications for HMGP, LWI, and BRIC which included modeling proposed projects and performing benefit-cost analyses to meet criteria of prospective grants. Additionally, he helped manage current grants on behalf of the Parish.
08/21-04/23	**Mississippi River Safety Program, Multiple Locations, Mississippi:** Performed walking inspections of over 200 miles of embankment levee/floodwalls/ floodgates. This consisted of identifying, photographing and documenting any depressions, seepage, slides, burrows, missing sod cover, etc.
09/23-04/24	**Morgantown Industrial Park Access, Morgontown, West Virginia:** Assisted in the drainage design for the Morgantown Industrial Park Access bridge. Design components included bridge runoff, detention pond, ditch, culvert, and storm sewer system.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**James DiPasquale, PE**	Years of relevant experience with this employer	3
Title	Resident Engineer	Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization	BS / 2006 / Civil Engineering		
Active registration number / state / expiration date	31155 / KS / 4-30-2026; 2025004923 / MO / 12-31-2025; 080611 / PA / 09-30-2027		
Year registered	2013	Discipline	Civil
Contract role(s) / brief description of responsibilities	Constructability/Sequencing		

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).
	James is a resident engineer at HNTB's Kansas City Metro office. Throughout his 18-year career, James has worked on-site on major construction projects across the U.S. and internationally. His experience includes estimating, procurement, pre-construction planning, management of contracts, schedule and budget, and supervision of engineering, construction, quality, and safety staff. Areas of expertise include means and methods planning and execution, construction safety, heavy lift cranes, structural steel erection, bolting and welding, scheduling, and contract management.
09/23-Ongoing	**US 69 Express, Overland Park, Kansas:** Task lead working with the designated resident engineers for both Roadway and Structures groups. Assists with day-to-day oversight of inspection work and project controls, mentors' inspectors and field engineers, and implements project controls for the Construction Manager. Developed protocols to better engage the field inspection staff in safety awareness. Partnered with the General Contractor's Safety Manager and HNTB Corporate Safety Director to encourage a positive and active safety culture on-site.
10/22-08/23	**BNSF BR. 425.2B over the Missouri River, Sibley, Missouri:** Assisted the design project manager with the RFP phase and contract award. He will be the resident engineer leading the construction management site staff on this new bridge construction for BNSF. Provided shop drawing and RFI review on the Portal North Bridge. Provided base schedules and constructability reviews.
06/19-Ongoing	**I-44 over UPRR/Black Gold Drive, Oklahoma City, Oklahoma:** Constructability reviewer for an accelerated bridge project. The study included evaluations to determine the most cost effective bridge construction method to erect the bridge while minimizing the impact to traffic. The study included options for traditional bridge construction, accelerated bridge construction (ABC) using self-propoelled modular transporters and prefabricated bridge element systems. Responsibilities include constructability reviews, crane selection and crane placement in the tight railroad corridor.
12/24-Ongoing	**SLTW03 - South Lawrence Trafficway:** Project Quality Manager (PQM) for both design services and Construction Engineering and Inspection (CEI) contracts. During construction phase, James is assisting in EOR review of shop drawings and construction planning submittals for new bridge structures.
04/23-Ongoing	**US69 over 18th St, Kansas City, Kansas:** During the design phase of this major river bridge crossing, James provided constructability reviews, developed sequence and phasing plans, and a CPM schedule. Now in the construction phase, James is currently assisting in EOR review of shop drawings and construction planning submittals.
08/15-08/16	**US69 over the Missouri River, Kansas City, Missouri*:** Project engineer for this $72M design-build replacement bridge on Highway 69 over the Missouri River. The bridge spans 2,163 feet and carries four lanes of traffic with one pedestrian lane. Supervised construction of all structural steel erection, including management of the ironworker superintendent and field engineers. *Previous employer

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Joseph Stilson, PE, PMP**	Years of relevant experience with this employer	1
Title	Project Manager	Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization	BS / 2009 / Civil Engineering		
Active registration number / state / expiration date	39762 / LA / 09-30-2025		
Year registered	2015	Discipline	Civil
Contract role(s) / brief description of responsibilities	Constructability/Sequencing, Bridge Construction Support		

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).

Joseph is a project manager with over 17 years of experience as roles such as contractor, owner representative, and multi-discipline engineering designer, contributing to a well-rounded and strategic project perspective. He is a member of American Society of Civil Engineers (ASCE). Joseph has held key positions including field engineer, asset inspector, site civil/structural engineer, assistant project manager, project controls Specialist, and Project Manager. This diverse background has equipped him with deep expertise in: construction means and methods engineering, planning and execution of complex construction projects, structural steel erection, bolting, and welding, construction safety and compliance, project scheduling and controls, contract administration and management, and multi-discipline coordination and project leadership. He has successfully led and supported a wide range of projects, consistently delivering results through technical proficiency, collaborative leadership, and a commitment to quality and safety.

*Work completed with previous employer

02/21-02/22	**Corridor H Steel Bridge Erection, Kerens, West Virginia*:** Assistant project manager responsible for managing the overall project budget and preparing detailed financial reports, submitting monthly pay estimates and tracking earned value, overseeing implementation of safety and quality management plans, maintaining the construction schedule and coordinating daily field operations, leading the development of in-house engineering solutions, including the design of falsework towers and a complex cantilevered erection sequence, and collaborating closely with the general contractor and steel fabricator to ensure timely fabrication, delivery, and field execution aligned with project milestones. Joseph's leadership and technical oversight were instrumental in maintaining schedule integrity and ensuring safe, high-quality bridge erection across one of the five structures.
02/12-03/14	**US 190 Mississippi River Bridge Painting and Steel Repairs, Baton Rouge, Louisiana*:** Responsible for supporting steel repairs and structural upgrades on the 3,326' cantilever truss bridge and 2,571' of approaches that supported both railroad and highway traffic. He managed project budgeting and scheduling, developed RFPs, evaluated supplier bids, issued POs, and coordinated material logistics. He monitored production rates and collaborated with in-house engineering to design complex construction methodologies aligned with contract specifications.
07/19-Ongoing	**MOVEBR Infrastructure Program, Baton Rouge, Louisiana:** Resident engineer for the $1.2B program of projects that was separated into a list of capacity and enhancement projects. HNTB, as a sub for the CSRS team, is responsible for the $800M in capacity infrastructure projects on 40 roadways throughout the parish of East Baton Rouge.
06/25-Ongoing	**LA 1 Leeville to Golden Meadow Phase 2 Construction Support, Leeville, Louisiana:** Project engineer and construction support services lead for this bridge project, which will eventually connect at-grade LA 1 to the existing Phase 1 structure. His duties include steel plate girder design, superstructure development, substructure development and geometric alignment development. This project is multi-faceted, including a phased design and construction approach, a tolling facility, levee, flood wall and pipeline crossings, unique accelerated bridge construction methods, and environmental regulations.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Joseph Pihlaja, PE**	Years of relevant experience with this employer	2
Title	Senior Estimator	Years of relevant experience with other employer(s)	23
Degree(s) / Years / Specialization	BS / 2003 / Civil Engineering		
Active registration number / state / expiration date	50171 / WA / 11-13-2025; 59821 / MN / 06-30-2026; 6074 / ND / 12-31-2026		
Year registered	2013	Discipline	Civil
Contract role(s) / brief description of responsibilities	Cost Estimator		

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).
	Joe is a senior estimator and project controls subject matter expert that estimates, schedules, performs quality control and constructability reviews of plan, specifications and other deliverables. He brings more than 25 years of experience with general contractor and government engineering services. Over the last 10+years, he has managed and estimated several construction projects in Illinois, California, Minnesota, Ohio, North Carolina, North Dakota, Alaska, Washington, Oregon and Idaho. Prior to that, Joe supervised multiple state transportation department projects. *Work completed with previous employer
01/25-02/25	**KDOT Value Engineering (VE) Study, Topeka, Kansas:** Project controls subject matter expert who developed value engineering proposals cost savings. The VE study was for a 2,500 LF bridge replacement project over Union Pacific Railroad and Missouri River near Leavenworth, KS. The project plans were 60% designed and the VE team met the design team, toured the project site and then spent the next week evaluating and costing VE concepts. The team proposed over $18M in concepts, which $6M was enacted by the Designer and Owner. An independent total cost estimate review was also provided.
10/21-03/22	**City of Fargo/NDDOT, 64th Avenue Overpass Structure, Fargo, North Dakota*:** Contractor project manager responsibility for overall project activities. Joe managed the schedule and budget to see that project activities were constructed on time and according to contract requirements. He conducted weekly owner meetings and served as the general contractor's representative to the owner. The project included a 300-foot steel bridge, geofoam fill, concrete pavement, municipal water, stormwater and sanitary sewer facilities.
07/19-12/19	**Alaska DOT, Waterfalls Creeks Bridges, Ketchikan, Alaska*:** Estimator and change project manager tasked with solving several unmitigated project challenges, including out of sequence work, the need for technical blasting plans, pre-blast structural inspections, logistical challenges and a revised crane pick plan for a crane replacement due to circumstances beyond the contractor's control. Joe helped successfully resolve the issues and the project was completed on time. The project involved the construction of two pre-stressed concrete bridges over two creeks approximately 1 mile apart. To replace the structures, temporary bridges were launched and designed for a specific crane as the design vehicle. The existing timber bridges, which were 80 feet above the creek below, were demolished and replaced with 144-foot bulb-tee girders. Fabrication, transportation and setting the large girders in this remote location was a major challenge. Other project elements included controlled blasting, utility moves, asphalt pavement and guardrail.
02/08-04/11	**Topaz Bridge, Lava Hot Springs, Idaho*:** Engineer for the replacement of an existing U.S. 30 highway bridge crossing over the Union Pacific Railroad and the environmentally sensitive Portneuf River. The bridge included the longest span in Idaho with 10-foot-tall steel girders, phased construction and a design-build 30-foot-high geofoam wall. Joe successfully brought on nationally known subject matter experts together to solve a design impasse on the geofoam wall.
10/15-08/17	**Wasilla Overhead Bridge, Parks Highway, Wasilla, Alaska*:** Structures estimator and project engineer for the bid. Upon NTP, Joe worked with the field management team to establish a schedule, budget, initial submittals and other project kick-off activities. He later assisted field staff with engineering a critical lift plan for setting 10-foot-deep by 200-foot-long steel bridge beams using a 550-ton crane, the largest crane in Alaska. The project involved construction of a highway bridge crossing over the Alaska Railroad on the Parks Highway (Alaska Highway 3), a divided interstate highway in Alaska. This route is critical to delivering goods and services to Alaska's interior.

16. STAFF EXPERIENCE

Firm employed by: **Stanley Consultants, Inc.**			
Name	**Jim Benge**	Years of relevant experience with this employer	14
Title	Construction Scheduler	Years of relevant experience with other employer(s)	54
Degree(s) / Years / Specialization	BS / 1981 / Construction Engineering		
Active registration number / state / expiration date	EI 6713 / Iowa / n/a		
Year registered	n/a	Discipline	n/a
Contract role(s) / brief description of responsibilities	Cost Estimator		

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).
	Jim specializes in the development and maintenance of project PDM-CPM schedules. The schedules for these projects involved multi-scenario & what if, analysis, as well as periodic scheduling updates for project tracking, monitoring, control, and documentation. Jim has 40+ years of project management, estimating and scheduling experience on projects that include the most current and industry-accepted computer software tools, such as Primavera Finest Hour - P3/P5/P6, Primavera SureTrak, and Primavera Contractor. Jim has utilized Microsoft Project Planner on numerous complex projects for schedule controlling and monitoring. He has performed cost estimating and project budget analysis and control on projects with several software tools ranging from Timberline Estimating and Timberline Project Cost Management, to personally developed Microsoft Excel macros. Jim's responsibilities and construction management involvement has been on hundreds of municipal, industrial, and commercial projects.
10/23–05/24	**USACE TO Renovate Hangar B6413, Barksdale AFB, Louisiana:** QA/QC Reviewer responsible for performing the schedule ITR(s) on the project, which involved following on each project deliverable but not necessarily limited to a review of overall logic of the schedule tasks/phases; review for completeness of the schedule as it related to the basic project scope of installations; review of the schedule for format and overall arrangement for clarity, titles and work breakdown structure (WBS); and review of individual tasks as well as the phase of schedule durations for reasonableness considering the project installations (i.e., project size, location, type of work and timing in the calendar year). The schedule ITR also involved review of the schedule design analysis and/or respective schedule narrative that accompanied the project schedule deliverables.
03/24-Ongoing	**USACE TO Entry Corridor ADP Arlington National Cemetery, Arlington, Virginia:** Project Scheduler responsible for providing equipment listing, equipment durations for the program plan/project construction phase. Part of the equipment listing involved selection of equipment possibly utilized throughout the project multiple phases with duration of use within the contract construction work at the site/area(s). The equipment selection was then used within a project environmental impact over the duration of project construction phase.
10/23-Ongoing	**USACE TO Renovate Prescott VA Medical Center, Prescott, Arizona:** Project Scheduler responsible for providing project program schedules/project detail schedules on construction installations involved. Project schedules incorporated all major programming phases of the project including, but not limited to, the design phase, bid/award phase and the construction phase. The project schedule detailed tasks within the construction phase and associated work breakdown structure (WBS) involved the main project scope items. Scope of the schedules involved all facets of the construction phase broken down and detailed within the successive design submittals on the project.
08/21–07/24	**USACE TO GIWW Brazos River Crossing, Galveston, Texas:** QA/QC Reviewer responsible for review of project schedules for internal technical review (ITR) at the project's deliverables.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Jason Veclotch, PE**	Years of relevant experience with this employer	13
Title	Project Manager	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization	MS / 2013 / Civil Engineering; BS / 2010 / Civil Engineering		
Active registration number / state / expiration date	43378 / GA / 12-31-2025		
Year registered	2013	Discipline	Civil
Contract role(s) / brief description of responsibilities	Railroad Standards Compliance & Coordination - Norfolk Southern (NS)		

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).
	Jason is an experienced project manager, team leader, project quality manager, and design engineer. His primary area of expertise is design services for transportation infrastructure including highway and rail bridges, transit facility and station developments, and retaining walls. His highway and DOT experience includes bridges and structures projects for LaDOTD, GDOT, FDOT, MassDOT, NCDOT, CTDOT, VDOT, Cobb County, Gwinnett County, and MDX. His transit design experience includes work with highspeed, class 1 freight, commuter, and light rail applications. He has extensive bridge design and public projects support experience with Norfolk Southern. His public projects support includes plan and submittal reviews on behalf of the railroad and onsite monitoring during construction for compliance with railroad requirements.
08/21-05/24	**Inspection, Assessment, and Rehabilitation of Bridge HA-687.97 over Susquehanna River, Norfolk Southern, Wilkes-Barre, Pennsylvania:** Project manager; The project consisted of an initial phase of inspection, assessment, and recommendations for repair of observed bearing failure and truss member distress in the multi-span deck truss structure. In the second phase we were then authorized to design the recommended repairs and bearing replacements. Tasks included client coordination, scope and fee development, quality plan development, project initiation, project oversight and coordination, review of technical memos, analysis of longitudinal loading effects on the structure, and reviews of key design components. The third task order then covered contractor submittals during construction. I led successful delivery of the first task order and was able to leverage the client's satisfaction to be selected for second and third task order.
08/23-Ongoing	**Dublin Bypass Concept Report, GDOT, Dublin, Georgia:** Deputy project manager, railroad coordination lead, and bridge task lead; The HNTB team is leading development of a concept memo for a new alignment bypass around the city of Dublin, GA in Laurens County. The proposed alignment is anticipated to have at least two major bridges, one river crossing and one railroad crossing over a line utilized by Norfolk Southern and Genesee and Wyoming. Evaluated proposed alternatives to minimize environmental and railroad impacts. Lead development of structures configurations for railroad bridges and early coordination with Norfolk Southern and Genesee and Wyoming.
04/18-08/21	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Bridge engineer; The projected consisted of 7 miles of elevated highway in a coastal tidal region. A majority of the structure utilized psc beams with precast caps and piles. Several longer spans utilized steel superstructures. Given the large number of spans, the structure was divided up into multiple typical configurations with each typical span designed for the associated worst case envelope forces within a particular span configuration. Designed the substructure units for a number of the typical span configurations including full soil interaction modeling in FB-Pier. Pile bents utilized high moment capacity 30" PSC piles with pre-cast caps. Developed and quality checked portions of the project wide loads including wave loading.
06/16-11/19	**I-85 Widening, GDOT, Gwinnett, Barrow, and Jackson Counties, Georgia:** Lead bridge engineer; The project consisted of concept development for replacement of 4 mainline interstate bridges and 4 side road overpasses along the corridor. Concept work included preliminary bridge layouts and staging plans. The structures were multi-span precast AASHTO, Bulb Tee, and FIB structures with span lengths of up to 165'. The mainline structures included riverine and CSX rail crossings. The work was performed as a client representative for a variable scope design-build delivery project. Led design of all 8 bridges and oversaw CAD production for the concept plans. Coordinated with CSX to ensure compliance with their standards and incorporation of appropriate clearances and future track provisions.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Sean Cooney, PE**	Years of relevant experience with this employer	18
Title	Senior Project Manager	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization	BS / 1992 / Civil Engineering		
Active registration number / state / expiration date	23572 / KS / 04/30/2026; 2014007262 / MO / 12-31-2026		
Year registered	1997	Discipline	Civil
Contract role(s) / brief description of responsibilities	Railroad Standards Compliance & Coordination - Union Pacific (UP)		

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).
	Sean is a senior project manager and rail bridge practice leader. He has over 31 years of experience, primarily focused on the design and management of rail and highway bridge projects. Sean's experience covers all aspects of the design process, from preliminary engineering through final design and construction. His bridge experience includes developing bridge layout and type studies, preliminary and final design, development of final plans, specifications and estimates, and construction engineering and support for both traditional delivery, design-build and CM/GC projects. He currently serves as the Vice Chairman for the American Railway Engineering and Maintenance-of-Way Association (AREMA) Committee 9, and Chairman of Committee 9 - Subcommittee 2, which focuses on the seismic design of railway structures.
06/25-Ongoing	**Improve I-70: Warrenton to Wentzville, Project 2, Missouri:** Task lead responsible for the design of a temporary shoofly bridge over I-70 which supports Norfolk Southern Railroad (NSRR) traffic during the construction of a permanent replacement structure for NSRR over I-70 for this MoDOT Design Build Project. In addition to design, project responsibilities include railroad coordination between the contractor and NSRR's Public Project Manager and reviewers. This project provides an additional lane of travel in each direction on I-70 from Warrenton to I-64 and on I-64 from I-70 to Route K, improving the I-70/I-64/US 61 interchange to provide for better traffic flow and safety, modernizing I-70 while improving the existing pavement, bridges, and interchanges to enhance mobility, including freight, and minimizing construction impacts with a focus on work zone safety, communication and construction staging while maintaining mobility.
03/25-Ongoing	**City of Seattle, 4th Ave South Bridge Replacement Planning Study, Seattle, Washington:** Task lead and senior technical reviewer responsible for coordination between the design team and the Class I railroads impacted by this project. The 4th Avenue South Bridge Replacement Planning Study aims to develop bridge replacement options that will provide for safe and predictable travel for people walking, biking, and driving in cars, as well as freight trucks to access jobs and essential services along Fourth Avenue across the ARGO Yard owned and operated by Union Pacific Railroad (UPRR) and the BNSF Railway's Seattle Subdivision. HNTB developed several alternatives to progress through the alternatives screening process. Once two to three preferred alternatives are determined, preliminary level plans are developed to facilitate final design selections.
02/19-04/25	**Kansas City Levees, Armourdale and CID Unit Levee Raises and Seepage Controls Design, Kansas City, Kansas and Missouri:** Project engineer responsible for coordinating design details, submittals and reviews with the railroad companies that interface with the levee structures improved by this USACE project. The layout, configuration and design details for stoplog and sandbag gap structures required coordination with BNSF Railway, Union Pacific Railroad, Kansas City Terminal Railway, and Kansas City Southern Railway.
09/08-04/13	**Huey P. Long Bridge, New Orleans, Louisiana:** Deputy project manager responsible for the erection engineering on the $452-million superstructure widening contract. This project involved the addition of eight 528-foot truss panels to the four-span, cantilever truss unit over the Mississippi River. The Huey P. Long Bridge carries two tracks of the New Orleans Public Belt Railroad as well as two lanes of US 90 in its un-widened configuration and three lanes of US 90 in the bridge's final condition.
06/19-Ongoing	**I-44 over UPRR/Black Gold Drive, Oklahoma City, Oklahoma:** Railroad coordination advisor on the study phase, preliminary and final design of an accelerated bridge project. The study included evaluations to determine the most cost effective bridge construction method to erect the bridge while minimizing the impact to traffic. The study included options for traditional bridge construction, accelerated bridge construction (ABC) using self-propoelled modular transporters and prefabricated bridge element systems. The design solution consisted of new prefabricated bridge element superstructure on top of rehadbilitated and widened piers.

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Collins Landry**	Years of relevant experience with this employer	6
Title	Construction Field Specialist	Years of relevant experience with other employer(s)	34
Degree(s) / Years / Specialization	HS / 1983 / Agricultural Education		
Active registration number / state / expiration date	N/A		
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities	Utility Review		

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).
	Collins has more than 40 years of experience in state government, with extensive experience in utility relocation and permitting and roadway inspection. Throughout his career, he has been responsible for management of projects and coordinating utility relocation for LADOTD on over 100 road projects covering all of District 61. He has coordinated utility relocation in nine parishes and has extensive networking with contacts from across the nation.
03/21-Ongoing	**MoveBR Capital Improvement Program: East Baton Rouge Parish, Louisiana:** Senior utility coordinator for this $800M roadway capacity improvement program, Collin is managing utility coordination for the following projects in the program: • South Choctaw, Flannery to Central Thruway – Utility coordinator on all road construction involving utilities. He is managing all utility agreements and light and relocation plans; reviewing all construction plans to determine what utilities are in conflict; and reviewing all invoices and back up data prior to submittal for payment. (03/21-Ongoing) • McHugh Road, Groom Road to Lower Zachary – Utility coordinator on all road construction involving utilities. He is acquiring construction plans to determine what utilities are in conflict and reviewing all invoices and back up data prior to submittal for payment. (06/21-Ongoing) • Mall of Louisiana – Utility coordinator on all road construction involving utilities. He is acquiring all utility agreements, light and relocation plans, reviewing all construction plans to determine what utilities are in conflict, reviewing all invoices and back up data prior to submittal for payment, and coordinating with the City of Baton Rouge Survey crew to stake out the ROW and putting station stakes out. (06/21-Ongoing) • Jefferson at Bluebonnet Intersection Improvement – Utility coordinator on all road construction involving utilities. He is acquiring all utility agreements, light and relocation plans, reviewing all construction plans to determine what utilities are in conflict, and reviewing all invoices and back up data prior to submittal for payment. (06/22-Ongoing) • Midway Piccardy to Constantine – Utility coordinator on all road construction involving utilities. He is acquiring all utility agreements, light and relocation plans, reviewing all construction plans to determine what utilities are in conflict, and reviewing all invoices and back up data prior to submittal for payment. (06/21-Ongoing) • Constantine Phase 2 Midway to Bluebonnet – Utility coordinator on all road construction involving utilities. He is acquiring all utility agreements, light and relocation plans, reviewing all construction plans to determine what utilities are in conflict, and reviewing all invoices and back up data prior to submittal for payment. (06/21-Ongoing) • Old Hammond Highway Seg. 1 – Utility coordinator on all road construction involving utilities. He is acquiring all utility agreements, light and relocation plans, reviewing all construction plans to determine what utilities are in conflict and reviewing all invoices and back up data prior to submittal for payment. (08/21-Ongoing) • Old Hammond Highway Seg. 2 – Utility coordinator on all road construction involving utilities. He is acquiring all utility agreements, light and relocation plans, reviewing all construction plans to determine what utilities are in conflict and reviewing all invoices and back up data prior to submittal for payment. (06/22-Ongoing)

16. STAFF EXPERIENCE

Firm employed by: **HNTB Corporation**			
Name	**Lynn Maloney-Mujica, AICP**	Years of relevant experience with this employer	7
Title	Senior Project Manager, Senior Environmental Scientist	Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization	MS / 2008 / Environmental Sciences | BA / 1976 / Liberal Arts		
Active registration number / state / expiration date	20555 / AICP / N/A		
Year registered	2006	Discipline	Certified Planner
Contract role(s) / brief description of responsibilities	EA Compliance		

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).
	Lynn is a certified planner with a focus on transportation infrastructure projects. Her expertise in environmental evaluations and documentation began in 2004 when she worked as an environmental scientist on the Future I-49 South and Kansas Lane Connector EIS teams for LADOTD. From 2007 until 2014, she authored three EAs that resulted in a Finding of No Significant Impact (FONSI) by LADOTD. She was also the NEPA lead on the Ouachita Bridge EIS that was postponed due to lack of funding and includes public outreach and stakeholder engagement as well as navigation studies, Section 106 and Section 4(f) compliance, and permitting required for these projects. During her 35-year career as an environmental professional she has prepared dozens of Phase I Environmental Site Assessments (ESAs) for both private and public clients. For LADOTD, she prepared Phase 1 ESAs for the LA 3234 Extension (2017), US 51 Hwy EAs (2016), and Florida Blvd (2025). She is currently preparing Phase I ESAs for the Baton Rouge and Gonzales Passenger Train Stations as part of LADOTD's Intercity Passenger Rail Program. *Work completed with previous employer
05/13-03/15	**US 11 Norfolk Southern RR Overpass Replacement, St. Tammany Parish, Louisiana*:** NEPA planner for the replacement and widening of the US 11 roadway overpass of the Norfolk Southern Railroad. Technical review and oversight for preparation of the Environmental Assessment regarding issues such as the historic status of the bridge; commercial parking impacts; use of the Norfolk Southern right of way; and travel pattern changes following implementation of the project.
06/18-Ongoing	**I-10 Calcasieu River Bridge EIS, Lake Charles, Louisiana:** Senior project manager responsible for EIS documentation, alternatives scoping and screening, technical team oversight, preparation and/or review of technical documents, public involvement, interagency coordination, navigation studies and mitigation, Section 106 and Section 4(f) compliance, and enhanced stakeholder engagement required by FHWA. After the Record of Decision was issued in January 2024, she conducted a NEPA re-evaluation that included bridge/culvert assessments for bats that are proposed for listing as Threatened by USFWS. She is currently providing oversight of the P3 developers related to NEPA, along with USCG, USACE, SHPO, and other agency permits and approvals.
10/19-02/20	**LA 1 Leeville to Golden Meadow Phase 2, Leeville, Louisiana:** Member of team that prepared an INFRA Grant application for funding to complete the elevation of eight miles of roadway to protect America's premier oil production and distribution center against severe weather event disruptions. About 20 percent of the U.S. domestic energy production relies on this corridor. This application received $135 million – the largest such award to date, and about 15 percent of 2020's INFRA Grant funds. Responsible for team coordination, editorial review, and obtaining 50 customized letters of support from local, regional, and national stakeholders.
08/22-02/25	**Florida Blvd. Corridor Enhancement Seg 2 (22nd St. to Airline Hwy), East Baton Rouge Parish, Louisiana:** Senior Project Manager and Environmental Planner responsible for the Stage 0 and Stage 1 Environmental Determination checklists for this urban corridor project funded through MOVEBR and LADOTD HPP funds. Preparation of technical reports included a Phase I ESA and Environmental Justice Tech Memo.
09/19-11/19	**College Drive Flyover Ramp, Baton Rouge, Louisiana:** Responsible for coordinating the open house public meeting to provide information and collect comments on a flyover ramp designed to improve traffic flow within the I-10/I-12 westbound interchange. Also responsible for developing exhibits, looping presentation, and other meeting materials, addressing comments, and producing the meeting transcript.
08/24-Ongoing	**East Baton Rouge Parish Off-System Bridges, Louisiana:** Environmental lead for NEPA reviews and approvals included Tricolored Bat Bridge assessments and oversight of Section 106 and Section 404 permits.

Section 17: Firm Experience

17. FIRM EXPERIENCE

Firm name	HNTB Corporation		**Discipline(s)***	Bridge, Geotech, Road, Other (Hydraulics)	
Project name	**I-44 over UPRR/Black Gold Drive**			**Firm responsibility (prime or sub?)**	Prime
Project number	CI 2117		**Owner's name**	Oklahoma Department of Transportation (ODOT)	
Project location	Oklahoma City, Oklahoma		**Owner's Project Manager**	Jason Giebler, PE, SE	
Owner's address, phone, email	200 N.E. 21st Street, Oklahoma City, OK 73105 | (405) 521-2606 | jason.giebler@odot.ok.gov				
Services commenced by this firm (mm/yy)	06/19		**Total consultant contract cost ($1,000's)**	$2,583	
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**	$2,104	
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

HNTB led a multidisciplinary effort for the rehabilitation and widening of I-44, the state's most heavily traveled interstate corridor, over UPRR and Black Gold Drive, ensuring compatibility with the future K Interchange configuration. The project required careful consideration of high traffc volumes and proximity to the state fairgrounds, demanding innovative design and construction solutions to minimize disruption to the traveling public. HNTB served as the lead designer for the alternative study, final design, and cost estimate development. Key engineering contributions included roadway design focused on line and grade, cost estimation, and construction sequencing; geotechnical design addressing slope stability through soil nail walls and micropile foundations; and RR coordination to meet vertical clearance requirements and minimize operational impacts.

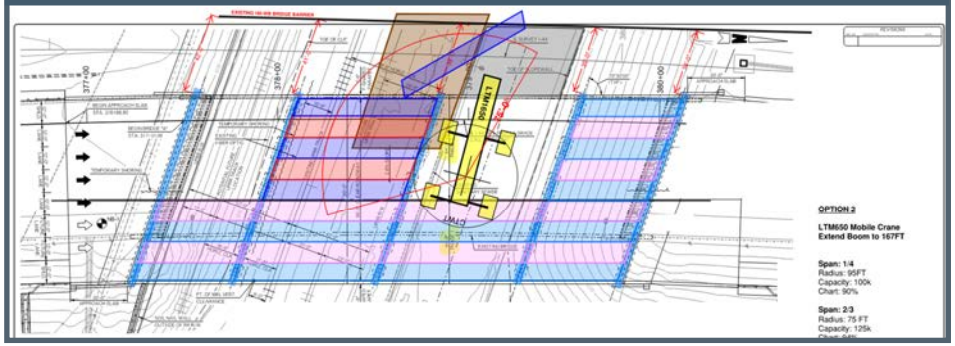
- **Detailed Line and Grade Study |** A comprehensive detailed line and grade study was conducted to evaluate geometric corrections, maintenance of traffc (MOT) strategies, and accelerated bridge construction (ABC) techniques. Establishing the line and grade was essential to meeting railroad clearance requirements.

- **Constructability Review |** The study compared traditional construction methods with ABC alternatives, including self-propelled modular transporters (SPMTs) and prefabricated bridge element systems (PBES), to identify the most cost-effective approach with minimal traffc impacts.

- **Sequence of Construction |** The final design incorporated contra-flow crossover lanes to maintain four lanes of traffc in each direction during construction and utilized PBES to accelerate the construction schedule. Crane placement was critical for the PBES option.

- **Innovative Solutions |** The use of PBES minimized duration of impacts to rail operations and maintained traffic while removal of the south embankment—off the RR ROW—allowed for future rail expansion of two new lines. Installation of a new pier with a crashwall adjacent to the active rail line was facilitated by incorporating provisions for a railroad shoofly, a temporary section of track lain to bypass construction on the main line, allowing trains to continue operations while work is completed. This shoofly was also designed by HNTB.

Constructability Review of Temporary Crane Placement



FIRM MEMBERS INVOLVED: Manab Medhi, Natalie McCombs, Sarah Larson, Donald Hammond, James DiPasquale, Sean Cooney

RELEVANCY: Constructability Review, Geotechnical Services, Railroad Coordination, Innovative Solutions, Line and Grade, RR Crash Wall Design

17. FIRM EXPERIENCE

Firm name	HNTB Corporation		**Discipline(s)***	Bridge, Geotech, Road, Other (Hydraulics)	
Project name	**I-20 Eastbound Bridge over I-55 South/Illinois Central RR**			**Firm responsibility (prime or sub?)**	Prime
Project number	BR-0020-01 (216)		**Owner's name**	Mississippi Department of Transportation (MDOT)	
Project location	Jackson, Mississippi		**Owner's Project Manager**	Micah Dew, PE	
Owner's address, phone, email	401 North West Street, Jackson, MS 39201 | (601) 359-7200 | mdew@mdot.ms.gov				
Services commenced by this firm (mm/yy)	12/17		**Total consultant contract cost ($1,000's)**		$1,646
Services completed by this firm (mm/yy)	10/21		**Cost of consultant services provided by this firm ($1,000's)**		$1,571
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

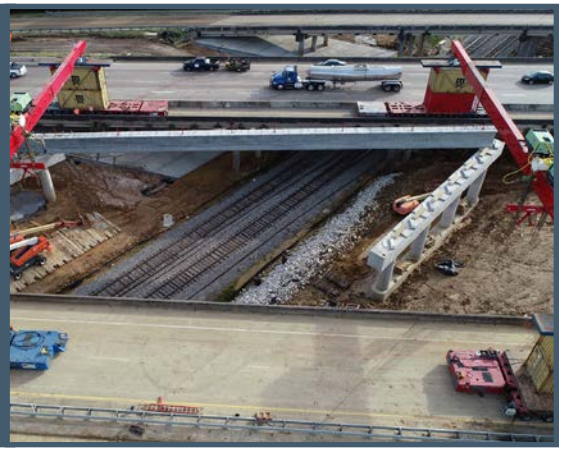
As part of a three-year general bridge retainer with MDOT, HNTB was tasked with conducting a value engineering study and constructability review of a 60% bridge replacement design prepared by another consultant that eventually led to HNTB designing the new bridge structures. HNTB provided the following services:

- **Constructability & Line and Grade Review** | HNTB conducted a comprehensive value engineering review that included reviewing the line and grade for the project. HNTB's review led to a new bridge concept that significantly reduced both design and construction costs—saving $20 million on a $50 million project.
- **Bridge Type, Size, and Location** | HNTB's revised bridge replacement concept better addressed site constraints and client needs by incorporating simpler, proven construction techniques and accommodating the complex features the bridge would span. Benefits included a more durable structure, reduced traffic impacts, and shorter construction duration.
- **Bridge and Roadway Final Design** | Following the study, HNTB was selected to carry the project through final design and construction. The scope included bridge, roadway, and drainage plans for the replacement of the I-20 EB bridge over I-55, US 51, and the Illinois Central RR. The design utilized prestressed concrete Florida I-Beams (FIB78 and FIB84) to reduce costs and improve maintainability. Reinforced concrete column bents on drilled shafts were used extensively, with skewed substructures to avoid underlying roadways. Post-tensioned inverted-tee straddle caps were employed to span roadways, minimizing traffic disruption and avoiding the need for roadway relocation.
- **Geotechnical Design** | HNTB also performed the geotechnical design for the drilled shaft foundations and improved the RR corridor by enhancing drainage with underdrains, stabilizing slopes with H-piles, and coordinating with the railroad.
- **Construction Support Services** | HNTB provided construction engineering support services, including participation in project meetings, RFI responses, contractor submittal reviews, and fabrication/shop drawing reviews. HNTB also collaborated with the contractor and PPC girder fabricator to optimize strand patterns, improving construction efficiency.
- **Existing Bridge Rehabilitation** | An unexpected challenge arose when inspections of the existing bridge revealed cracks in the deteriorating steel structure over I-55. Out of caution, MDOT requested HNTB to expedite emergency repair plans in case the bridge condition worsened. These plans were quickly developed and delivered for contingency use.

HNTB received the 2023 ACEC Mississippi Grand Conceptor Award for this project.

FIRM MEMBERS INVOLVED: Dusty Bastion, Manab Medhi, Natalie McCombs, Sarah Larson, Kate Prejean, Brian Powell, Brad Wilder, Jared Sommers

RELEVANCY: Constructability Review, Line & Grade Analysis, Railroad Coordination, Drainage Solutions, Roadway Solutions, Reduced Traffic Impacts, Cost-Effective Solutions, Bridge Replacement, Geotechnical Services, Construction Support Services



17. FIRM EXPERIENCE

Firm name	HNTB Corporation	**Discipline(s)***	Bridge, Geotech, Road, Other (Railroad)
Project name	**I-10 Calcasieu (HBI) Early Works Package**	**Firm responsibility (prime or sub?)**	Prime
Project number	H.003931 / H.012083 / H.016466	**Owner's name**	LADOTD
Project location	Calcasieu Parish, Louisiana	**Owner's Project Manager**	Paul Vaught III, PE
Owner's address, phone, email	1201 Capitol Access Road Baton Rouge, LA 70802 | (225) 379-1816 | paul.vaughtiii@la.gov		
Services commenced by this firm (mm/yy)	02/22	**Total consultant contract cost ($1,000's)**	$2,528
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**	$1,158
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)			

In December 2023, LADOTD initiated the replacement of the I-10 over Calcasieu River bridge between Lake Charles and Westlake. The replacement of the bridge will be constructed under a P3 agreement between the state and a developer. Several obstacles needed to be overcome to allow for the replacement bridge to be constructed within the proposed limits set out by the P3 procurement and the environmental documents. The Early Works package includes a set of repairs for the existing bridge, a relocation of an existing railroad spur, a modification of the existing bridge to allow for the relocation of the railroad spur, and a modification of the existing Sampson Street on/off ramp to allow for the relocation of a pipe rack crossing I-10. LADOTD developed a plan that required the new pipe racks to be run below the existing grade of the Sampson Street on/off ramp, and a reworked roadway and new bridge that spans the pipe racks. HNTB helped LADOTD develop the Early Works package, including:

- **Bridge Design – Repair Plans |** Repair plans were developed based on the agreed upon repairs from the inspection performed. The scope of the repairs included those necessary to extend the life of the structure for the duration of the replacement schedule and to minimize the maintenance required on the existing structure until it can be retired from service.

- **RR Engineering |** HNTB utilized staff well versed in RR engineering to develop a new preliminary railroad realignment that satisfied all the railroad requirements as well as allowed for the construction of the new P3 bridge. This alignment is being developed into final plans through a contract with the LADOTD in coordination with the railroads.

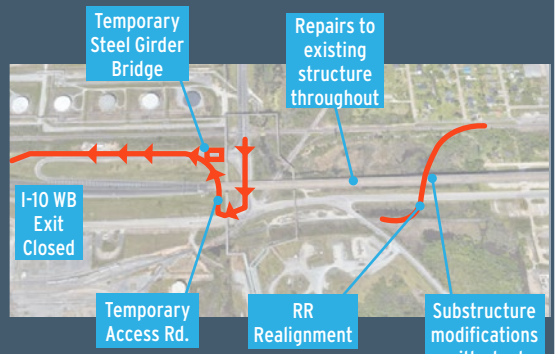
- **Bridge Engineering - Substructure Modifications |** To allow for the new railroad alignment, modifications were required to the substructure of the existing bridge. A complex system involving temporarily supporting the structure and transferring the load to the new structure was designed. Complex Finite Element Analysis was required to design the straddles and jacking connection.

- **Bridge Engineering – Accelerated Construction of Temporary Bridge |** To facilitate the relocation of existing pipe racks, a new steel girder temporary bridge along the Sampson Street on/off ramp was required to cross a new trench which would carry the relocated pipe racks. HNTB worked with the pipe rack companies through LADOTD to coordinate the complex construction schedule and phasing. In order to limit the disruption to traffic, ABC techniques were incorporated to the design, including prefabricated bridge element systems, limiting the off-ramp closure to three months.

- **Roadway Engineering – Sampson Street Interchange |** To facilitate the relocation of existing pipe racks and avoid a full closure of the on/off ramp, modifications to the off ramp and Sampson Street were required. A temporary on-ramp, intersection improvements, and signal modifications were required to carry the relocated pipe racks. HNTB worked with the pipe rack companies through the department to coordinate the complex construction schedule and phasing.

FIRM MEMBERS INVOLVED:
Dusty Bastion, Josh Porter, John Bernard, Marc Hoffmann, Patrick Duffy, Brian Powell, Jared Sommers

RELEVANCY: Multi-disciplined Project Management, Steel Girder Design, Sequence of Construction, Utility & Railroad Coordination, Bridge & Roadway Design, Geotechnical Engineering



17. FIRM EXPERIENCE

Firm name	HNTB Corporation		**Discipline(s)***	Bridge, Geotech, Road, Other (Hydraulics)	
Project name	**US 80 over CPKC Railroad**			**Firm responsibility (prime or sub?)**	Prime
Project number	BR-2904-00 (018)		**Owner's name**	MDOT	
Project location	Brandon, Mississippi		**Owner's Project Manager**	Micah Dew, PE	
Owner's address, phone, email	401 North West Street, Jackson, MS 39201 | (601) 359-7200 | mdew@mdot.ms.gov				
Services commenced by this firm (mm/yy)	01/22		**Total consultant contract cost ($1,000's)**		$847
Services completed by this firm (mm/yy)	06/25		**Cost of consultant services provided by this firm ($1,000's)**		$815
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

As part of a three-year general bridge retainer with MDOT, HNTB was engaged to evaluate the replacement of two structures carrying US 80 traffic over the KCS (now CPKC) RR. HNTB performed the following services on the contract:

- **Detailed Line and Grade Analysis** | HNTB performed a line and grade analysis to assess the feasibility of various bridge concepts and their impacts on the approach roadway. Given the railroad's vertical clearance requirements and the need to minimize grade changes, the selected structure type had to be as shallow as possible. The study identified three feasible alternatives, which were presented to MDOT for consideration.

- **Railroad Constraints and Solutions** | The project presented several design challenges, including the presence of the railroad beneath the structures, the proximity of adjacent businesses and surface street intersections, and the need to accommodate increased traffic volumes with additional lanes. A key constraint was minimizing raising the existing roadway grade to avoid significant impacts to surrounding infrastructure. Compounding the complexity was the presence of unstable soils contributing to the accelerated deterioration of the existing structures.

- **Cost-Effective Solution** | Each concept was evaluated based on criteria including construction duration, cost, approach impacts, long-term maintenance, inspectability, and potential for phased construction. The preferred alternative was an adjacent precast prestressed concrete (PPC) box beam structure.

- **Preliminary and Final Plans** | HNTB performed preliminary and final bridge plans, building upon the line and grade analysis and utilizing PPC box beams not previously standardized by MDOT. To avoid encroachment into the railroad right-of-way, a unique span configuration was adopted, consisting of a 26-foot jump span and a 117-foot main span. Due to the span length and structure type, additional prestressing strands and haunch depth were required. This non-standard approach successfully addressed both client objectives and site constraints.

Other enhancements to the railroad corridor included slope regrading, improved drainage systems, and coordination with the railroad to ensure compliance with operational requirements.

FIRM MEMBERS INVOLVED: Dusty Bastion, Natalie McCombs, Sarah Larson, Marc Hoffmann, Patrick Duffy, Aravind Tankasala, Brian Powell, Brad Wilder, Jared Sommers

RELEVANCY: Line & Grade Analysis, Bridge Engineering, Sequence of Construction, Railroad Crossing, Railroad Coordination, Geotechnical Engineering

17. FIRM EXPERIENCE

Firm name	HNTB Corporation		**Discipline(s)***	Bridge	
Project name	**LA 1 Leeville to Golden Meadow Phase 2**			**Firm responsibility (prime or sub?)**	Prime
Project number	H.008145		**Owner's name**	LADOTD	
Project location	Leeville, Louisiana		**Owner's Project Manager**	Ryan Morvant, PE	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 | (225) 379-1232 | ryan.morvant@la.gov				
Services commenced by this firm (mm/yy)	10/12		**Total consultant contract cost ($1,000's)**		$21,618
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$14,573
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

The LA 1 bridge, also known as the "LA 1 Expressway," is a roughly nine-mile elevated bridge over the tidal marshes of the Mississippi River delta constructed to replace the previous low elevation route of LA 1. This portion of LA 1, which is the sole land route to Port Fourchon, one of the nation's leading oil and gas ports, services nearly 20% of America's energy infrastructure. Phase 2 of the LA 1 project extends the existing elevated bridge northwards from Leeville to Golden Meadow, where it will connect with an existing four lane road (LA 3235) inside the coastal levee system. The construction method that is currently being employed is top down, which utilizes a gantry system to construct the bridge from the already completed structure, allowing accelerated construction and the ability for the contractor to avoid wetland mitigation by not having equipment on the ground. HNTB provided the following services for this project:

• **Line and Grade Analysis** | HNTB conducted comprehensive line and grade studies to determine optimal horizontal and vertical alignments across nine miles of environmentally sensitive terrain. The analysis included optimizing span length arrangements over wetland, pipelines and canals; setting the bottom chord elevation; and optimizing the T-intersection and tie in to LA 3235.

• **Design Services** | As designer of record, design elements included nine miles of elevated bridge crossing canals, pipelines, wetlands and a levee, approach roadway and surrounding local road tie-ins, signage layouts, and geotechnical services. In order to avoid utility pipelines, skewed substructures and a steel plate girder span were utilized at various locations throughout the project. The associated INFRA grant required funding be obligated by March 31, 2023, so an expedited plan delivery schedule was necessary to get the contractor under contract to commence construction. HNTB delivered the nearly 1,200 sheet plan set on time utilizing an extremely condensed schedule and extensive collaboration between multiple disciplines, subconsultants, and most importantly the LADOTD.

• **Innovative Techniques** | HNTB's innovated techniques included eliminating transversely battered piles via advanced analysis to reduce construction schedule and price, evaluating optimal span lengths for top-down construction and providing three design alternatives in order to secure a competitive bid ensuring project costs were minimized, and utilizing majority precast elements, both superstructure and substructure, for the top down construction portion to eliminate the time required for cast-in-place construction.

• **Construction Services** | Currently in the construction phase, HNTB is providing critical construction support with LADOTD to overcome any construction issues that arise in order to keep the project on schedule. Reviewing large batches of shop drawings and responding to any RFIs within the two week window outlined in the LADOTD Standard Specifications, HNTB is ensuring the bridge is being constructed in accordance with the contract plans. HNTB is also monitoring the pile driving using PDA devices, which ensures a seamless integration of field pile data with the design.

FIRM MEMBERS INVOLVED: Dusty Bastion, Josh Porter, John Bernard, Marc Hoffmann, Aravind Tankasala, Patrick Duffy, Kate Prejean, Brian Powell, Jared Sommers, Brad Wilder

RELEVANCY: Line & Grade Analysis, Bridge Girder Replacement, ABC, Steel Plate Girder Design, Cost-Effective Solutions/Alternatives, Construction Support Services

17. FIRM EXPERIENCE

Firm name	Stanley Consultants, Inc.		**Discipline(s)***	Road	
Project name	**US 190: R-CUT at LA 741**			**Firm responsibility (prime or sub?)**	Prime
Project number	H.015849.5		**Owner's name**	LADOTD	
Project location	St. Landry Parish, Louisiana		**Owner's Project Manager**	Kyle East, PE	
Owner's address, phone, email	228 Rue de Voyages, LA 70508 | (337) 262-2262 | kyle.east@la.gov				
Services commenced by this firm (mm/yy)	09/24		**Total consultant contract cost ($1,000's)**		$386
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$294
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

Stanley Consultants was contracted by LADOTD District 03 to perform engineering design services to convert a conventional four-way intersection at US 190 and LA 741 to an R-CUT configuration with upstream and downstream J-Turns with bulbouts for larger design vehicles in Port Barre, Louisiana.

US 190 is considered a principal rural arterial roadway within the project limits and serves as the primary alternate route to I-10 between the metropolitan centers of Baton Rouge and Lafayette. The scope of work includes topographic survey, engineering development of preliminary and final plans for construction of the RCUT, J-turns, bulbouts, and subsurface drainage. New turn lanes and bulbouts are designed to the latest LADOTD geometric guidelines. Subsurface drainage will collect water from the median and turn lanes and provide additional capacity at cross drains below US 190 and LA 741. Additional improvements include reconstruction of a portion of the EB US 190 outside shoulder due to extreme surface-to-subbase longitudinal cracking and mill and overlay of existing pavement with new permanent pavement markings. Stanley and District 03 will also coordinate with the adjacent railroad entity to ensure improvements have minimal impacts to the railbed and RR ROW.

Converting the four-way intersection to a progressive RCUT and J-turn configuration provides fewer conflict points at the intersection proper by allowing US 190 left turns onto LA 741. Left turn and thru movements from LA 741 will be shifted to the downstream J-turns. Additionally, the new median turn lanes and inlets will be drained via subsurface drainage and outlet to a new parallel cross drain adjacent to existing cross drains under US 190 and LA 741. Finally, a portion of the EB US 190 outside shoulder will be reconstructed to eliminate significant deep longitudinal cracking.

FIRM MEMBERS INVOLVED: Adam Fields, Caitlin Marks, Kayla Lafitteau

RELEVANCY: Subsurface Drainage, J-turn, U-turn, and Bulbout Design, Railroad Coordination

17. FIRM EXPERIENCE

Firm name	Stanley Consultants, Inc.		**Discipline(s)***	Road, Traffic	
Project name	**US 167: Median Improvements**			**Firm responsibility (prime or sub?)**	Prime
Project number	H.016278.5		**Owner's name**	LADOTD	
Project location	Vermillion Parish, Louisiana		**Owner's Project Manager**	Kyle East, PE	
Owner's address, phone, email	228 Rue de Voyages, LA 70508 | (337) 262-2262 | kyle.east@la.gov				
Services commenced by this firm (mm/yy)	04/25		**Total consultant contract cost ($1,000's)**		$489
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$430
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

Stanley Consultants was contracted by LADOTD District 03 to perform engineering design services to improve intersections on US 167 with LA 696, LA 697 and LA 699.

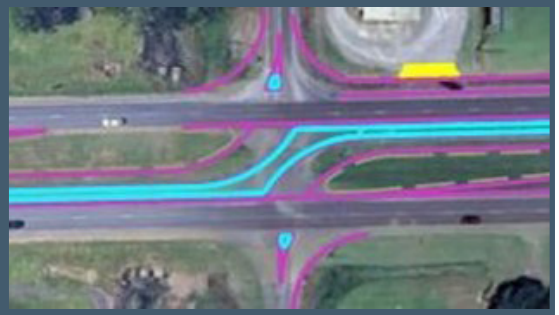
US 167 is considered a principal rural arterial roadway within the project limits and serves as a vital north-south route between Lafayette and surrounding townships and rural areas. The scope of work includes topographic survey, engineering development of preliminary and final plans for construction of RCUTs, J-turns, U-turns, bulbouts, subsurface drainage, and traffic signal plans. The project will convert full access median openings at Rue Blanc Road and LA 696 into partial median openings with left turn lanes; convert the full-access median opening at LA 697/Derek Road into an R-CUT intersection with northbound and southbound U-Turns; modify the existing R-CUT intersection at LA 699/Fusilier Road to improve geometry.

New turn lanes and bulbouts are designed to the latest LADOTD geometric guidelines. Subsurface drainage will collect water from the median and turn lanes and provide additional capacity at cross drains below US 167. Additional improvements include new permanent pavement markings.

Converting the series of full-access median opening intersections to progressive RCUTs with U-turns or J-turns provides fewer conflict points at the intersections proper by allowing left turns and U-turns from US 167 and shifting side street left turns up and downstream of the intersection proper; bulbouts at the U-turns will accommodate larger vehicles.

FIRM MEMBERS INVOLVED:
Adam Fields, Caitlin Marks, Kayla Lafitteau

RELEVANCY: Subsurface Drainage, J-turn, U-turn, Bulbout Design



17. FIRM EXPERIENCE

Firm name	Stanley Consultants, Inc.		**Discipline(s)***	Road, Traffic	
Project name	**LA 30 Roundabouts at Tanger Mall and I-10**			**Firm responsibility (prime or sub?)**	Prime
Project number	H.010960.5		**Owner's name**	LADOTD	
Project location	Ascension Parish, Louisiana		**Owner's Project Manager**	Joshua Harrouch, PE, PTOE	
Owner's address, phone, email	1201 Capitol Access Road Baton Rouge, LA 70802 | (225) 242-4640 | joshua.harrouch@la.gov				
Services commenced by this firm (mm/yy)	03/17		**Total consultant contract cost ($1,000's)**	$1,074	
Services completed by this firm (mm/yy)	07/22		**Cost of consultant services provided by this firm ($1,000's)**	$825	
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

Stanley Consultants provided engineering and related services to develop full-size construction plans for roundabouts at the intersection of LA 30 and Tanger Blvd, and at the Eastbound and Westbound ramp termini at the LA 30 and I-10 Interchange in Gonzales, Louisiana.

In order to relieve congestion and mitigate intersection safety concerns through the LA 30 corridor in Gonzales, Stanley Consultants provided design phase services for the replacement of three existing signalized intersections with three roundabouts. Early and often coordination with DOTD's Traffic and Road Design Sections resolved concerns related to right-of-way takings and establishing limits of the project. Design challenges overcome during the project included the use of spiralized geometry; significant utility coordination with the City of Gonzales and their representative engineering firm; sequencing construction to maintain all travel lanes through this high ADT corridor and through the I-10 ramp termini; and addressing the constant ongoing development within the project area during design. Our team had to be nimble to keep up with and accommodate the many changes and evolving conditions. These are all challenges that will be encountered during this US 11 Norfolk Southern RR Overpass project.

Complex spiral geometry was required to provide all necessary turning movements through each of the three roundabouts included in this project. This project was sequenced to be constructed while maintaining all lanes of through traffic.

FIRM MEMBERS INVOLVED:
Jesse Tisdale, Adam Fields, Kayla Lafitteau

RELEVANCY: Roundabout Design, Line & Grade, Utility Coordination, Construction Support Services

17. FIRM EXPERIENCE

Firm name	Ardaman & Associates, Inc.		**Discipline(s)***	Geotech	
Project name	**I-10: LA 415 to Essen Lane (CMAR)**			**Firm responsibility (prime or sub?)**	Prime
Project number	H.004100.5		**Owner's name**	LADOTD	
Project location	East Baton Rouge Parish, Louisiana		**Owner's Project Manager**	Nicholas Olivier, PE	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 | (225) 379-1100 | nicholas.olivier@la.gov				
Services commenced by this firm (mm/yy)	07/21		**Total consultant contract cost ($1,000's)**		$44,000
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$1,217
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

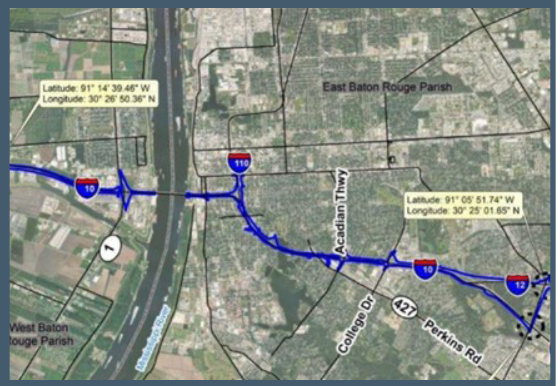
The Construction Management at Risk (CMAR) project scope consists of widening of the east and westbound lanes, elevated structures, interchanges, and ramps along I-10 from LA 415 in West Baton Rouge Parish to Essen Lane on I-10 and I-12 in East Baton Rouge Parish spanning approximately 2.5 miles. Ardaman is the geotechnical consultant on the CMAR team and is currently providing geotechnical support for Segment 1 which starts near the I-10 and I-110 split between Napoleon and St. Joseph Streets to Acadian Thruway entrance and exit ramps.

Ardaman previously completed 58 soil borings and associated laboratory testing based on LADOTD standards, and 11 electronic cone penetration tests (ECPT) in the preliminary portion of the widening project between Napoleon Street and Louise Street under our current retainer contract in support of the project. In addition, Ardaman performed electrical resistivity (ER) geophysical survey transects along the entire alignment, which allowed for survey of the subsurface conditions between the boring locations. Ardaman is currently performing additional soil borings along the Segment 1 area to supplement existing data along the alignment.

Engineering services include supervision of the field program, development of the laboratory testing program, quality control review, and development of an interactive geotechnical database to compile and analyze all the supplied soil boring data provide by LADOTD and the additional borings that are currently being performed. The engineering analyses consist of detailed selections of design reaches and design soil parameters, slope stability and settlement of earth retained structures, soil-structure interaction with existing structures, deep foundation design, load testing recommendations, review of load test results and refinement of design. A preliminary geotechnical assessment report was prepared, and a final geotechnical design report will be submitted.

FIRM MEMBERS INVOLVED:
Robert Jewell, Megan Bourgeois

RELEVANCY: Detailed Geotechnical Engineering, Load Testing, Refinement of Design



17. FIRM EXPERIENCE

Firm name	Ardaman & Associates, Inc.	**Discipline(s)***		Geotech	
Project name	**I-12 to Bush: Route LA 3241 Segment 2**		**Firm responsibility (prime or sub?)**	Sub	
Project number	H.004435	**Owner's name**	LADOTD		
Project location	St. Tammany Parish, Louisiana	**Owner's Project Manager**	Chris Nickel, PE		
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 | 225.379.1100 | Chris.Nickel@la.gov				
Services commenced by this firm (mm/yy)	04/14	**Total consultant contract cost ($1,000's)**		$3,197	
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**		$460	
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

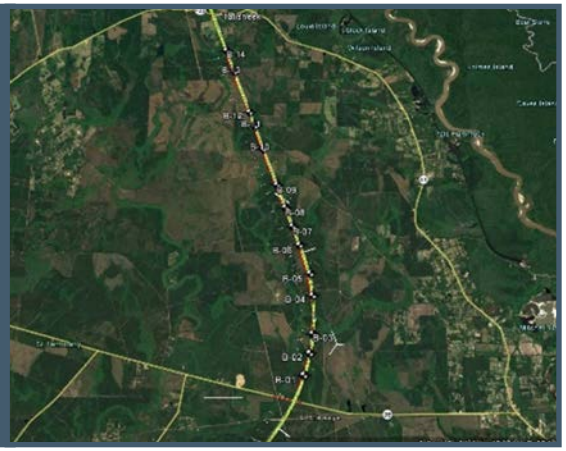
As part of the TIMED Program, this project consists of design of a new highway that ties into I-12 at the existing I-12/LA 434 Interchange (Exit 74) and proceeds northerly along LA 434 for approximately 2.5 miles then leaves the existing highway and proceeds on new alignment until it connects with an abandoned RR corridor approximately 1.7 miles north of LA 36. The alignment then follows the abandoned RR alignment north and ties into the intersection of LA 40 and LA 41. The project is divided into three distinct project segments, and Ardaman was on the teams selected for Segments 2 and 3.

Segment 2 consists of an 8-mile alignment between LA 36 and LA 435 including two bridge structures and eight culvert structures. The field investigation, conducted in accordance with LADOTD specifications, included field reconnaissance including access and gaining rights of entry, completing utility locations, locating/staking boring locations, and developing a plan for the initial mobilization of equipment to the site and mobilization between sites. The project consisted of 32 deep soil borings, 10 intermediate culvert borings, and 88 shallow roadway borings, sampling, and laboratory testing along the alignment. Global Positioning System (GPS) data was collected at each soil boring location along with groundwater level readings.

Soil boring logs were created in LADOTD format. Ardaman also provided geotechnical analyses and recommendations according to LRFD guidelines that included recommended pile capacities, culvert bearing capacities, embankment settlement analyses, and a pile data table. Ardaman also oversaw the pile testing program consisting of dynamic monitoring with PDA for the indicator and monitor piles at the various bridges. Ardaman analyzed the driving system with GRLWEAP and the PDA data and issued reports with the pile recommendations based on the field results.

FIRM MEMBERS INVOLVED:
Robert Jewell, Megan Bourgeois

RELEVANCY: Subsurface Exploration, Geotechnical Design, Embankment Settlement Analysis, PDA monitoring



17. FIRM EXPERIENCE

Firm name	Ardaman & Associates, Inc.		**Discipline(s)***	Geotech	
Project name	**US 371 CPKC Railroad Overpasses HBI**			**Firm responsibility (prime or sub?)**	Sub
Project number	H.012030		**Owner's name**	LADOTD	
Project location	Webster Parish, Louisiana		**Owner's Project Manager**	Hamed Babaizadeh, PE, LEED AP BD+C	
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 | (225) 379-1937 | hamed.babaizadeh@la.gov				
Services commenced by this firm (mm/yy)	07/2023		**Total consultant contract cost ($1,000's)**		$956
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$231
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)					

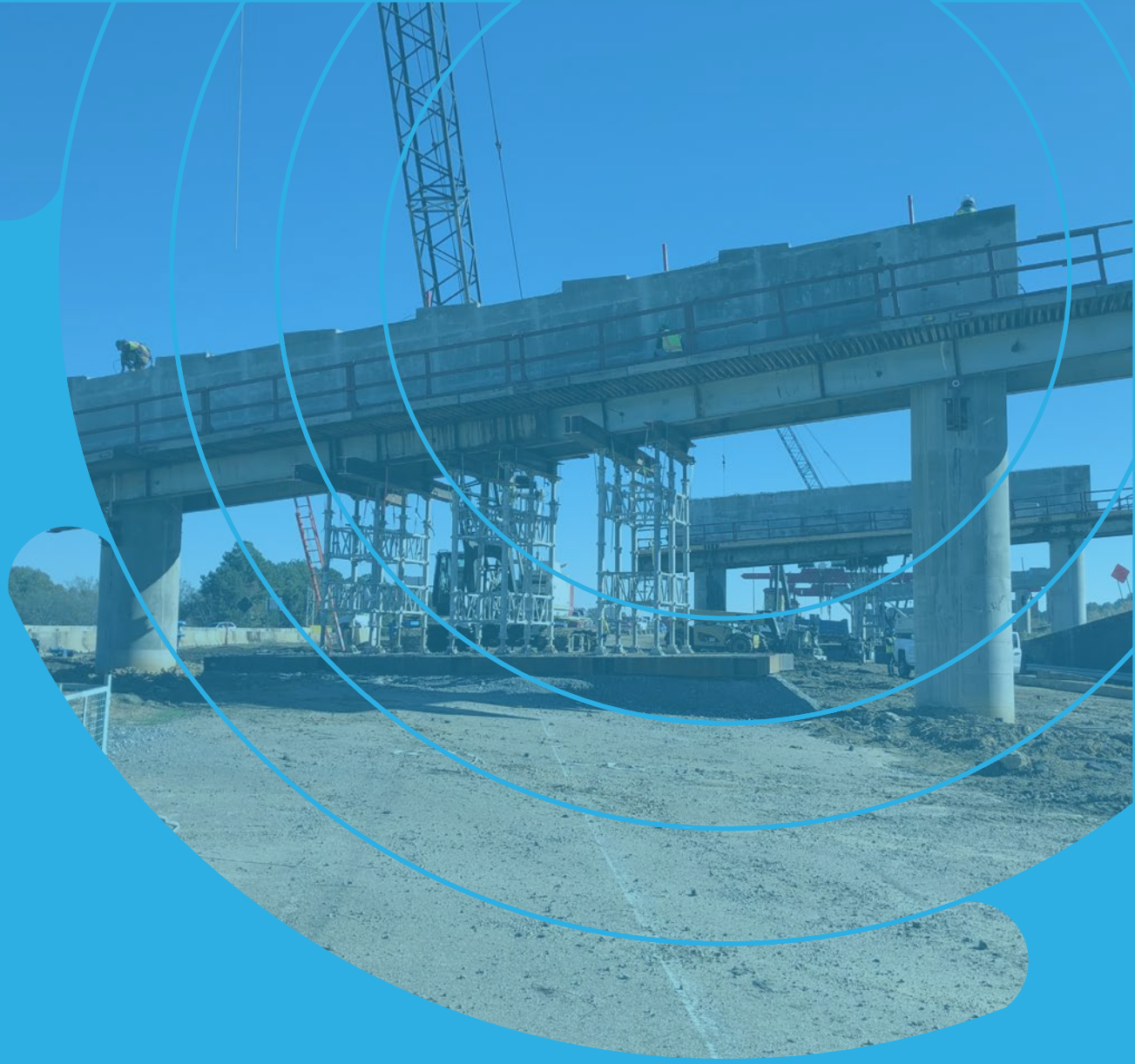
The project consists of a geotechnical subsurface exploration and recommendations for US 371: KC Railroad Overpasses HBI, with the objective of replacing two parallel bridges and one standalone bridge located on US 371 between Minden and Sibley, Louisiana. The bridges cross over Kansas City (KC) Railroad at each site. The standalone bridge near Sibley was later removed from the project to be placed under another state project, however the geotechnical exploration that was performed for this site will be included in this description. The three bridges range from approximately 200 feet to 250 feet in length including four bents per bridge supported on drilled shafts with varying diameters.

For the geotechnical exploration phase of work, Ardaman performed eight soil borings to a maximum depth of 110 feet below existing ground surface (bgs) targeting the proposed bridge foundations on either side of the KC railroad. Two of the soil borings were performed through the existing bridge deck within the ROW of the KC railroad while occupying one lane of US 371. Coordination with temporary traffic control services and the KC railroad temporary constructions requirements was necessary to perform these soil borings.

Engineering services include supervision of the field program, development of the laboratory testing program, quality control review, and development of an interactive geotechnical database to compile all the soil borings. The engineering analyses included drilled shaft design and advanced test shaft program recommendations. A data report, geotechnical interpretation report, and test shaft memorandum were submitted.

FIRM MEMBERS INVOLVED:
Megan Bourgeois, Robert Jewell

RELEVANCY: Subsurface Exploration, Soil Testing, Test Shaft Program



Section 18: Approach & Methodology

Structured to Deliver

HNTB has a long-standing and trusted partnership with the LADOTD, delivering innovative and cost-effective infrastructure solutions across the state. Our firm has served as prime consultant on numerous bridge and roadway projects for LADOTD, consistently meeting aggressive schedules and complex design challenges. Our familiarity with LADOTD's Bridge Design and Evaluation Manual (BDEM) and Road Design Manual (RDM) ensures that our designs are not only compliant but optimized for constructability, safety and long-term performance.

We've organized our team into three core groups: Design Services, Plan Review and Compliance, and Construction Support to provide LADOTD with a full-service delivery model from initial through additional services.

PLAN REVIEW AND COMPLIANCE


11 EXECUTIVE SUMMARY

The foundation of this project is compliance with the Environmental Assessment (EA) document. We also understand how critical it is to identify potential conflicts early, especially those involving railroad standards and existing utility locations.

Recognizing the critical need to adhere to the EA and to proactively identify and address potential conflicts, particularly those involving utility infrastructure and railroad standards, we established a dedicated plan review and compliance group. This group will be utilized for several internal reviews, as noted in our project schedule, to ensure that plans developed in the line and grade studies and sequence of construction are compliant with the EA, all necessary standards, and in conformance with the topographic survey, SUE survey, and property survey provided by LADOTD to minimize conflicts during preliminary design, final design, and construction.

Our EA compliance reviewer, Lynn Maloney-Mujica, AICP was a technical reviewer in the preparation of the current US 11 Norfolk Southern Railroad EA. Her prior involvement and deep understanding of the environmental process bring critical insight and continuity to our team.

The railroad standards compliance and coordination unit will be instrumental in addressing railroad concerns and preferences early in the design process. This unit includes staff with experience working with both Norfolk Southern and Union Pacific Railroad in anticipation of their potential merger. HNTB has experience navigating similar entity changes with our US 80 over CPKC project, which included railroad plan reviews that occurred before, during and after their merger.

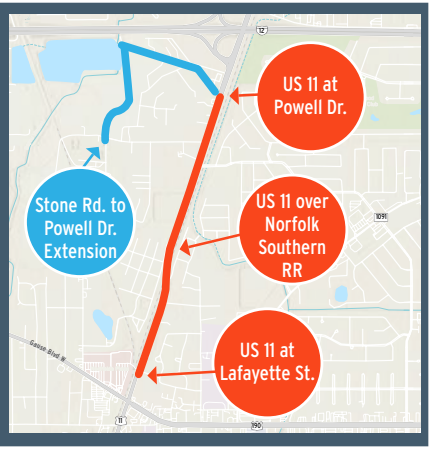
DESIGN SERVICES

The HNTB team is led by project manager Josh Porter, PE. Josh has extensive experience in project management and delivery of multidiscipline LADOTD projects. He will be supported by Manab Medhi, PE, who will serve as senior project advisor. Manab has 19 years of experience primarily focused on delivering rail projects for DOT and rail clients. His extensive experience in managing complex multi-disciplined projects, particularly those with site constraints and limited bridge construction access, will be instrumental in helping Josh proactively identify potential project risks and develop effective mitigation strategies early in the process.

From bridge engineering services to cost estimating, our design team is equipped with subject matter experts prepared to develop constructable and cost effective solutions to this complex project. HNTB's experience with projects such as I-44 over UPRR & Black Gold Drive, I-20 Eastbound Bridge over I-55 South/Illinois Central RR, and US 80 over CPKC RR directly aligns with the scope and complexity of the US 11 Norfolk Southern RR Overpass. Each of these projects involved bridge replacements over major corridors and/or railroads, requiring innovative structural solutions, accelerated bridge construction (ABC) techniques and careful coordination with stakeholders. Additional project history such as LA 1 Leeville to Golden Meadow Phase 2 and I-10 Calcasieu (HBI) Early Works Package display HNTB's success is delivering projects that are critical to Louisiana's transportation network.

PROJECT AREA FAMILIARITY:

In 2024, Stanley Consultants successfully completed final plans for the Stone Road to Powell Drive Extension project for St. Tammany Parish Government. Stanley Consultants' knowledge of the area of interest for the US 11 project presents a unique opportunity for seamless coordination with all stakeholders.



To further strengthen our team, HNTB has partnered with Stanley Consultants and Ardaman & Associates, two firms whose expertise complement HNTB's bridge design leadership. Stanley Consultants' deep familiarity with LADOTD's roadway standards and corridor planning ensures seamless integration between bridge and approach roadway elements. The Ardaman & Associates team brings specialized geotechnical expertise in Louisiana soils, including

subsurface investigations, foundation design, and materials testing, all critical to supporting the bridge structure and ensuring long-term performance. Together, our integrated team offers LADOTD a comprehensive and collaborative approach to project delivery, backed by decades of experience and a shared commitment to quality, safety and innovation.

Project Delivery

As outlined in the EA document, the roadway layout, including the location of J-turns, roundabouts, and neighborhood accesses, have received engagement and approval from the public. The HNTB team understands that drastically modifying Alternative 1R Modified as outlined in the EA is not a viable nor warranted solution. Our team will use the EA document as the guide and roadmap, with our first goal being to provide a detailed line and grade study that complements the EA.

This project is split into two stages: initial services and additional services. Delivering a high-quality detailed line and grade report along with a viable sequence of construction preliminary cost estimate will pave the way for successful delivery of preliminary and final plans.

Initial Services

LINE AND GRADE ANALYSIS

For the initial services phase of this project, the HNTB team will begin by examining all the items provided by LADOTD to develop design guidelines, the first step in the detailed line and grade analyses. Working collaboratively with LADOTD to ensure implementation of LADOTD recommendations, the HNTB team will set forth updating and revising, as necessary, the LADOTD Design Report for this project that was developed in 2018. The HNTB team will utilize the Minimum Design Guidelines and complete the updated LADOTD Design Report template.

DETAILED LINE AND GRADE STUDIES

STUDY 1 | Widening of US 11 to a four-lane, access-managed cooridor including replacement of the existing bridge with a four-lane bridge

STUDY 2 | Replacing the existing bridge with a two-lane bridge and necessary shoulders with project limits set accordingly

Once the design report has been established, the HNTB team will move forward with investigating the horizontal and vertical geometry with the goal of developing the line and grade and design criteria for the project outlining the geometric and structural parameters of the project.

The bridge location and existing conditions present significant challenges due to limited spatial flexibility and environmental constraints. The bridge portion of the line and grade studies must include constructability considerations, phasing requirements and MOT. The site is tightly bound by trees and residential neighborhoods and crosses Norfolk Southern RR, leaving minimal room for offsite construction staging. Maintaining access will be important in construction phasing.

BRIDGE ALTERNATIVES CONFERENCE

HNTB will host a Bridge Alternatives Conference that brings together experienced subject matter experts in complex bridge design, construction phasing and MOT. This collaborative session will encourage open exploration of all possible structure types with the mindset that no idea is off the table. Our team of sophisticated modelers will translate conceptual sketches into 3D models in real time, allowing for immediate visualization and refinement. Throughout the process, we will carefully consider factors such as construction access, crane placement, girder sizing and transport logistics, and coordination with the railroad to ensure each alternative is both feasible and practical.

The Bridge Alternative Conference will evaluate multiple bridge alternatives, each with distinct constructability and operational challenges and solutions. Our team brings proven expertise in minimizing impacts to the railroad and surrounding ROW, including the use of inverted T cap beams, straddle bent designs and clear spanning the RR ROW. We will balance the cost of these techniques versus their benefit of reduction of impact.

DESIGN CRITERIA

The design criteria will be a culmination of the iterative nature in developing the proposed bridge type, size and location for this project, including the best solutions for the bridge foundation elements and railroad requirements. Design criteria development will occur simultaneously with the line and grade development; however, check-in points will be established with LADOTD and stakeholders to ensure successful collaboration and approval on the direction of the final line and grade and design criteria. One of the most critical components of the detailed line and grade reports is the clear and comprehensive identification of all utility and ROW impacts for the proposed line and grade. Careful attention will be given to the locations of utilities, environmentally sensitive areas, such as the wetlands identified in the EA document along the northbound and southbound lanes of US 11, developed properties, and urban constraints. In this stage, it is critical to begin identifying construction staging areas to ensure constructability and identify potential construction impacts, both permanent and temporary.

SITE-SPECIFIC SOLUTIONS

RIGHT-OF-WAY (ROW)

Particularly in the line and grade concerning widening of US 11, ROW acquisition will be required. Stanley Consultants will examine the required ROW established in the EA and assess whether possible changes, if any, can mitigate the impact of ROW acquisitions.

UTILITY COORDINATION

It will be essential to meet with the district utility coordinator early in the line and grade development.

The main overhead power distribution lines are located along the west side of US 11 with distribution lines running along the east side at some portions of the corridor. Stanley Consultants will assess the design identified in the EA and determine if any modifications can be made to minimize the impacts to these utility poles. Utility relocations will be avoided where possible. If not possible, relocations will be identified in the line and grade study. Per the listed scope of work, a list of utility conflicts will be generated in the line and grade report.

POWELL DRIVE ROUNDABOUT DESIGN CONSTRAINTS

Proximity to Retention Pond: A retention pond currently exists at the northwest corner of the US 11 and Powell Drive intersection on the RaceTrac property. Installation of a roundabout will encroach on the retention pond, which will require mitigation.

Proximity to Shell Gas Station and Peters Road: A Shell gas station with two ingress/egress driveways and Peters Road are located at the southwest corner of US 11 and Powell Drive. The proximity of these access points may cause operational slowdowns as people exiting the roundabout slow down for traffic turning out of the station or Peters Road. With the roundabout median preventing left turns from Peters Road and the gas station, vehicles will divert about 500 feet to the north to make a U-turn movement through the proposed J-turn, which is part of this project as identified in the EA.

Underground Fuel Storage at Gas Stations: With two gas stations present at the southwest and northwest corners of the roundabout, the existing underground fuel storage will need to be located as the roundabout and associated curb and gutter could encroach on the underground storage tanks. If deemed close enough, future potential leaks of these tanks will need to be considered for possible environmental impacts. In this case, the team will evaluate relocation of the underground storage tanks.

Pedestrian and Bicycle Accommodations: The EA describes a typical section that includes 7-foot sidewalks on both sides of the widened US 11 corridor. It is understood this identified design in the EA provides an optional complete streets configuration with a 4-foot shoulder on the west side of US 11, which can accommodate bicycles with a 7-foot shoulder on the east side of US 11. Stanley Consultants will assess the optional typical section and, if implemented, will ensure future bicycle and pedestrian improvements can interact seamlessly with the complete streets typical section on US 11. Particular attention will be paid to the roundabout design at Powell Drive to evaluate whether pedestrian cut throughs will still be required through the roundabout splitter island on Powell Drive.

A COLLABORATIVE APPROACH

Stanley Consultants have recently been able to streamline 30% geometric reviews for their roundabout projects by holding roundabout geometry reviews with the LADOTD Geometrics section personnel at the 30% preliminary plan submittal process. This open communication has allowed them to collaborate more efficiently than the typical submittal review and markup process. Should services for this contract extend to preliminary and final design, they will use their experience to streamline reviews in this same manner for the roundabout design identified at the US 11 intersection at Powell Drive.

LINE AND GRADE REPORTS

Once the analyses are complete, the HNTB team will develop the line and grade study reports for both requested alternatives: the widening of US 11 to four lanes throughout the identified corridor, as well as the replacement of the US 11 bridge over Norfolk Southern Railroad. Both reports will include legible and detailed typical sections, plan and profile plan sheets, and schematics. Critical to the success of the detailed line and grade study is the understanding that the study needs to be developed with the most viable sequence of construction in mind.

Sequence of Construction

The HNTB team will develop and submit sequence of construction plan sheets for both alternatives. These plan sheets will demonstrate a detailed understanding of how the project can be most cost-effectively constructed by outlining the various phases of the project and identifying which activities can occur simultaneously. Maintenance of one southbound lane and one northbound lane through the corridor throughout the entirety of the project is critical to EA compliance. Assurance that each lane can be converted to a two-lane contraflow situation is a crucial aspect of the proposed sequence of construction. Our team, through detailed sequence of construction, will demonstrate the accommodation of through traffic as well as ingress/egress to all businesses along the corridor during all stages of construction. The sequence of construction will outline the phasing of the Addis Boulevard relocation as well as the timing of the Indiana Avenue permanent closure to US 11 should the Indiana Avenue intersection still be deemed non-relocatable.

We will investigate the feasibility of ABC techniques, including the use of SPMTs and prefabricated bridge element systems (PBES). We understand the importance of maintaining continuous traffic flow on this critical secondary hurricane evacuation route and will develop construction phasing that complies fully with the EA—particularly regarding MOT.

This was a top concern on HNTB's I-44 over UPRR/Black Gold Drive project. Our solution was a combination of contraflow lanes, a PBES superstructure and staged construction to deliver for the client and UPRR standards The bridges were replaced in stages using ABC techniques, where the superstructure element consisted of two steel beams with a slab to make one PBES unit. The PBES units were placed on the piers as one piece and were set adjacent to each other. An ultra-high performance concrete was used to fill the gaps, and the top of the slab was ground to the appropriate profile and deck smoothness. This method shortened the duration of impacts to the users and RR as much of the work occurred at a nearby laydown yard. Similar methods are an option for this overpass, and additional ABC techniques such as a lateral slide and SPMTs can be considered.

Preliminary Cost Estimate

Taking into account all pieces of the line and grade study as well as the sequence of construction, HNTB will develop an accurate and detailed preliminary cost estimate for both line and grade alternatives. Collaboration of all disciplines, with the purposeful oversight of the constructability and cost estimating disciplines, is crucial to a comprehensive preliminary cost estimate. The constructability and cost estimating discipline's oversight and input ensures every aspect of the project has an associated cost. Contractor access, staging areas, phasing, temporary works, and accelerated construction techniques are all examples of the level of detail and expertise required to furnish a cost estimate that provides LADOTD with a comprehensive understanding of the funds required to construct the project.

Project Management

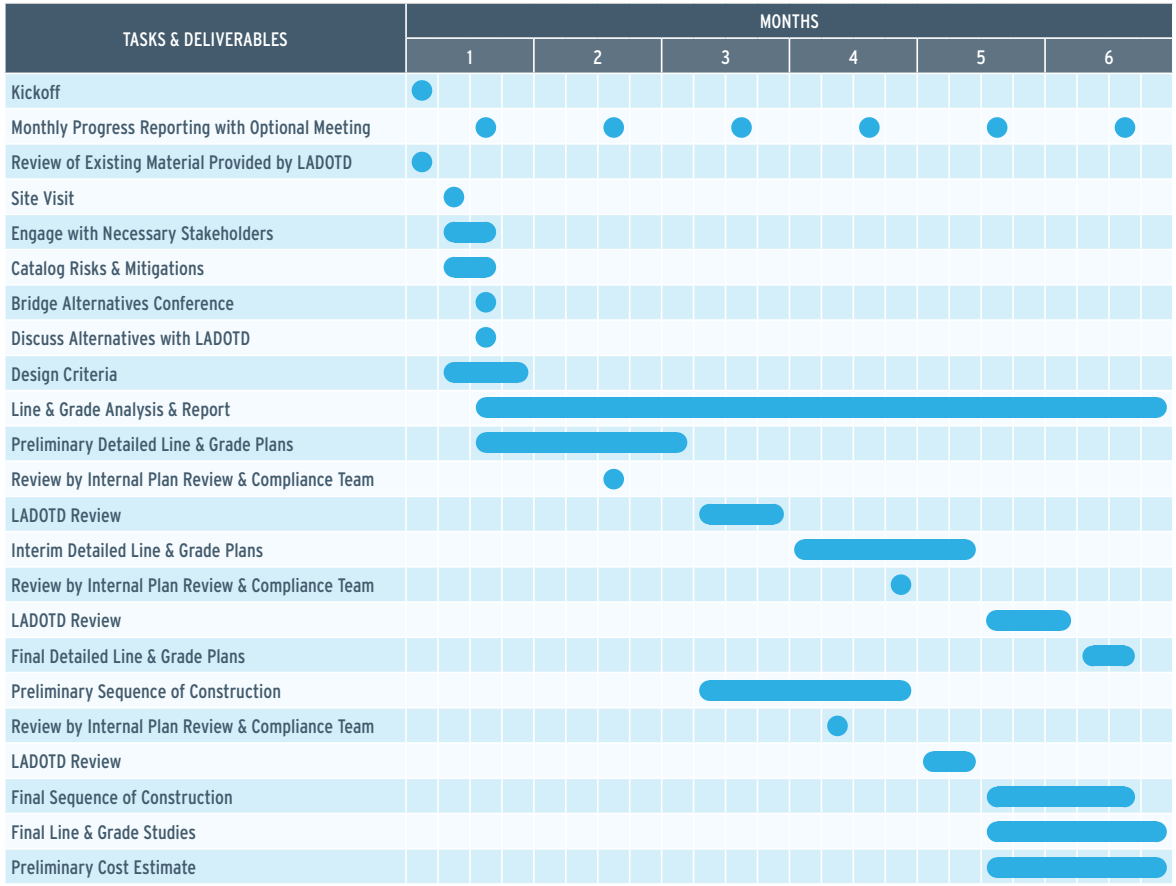
Led by our dedicated project manager, HNTB will establish a detailed project schedule with milestones aligned to LADOTD's letting date, conduct regular coordination meetings with LADOTD, Norfolk Southern, and stakeholders, and use HNTB's internal QA/QC protocols to ensure design accuracy and compliance.

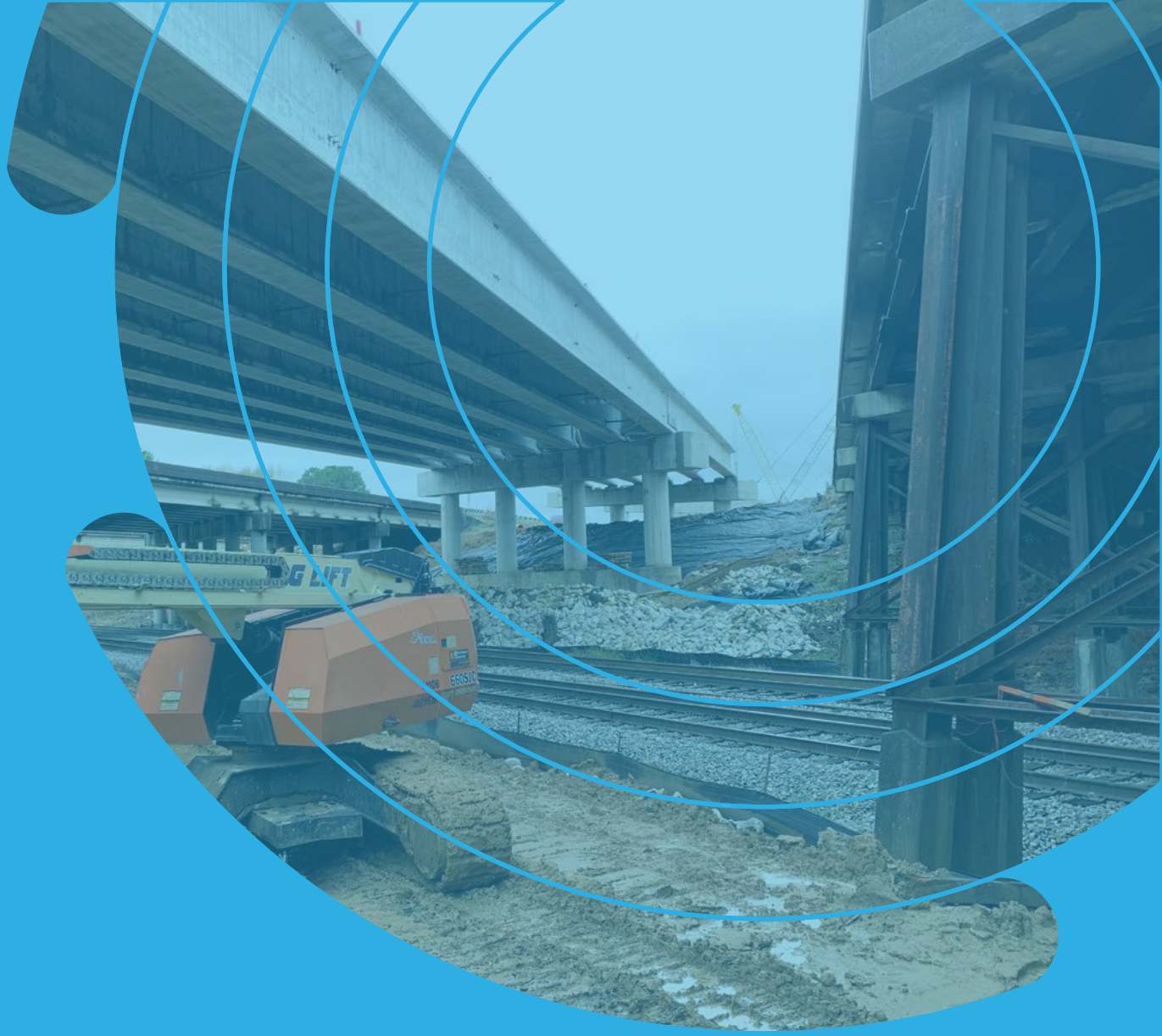
To ensure transparency and proactive communication, HNTB will develop a standardized Project Progress Report in coordination with LADOTD's PM. We will submit this report monthly and include updates on project budget, milestones recently completed, upcoming milestones, resources allocated for the next phase and any risks requiring mitigation. Additionally, we will schedule an optional monthly meeting one week after each report is delivered, allowing LADOTD the opportunity to discuss progress, address concerns and align on next steps.

Additional Services

PRELIMINARY, FINAL PLANS AND CONSTRUCTION SUPPORT

HNTB and its team is also structured to deliver preliminary plans, final plans, and construction support in full compliance with LADOTD's BDEM and RDM. Construction support will involve timely responses to contractor RFIs, shop drawing reviews, field visits and coordination with LADOTD's construction management team to ensure design intent is maintained throughout execution.





Section 19: Workload

19. WORKLOAD

Firm(s) All firms must be represented in this table	Discipline(s)*	Contract number and State project number	Project name	Remaining unpaid balance**
HNTB Corporation	Bridge	44-24189	Statewide Bridge Preservation	
		H.12899.6	Task Order 2 – I-20 Rehab CRES	$61,619
		H.002337.5	Task Order 6 – Bayou Fountain	$7,983
		H.015935.6	Task Order 7 – Bayou Bienvenue CRES	$103,820
		H.014059.5	Task Order 8 – US 80: Bridges over Minden	$754,597
		H.016276	Task Order 10 – Sidney Leblanc Rd over Coulee	$240,796
		H.015911	Task Order 9 – Grover Jones Rd over Williams Creek	$248,736
		44-25029	IIJA Off-System Bridge Program	$417,352
		44-23512	Statewide Complex Bridge Inspection	
			Task Order 3 - BIM Updates and Load Rating	$181,446
			Task Order 9 - GNO #2, I-10 Calcasieu Inspection	$497,147
		44-4900; H.008145.6	LA 1 Phase 2	$4,934,439
		44-21594; H.009859.5	Complex Bridge Rating	$43,726
		44-28432; H.015569.5	LA 44: I-10 Roundabout	$245,626
	Other (Weigh Stations)	44-23812	Statewide Weigh Station Assessment, Rehab and Plan Development	
		H.015377.1	Task Order 2	$1,703,493
	Planning	44-21094	Statewide Transportation Plan	$551,873
	Other (Tolling)	44-23640	Toll Support IDIQ	
			Task Order No. 3: LA1 Facility Implementation	$342,704
			Task Order No. 6: Toll Services	$2,061,062
	Environmental	44-26365; H.015223	BR to NO Passenger Rail Corridor Environmental Study	$183,039
	ITS	44-25921; H.015938.1	TSMO Strategic Plan	$28,258
	CE&I/OV	44-23074; H.010960	LA 30 Roundabout @ Tanger Mall	$211,276
		44-27349	Calcasieu River Bridge OV	$33,509,459
	Other (Railroad)	44-27876; H.015223.1	Intercity Rail Program	$4,665,051

19. WORKLOAD

Firm(s) All firms must be represented in this table	Discipline(s)*	Contract number and State project number	Project name	Remaining unpaid balance**
Stanley Consultants, Inc.	Road	44-23943; H.009892	US 90 FR: Exit to LA 329	$324,466
		44-23943; H.016278	US 167: Median Improvements	$380,019
		44-23943; H.014886.5	US 90: Lafitte Ave to France Rd	$278,176
		44-27093; H.016141	LA 353: Cypress Isl Ext-LA 31	$88,826
		44-27093; H.016110	LA 31: LA 94 - LA 341	$226,959
		44-23943; H.013941	LA 724: Roundabout at Landry Rd	$98,979
		44-24307; H.015052	I-20 Widening/Ovrly (Vancil Rd-LA 34)	$75,000
		44-27093; H.014041	Inter. Imp. on LA 92 @ LA 733 & Gallet Rd.	$197,000
		44-28432; H.015569.5	LA 44: I-10 Roundabouts	$780,160
		44-23943; H.012633	LA 1088 Forest Brook Blvd Roundabout	$368,412
		44-27093; H.015849	US 190: R-Cut @ LA 741	$161,277
		44-23943; H.009892	US 90 FR: Exit to LA 329	$324,466
		44-27093; H.014824	US 90 @ Wax Lake	$278,574
		44-27093; H.015847	US 90: LA 668 to LA 318	$357,208
		44-27093; H.015949	LA 335: E JCT LA 694 - LA 14	$135,530
		44-27093; H.016055	LA 83: US 90 - Darnall Rd	$13,761
		44-27093; H.016052	LA 96: LA 347 - LA 352	$19,140
		44-27735; H.014056	I-69 Frontage Road Connector (Stonewall Frierson)	$200,000
		44-27735; H.005184	I-69 Frontage Rd (Stonewall to Ellerbe Rd)	$485,000
		44-27735; H.014054	I-69 Frontage Rd (Ellerbe Rd to LA 1)	$530,000

19. WORKLOAD

Firm(s) All firms must be represented in this table	Discipline(s)*	Contract number and State project number	Project name	Remaining unpaid balance**
Stanley Consultants, Inc.	CE&I/OV	44-23943; H.01137 & H.013866	I-12 Construction Services	$37,257
		44-23943; H.010960.6	LA 30 Roundabouts @ Tanger Mall & I-10 Construction Support	$63,621
		44-23943; H.011909.6	US 171 Roundabout at Boone St. Construction Support	$65,366
	Other (Project Management)	44-24307; H.015052	I-20 Widening/Ovrly (Vancil Rd-LA 34)	$25,000
		44-28432; H.015569.5	LA 44: I-10 Roundabouts	$42,000
		44-27735; H.014056	I-69 Frontage Road Connector (Stonewall Frierson)	$267,498
		44-27735; H.005184	I-69 Frontage Rd (Stonewall to Ellerbe Rd)	$294,324
		44-27735; H.014054	I-69 Frontage Rd (Ellerbe Rd to LA 1)	$291,747
	Other (Trial Services)	32184S-T001; H.011909	US 171 – Trial Services	$7,000
	Other (Real Estate)	32184S-T002; H.011909	US 171 – Property Report	$3,200
	Bridge	44-24307; H.015052	I-20 Widening/Ovrly (Vancil Rd-LA 34)	$10,000
		44-25029; H.015545	Stoney Point Burch over Drainage Bayou	$14,892
		44-25029; H.015550	Pride-Baywood Over Mill Creek	$14,892
		44-27735; H.005184	I-69 Frontage Rd (Stonewall to Ellerbe Rd)	$123,138
		44-27735; H.014054	I-69 Frontage Rd (Ellerbe Rd to LA 1)	$96,000
	Traffic	44-27735; H.014056	I-69 Frontage Road Connector (Stonewall Frierson)	$184,114
		44-27735; H.005184	I-69 Frontage Rd (Stonewall to Ellerbe Rd)	$147,000
		44-27735; H.014054	I-69 Frontage Rd (Ellerbe Rd to LA 1)	$191,270

19. WORKLOAD

Firm(s) All firms must be represented in this table	Discipline(s)*	Contract number and State project number	Project name	Remaining unpaid balance**
Ardaman & Associates, Inc.	Geotech	44-25025; H.015337, H.015452-H.015463	IIJA	$77,119
		44-24652; H.014265.5	N River Road Irving Branch	$65
		44-24652; H.012533.5	LA 1252 Bayou Pt Brule Bridge	$39
		44-24652, H.012607.5	Henderson Bayou Bridge LA 933	$65
		44-24652, H.015568.5, H.015569.5	Pelican Point Roundabout	$45,870
		44-24652; H.012842.5	LA 124 Ext. Larto Lake	$152
		44-21519; H.012030.5	KCS RR Overpasses US 371	$44,036
		44-6189; H.016313.5, H.016314.5, H.016315.5, H.016316.5, H.016317.5, H.016318.5, H.016319.5, H.016320.5, H.016325.5	Culvert Replacements	$187,765
		44-21887; H.012542, H.012453, H.012544, H.012047	Replacement of 15 Bridges	$579,165
		44-25026; H.015489, H.015490, H.015491, H.015492	IIJA	$14,545
		44-4128; H.004273	I-49 Connector, Lafayette	$338,752
		44-18899; H.004791	LA 23: Belle Chasse Bridge & Tunnel (HBI)	$40,897
		44-19013; H.004100.5 & .6	I-10 CMAR Design Continuation: LA 415 TO ESSEN ON I-10 & I-12	$692,204
		H.004435	I-12 to Bush Construction Phase	$47,370
		44-8671; H.009266	I-10 Widening: LA 73 to LA 30	$25,760
		44-19013; H.002244.5	Boudreaux Canal Bridge (LA 56)	$180
		44-17438; H.013284	MRB GBR LA 1 to LA 30 Connector	$2,781
		44-6189; H.004647.6	I-20 Mississippi River Bridge at Vicksburg	$1,651,052
		H.015935	LA 47 @ Bayou Bienville	$23,059

Section 20: Certifications

20. CERTIFICATIONS/LICENSES

PDCA
PILE DRIVING CONTRACTORS ASSOCIATION

Pile Dynamics, Inc.

This documents that

Robert Edwin Jewell
Ardaman & Assoc

has on February 17, 2011 achieved the rank of

ADVANCED

on the **Dynamic Measurement and Analysis Proficiency Test.**

The individual identified on this document demonstrated to the degree granted above an understanding of theory, data quality evaluation, interpretation and signal matching for high strain dynamic testing of deep foundations. ***It is recommended*** **that individuals at the Advanced level seek Master or Expert levels through additional study within four years of the date of this document.**

The ability of the individual named to provide appropriate knowledge and advice on a specific project is not implied or warranted by the Pile Driving Contractors Association or Pile Dynamics, Inc. The Pile Driving Contractors Association or Pile Dynamics, Inc. assumes no liability for foundation testing and analysis work performed by the bearer of this certificate.

Steven A. Hall, Executive Director
Pile Driving Contractors Association

Garland Likins, President
Pile Dynamics, Inc

PDCA
PILE DRIVING CONTRACTORS ASSOCIATION

Pile Dynamics, Inc.

This documents that

Brad Wilder
HNTB

has on September 11, 2024 achieved the rank of

INTERMEDIATE

on the **Dynamic Measurement and Analysis Proficiency Test**

The individual identified on this document demonstrated to the degree granted above an understanding of theory, data quality evaluation, interpretation and signal matching for high strain dynamic testing of deep foundations. ***It is recommended*** **that individuals at the Basic level seek Intermediate, Advanced, Master or Expert levels through additional study within two years of the date of this document**

The ability of the individual named to provide appropriate knowledge and advice on a specific project is not implied or warranted by the Pile Driving Contractors Association or Pile Dynamics, Inc. The Pile Driving Contractors Association or Pile Dynamics, Inc. assumes no liability for foundation testing and analysis work performed by the bearer of this certificate. This certificate can be verified at www.PDAproficiencytest.com.

SEAL

Frank T. Peters, Executive Director
Pile Driving Contractors Association

Garland Likins, Senior Partner
Pile Dynamics, Inc.

No. 3851

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
HNTB CORPORATION	Business Corporation (Non-Louisiana)	DOVER	Active

Previous Names

Business: HNTB CORPORATION
Charter Number: 34422713F
Registration Date: 12/23/1992
Domicile Address
615 S DUPONT HWY
DOVER, DE 19901
Mailing Address
P.O. BOX 412197
KANSAS CITY, MO 64141
Principal Business Office
715 KIRK DRIVE
KANSAS CITY, MO 64105
Registered Office in Louisiana
4459B BLUEBONNET BLVD.
BATON ROUGE, LA 70809
Principal Business Establishment in Louisiana
450 LAUREL STREET, SUITE 1200
BATON ROUGE, LA 70801

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
STANLEY CONSULTANTS, INC.	Business Corporation (Non-Louisiana)	MUSCATINE	Active

Previous Names

Business: STANLEY CONSULTANTS, INC.
Charter Number: 34562879F
Registration Date: 6/12/1997
Domicile Address
225 IOWA AVE.
MUSCATINE, IA 52761
Mailing Address
225 IOWA AVE.
MUSCATINE, IA 52761
Principal Business Office
225 IOWA AVE.
MUSCATINE, IA 52761
Registered Office in Louisiana
450 LAUREL STREET, 8TH FLOOR
BATON ROUGE, LA 70801
Principal Business Establishment in Louisiana
700 MAIN STREET
SUITE 405
BATON ROUGE, LA 70802

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
ARDAMAN & ASSOCIATES, INC.	Business Corporation (Non-Louisiana)	ORLANDO	Active

Previous Names

Business: ARDAMAN & ASSOCIATES, INC.
Charter Number: 34396031F
Registration Date: 12/13/1991
Domicile Address
8008 SOUTH ORANGE AVENUE
ORLANDO, FL 32809
Mailing Address
3475 E. FOOTHILL BLVD.
PASADENA, CA 91107
Principal Business Office
8008 SOUTH ORANGE AVENUE
ORLANDO, FL 32809
Registered Office in Louisiana
3867 PLAZA TOWER DR.
BATON ROUGE, LA 70816
Principal Business Establishment in Louisiana
316 HIGHLANDIA DR.
BATON ROUGE, LA 70816

Section 21: QA/QC Plan

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

Contract No. 4400032800,

BRIDGE PROJECT QA/QC MANAGEMENT PLAN

1.0 INTRODUCTION

1.1 PROJECT INTRODUCTION

This document was developed to provide quality control (QC)/quality assurance (QA) procedures for multiple IDIQ contracts for bridge preservation advertised by the LADOTD. The intent of this HNTB QMP is to supplement Part I, Chapter 3 of the LADOTD Bridge Design and Evaluation Manual.

1.2 QUALITY INTRODUCTION

The HNTB doctrine states – sustainability, profitable growth, best business practices and "4 for 4". HNTB's "4 for 4" is our performance standard for each and every project as stated below:

- ☑ Quality Work
- ☑ On Time
- ☑ On Budget
- ☑ To the Client's Satisfaction on Every Project

Quality is a key component of this doctrine and is expected in everything we do. HNTB has defined the standard of quality that is to be achieved in our Manual of Professional Practice (MPP) and has established general guidelines for achieving this goal and documenting the results.

The HNTB team is aware that QC and QA is our responsibility, not the responsibility of the LADOTD. We are committed to providing high-quality, accurate work on all deliverables associated with this contract.

The **Bridge QMP** establishes planned and systematic processes necessary to provide adequate confidence that this project will conform to the established quality requirements. It consists of two key components, QC and QA.

This QMP provides an understanding of basic quality processes set forth for the project and the procedures established for implementing those processes. The general procedures outlined herein are recommended for use on all tasks including the management of our subconsultant's work products. These procedures are intended to serve as guidelines and are not intended to be a replacement for sound professional judgment.

The following QMP was developed in accordance with HNTB Gulf Coast District QMP and Part I, Chapter 3 of the LADOTD Bridge Design Manual "Policy for quality control and quality assurance (QC/QA)".

1.3 DEFINITION OF TERMS AND POSITIONS

QC: Procedure for checking the accuracy and consistency of the calculations and the drawings, detection and correcting design omissions and errors before the design plans are finalized, and verifying the specification for the load-carrying members are adequate for the service and operation loads.

QA: Procedure for reviewing the work to ensure the QC procedures are in place and effective in preventing mistakes, and consistency in the development of the bridge design plans and specifications.

Designer: Engineer directly responsible for the development of design calculations, drawings, special provisions and cost estimates. Must be either a licensed professional engineer or engineer intern.

Checker: Engineer responsible for performing a full technical review of the design calculations, special provisions, drawings, and cost estimates. Must be either a licensed professional engineer or engineer intern, however, if the designer is a engineer intern the design checker must be a professional engineer.

Design Back-Checker: Typically the designer. If designer is unavailable, the design back-checker must coordinate with the checker to ensure all noted changes are agreed to. Must be either a licensed professional engineer or engineer intern, however, if the checker is an engineer intern, the design back-checker must be a professional engineer.

Detail Back-Checker: Engineer responsible for performing a full review of the drawings. Must be either a licensed professional engineer or engineer intern, however, if the checker is an engineer intern, the detail back-checker must be a professional engineer.

Updater: Individual responsible for updating the design calculations or plans to reflect all agreed upon changes. (For design calculations, typically the designer; for plans, typically the detailer.)

Verifier: Individual (usually the checker) responsible for verifying that all changes or additions to a drawing, calculation, report or graphic element have been accurately incorporated.

Reviewer: Engineer responsible for ensuring that the QC process has been followed as outlined.

Detailer: Individual responsible for preparing drawings.

Supervisor or Team Leader: Project manager or task assignee responsible for overseeing the project and staff on the project.

Engineer of Record (EOR): The engineer responsible for supervision and/or preparation of plans, sealing calculations, plans, and special provisions if required.

Quality Project Manager (QPM)/Quality Task Manager (QTM): Individual responsible for conducting audits and ensuring QC plans are adhered to. The QPM is responsible for the entire project and all aspects and the QTM are responsible for each discipline.

Independent Technical Reviewer: Engineer who completes an independent review of the drawings and/or calculations. Independent technical reviewer is part of the consultant team but is not part of the design team. Engineer must have experience reviewing tasks that meet or exceed those of the designer and or checker.

Peer Review: Independent engineering entity, with no prior involvement in the project, performs a check of the designs by producing an independent set of calculations based on the drawings or performs the review as specified in the scope of work. Peer reviewer may not be employed by the same consultant with whom the designer or design checker is employed. Peer reviews are typically performed between 60% to 98% final plans stage depending on the scope of the review. It is not within the scope of services for this project.

Audit: A systematic, independent and documented activity performed to verify that applicable elements of the QMP have been effectively implemented and documented in accordance with the specific requirements.

Constructability Review: A design review performed by the contractor or appropriate construction services personnel to assess the feasibility of the proposed design from a construction perspective.

Design Criteria: A set of project-specific parameters that define the design requirements, specifications and functional classifications of the project.

Inter-Discipline Review: A discipline specific design review of a design package by all applicable design disciplines.

Quality Records: A completed document or recordkeeping evidence of successful implementation of any given aspect of the QMP.

1.4 SUBCONSULTANTS

Any work performed by a subconsultant to HNTB shall be held to the same quality standards as described herein for HNTB produced work. The subconsultant will be responsible for following the Movable Bridge QMP. As part of the HNTB team project kick-off, all team members will participate in a quality training session to ensure all parties understand QC/QA requirements and expectations. At a minimum, additional quality training sessions will be held yearly to reinforce quality processes and introduce processes to any new team members.

1.5 FILE MANAGEMENT

Projectwise will be used to manage electronic files between HNTB, Ardaman, Civix, ELOS, Forte and Tablada, KGC, Moffatt & Nichol, Vectura, WJE and LADOTD. Separate folder structures will be created for each structure. ProjectWise will be used to transfer data between LADOTD and HNTB. CADD drawings will be created and modified on local servers. Once complete, all team members will upload PDF CADD files to Projectwise to initiate quality reviews. HNTB will upload final CADD and PDF files will be uploaded to ProjectWise.

1.6 CADD

All drawings will be developed in Microstation V8i and be CADD conformed to LADOTD standards.

1.7 RESPONSIBILITIES OF THE LADOTD BRIDGE TASK MANAGER

LADOTD bridge task manager will not be responsible for QC/QA of HNTB or our subconsultant's work. The LADOTD bridge task manager will be responsible for items listed in Section 3.3.2 of Part I, Chapter 3 of the Bridge Design Manual. Some, but not all, items are listed below:

- Develop scope.
- Approve design criteria submitted by HNTB.
- Review and approve bridge type, size and location (TS&L) and ensure design criteria is updated as project progresses.
- Review consultant submittals. Selectively check dimension and details as a cursory review of the plans for constructability, consistency, and clarity but not as QC/QA of HNTB work.
- Monitor project schedule – HNTB is ultimately responsible for maintaining schedule or communicating concerns with LADOTD PM.
- Monitor budget - HNTB is ultimately responsible for maintaining budget or communicating concerns with LADOTD PM.

STEVEN HAGUE, PE, SE, will serve as the QC/QA manager for this contract. His thorough understanding of site-specific seismology, and geotechnical soil and rock remediation, as well as his ability to review and coordinate a wide variety of disciplines to ensure that all the necessary pieces of a complex design come together successfully allow him to provide the greatest level of quality for this contract.

2.0 QUALITY CONTROL PROCESS

QC is defined as the procedures and processes established to meet the project requirements for quality as stated in the QMP and the accepted standard of care. It is our basic checking procedures for ensuring accuracy and completeness. The following are the standard checking formats for hard copy documents (such as hand calculations, program input files and plans) and electronic documents (such as word documents) that should be implemented for all QC processes:

Design Calculations and LADOTD Approved Design Programs

QC starts first with the designer. The designer is responsible for reviewing all calculations prior to being checked.

A copy of the original document is made for documentation of all review activities. For checking of design programs, a printout of the input and output should be provided to the checker, however, the checker is only responsible for checking the input and reviewing the output to verify the input.

Review of the document for correctness and completeness is performed by the **checker**.

- Changes are **marked in red**.
- Correct items are **highlighted in yellow**.
- Correct full paragraphs (or pages) are marked with a **yellow diagonal**.
- Input files are 100% checked. Controlling values of output files will be verified as an additional check.
- When the checker is complete, all text will be either **highlighted in yellow** or **marked in red**. By doing so, the QPM can easily verify if the entire document has been checked.

A back-check of all comments/proposed changes is performed by the design **back-checker** (usually the **originator**).

- Agreement is shown with a **green check mark** ✓.
- Disagreement is discussed with **checker** and noted with a **green STET** (no change required) upon concurrence with original value.

All agreed upon changes are made to the original document by the **updater**.

- Items are **circled in blue** to show that the change has been made.

All updates to the document are verified for completeness and correctness by the **verifier** (usually the **checker**).

- **Blue circles** are **highlighted in yellow** to show that updates were made.

Once complete, there should be two copies of the design calculations. One yellow highlighted copy with changes noted in red, agreement in green, blue circle to note the change is made and yellow over the blue indicating the change has been verified. The second copy is the corrected copy and should have the checker and back-checker initials. The corrected copy will be included as part of the design calculation book submitted to LADOTD. Both files shall be uploaded to the Team ProjectWise folder.

Electronic Documents (Word, PDFs, etc.) (Not Design Programs)

A review of the document for correctness and completeness is performed by the **checker**.

- Changes are shown in an inserted comment box or using track changes in a Word Document.
- Correct items are **highlighted with yellow**.
- Correct full paragraphs (or pages) are **highlighted in yellow**.
- Checker will save a version of the checked file once checking is complete.

A back-check of all comments/proposed changes is performed by the **back-checker** (usually the **originator**).

- Agreement is shown by typing "concur" and initialing in comment box or accepting changes (Word Document).
- Disagreement is discussed with **checker** and noted with a STET in comment box with initials of both parties or by rejecting changes (Word Document) upon concurrence with original value.
- Back-checker will save a version of the file once back-checking is complete.

All agreed upon changes are made to the original document by the **originator** (or **updater** if track changes was not used). A version will be saved once updating is complete.

All updates to the original document are verified for completeness and correctness by the **verifier** (usually the **checker**). The final, clean version will be saved once verification is complete. Associated files shall be uploaded to the Team ProjectWise folder.

Plans (All Submittals to LADOTD)

A set of plans is printed to PDF and each sheet stamped with a PDF checking print stamp (see Appendix).

Review of the plans for correctness and completeness is performed by the checker. The preference is this checking process occur within Bluebeam, but printing paper copies and hand marking is acceptable.

- Changes are **marked in red**.
- Correct items are **highlighted in yellow**.
- If **checker** has significant comments and changes, plans shall be updated accordingly and checking process restarted.
- **Checker** must be a professional engineer or engineer intern and cannot be the **designer** of the plans.

The **detail back-checker** (usually the **designer**) will perform a back-check of all comments/ proposed changes. **Back-checker** is responsible for reviewing all items on the drawing including items marked by **checker**.

- Agreement is shown with a **green check mark** ✓.
- Disagreement is discussed with **checker** and noted with a **green STET** upon concurrence with original value.

All agreed upon changes are made to the original document by the **updater**.

- Items are **circled in blue** to show that the change has been made.

All updates to the document are verified for completeness and correctness by the **verifier** (usually the **checker**).

- **Blue circles** are **highlighted in yellow** to show that updates were made.

Once complete, there should be two copies of the plans. One yellow highlighted copy with changes noted in red, agreement in green, blue circle to note the change is made and yellow over the blue indicating the change has been verified. The second copy is the clean, corrected copy and will be the official deliverable document. Both files shall be uploaded to the Team ProjectWise folder.

A basic checking procedure is displayed below:

2.1 LEVELS OF REVIEW

There are two levels of review that are utilized within the QC process, as defined below. A given project task could receive a Level 1 or a Level 2 review, or both as deemed appropriate by the supervisor or team leader.

Level 1 - 100% checking of a produced document to include drawings, calculations, spreadsheets, special provisions, tables within reports, program input, graphic elements for reports or presentations, design programs, CADD modeling input.

Level 1 - 100% Document Check

- Check everything on a sheet.
- Use the appropriate standard checking format.
- Document checking procedures on an attached check print sign off sheet or by check print stamp (see Appendix for examples).
- Copy and upload original checked documents as color PDF files to the project QC directory, to await audit.

Level 1 - 100% Input Check

- Checking is only for input data.
- Use the appropriate standard checking format
- Verify that the software or spreadsheet used is appropriate.
- LADOTD pre-approved software does not require validation.
- Verify any previously prepared MathCad and Excel spreadsheets.
- Document checking procedures on an attached check print sign off sheet (see Appendix).
- Copy and upload original checked documents as color pdf files to the project "QC" directory, to await audit.

Level 2 - Peer or senior technical review of documents to include drawings, calculations, report text, CADD documents, shop drawings and RFIs, presentation materials and QA checklists; inter-disciplinary, constructability and independent technical reviews; review and oversight of subconsultant submittals.

- Check or validate only specific items as determined by the supervisor or team leader
- Use the appropriate standard checking format.
- Document checking procedures on an attached check print sign off sheet or by check print stamp (see Appendix for examples).
- Copy and upload original checked documents as color PDF files to the project QC directory, to await audit.

3.0 QUALITY ASSURANCE PROCESS

QA is defined as the systematic activities implemented to provide confidence that the QC processes are followed in compliance with the QMP. These are our audit processes for verifying that the appropriate checking procedures have been performed and documented, and our corrective action plans for addressing problems have been identified within the processes. The keys to an effective quality program lie in the accountability, compliance and continual improvement of the program.

Once the QC processes have been performed, a QA process must be implemented to confirm that the QC procedures were performed to the expectations documented in the QMP. The following procedures should be part of the assurance/validation process.

3.1 AUDITS

Each consultant shall be responsible for uploading their quality checked files onto ProjectWise for QA and notifying the QPM. The QPM will audit the QC records prior to each submission to confirm that all QC procedures have been performed for each task of the deliverable, and record the findings on associated form (see Appendix). Upon approval of the quality documents, the QPM will move each approved document into the project quality records folder and will inform the supervisor or team leader that the submittal is ready for release to the client. The office leader will also receive a hard copy of that verification.

Additionally, the HNTB office quality manager may choose this project for review at an executive level. An audit may be performed similar to the routine project audit, but will also include interviews with staff to determine if the quality management process is clearly understood and is being performed unbiased and independent of the design or production process.

The purpose of the audit is two-fold:

- Identify and correct a breakdown in quality or any instance of noncompliance to established HNTB best practice procedures through a defined corrective action plan.
- Identify opportunities for implementation of preventive action, training and continual improvement processes to enhance quality, efficiency and value to our projects and clients.

All audit findings should be documented as a part of the quality records.

3.2 CORRECTIVE ACTION AND PREVENTIVE ACTION PLANS

A corrective action plan (CAP) is a strategy for correcting or eliminating a problem impacting project quality or performance that has already occurred or been identified. The focus of the plan is to systematically review the root cause of the problem in an attempt to prevent the problem from recurring. The primary concepts of the plan are as follows:

- Task leads identify the problem and present to PM or QPM
- Determine the cause of the problem or unintended result
- Identify action items or plan to correct to the problem

Preventive actions are implemented in response to the identification of a trend that would potentially impact quality and lead to a project issue or problem. Preventive action is considered as a proactive undertaking. For example, if we anticipate a potential problem and take action to eliminate the causes and prevent the occurrence of that problem, this is considered to be preventive action.

If a problem or breakdown in quality is discovered during an audit, the PM will be notified immediately. The PM and QPM will perform a root cause analysis to determine the extent of the problem and develop a CAP for implementation. A follow-up meeting will be conducted with all responsible individuals to convey the CAP expectations. If a resolution cannot be reached, the office leader will become involved in the process.

4.0 QUALITY MANAGEMENT IMPLEMENTATION

For a quality program to be effective, it must be planned and implemented as part of the project work plan, and budgeted accordingly. A QMP log - Form 1.0 (see Appendix) should be filled out by the PM for every project, incorporated into the Project Work Plan and forwarded to the QPM for execution.

Proper documentation of the process throughout is also key to successfully managing quality. The following file structure should be set up within the project directory for each project:

\Job_Folder\QMP\Deliverable Name\QC (local server)

\Job_Folder\QMP\Deliverable Name\QA (ProjectWise)

\Job_Folder\QMP\Deliverable Name\Quality Records (ProjectWise)

\Job_Folder\QMP\Deliverable Name\Client Deliverable (ProjectWise)

The **QMP** folder will contain the QMP log (Form 1.0) and all project specific quality requirements, checklists, etc.

The **QC** sub-folder will receive each task item or deliverable that has been produced and is ready for review. Each deliverable will be accompanied by either Form 2.0 or Form 3.0, as determined by the PM or task leader. All assigned checkers will go here to get their assigned documents.

The **QA** sub-folder will receive each completed item or deliverable from the QC folder along with a completed Form 2.0 or Form 3.0. The PQM will go here to find all documents ready for QA.

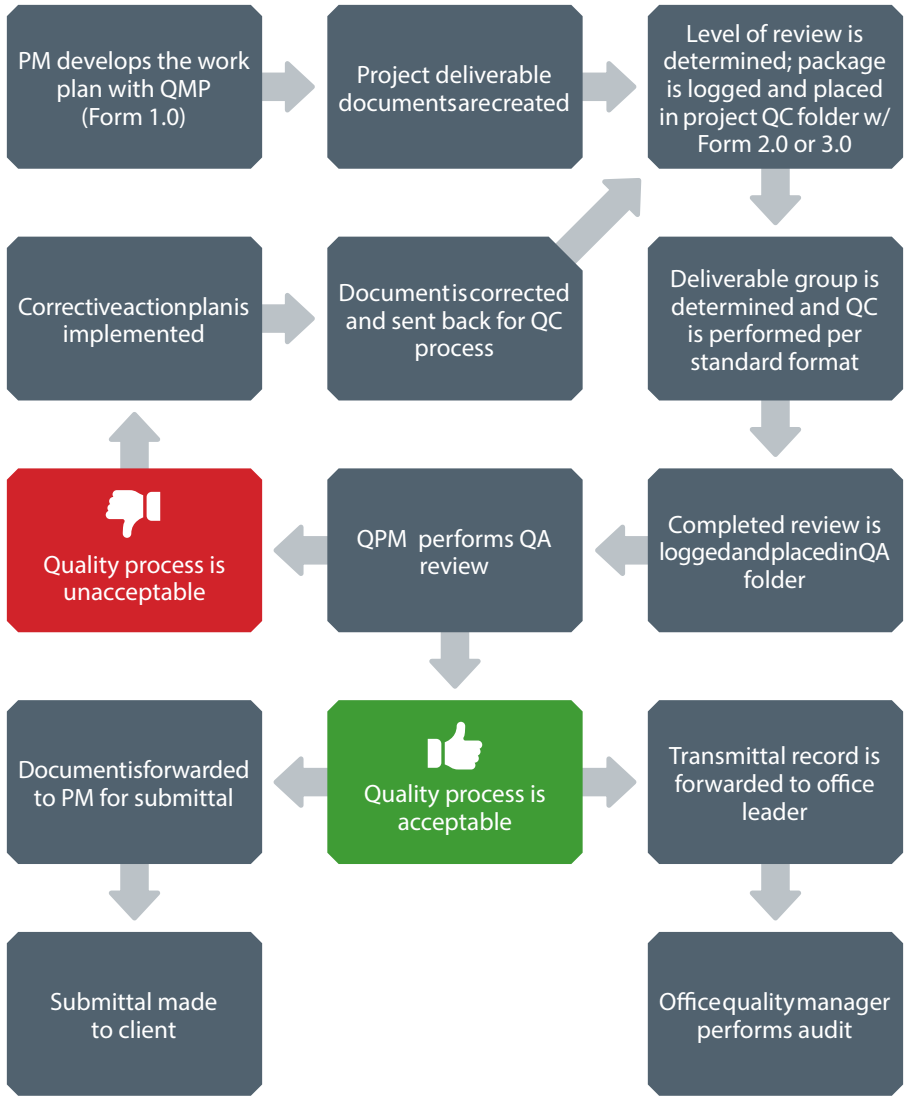
The **Quality Records** sub-folder houses all completed quality documentation that has been signed off by the QPM and the PM, all audit findings and CAP documentation.

The client deliverable folder houses only clean files which have completed QC/QA procedures that are to be submitted to the client.

4.1 QMP PROCESS DIAGRAM

The diagram depicts all key activities and the work flow required for the quality management process. This diagram is only intended as a guide and can be supplemented as required by the PM or QPM, based upon project complexity or client requirements.

Quality Process Diagram



5.0 DELIVERABLES

All deliverables submitted to the LADOTD will be subject to QC/QA as described in our QMP. A specific list of deliverables and milestones will be developed and described in the contract scope of work.

6.0 APPENDIX

FORM 1.0 – QUALITY MANAGEMENT PLAN LOG

FORM 2.0 - LEVEL 1 CHECK PRINT SIGN-OFF SHEET

FORM 3.0 – LEVEL 2 REVIEW MEMORANDUM

FORM 4.0 – QUALITY AUDIT CHECKLIST

FORM 5.0 – CORRECTIVE ACTION LOG/ PREVENTIVE ACTION LOG

Sample Check Print Stamps

LADOTD QC/QA Certification

LADOTD Consultant Submittal QC/QA Certification

HNTB **FORM 1.0**

Quality Management Plan Log

Project Description:	Job No. PM:
Project Fee:	QA/QC Budget:

Deliverable		QA/QC Budget	Review Level	Reviewer	Date	Completed

Bridge Quality Management Plan **FORM 2.0**

LEVEL 1 CHECK PRINT SIGN-OFF SHEET

Client Name: _____

Job Title: _____

Job Number: _____

Document Title: _____

Check Level (Mark One):

- ☐ 1 - 100% Document Check
- ☐ 1 - 100% Input Check (When Pre-Validated Software in Used)

		Name	Received Date	Completion Date
Originated By:	☐			
Checked By:	☐			
Backchecked By:	☐			
Verified By:	☐			

Comments:

Bridge Quality Management Plan **FORM 3.0**

LEVEL 2 REVIEW MEMORANDUM

Client Name: _____

Job Title: _____

Job Number: _____

Document Title: _____

Check Level (Mark One):

- ☐ Studies or Report Type Documents
- ☐ Documents Prepared by Others
- ☐ Checklist
- ☐ CADD QC Audit
- ☐ Other

Specify below:

		Name	Received Date	Completion Date
Reviewed By:	☐			

Review Findings:

FORM 4.0

QUALITY AUDIT CHECKLIST

AUDITED AREA:	DATE(S) OF AUDIT:
AUDITOR:	AUDIT:

AUDIT ITEM	REFERENCE	METHOD OF VERIFICATION	CONFORMS	
			YES	NO
1. Have computer programs utilized been validated?	QMP Group D	Review validation records.		
2. Are calculation check prints available?	QMP Group B	Review originals and check prints		
3. Were calculations checked prior to drawing checking?	QA Folder, QMP Log	Review check prints.		
4. Are drawing check prints available?	QMP Group E	Review record set and check prints.		
5. Are check prints of specifications available?	QMP Group A	Review record set and check prints.		
6. Is checking of input to computer programs being accomplished?	QMP Group B	Review originals and check prints		
7. Are check prints of studies or report-type documents available?	QMP Group A	Review check prints.		
8. Are procedures for marking up check prints being followed? Checker - Yellow/Red Backchecker - Green Updater - Blue Verifier - Yellow	QA Folder	Review check prints.		
10. Are check prints properly signed and dated?	QA Folder	Review check prints.		
11. Are plan reviews completed?	QMP Log	Review package to verify that comment sheets are available.		
12. Are the review comments incorporated into the final documents or disposed of as otherwise noted?	QA Folder	Review for verification that Design Reviews comments have been incorporated.		
		Review for verification that comments from prior Design Reviews have been incorporated.		
13. Are check prints of graphic elements available?	QMP Group C	Review check prints.		
14. Are all checklists validated?	QMP Group D	Review check prints.		

Corrective Action Log

Form 5.0

HNTB - Quality Manager:

Project #	PM or PQM	Issue Summary	Corrective Action	Implemented
12345	Joe Smith	Subs delayed project submittal	Updated schedule for additional time for subs; weekly conference calls initiated	1/1/2012

Preventative Action Log

HNTB - Quality Manager:

Project #	PM or PQM	Issue Summary	Preventative Action	Implemented
12345	Joe Smith	Task 50% complete - 65% spent	Weekly monitoring by PM	1/1/2012

Sample Check Print Stamps

CHECKING PRINT

Checked by_____ Date_____
Back Checked by_____ Date_____
Corrected by_____ Date_____
Tracing Signed by_____ Date_____

AUXILIARY
CHECKING PRINT NO._____

Checked by_____ Date_____
Back Checked by_____ Date_____
Corrected by_____ Date_____
Tracing Signed by_____ Date_____

DOTD QC/QA Certification

Project No.: H.0XXXXX
Project Name: XXXXXXXXXXXX

We, the undersigned designers, detailers, checkers and reviewers for this project, have reviewed and accepted the calculations, plans, quantities, special provisions, and cost estimate prepared for the project. We certify that the work for which we are responsible has been completed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

Team Members	Name	PE Registration No.	Responsible Plan Sheets	Responsible Special Provisions	Construction Cost Estimate	Signature
Designers						
Design Checkers						
Detailers						
Detail Checkers						
Reviewers						
Peer Reviewer						
Geotechnical Engineer						
Hydraulic Engineer						
EOR						

DOTD Consultant Submittal QC/QA Certification

Project No.: H.0XXXXX
Project Name: XXXXXXXXXXXX

I, the undersigned Supervisor or Team Leader for this project, certify that the information included in this submittal has been prepared in accordance with the QC/QA plan documents and LADOTD Bridge Design Section policy on QC/QA and the information presented is accurate and meets the requirements of this submittal. All CAD drawings meet LADOTD CAD standards.

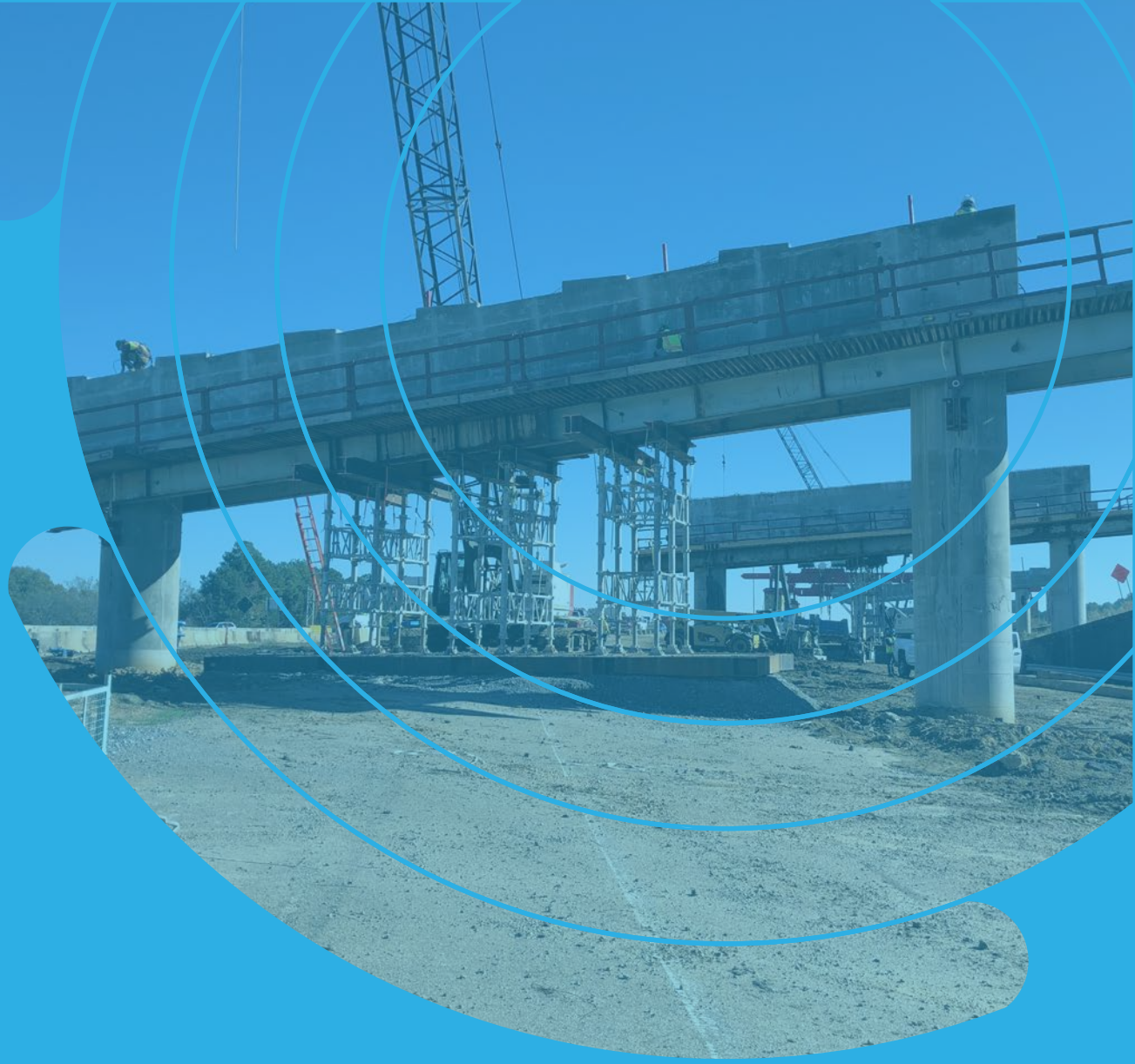
_____
Submittal Description

_____ _____ _____
Supervisor or Team Leader Name Signature Date

Section 22: Sub-Consultant Information

22. SUB-CONSULTANT INFORMATION

Firm Name (Name must match exactly as registered with Louisiana's Secretary of State (SOS): including punctuation, include screenshot(s) from SOS at the end of Section 20)	Address	Point of contact and email address	Phone number
Ardaman & Associates, Inc.	316 Highlandia Drive Baton Rouge, LA 70810	Robert Jewell, PE rjewell@ardaman.com	(225) 666-4598
Stanley Consultants, Inc.	700 Main Street, Suite 405 Baton Rouge, LA 70802	Blake Roussel, PE, PMP rousselblake@stanleygroup.com	(225) 388-4211



Section 23: Location

23. LOCATION

Location is not an evaluation criterion for this advertisement.