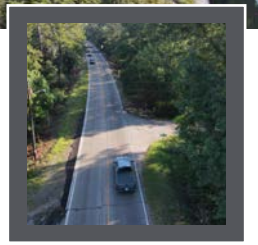


WAGGONER

US 11 Norfolk Southern RR Overpass (HBI)
Route: US 11
St. Tammany Parish

LADOTD Contract No. 4400032800
State Project No. H.000688.5
Federal Aid Project No. H000688

September 9, 2025

Submitted by:
Waggoner Engineering, Inc.

waggonereng.com

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

September 9, 2025

Louisiana Department of Transportation and Development
1201 Capital Access Road
Baton Rouge, LA 70433

RE: LADOTD Contract No. 4400032800, State Project No. H.000688.5, Federal Aid Project No. H000688
Request for Qualifications for Engineering and Related Services for US 11 Norfolk Southern RR Overpass (HBI)
Route: US 11, St. Tammany Parish

Dear Members of the Selection Committee:

Waggoner Engineering, Inc. (Waggoner) is excited for the opportunity to work with the Louisiana Department of Transportation and Development (LADOTD) on the US 11 Norfolk Southern Railroad Overpass (HBI) project located in St. Tammany Parish. Our team is fully prepared to bring our expertise and proven project delivery track record to support this contract.

FIRM EXPERIENCE AND PAST PERFORMANCE: Waggoner, a leader in water resources engineering in the Gulf Coast region, expanded its footprint and technical practice expertise by joining forces with Sigma Consulting Group, Inc. (Sigma) in November 2022. Sigma's 35 years of transportation engineering expertise with the LADOTD now serves as Waggoner's transportation division headquarters. **While legacy Sigma now operates under the Waggoner name, the day-to-day management and operational structure remain unchanged.** The former owners and managing partners of Sigma are active leaders in Waggoner's management and operations, **ensuring that the firm's experience and exemplary past performance provided by Sigma over our 30 plus years of service to the LADOTD remains intact** while offering the broader resources and capabilities of Waggoner.

LADOTD ROAD AND BRIDGE DESIGN EXPERIENCE: Waggoner (formerly Sigma) has an extensive tract record of providing engineering design and related services for roadway and bridge rehabilitation, replacement and widening projects. Our team has successfully delivered similar LADOTD projects comparable in scale and complexity to the US 11 Norfolk Southern Railroad Overpass project, including the LA 3213: Gramercy Bridge over UPRR, I-49 South: Ambassador Caffery/US 90 Interchange, and LA 347: Roundabout at Melancon Road. Our innovative approach coupled with our design expertise has positioned us to effectively manage and deliver a quality product to LADOTD and the residents of St. Tammany Parish. Our project manager, **Andrew Windmann, PE** has 13 years of experience in bridge design on LADOTD projects. Our staff experience is founded on LADOTD project delivery processes which will be our guiding roadmap to meet the project goals under this contract.

We have strategically teamed with our Trilon Partner Firm, **DRMP, Inc. (DRMP)**, whose structural engineering expertise is essential to delivering a constructable design with a focus on the main spans over and adjacent to the railroad tracks.

In addition, we have added the local Louisiana expertise of **Ardaman & Associates, Inc. (Ardaman)** to provide geotechnical investigation, testing and laboratory services. More detailed information on our teaming partners can be found in Sections 16 and 17.

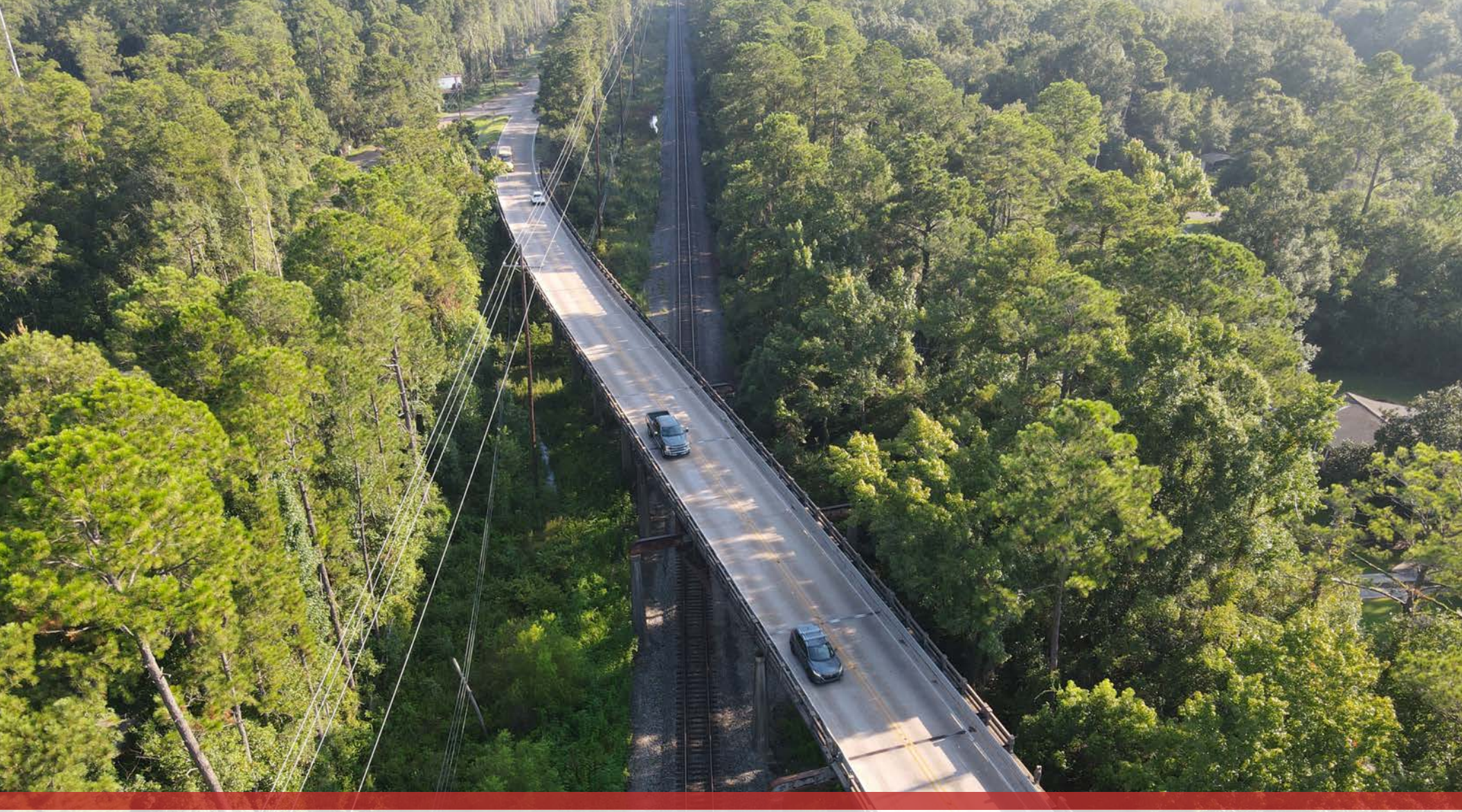
PROJECT UNDERSTANDING: Waggoner understands the importance of this priority project to provide a safer route connecting travelers to residential and commercial areas in Slidell, LA. This project involves providing engineering and related services to design the reconstruction and widening of US 11 from I-12 to US 190 including the replacement of the US 11 bridge over the Norfolk-Southern Railroad. The initial phase will focus on the completion of line and grade studies to determine the full **constructable** scope for current and future needs. As part of our approach, we will ensure that all services and documents will comply with AASHTO and LADOTD guidelines and standards.

APPROACH AND METHODOLOGY: Our approach and methodology as outlined in Section 18 is grounded in a deep understanding of the LADOTD Bridge and Roadway Design requirements, paired with innovative methodologies that ensure each project meets the highest standards of safety, efficiency, and sustainability. We plan to leverage our past experience in LADOTD project delivery, effective communication, rigorous QA/QC process, and commitment to partnership with LADOTD to fulfill your needs and expectations for this project.

Thank you for considering Waggoner for this opportunity. We are committed to delivering a project that benefits the residents and those traveling through St. Tammany Parish. If you require any additional information or have questions, please do not hesitate to contact me at 225.298.0800 or via email at robert.lear@waggonereng.com.

Sincerely,

Robert Lear, PE, LSI
Vice President, Senior Project Manager
Waggoner Engineering, Inc.



Sections 1-11

A key component of a successful project will be the identification and coordination of numerous overhead and subsurface utilities that will require relocations. Early communications and collaboration with the utility owners will help maintain good partnership with all stakeholders involved.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

DOTD FORM: 24-102

(Revised August 11, 2025)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

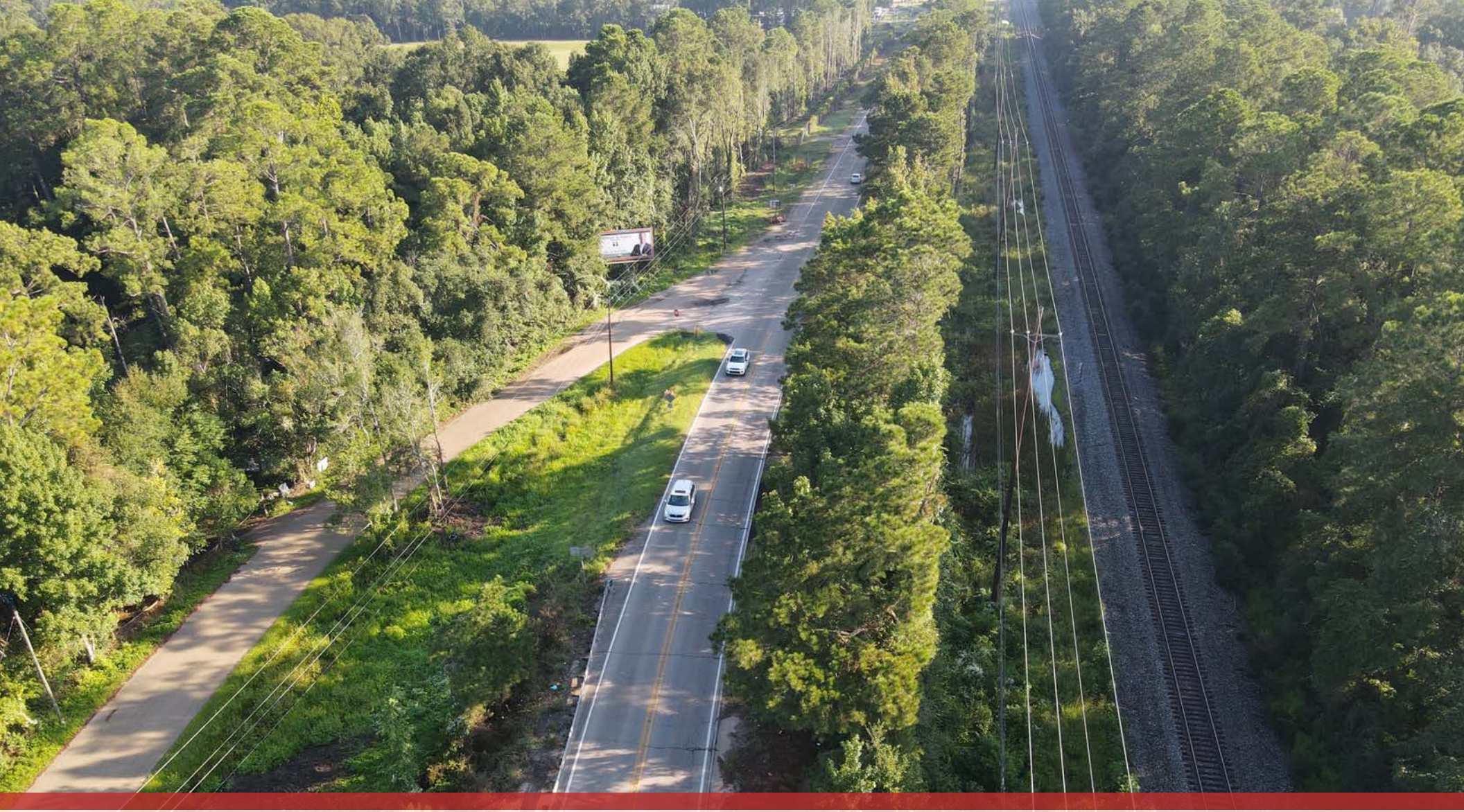
Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

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

1. Contract Name as shown in the advertisement	US 11 Norfolk Southern RR Overpass (HBI) Route: US 11 St. Tammany Parish
2. Contract Number(s) as shown in advertisement	Contract No. 4400032800
3. State Project Number(s), if shown in the advertisement	State Project No. H.000688.5 Federal Aid Project No. H000688
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)	**Waggoner Engineering, Inc.** (formerly Sigma Consulting Group, Inc.)
5. Prime Consultant License Number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	**EF.0002553** **VF.0000457**
6. Prime Consultant Mailing Address	10305 Airline Highway Baton Rouge, LA 70816
7. Prime Consultant Physical Address (existing or to be established, if location is used as an evaluation criteria)	10305 Airline Highway Baton Rouge, LA 70816
8. Name, Title, Phone Number, and Email Address of Prime Consultant's Contract Point of Contact	**Robert J. Lear, Jr., PE, LSI** Vice President robert.lear@waggonereng.com 225.298.0800
9. Name, Title, Phone Number, and Email Address of the Official with Signing Authority for this Proposal	**Robert J. Lear, Jr., PE, LSI** Vice President robert.lear@waggonereng.com 225.298.0800

10. 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.**	 **Robert J. Lear, Jr., PE, LSI** *Vice President* Signature above shall be the same person listed in Section 9 Date: September 9, 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.	Firm(s)	Firm Percent
	Total DBE Participation:	0%
	NO DBE GOAL WAS SET FOR THIS PROJECT.	



Sections 12-15

Addis Boulevard provides the only access to a local neighborhood and is a major element of attention for the construction phasing of the proposed bridge replacements. Access will be maintained to the neighborhood from US 11 at all times during construction.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

12. PAST PERFORMANCE EVALUATION DISCIPLINE TABLE:

Discipline(s)	% of Overall Contract	Waggoner (formerly Sigma)	DRMP	Ardaman	Each Discipline must total to 100%
Road	40%	100%	-	-	100%
Bridge	50%	60%	40%		100%
Geotech	10%	-	-	100%	100%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant.					
Percent of Contract	**100%**	**70%**	**20%**	**10%**	100%

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)
WAGGONER	Principal	1	1
	Professional	2	2
	Supervisor - Engineer	4	6
	Engineer	6	9
	Engineer Intern	3	5
	Engineer - Other	0	1
	Environmental Manager	0	1
	CADD Technician	2	4
	CADD Operator	0	0
	Supervisor	0	1
	Senior Technician	2	5
	Technician	1	2
	GIS Analyst	0	2
	Instrument Man	0	1
	Surveyor	0	2
	Party Chief	0	2
	Clerical	1	2
DRMP	Principal	1	1
	Engineer	5	8
	Supervisor - Other	1	1
	Senior Technician	6	20
	CADD Technician	8	66

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)
Ardaman & Associates, Inc.	Principal	2	3
	Engineer	1	6
	Engineer Intern	3	6
	Senior Technician	8	9
	Technician	11	15
	Supervisor - Engineer	3	3
	Supervisor - Other	3	4
	CADD Technician	2	2
	Clerical	1	2
	Administrative	1	1

14. ORGANIZATIONAL CHART:

KEY
Waggoner (formerly Sigma)
DRMP
Ardaman
(#) Meets MPR Criteria
✪ Meets Work Zone Training Requirements
▶ Meets Traffic Engineering Process & Report Training Requirements
DISCIPLINE LEAD (CAPS & BOLD)

PRINCIPAL-IN-CHARGE

Miles Williams, PE (1, 2)

QA/QC

Robert J. Lear, Jr., PE, LSI (3) ✪
(Roadway and Drainage)
Scott Benson, PE (Bridge)

PROJECT MANAGER

Andrew Windmann, PE

BRIDGE DESIGN

ANDREW WINDMANN, PE
LEO RODRIGUEZ, PE (4)
Joshua Gonya, PE
Joshua Olivier, PE
Josue Herrera, PE
Nicole Catino, PE
Hung Tu, PE, SE
Sanjeev Howlader, PE
Mark Jones, PE

ROADWAY DESIGN

ALEX FARR, PE ✪ ▶
Robert J. Lear, Jr., PE, LSI (3) ✪
Kelsie Bankston, PE
Charlotte Gremillion, PE
Steve Gilliam, PE

UTILITY COORDINATION

JOSHUA RENARD, PE ✪
Brandon Bollich, EI

DRAINAGE DESIGN

BRYAN HARMON, PE
Gage Spell, LSI
Steve Gilliam, PE

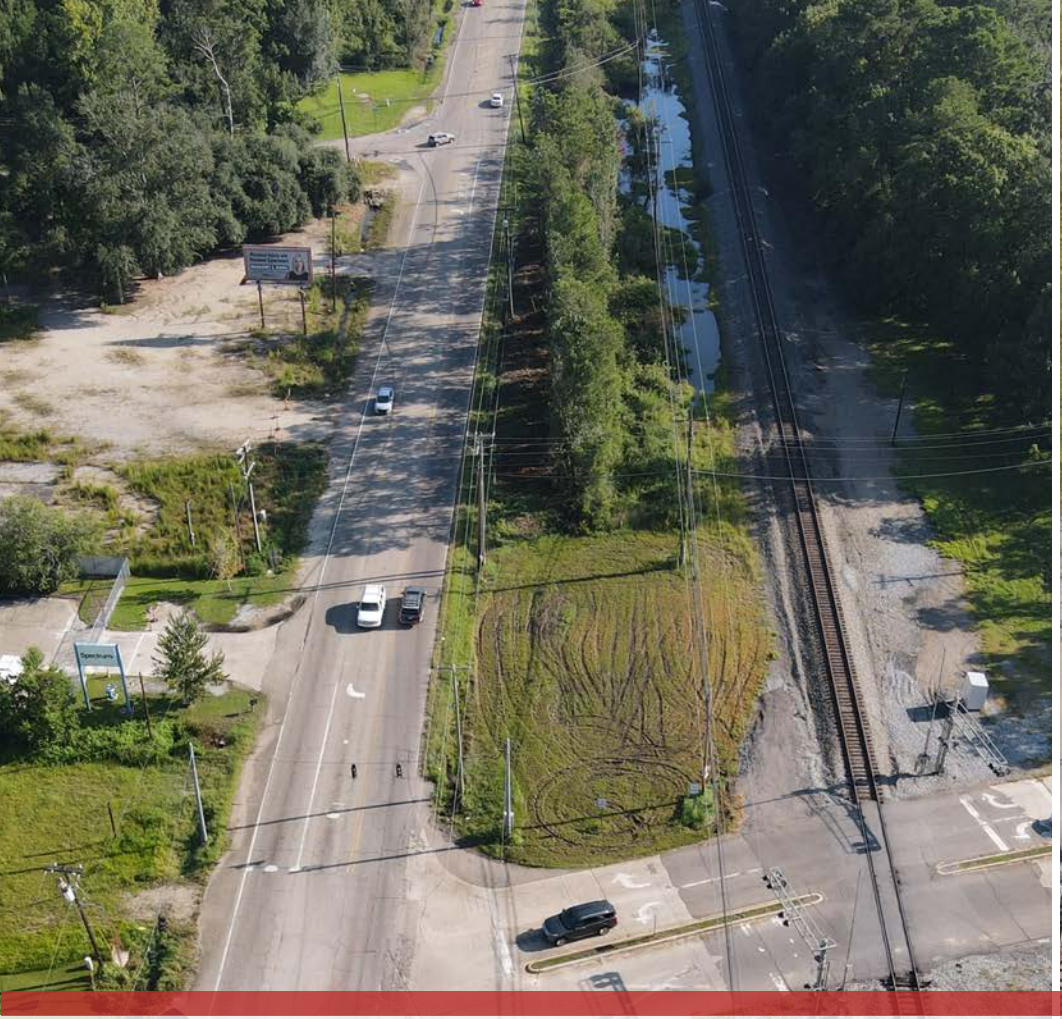
GEOTECHNICAL

MEGAN BOURGEOIS, PE (5)
ROBERT JEWELL, PE (6, 7)
Mark Woodward, PE
Jarmon King, PE
Jessica Litt
Casey Floyd

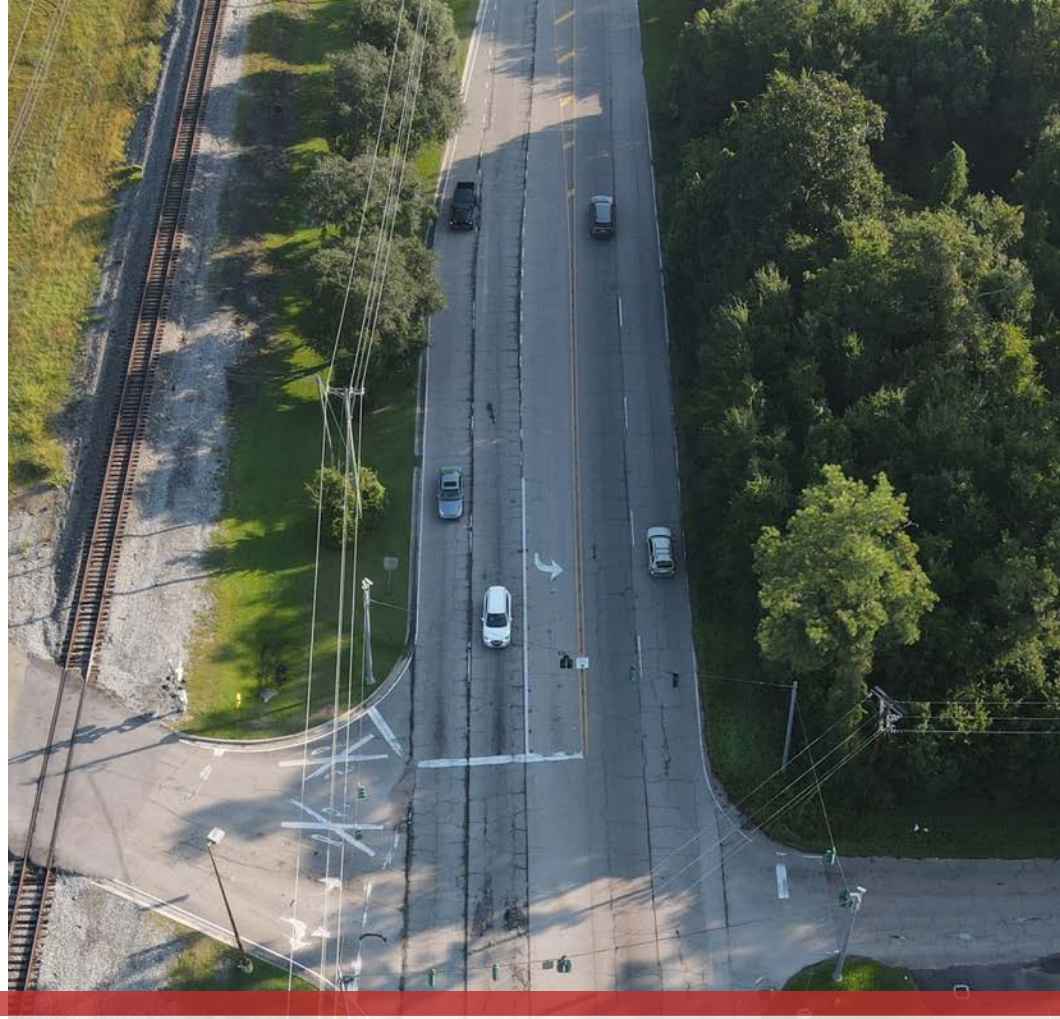
15. MINIMUM PERSONNEL REQUIREMENTS:

MPR # Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/certification & number (Ex: PE # - Civil)	State of license	License/ certification expiration date
1	Miles Williams, PE	Waggoner Engineering, Inc.	PE No. 23094 - Civil	LA	3/31/2026
2	Miles Williams, PE	Waggoner Engineering, Inc.	PE No. 23094 - Civil	LA	3/31/2026
3	Robert J. Lear, Jr. PE, LSI	Waggoner Engineering, Inc.	PE No. 29394 - Civil	LA	3/31/2027
4	Leo Rodriguez, PE	DRMP, Inc.	PE No. 44201 - Civil	LA	9/30/2026
5	Megan Bourgeois, PE	Ardaman & Associates, Inc.	PE No. 36725 - Civil	LA	3/31/2026
6	Robert Jewell, PE	Ardaman & Associates, Inc.	PE No. 38579 - Civil	LA	9/30/2026
7	Robert Jewell, PE	Ardaman & Associates, Inc.	PE No. 38579 - Civil	LA	9/30/2026

* The Waggoner team has multiple personnel assigned to this contract who have the qualifications necessary to meet each minimum personnel requirements. Individuals listed are the key personnel for each MPR. Additional names were not added to keep the response clear and concise.



North Boulevard at US 11 and NSRR



US 11 Entrance to The Crossing Shopping Center

Section 16

North Boulevard intersects US 11 and Norfolk Southern Railroad track approximately 130 feet apart on centers. This will serve as a vertical alignment controlling point to ensure proper grade along North Boulevard is maintained and improvements to the railroad crossing conform to NSRR requirements.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

The US 11 entrance to The Crossing Shopping Center intersects to existing NSRR tracks. Careful consideration with be provided when defining the new profile for the full-build alternative such that impacts to this entrance and to Lafayette Street are fully vetted for geometry and drainage.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Andrew Windmann, PE**			Years of Relevant Experience with this Employer	2
Title	Senior Bridge Design Engineer			Years of Relevant Experience with Other(s) Employers	13
Degree(s)/Years/Specialization			BS / Civil Engineering / 2010		
Active Registration Number/State/Expiration Date			PE No. 39042 / LA / 09-30-26		
Year Registered	2014	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Project Manager | Bridge Design Lead (Approach Spans)			

Andrew is a licensed civil engineer with over 15 years of experience in bridge design with a track record of delivering successful infrastructure projects. His experience includes **13 years with LADOTD**, as **an Assistant Bridge Design Administrator (2021–2023),** where he managed a $240 million statewide bridge program, overseeing planning and design for **rehabilitation and replacement** projects. Andrew will serve as **Project Manager**, responsible for leading project coordination, managing schedule and deliverables, and overseeing the design team's execution of the **line and grade studies**, **bridge reconstruction**, **widening and replacement design**. His deep understanding of LADOTD Bridge Design policies and LADOTD project delivery procedures will allow him to effectively manage the **accelerated project delivery** in alignment with LADOTD design standards.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/13 - 12/19 SECTION 17 PROJECT	**I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) | I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014) | I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** **Lead Bridge Design Engineer.** Andrew served as one of two lead bridge design engineers on this project that included the rehabilitation and widening of six bridge structures (three unique sites) along the I-10 mainline. The scope of this project included the initial assessment of each bridge to provide recommendation on widening versus replacement, while factoring in current condition, load carrying capacity, and feasibility of construction. During Stage 3 of the project, Andrew led the structural team, ensuring the design of every component and detailing of over 120 plan sheets were performed with great quality following LADOTD's QC/QA plan. Structural components included concrete decks, skewed PPC girder superstructures (AASHTO-girders), pile supported bent caps, column bents supported on pile footings, and drilled shafts. Andrew also provided construction-related engineering services throughout the 3.5-year construction time-frame. Services included fabrication drawing review, responding to contractor RFIs, and contractor proposals, as well as reviewing required contract submittals.
01/13 - Ongoing SECTION 17 PROJECT	**I-49 South: US 190 and Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868)** **Bridge Design Engineer.** Andrew is a bridge design engineer for a new interchange on future I-49 at Ambassador Caffery Parkway in Lafayette, LA. He is responsible for the construction support services involving RFI's and contractor proposals related to the new overpass bridge.
2016 - 2022 SECTION 17 PROJECT	**I-10: LA 328 to LA 347 Widening Project, St. Martin Parish, LA (H.010601) 2016-2022** **Bridge Design Engineer.** Andrew served as the lead bridge design engineer on this project that included the replacement of two existing mainline bridges over an abandoned railroad and local road with at-grade I-10 roadway and a singular new bridge allowing the local road to overpass the interstate. Initial work on this project included the structure layout (type, size, and location) of the new overpass structure to ensure adequate horizontal and vertical clearance were provided. Structural components included concrete deck, skewed LG-girder superstructures pile-supported bent caps, column bents supported on pile footings, and columns supported on drilled shafts. Andrew also provided construction-related engineering services throughout the 3-year construction time frame. Services included fabrication drawing review, responding to contractor RFIs and contract proposals, as well as reviewing required contractor submittals.

Andrew Windmann resume continued

2023 – Present	**Rural Bridge Replacement Initiative Phase II (South), LA (4400019338)** **Lead Bridge Design Engineer.** Andrew is the bridge lead for this contract of 16 state projects including 29 bridge replacements throughout south Louisiana. Andrew oversees the structure type recommendation from hydraulic engineers and the selection and conformance to the appropriate LADOTD standard plans. Where details do not currently exist in standard plans for particular site needs, Andrew has designed and detailed those structural components, meeting all governing design requirements and additional client requirements. Various components include reinforced concrete slab bridges, precast, prestressed concrete girders, cast-in-place concrete pile bents, steel sheet pile walls, and bridge barrier rails and guard rail systems.
2023 – Present	**IIJA Bridge Replacement Initiative (District 62), LA (4400025041)** **Lead Bridge Design Engineer.** Andrew is the project manager and bridge lead for this contract of 6 state projects including 6 bridge replacements in Livingston, St. Helena, Tangipahoa, and Washington Parishes, LA. As Bridge Lead, Andrew oversees the structure type recommendation from hydraulic engineers and the selection and conformance to the appropriate LADOTD Standard plans. Where details do not currently exist for site needs, Andrew has designed appropriate details to include in the construction plans. As Project Manager, he has developed an efficient process/sequence of collecting field data (survey) and bringing it into the office (plan development), while staggering the various projects so that there is a continuous flow of data from phase to phase. Ultimately, Andrew is responsible for all coordination with subconsultants and progress reporting and invoicing with the client.
2012 - 2016	**I-12: Northshore/Airport Rd. – US 11, St. Tammany, LA (H.009185) 2012-2016** **Roadway Designer.** Andrew served as a designer on this project that included the widening of parallel Interstate bridges over a local road and abandoned railroad line. The existing structures were comprised of AASHTO Type III PPC girder spans supported on reinforced concrete column bents and founded on pile-supported footings. The new, widened portions matched these components type using current material properties and design requirements. Sequence of construction was a major consideration in the design to facilitate the continued allowance of two lanes of traffic at all times. Andrew also provided construction-related engineering services throughout construction which included responding to contractor RFIs and contractor proposals, as well as reviewing required contractor submittals (i.e. working/fabrication drawings and proposals).
05/10 - 10/23	**LADOTD Bridge Design Section Engineer Intern to Assistant Bridge Design Administrator.** Prior to joining Waggoner, Andrew worked in the Bridge Design section at LADOTD for 13.5 years. Andrew gained a breadth and depth of organizational, procedural, and state-specific knowledge of LADOTD's design requirements, including internal policies, preferences, and intimate knowledge of the current standard plans. Part of his time working in the Bridge section, Andrew served as a manager in the Bridge Manual, Specifications, and Standards sub-unit, where he oversaw the development of the slab-span standard plans, LG-girder standard plans, among others. Immediately prior to joining Waggoner, Andrew served as the state-wide Bridge Preservation program manager whose responsibility it was to understand the overall health of the over 7000-bridge inventory as well as program bridge replacement, rehabilitation, and repair projects over a rolling eight-year program to spend an annual budget of $240 million. He has a unique understanding of the Department's need for practical design and getting the most efficient bridge replacements completed to get the most use of the insufficient funds received for bridge preservation across the state. While working for LADOTD, Andrew served as the Department's Bridge Design task manager on several high-profile and critical projects where he was responsible for ensuring the design consultant was providing safe, complete, and constructable structural plans and supporting calculations. Having involvement with these projects exposed him to a wide range of structure types, site considerations/constraints, project hurdles from multiple perspectives (outside stakeholder interests, financial implications, and design/construction concerns), and overall understanding of the magnitude of effort needed from the entire project team to successfully manage/deliver these large projects. Some of these projects are shown below: • **H.004100 – LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge, LA** • **H.013284 – MRB South GBR: LA 1 to LA 30 Connector (PEL), East Baton Rouge and West Baton Rouge, LA** • **H.011137 – I-12: LA 1077 to LA 21, St. Tammany, LA** • **H.013866 – I-12: LA 21 to US 190, St. Tammany, LA** • **H.011152 – I-12: US 190 to LA 59, St. Tammany, LA** • **H.005967 – Nelson Rd. Extension and Bridge, Calcasieu, LA** • **H.005121 – LA 1/LA 415 Connector Stage 0/1, West Baton Rouge, LA**

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Robert J. Lear, PE, LSI**			Years of Relevant Experience with this Employer	26
Title	Vice President | Senior Project Manager			Years of Relevant Experience with Other(s) Employers	3
Degree(s)/Years/Specialization			BS / 1996 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 29394 / LA / 03-31-2027		
Year Registered	2001	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		QA/QC - Roadway and Drainage Design | **Meets MPR 3**			

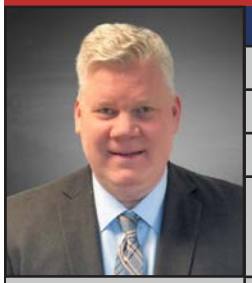
Robert is a licensed civil engineer and land surveyor intern with over **25 years of experience** in **LADOTD project design and management,** specializing in **roadway design, technical reviews**, and **plan development**. He is proficient in **MicroStation and InRoads**, and has led quality control processes across numerous transportation projects. Robert will serve as the **QA/QC Manager**, responsible for developing and implementing the **Quality Assurance/Quality Control Plan** in accordance with **LADOTD's Bridge Design QA/QC Policy**. He will conduct **regular inspections, document reviews,** and **compliance audits** to ensure all deliverables meet LADOTD and program-specific standards. Robert meets **MPR #3** as a registered civil engineer in Louisiana and brings a disciplined focus on schedule, quality, and design integrity in the preparation of roadway plans.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/13 - 07/22 SECTION 17 PROJECT	**I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) | I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014) | I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** **Project Manager and Lead Road Design Engineer Of Record.** Robert served as the project manager and lead road design engineer of record for capacity and pavement preservation improvements for I-10 in Lafayette. These three projects were designed concurrently under a road design retainer and constructed under three separate construction contracts. He designed roadway geometrics, drainage, graphical grades, ramp terminals, roundabout intersections, and construction sequencing. He also coordinated the multi-discipline plan set packaging, quantity computations, specs, special provisions, pay items, design reports, design waivers, design exceptions, and utility conflicts. He played an active role in construction support as well. This project included both pavement preservation and capacity functional classifications.
01/13 - Ongoing SECTION 17 PROJECT	**I-49 South: US 190 and Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868)** **Roadway Design Engineer.** Robert is a roadway design engineer for a new interchange on future I-49 at Ambassador Caffery Parkway in Lafayette, LA. Robert is responsible for the horizontal and vertical geometric design and road plan production of a four-tiered interchange, eight-lane mainline, two-lane one-way frontage roads, and u-turns.
10/12 - Ongoing SECTION 17 PROJECT	**Hooper Road Widening (LA 408) Blackwater-Joor, East Baton Rouge Parish, LA (H.002316)** **Project Manager.** Robert was the project manager during the Environmental Assessment phase of this 2.2-mile urban roadway capacity project. Hooper Road is being upgraded to a four-lane boulevard with complete streets accommodations. He also managed the topographic survey and prepared right-of-way (ROW) maps. This project included both pavement preservation and capacity functional classifications.
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Roadway Design Engineer.** Robert is a roadway design engineer for the widening of I-10, interchange improvements, and surface street improvements through Baton Rouge. His responsibilities include urban roadway, freeway, and interchange geometrics, profile design, typical sections, design reports, establishing required ROW, and plan preparation using Microstation and Inroads. He is part of the roadway task force which collaborates with the design team, LADOTD, and the CMAR contractor.

Robert Lear resume continued

03/03 - Ongoing	**LA 1 Improvements: Fourchon-Golden Meadow, Lafourche Parish, LA (700-29-0112 | H.008145 | H.004526)** **Project Manager, Roadway Design Engineer, Permitting Manager.** Robert has served multiple roles for this multi-phase mega project to add 17 miles of tolled bridge on new alignment through coastal Louisiana. During Phase 1 (Fourchon-Leeville), he designed roadway, geometrics, permanent signing, permanent striping, roadway lighting, construction canal dredging plans, marsh creation mitigation plans, and provided construction support. He performed CE&I/OV services for the toll gantry, roadway lighting, electrical systems, wayfinding signage, permanent signing, and new toll building. He also prepared and secured all construction permits (USACE, DNR, USCG, DEQ) for Phases 1 and 2. He prepared demolition plans for the old Bayou Lafourche bridge substructure, as well as coordinated SUE and utilities for all pipeline in the active oil and gas field. This project included both pavement preservation and capacity functional classifications.
08/18 – 10/22	**I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370)** **Lead Roadway Design Engineer.** The project includes adding ramps to the existing I-20/I-220 Interchange and providing full access to the Barksdale Air Force Base via a new four-lane rural arterial roadway. Robert is the roadway design engineer for this LADOTD design-build project. He is responsible for preparing the geometric design criteria reports, design exceptions, horizontal and vertical geometrics for the interstate, diagonal and loop ramps, C-D road, and rural arterial; superelevation transitions, typical sections, plan profile sheets, geometric control, geometric layout, geometric details, cross sections, drainage design including cross drains, storm drains, side drains, roadside ditches, existing and design drainage maps, clearing and grubbing plans, and construction support. Robert also was responsible for QA/QC reviews and/or independent reviews of the SWPPP, Interchange Modification Report (IMR) re-evaluation, traffic control plans, signing and striping plans, and transportation management plan.
04/02 – 04/12	**Jones Creek Rd Improvements Tiger Bend Road – Coursey Blvd., East Baton Rouge Parish, LA (H.007137)** **Project Manager and Lead Roadway Design Engineer.** Robert was the project manager and lead road design engineer for the widening of a two-lane road to a five-lane urban section. He designed roadway geometrics, intersections, sidewalks, residential and commercial drives, pavement markings, and cross sections. He also managed the topographic survey and worked under PLS supervision for the preparation of right-of-way maps.
08/21 – 05/23	**LA 73: US 61 (Airline Highway) – LA 426 (Essen Lane), East Baton Rouge Parish, LA (H.010652)** **QA/QC.** Robert performed the roadway QA/QC for the entire project including typical sections, plan profiles, cross sections, pay items, quantities, and opinion of probable costs. Waggoner was contracted by LADOTD to engineer the reconstruction of LA 73, covering full pavement replacement, curbs, gutters, and sidewalks from Airline Highway to the I-12 on-ramp, and repairs from the I-12 on-ramp to Essen Lane. The project included a 2.3-mile roadway with quantity summaries, cost estimates, and plans to minimize traffic impacts.
10/20 - Ongoing	**I-10 and I-12 College Drive Flyover Ramp Design-Build (CE&I/OV), East Baton Rouge Parish, LA (H.013897)** **Lead Roadway Design Engineer.** Robert is serving as the lead design review engineer for the following design units: definitive design, clearing and grubbing, roadway, drainage, maintenance of traffic, pavement marking and signing, Stormwater Pollution Prevention Plan (SWPPP), and TMP Level 4. His responsibilities include technical reviews of calculations and drawings for conformance to the minimum guidelines, project technical performance specifications, and contract documents.

16. STAFF EXPERIENCE:



Firm Employed By: DRMP, Inc.					
Name	**Scott Benson, PE**			Years of Relevant Experience with this Employer	>1
Title	Structures Chief Engineer			Years of Relevant Experience with Other(s) Employers	34
Degree(s)/Years/Specialization			BS / 1999 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 048629 / NC / 12-31-2025 | PE No. 062-050868 / IL / 11-30-2025 PE No. 102006 / FL / 2-28-2027 | PE No. 44285 / SC / 6-30-2026 PE No. 0402070428 / VA / 7-31-2027		
Year Registered	NC - 2019 IL - 1996 FL - 2025 SC - 2025 VA - 2025	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		QA/QC Bridge Design			

Scott serves as a Structures Chief Engineer for DRMP's Transportation Market Sector. He has 34 years of experience in **design**, **rehabilitation**, and **inspection** of transportation structures for both public and private clients. He has been responsible for the development and preparation of contract plans and estimates for various agencies including NCDOT, NCTA, VDOT, MassDOT, IDOT, CDOT, KDOT, and Illinois Tollway. His experience includes performing **technical quality control** reviews of plans and calculations both internal and external to ensure client deliverables meet the highest standards. Scott is also knowledgeable in **curved and straight steel plate girder**, **concrete FIB and Bulb T beam superstructures**, interior and end bent design, retaining walls, **box culverts, and railroad bridge design**.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/25 - Ongoing SECTION 17 PROJECT	**I-275 at I-4 Interchange Improvements Design-Build, The Lane Construction Corporation for FDOT District Seven, Hillsborough County, FL** **Structures Engineer.** Scott was the Structural Engineer of Record for this interchange improvements project, which includes the design and construction of six new bridges, eight bridge widenings/modifications, four existing bridge coatings, and two existing bridge railing retrofits; widening the existing roadway from 2-lanes to 3-lanes in specific segments; improving existing drainage facilities, and providing complex temporary traffic control plans throughout each phase of the project to minimize disruption for all users. The design-build team's innovative alternative technical concept includes an innovative new dual-lane flyover bridge to accommodate the I-275 southbound traffic onto I-4 eastbound without needing a complex widening. This eliminates over 100 detours by performing off-line construction and provides FDOT with the opportunity to add a new I-4 eastbound auxiliary lane to the Selmon Expressway exit just east of the downtown interchange. Other project design elements include permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, and geotechnical.
01/24 - 04/25	**NC 540 (Triangle Expressway) Southeast Extension from I-40 to South of SR 2542 (Rock Quarry Road) Design-Build, North Carolina Turnpike Authority, Wake County, NC** **Senior Structural Project Engineer.** Scott was the Structural Engineer for this project that includes the southeast extension of NC 540 (Triangle Expressway) in Raleigh, North Carolina, for the North Carolina Turnpike Authority (NCTA), and I-40 to south of SR 2542 (Rock Quarry Road) with interchanges at SR 2547 (White Oak Road) and US 70 Business. Scott provided QC technical checks of bridge plans and design calculations for five bridges and seven reinforced concrete box culverts.

Scott Benson resume continued

11/24 - 04/25	**I-85 Widening Design-Build, NCDOT, Gaston County, NC** **Senior Structural Project Engineer.** Scott was the Structural Engineer for the preliminary design of three new Y-Line bridges and widening one mainline bridge over South Fork River along the I-85 corridor near Gastonia, NC. Scott provided QC technical checks for plans and design calculations.
01/24 - 11/24	**I-26/I-240 Interchange Design-Build, NCDOT, Buncombe County, NC** **Senior Structural Project Engineer.** Scott was the Structural Engineer for the preliminary design of proposed curved girder steel plate girder bridge on I-240 over French Broad River. Mr. Benson provided steel curved girder design and used Midas Civil software to model the steel superstructure.
04/21 - 08/23	**NC 150 Bridge over Lake Norman, NCDOT, Catawba and Iredell Counties, NC** **Senior Structural Project Engineer.** Scott was a Structural Engineer for the design of a new 1,200-foot bridge from Greenwood Road in Catawba County, North Carolina, to US 21 in Iredell County, North Carolina. The new bridge over Lake Norman will carry 4-lanes of vehicular traffic and a multi-use path for bicycles and pedestrians. Scott provided QC technical checks for bridge plans and design calculations.
09/19 - 09/23	**US 70 Improvements Design-Build (U-5713/R-5777 A&B), NCDOT, Craven County, NC** **Senior Structural Project Engineer.** Scott was a Structural Engineer for this design-build project to upgrade approximately five miles of US 70 in Craven County, North Carolina, to a controlled-access highway in compliance with interstate standards from the eastern approach of the Neuse River Bridge to Garner Road and a 4-lane divided highway from Garner Road to approximately one mile east of Thurman Road. Scott provided QC technical checks of bridge plans and design calculations.
08/22 - 08/23	**I-64 Hampton Roads Express Lanes Design-Build, VDOT, Hampton, VA** **Senior Structural Project Engineer.** Scott was a Structural Engineer for the reconstruction of three coastal bridges as part of the conversion of three eastbound and westbound I-64 into two general-purpose and two express lanes in Hampton, VA. The Virginia Department of Transportation project aimed to relieve congestion of I-64 from LaSalle Avenue to Settlers Landing Road. Scott provided QC technical checks of bridge plans and design calculations.
08/21 - 08/22	**I-95 Betsy Ross Interchange, PennDOT, Philadelphia County, PA** **Project Structural Engineer.** Scott provided design for Section BR3 of the Betsy Ross Interchange (BRI) in Philadelphia as part of the multiphase, I-95 corridor improvement project for PennDOT District 6-0. Section BR3 involves the reconstruction of northbound I-95 and ramps from Aramingo Avenue and the Betsy Ross Bridge to I-95 northbound, as well as mainline structures over Frankford Creek, Orthodox Street, and Lefevre Street. Scott provided QC technical checks of bridge plans and design calculations for this section of the project.
09/20 - 12/20	**Bridge Load Ratings, SCDOT, Statewide, SC** **Senior Structural Project Engineer.** Scott performed QA/QC for the load ratings of 345 bridges across South Carolina for the South Carolina Department of Transportation (SCDOT). This is part of a statewide initiative to rate all bridges in the SCDOT system. Bridge deterioration information gathered from inspection reports was applied to the load ratings, as necessary. Mr. Benson performed QC technical checks for the bridge rating calculations.
09/19 - 04/21	**Future I-74 Winston-Salem Northern Beltway Design-Build, NCDOT, Forsyth County, NC** **Senior Structural Project Engineer.** Scott provided design of ten bridges using design-build delivery of Sections D, E, and F of the Winston-Salem Beltway in Forsyth County, North Carolina. This project included five Y-line bridges. Scott performed technical QC checks for bridge plans and design calculations.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Miles Williams, PE**			Years of Relevant Experience with this Employer	35
Title	Senior Vice President/Transportation Market Section Lead			Years of Relevant Experience with Other(s) Employers	8
Degree(s)/Years/Specialization			BS / 1983 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 23094 / LA / 03-31-26		
Year Registered	1988	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities			Principal-in-Charge | **Meets MPR 1, 2**		

Miles is a licensed professional engineer with extensive experience in traffic engineering and transportation project delivery. He has served as a design engineer and project manager on a wide range of signal system, traffic control, and transportation infrastructure projects for both public and private clients. His work has included the design of roadway and bridge capacity and preservation projects, creating complex maintenance of traffic plans, and coordinating construction phasing strategies, all developed in compliance with LADOTD standards. Miles will serve as Principal-in-Charge, providing high-level oversight, guiding the project team, and ensuring compliance with all applicable LADOTD and AASHTO standards. He will be responsible for the final approval of deliverables, support coordination with LADOTD's Chief Engineer, and ensure that all services are completed in accordance with contract requirements and LADOTD's quality expectations. Miles meets MPR #1 and #2 as a principal of the prime consultant and a registered PE in Louisiana.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/13 – 07/22 SECTION 17 PROJECT	**I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003) | I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014) | I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** **Principal-in-Charge.** Miles served as the principal-in-charge and road design engineer for capacity and pavement preservation improvements for I-10 in Lafayette. These three projects were designed concurrently under a road design retainer and constructed under three separate construction contracts. He provided overall contract management, designed sequence of construction plans, and mentored the roadway design calculation and plan preparation process. He played a supportive role in construction support as well.
01/13 - Ongoing SECTION 17 PROJECT	**I-49 South: US 190 and Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868)** **Roadway Design Engineer.** Miles is the road design engineer of record for a new interchange on future I-49 at Ambassador Caffery Parkway in Lafayette, LA. He is responsible for the horizontal and vertical geometric design, subsurface and open ditch drainage design, and road plan production of a four-tiered interchange, eight lane mainline, two-lane one way frontage roads and u-turns. He also is responsible for coordinating the frontage road extensions and interchange alternative design for future/interim condition implementation.
10/12 - Ongoing SECTION 17 PROJECT	**Hooper Rd Widening (LA 408) Blackwater-Joor, East Baton Rouge Parish, LA (H.002316)** **Principal-in-Charge.** Miles is the principal-in-charge for the NEPA Environmental Assessment and urban road design of this 2.2 mile capacity project. Hooper Road is being upgraded to a four-lane boulevard with complete streets accommodations.
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Lead Roadway Design Engineer.** Miles is the roadway design lead professional for the replacement of I-10, interchange improvements, and surface street improvements through Metro Baton Rouge, LA. His responsibilities include road and drainage design, complex interchange geometric design, maintenance of traffic/sequencing plans, coordinating with the CMAR contractor, design and constructability reviews, value engineering assessments, cost estimating, project phasing for GMP limit determination, proposed right of way and control-of-access limit determination, utility coordination, and public involvement.

Miles Williams resume continued

03/03 - Ongoing	**LA1 Improvements: Fourchon-Golden Meadow, Lafourche Parish, LA (700-29-0112 | H.008145 | H.004526)** **Project Manager, Lead Roadway Design Engineer, Principal-In-Charge.** Miles was the lead roadway design engineer for Phase 1 of this multi-segment mega project to add 17 miles of tolled bridge on new alignment through coastal Louisiana. During Phase 1 (Fourchon-Leeville), he designed both interim and ultimate interchange/intersection geometrics, roadway plans, permanent signing, permanent striping, and provided construction support. He is the principal-in-charge for environmental and permitting services, and construction support services for Phase 2 (Leeville-Golden Meadow).
04/18 - Ongoing	**Belle Chasse Bridge and Tunnel Replacement Public-Private Partnership Project, Plaquemines, and Jefferson Parish, LA (H.004791)** **Project Principal and Hydraulic Design Engineer.** Waggoner is a design subconsultant providing drainage design for this alternative delivery project. Miles is serving as project principal and hydraulic design engineer. His work entails liaison with the prime consultant, builder, concessionaire and LADOTD. He is also assisting in the design of the drainage system for the roadways throughout the project including storm sewer design, drainage plans preparation, and generation of quantities.
08/18 – 02/20	**I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370)** **Project Principal.** Miles has served as the project principal on this design-build team lead by James Construction Group and Huval and Associates. Miles supervised all of Waggoner's (formerly Sigma) efforts on this project which included all urban interstate highway design and plan preparation, drainage design and pavement marking plans. The interchange design includes complex geometrics, sequencing of construction while maintaining traffic on I-20 and coordination with a major railroad and the US Air Force technical team at Barksdale Air Force Base.
12/14 – 04/19	**South Acadian Thruway (Perkins Road - LA 73), East Baton Rouge Parish, LA (H.011261)** **Principal-in-Charge.** Miles was the principal-in-charge for the safety project designed to reduce the number of accidents along the stretch of Acadian Thruway. The project includes replacing the asphalt overlay and improving the intersection design at Claycut Road. Miles reviewed proposed safety and sidewalk improvements as they were implemented in the project. This project included both pavement preservation and capacity functional classifications.
08/21 – 05/23	**LA 73: US 61 (Airline Highway) – LA 426 (Essen Lane), E. Baton Rouge Parish, LA (H.010652)** **Roadway Design Engineer.** Miles was the road design engineer-of-record and was responsible for all roadway design and plan preparation tasks. Waggoner was contracted by LADOTD to engineer the reconstruction of LA 73, covering full pavement replacement, curbs, gutters, and sidewalks from Airline Highway to the I-12 on-ramp, and repairs from the I-12 on-ramp to Essen Lane. The project included a 2.3-mile roadway with quantity summaries, cost estimates, and plans to minimize traffic impacts.
04/02 – 04/12	**Jones Creek Road Improvements Tiger Bend Road – Coursey Boulevard, East Baton Rouge Parish, LA (H.007137)** **Principal-in-Charge, Project Manager.** Miles was the principal-in-charge for the Jones Creek Road Improvements project for LADOTD. The project involves widening an existing two-lane roadway to a five-lane curb and gutter roadway with subsurface drainage. He was responsible for contracts, geometrics, road design, sequence of construction, signing, and coordination of traffic signalization. He was also the project manager during the topographic and boundary survey and right-of-way map preparation phases.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Joshua Gonya, PE**			Years of Relevant Experience with this Employer	1
Title	Senior Bridge Design Engineer			Years of Relevant Experience with Other(s) Employers	15
Degree(s)/Years/Specialization			BS / 2008 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 40859 / LA / 09-30-26		
Year Registered	2016	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Engineer			

Joshua is a licensed **Professional Engineer** and **NHI-Certified Bridge Inspector** with extensive experience in **civil and structural engineering**. His expertise includes the design of **prestressed and reinforced concrete, steel superstructures, foundations,** and **sign trusses**, and he is proficient in national and state standards including **AASHTO, LADOTD,** and **ACI**. Joshua will provide **bridge design services** ensuring conformance with **LADOTD's Bridge Design & Evaluation Manual**. He is familiar with the US 11 Bridge and has led other bridge replacement projects in St. Tammany Parish, LA. He will also support coordination with the hydraulics and roadway teams to integrate structure-specific needs into the overall project design. Joshua is proficient with **OpenBridge, AASHTOWare BrR, StaadPro**, and **MicroStation**, ensuring efficient and accurate structural modeling and plan production.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/12 - Ongoing	**Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA (12-CS-HC-0060)** **Bridge Designer.** Joshua is performing bridge design for this project. Waggoner was contracted by the East Baton Rouge Parish Department of Department of Transportation and Drainage through the MOVEBR Program to design the extension of Jones Creek Road from the existing Tiger Bend Road intersection to a new terminus point on Airline Highway. The project includes a two-mile four-lane boulevard on new alignment, green infrastructure drainage features, a roundabout at Jefferson Highway, a new residential subdivision access point for an existing subdivision, a new bridge over Claycut Bayou, topographic and ROW mapping, and stormwater detention ponds to control outfall channel levels.
05/14 - 05/15	**Essen Lane over Wards Creek Bridge Widening, LADOTD, Baton Rouge, LA** **Bridge Design Engineer.** Joshua was responsible for initial bridge evaluations and widening of the existing Essen Lane bridge over Wards creek. This project involved utility relocations, extending and matching existing substructures, extending, and matching existing slab span bridge elements. The bridge was evaluated in all temporary structural layouts with temporary traffic conditions.
11/23 - Ongoing	**Highway 18 Grade Separation, Phase A and Phase B Design, Rankin County, MS** **Senior Bridge Engineer.** Waggoner was contracted by Rankin County to provide design and development of construction plans to convert an at-grade CPKC railroad crossing to a grade-separated crossing, with Hwy 18 overpassing the railroad. Joshua is providing bridge design and plan development for two new 1,300 ft. long parallel PPC FIB girder bridges to replace an at-grade railroad crossing on Highway 18 in Brandon, MS. This includes bridge piers founded on pile-supported footings and concrete crash walls near the railroad, constructed in phases to allow for the continued passage of traffic along Hwy. 18. Joshua has performed the structural analysis and design in accordance with all applicable design codes (AASHTO LRFD Bridge Design Specifications and MDOT Bridge Design Manual and Memos).

Joshua Gonya resume continued

2024	**S. Campus Drive over Corporation Canal, East Baton Rouge Parish, LA** **Bridge Engineer.** Josh was the lead bridge engineer and load rating engineer for this project. He developed load rating procedures, completed calculations, provided summary reports, and recommended any closures or postings as necessary. Waggoner's scope of work involved a comprehensive evaluation of the existing lightweight precast concrete slab bridge, which is supported by a reinforced concrete cap and timber piling foundation. The project included an in-depth structural assessment to determine the bridge's current condition and load-carrying capacity. Advanced load rating techniques were employed to evaluate the performance of the precast slabs, reinforced cap, and timber piles under various loading scenarios, ensuring compliance with safety and regulatory standards.
2016	**St. Joseph Abbey Bridge, Private, St. Benedict, LA** **Bridge Engineer.** Josh was responsible for the inspection, modeling, and load rating of a private bridge for the assessment of damage by flooding and consideration of its posting load. This bridge was damaged by a large rain event carrying debris down the river. Josh compiled a report to clarify what limits need to be placed on the bridge, and recommended both repairs and maintenance that would allow the bridge to remove its load posting signage.
05/18 - 05/20	**Worthsville Road over Tracy Ditch Bridge Replacement, Greenwood, IN** **Project Manager and Lead Designer.** Joshua was the project manager and lead designer. He completed the design of a 72'-6" single-span, Hybrid Bulb-Tee Beam bridge to replace the existing three-sided culvert over Tracy Ditch. Bridge Hydraulic design was completed to size the bridge and provide Q100 roadway serviceability. The bridge was designed to accommodate phased construction so that one lane of traffic could be maintained in each direction during construction. The end bents and bridge piling were spaced and designed to span an existing sanitary force main that could not be relocated. The bridge cross section includes four travel lanes, striped median, two raised sidewalks, and bridge railing.
05/19 - 08/20	**SR 15 over Eagle Creek Bridge Replacement, Kosciusko County, INDOT, Kosciusko County, IN** **Project Manager and Lead Designer.** Joshua was the project manager and lead designer. He completed the design of a custom three-span slab superstructure supported by integral end bents and interior open pile bents found on steel shell piles. Hydraulic design and site visits concluded that drift and debris are a major factor for Eagle creek and the open pile bents were used in order to minimize the amount of drift present at the structure. The bridge was designed to accommodate phased construction so that one lane of heavy truck traffic could be maintained at all times during construction. This bridge was in an urban area and required a large effort for utility coordination and local business coordination.
08/18 - 07/19	**SR 3 over Willow Creek Rehabilitation, INDOT, Allen County, IN** **Project Manager.** Joshua was the project manager and was responsible for the inspection, assessment, and rehabilitation recommendations of this project. After infield condition assessments he recommended that the project consist of fiber wrapping substructure elements, patching, overlaying the bridge deck, adding channel protection, and traffic management plans.
08/18 - 07/19	**SR 101 over Hamm Ditch Rehabilitation, INDOT, Allen County, IN** **Project Manager.** Joshua was the project manager and he was responsible for the inspection, assessment, and rehabilitation recommendations of this project. After in field condition assessments he recommended that the project consist of deck and coping replacement, patching of the super and sub structures, railing replacement, approach slab replacement, and reconstruction of the roadway to provide a smooth transition over the limits of the project.
08/17 - 09/22	**Central Office Load Rating Contract, INDOT, Statewide, IN** **Project Manager and Lead Load Rating Designer.** Joshua oversaw the rating of 300+ bridges throughout the state of Indiana. Some notable ratings include curved post-tensioned segmental, curved steel continuous girder, cold bent steel boxes, steel trusses, precast arches underfill, steel beam bridges, slab spans, and typical continuous prestressed beam bridges. Joshua also provided support in the rating of many steel bridges inaccurately not rating, specifically assisting with the issue of Lateral Torsional Buckling in the negative moment region for a steel girder bridge. These ratings included new design ratings and added deterioration ratings as well as specific investigations and overrides of the preferred rating software (AASHTOware BrR).

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Name	**Joshua Olivier, PE**		Years of Relevant Experience with this Employer	7.5
Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	0
Degree(s)/Years/Specialization		BS / 2017 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE No. 46498 / LA / 9-30-26		
Year Registered	2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Engineer		

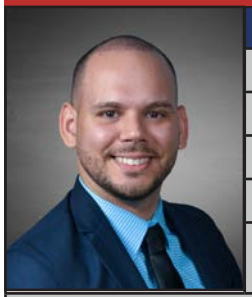
Joshua will support the bridge design team for this Project. He is a licensed **Professional Engineer** with experience in **bridge and structural design, geometric roadway design,** and **transportation-related studies.** He contributes to the preparation of **structural analyses, detailed drafting,** and **design calculations**, supporting **safe and efficient bridge construction**. Joshua is skilled in tools such as **AutoCAD, Civil 3D,** and **LEAP Bridge Concrete,** which he applies to plan preparation and structural modeling.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/12 - Ongoing SECTION 17 PROJECT	**Hooper Road Widening (LA 408) Blackwater-Joor, East Baton Rouge Parish, LA (H.002316)** **Project Engineer.** Joshua is serving as project engineer for this project, providing bridge and structural design services. This project is for the widening of an existing two-lane roadway to a four-lane boulevard to increase capacity. The project began with an Environmental Assessment and National Environmental Policy Act (NEPA) environmental documentation.
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East and West Baton Rouge Parishes, LA (H.004100)** Joshua served as project engineer for the NEPA Environmental Assessment portion of this project. He assisted in the development of the proposed vertical profiles for the Perkins Drive through Acadian Throughway section of the corridor. He was responsible for the identification of critical points of clearance along this region and the corresponding impacts to the design Profile Grade Line. He was also responsible for developing construction sequencing for the removal of the straddle bent over the Kansas City Rail Road overpass.
2014 - Ongoing SECTION 17 PROJECT	**I-49 South: US 190 and Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868)** **Project Engineer.** This project entails construction of a new fully access controlled grade separated interchange at the intersection of Ambassador Caffery Parkway (LA 3073) and US 90 (future I-49 South) in Lafayette Parish, LA. Joshua assisted with checking the superstructure and column bent substructure design. This project utilized the newly developed "LG" prestressed concrete girders. Additionally, Joshua performed shop drawing review and related support as the project entered construction.
2018 - Ongoing SECTION 17 PROJECT	**LA 3213 Gramercy Bridge Approach (Westbank), St. John the Baptist Parish, LA** **Design Engineer.** This project consists of constructing a new overpass along the existing horizontal alignment on LA 3213 to create a grade separation over the existing Union Pacific railroad tracks while remaining inside the existing right-of way and includes the design of an on-site diversion to route traffic around the construction zone. Joshua performed the final structural design for all superstructure and substructure components. All design was performed with the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) guidelines and LADOTD's Bridge Design and Evaluation Manual. This project utilized the newly developed LG prestressed concrete girders.
2018 - Ongoing	**Belle Chasse Bridge and Tunnel Replacement, Plaquemines/Jefferson Parish, LA** **Project Engineer.** This project consists of constructing a new bridge crossing the Intracoastal Waterway to replace the existing tunnel and vertical lift bridge. Joshua created the existing and design drainage maps, checked calculations for open ditch and subsurface drainage systems, and calculated roadway stormwater spread impacts. He also reviewed and recommended shop drawings for approval for proposed drainage structures such as inlets, catch basins, and manholes during construction.

Joshua Olivier resume continued

01/18 - 06/20	**I-10 Widening, LA30 - LA22, Ascension Parish, LA** **Project Engineer.** This project involves the widening of a five mile segment of I-10, including two girder bridge structures and one slab span structure as well as the replacement of the LA 941 bridge structure. Joshua was responsible for checking the longitudinal reinforcing design of the slab span bridge as well as the reinforcement of the new LA 941 bridge. He was also responsible for a preliminary bridge quantity estimate for the LA 941 overpass. All design was performed with the AASHTO LRFD guidelines and LADOTD's Bridge Design and Evaluation Manual.
08/18 - Ongoing	**I-220/I-20 Interchange Improvements and BAFB Access Design-Build, Bossier Parish, LA** **Project Engineer.** The project consists of constructing a new four-lane rural arterial extending from the existing I-220 terminus north of I-20 southward to a terminus within Barksdale Air Force Base. This includes an elevated section which will cross the Kansas City Southern Railway. Joshua was responsible for checking the cross sections and the drainage design of the project area.
2019 - Ongoing	**Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA** **Project Engineer**. Joshua is serving as project engineer for this project. Waggoner was contracted by the East Baton Rouge Parish Department of Department of Transportation and Drainage through the MOVEBR Program to design the extension of Jones Creek Road from the existing Tiger Bend Road intersection to a new terminus point on Airline Highway. The project includes a two-mile four-lane boulevard on new alignment, green infrastructure drainage features, a roundabout at Jefferson Highway, a new residential subdivision access point for an existing subdivision, a new bridge over Claycut Bayou, topographic and ROW mapping, and stormwater detention ponds to control outfall channel levels.
2016 - Ongoing	**Pecue Lane / I-10 Interchange, East Baton Rouge Parish, LA (H.003047)** **Project Engineer.** This project consists of the design of an interchange with multiple through and turn lanes on Pecue Lane, an entrance ramp and exit ramp on eastbound I-10, an entrance and exit ramp on westbound I-10, replacing the current Pecue Lane slab span bridge over Wards Creek, and widening the I-10 girder bridge over Wards Creek. Joshua was responsible for the superstructure and substructure design of the I-10 east bound and west bound bridge widening as well as the checking of the Pecue Lane slab span superstructure and substructure design. He also assisted with the load rating of all structures. Additionally, Joshua performed shop drawing review as the project entered construction.
01/18 - 05/20	**I-10 Corridor Improvements (LA 415 to Essen Lane) Environmental Assessment, West & East Baton Rouge Parishes, LA (H.004100) Project Engineer.** Joshua assisted in the development of the proposed vertical profiles for the Perkins Drive through Acadian Throughway section of the corridor. He was responsible for the identification of critical points of clearance along this region and the corresponding impacts to the design Profile Grade Line. He was also responsible for developing construction sequencing for the removal of the straddle bent over the Kansas City Rail Road overpass.
01/18 – 06/20	**I-10: Highland to LA 73 Design-Build Project, E. Baton Rouge and Ascension Parish, LA (H.009250)** **Project Engineer.** The project included widening I-10 for 6.6 miles to three-lanes in each direction from the Highland Road Interchange to the LA73 Interchange. The I-10 bridges over Highland Road and the approaching roadway were replaced with a new structure and profile grade. Joshua assisted in the drainage design and was responsible for checking the graphical grade design for the mainline and ramps. Additionally, he prepared details for the size and placement of several overhead exit signs along the route. During construction, he revised the lane shift stations to accommodate unanticipated site-specific limitations.

16. STAFF EXPERIENCE:



Firm Employed By: DRMP, Inc.				
Name	**Leo Rodriguez, PE**		Years of Relevant Experience with this Employer	5
Title	Area Structures Group Leader		Years of Relevant Experience with Other(s) Employers	12
Degree(s)/Years/Specialization		BS / 2008 / Civil Engineering | MS / 2012 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE No. 0044201 / LA / 9-30-2026 | PE No. 78493 / FL / 2-28-2027		
Year Registered	LA - 2015 FL - 2018	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Lead (Main Spans) **| MPR #4**		

Leo has experience with the **replacement**, **widening and rehabilitation** of **fixed and movable bridges**, design of new tolling facilities and building structures, and design of miscellaneous structures including sheet pile walls in coastal environments. He is responsible for planning, developing, quality control and delivery of studies, designs, plans, specifications and estimates for design build, conventional and complex transportation projects. Additionally, he has provided inspections and construction support services. For this contracts, Leo will focus on designing the main spans for the US 11 bridge. He will employ advanced engineering techniques to ensure **structural integrity, traffic management efficiency**, and tolling system integration. Additionally, he will oversee the rehabilitation of moveable bridges, coordinating with multidisciplinary teams to enhance functionality while adhering to regulatory standards and project specifications. Through meticulous planning and innovative designs, Leo will contribute to the development of **safe and efficient transportation infrastructure**.

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).
09/22 - Ongoing SECTION 17 PROJECT	**I-275 at I-4 Interchange Improvements Design-Build, The Lane Construction Corporation for FDOT District Seven, Hillsborough County, FL Structures Engineer.** Leo was the Structures Engineer for this interchange improvements project, which includes the design and construction of six new bridges, eight bridge widenings/modifications, four existing bridge coatings, and two existing bridge railing retrofits; widening the existing roadway from two-lanes to three-lanes in specific segments; improving existing drainage facilities, and providing complex temporary traffic control plans throughout each phase of the project to minimize disruption for all users. The design-build team's innovative alternative technical concept includes an innovative new dual-lane flyover bridge to accommodate the I-275 southbound traffic onto I-4 eastbound without needing a complex widening. This eliminates over 100 detours by performing off-line construction and provides FDOT with the opportunity to add a new I-4 eastbound auxiliary lane to the Selmon Expressway exit just east of the downtown interchange. Other project design elements include permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, and geotechnical.
10/18 - 06/23	**Wekiva Parkway Section 8 Interchange Design-Build, The Lane Construction Corporation for FDOT District Five, Seminole County, FL Structures Engineer.** Leo was the Structures Engineer for the design of a limited access toll road starting from Orange Boulevard to east of Rinehart Road. This $263.3 million project includes a new system to system interchange that connects I-4, SR 417 and SR 429 as well as accommodates future express lanes. The project includes 20 new bridges and two bridge widenings. Bridge types include a combination of single and multi-span bridges, concrete Florida-I Beams and steel plate girders. The design-build team's approved interchange alternative technical concept improves operations and safety during and after construction, while reducing overall impacts and long-term maintenance costs. Other project design elements include complex maintenance of traffic, drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, geotechnical, tolling and surcharge areas to consolidate deep muck.

Leo Rodriguez resume continued

01/21 - Ongoing	**SR 31 PD&E Study, FDOT District One, Lee County, FL** **Structures Engineer.** Leo was the Structures Engineer for this PD&E study to consider the widening of SR 31 and replacement of the Wilson Pigott Bridge over the Caloosahatchee River from SR 80 to SR 78 in Lee County. Alternatives are being evaluated to determine the best option to meet the purpose of the project while avoiding and minimizing impacts to the Florida Gas Transmission line, Sweetwater Marina and natural resources. Responsible for overseeing the preparation of the Natural Resources Evaluation report and Essential Fish Habitat Assessment in accordance with FDOT/FHWA standards to ensure NEPA approval and that the project moves forward successfully through design and permitting.
09/19 - 3/20	**LaPalco Boulevard Movable Bridge over Harvey Canal, Jefferson Parish, LA** **Structures Engineer.** Leo was responsible for the analysis and plans preparation for new fixed bridge and bascule bridge.
06/16 - 12/21	**SR 91 (Florida's Turnpike Mainline) Widening from SR 50 Interchange to Minneola Interchange (MP 273-279), Florida's Turnpike Enterprise, Orange and Lake Counties, FL** **Structures Engineer.** Leo was the Structures Engineer for the $162.3 million widening of six miles of SR 91 from a four-lane to eight-lane limited access facility. The project included a Public Meeting, extensive coordination with local agencies and presentations to County Commissioners and City Councils along with the development of Interlocal Agreements. The design consisted of 6.5 miles of roadway reconstruction including two interchanges, phased maintenance of traffic including a diversion for the length of the project limits, and two roundabouts along CR 455 adjacent to an overpass structure. The structural design effort was from the concept stage through final design for all structural elements on this project which included the replacement of the twin mainline bridges over Jones Road and Old Highway 50, the replacement of the CR 438 and CR 455 bridges, the replacement of the West Orange Trail pedestrian bridge and the addition of a new bridge to convey Fosgate Road over the mainline. The most significant project challenge was the structural design to accommodate traffic control. This required the extensive use of temporary walls and the design of temporary bridges to convey mainline traffic at the three bridge sites. Plans included all electronic tolling facility toll gantries, roadway, drainage, utility coordination, signing and pavement markings, temporary traffic control, structures, lighting, intelligent information systems, environmental permitting and surveying. The project also included the purchase of right-of-way for ponds only. This project is currently in construction.
06/5/21	**SR 50 Widening, FDOT Districts Five and Seven, Hernando and Sumter Counties, FL** **Structures Engineer.** Leo was the Structures Engineer for this project that involves widening eight miles of SR 50 from two-lanes to four-lanes from east of US 301 to east of CR 757. The project extends through the Withlacoochee State Forest and involves extensive environmental coordination with US Fish and Wildlife Service, Southwest Florida Water Management District, US Forestry Service, Acquisition and Restoration Council, two FDOT Districts and local agencies. The river crossing is composed of five spans of AASHTO Type II Beams founded on driven concrete plies to match the configuration of the existing river crossing which will remain in place. The CSX bridges eliminate an existing at-grade rail crossing and will span the full railroad right-of-way with single spans of Florida-I 63 Beams on driven concrete piles with retaining walls at the bridge ends. This project required coordination with CSX and a local mining operation. This project also includes drainage, signing and pavement marking, maintenance of traffic, environmental permitting, right-of-way mapping and public involvement.

16. STAFF EXPERIENCE:

Firm Employed By: DRMP, Inc.				
Name	**Josue Herrera, PE**		Years of Relevant Experience with this Employer	8
Title	Senior Structures Engineer		Years of Relevant Experience with Other(s) Employers	4
Degree(s)/Years/Specialization		BS / 2013 / Civil Engineering | MS / 2017 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE#83894/FL/2-28-2027		
Year Registered	FL - 2017	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Engineer		

Josue serves as a Senior Structures Engineer for DRMP's Transportation Market Sector. He has been involved in all phases of design, from preliminary engineering to the final design of **highway-related structures** for conventional and design-build projects. Josue is responsible for the preparation of preliminary and final design calculations and plans production on **rehabilitation, bridge replacement and new bridge projects**.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
04/18 - 02/20 SECTION 17 PROJECT	**SR 528/SR 436 Interchange Improvements and SR 528 Widening from SR 436 to Goldenrod Road (Contract No. 528-143), Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Josue was the Structures Engineer responsible for design and plans preparation for all bridges, as well as, the design of temporary critical walls and permanent walls for the reconstruction of the SR 528/SR 436 interchange and widening of SR 528 from 4-lanes to 6-lanes with an auxiliary lane eastbound to Goldenrod Road and westbound to Conway Road. This project includes construction of seven new bridges using a mix of steel box girders and concrete Florida-U Beams as well as the replacement of one box culvert. This project also involved extensive coordination with the Greater Orlando Aviation Authority and the Federal Aviation Administration as this interchange serves as the north entrance and exit to the Orlando International Airport. Other project design elements included complex maintenance of traffic, drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, and geotechnical analysis.
07/20 - 06/24	**SR 538 (Poinciana Parkway) Capacity Improvements from Ronald Reagan Parkway to Cypress Parkway Design-Build (Contract No. 538-165), The Lane Construction Corporation for Central Florida Expressway Authority, Osceola County, FL** **Structures Engineer.** Josue was the Structures Engineer for this $94.4 million design-build project to widen SR 538 from a two-lane undivided roadway to a four-lane divided expressway for seven miles. This project includes the design of new bridges over the Reedy Creek Mitigation Bank, Marigold Avenue and KOA Street using Florida-I Beams and founded on prestressed concrete piles. The bridge over the Reedy Creek Mitigation Bank is over a mile long, designed to minimize environmental impacts and has minimum vertical clearance that allows the safe passage of wildlife below. The project also included over two miles of sound walls, drainage, environmental, permitting, signing and pavement markings, intelligent transportation systems, lighting, all-electronic tolling and utility upgrades for the Toho Water Authority. The design-build team's innovative designs included a revised pile configuration that saved $5 million in project costs.
10/17 - 09/23	**Wekiva Parkway Section 8 Interchange Design-Build, The Lane Construction Corporation for FDOT District Five, Seminole County, FL** **Structures Engineer.** Josue was the Structures Engineer responsible for design and plans preparation, temporary critical walls and permanent walls for the design of a limited access toll road starting from Orange Boulevard to east of Rinehart Road. This $263.3 million project includes a new system to system interchange that connects I-4, SR 417 and SR 429 as well as accommodates future express lanes. The project includes 20 new bridges and two bridge widenings. Bridge types include a combination of single and multi-span bridges, concrete Florida-I Beams and steel plate girders. The design-build team's approved interchange alternative technical concept improves operations and safety during and after construction, while reducing overall impacts and long-term maintenance costs. Other project design elements include complex maintenance of traffic, drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, geotechnical, tolling and surcharge areas to consolidate deep muck.

Josue Herrera resume continued

06/18 - 05/19	**SR 91 (Florida's Turnpike Mainline) Widening from SR 50 Interchange to Minneola Interchange (MP 273-279), Florida's Turnpike Enterprise, Orange and Lake Counties, FL** **Structures Engineer.** Josue was the Structures Engineer responsible for design of girders, abutments and assisted in the plans preparation for the $162.3 million widening of six miles of SR 91 from a four-lane to eight-lane limited access facility. The project included a Public Meeting, extensive coordination with local agencies and presentations to County Commissioners and City Councils along with the development of Interlocal Agreements. The design consisted of 6.5 miles of roadway reconstruction including two interchanges, phased maintenance of traffic including a diversion for the length of the project limits, and two roundabouts along CR 455 adjacent to an overpass structure. The structural design effort was from the concept stage through final design for all structural elements on this project which included the replacement of the twin mainline bridges over Jones Road and Old Highway 50, the replacement of the CR 438 and CR 455 bridges, the replacement of the West Orange Trail pedestrian bridge and the addition of a new bridge to convey Fosgate Road over the mainline. The most significant project challenge was the structural design to accommodate traffic control. This required the extensive use of temporary walls and the design of temporary bridges to convey mainline traffic at the three bridge sites. Plans included all electronic tolling facility toll gantries, roadway, drainage, utility coordination, signing and pavement markings, temporary traffic control, structures, lighting, intelligent information systems, environmental permitting and surveying. The project also included the purchase of right-of-way for ponds only. This project is currently in construction.
09/16 - 08/17	**SR 388 Widening, FDOT District Three, Bay County, FL** **Structures Engineer.** Josue was the Structures Engineer responsible for the design of the girders, deck, pile bents and abutments bridge and assisted in the plans preparation for the new bridges for the widening of SR 388 in Bay County from a two-lane minor arterial to a four-lane suburban facility with design accommodations for the ultimate 6-lane urban section. The design included a raised median, bike lanes, sidewalks and a shared use path. Two new bridges were designed to span Burnt Mill Creek, 2,000 feet of existing causeway and provide wildlife accommodation. Shorter span lengths over the causeway are supported on pile bents which transition to longer spans on pier supports over the waterway to provide for improved navigational clearances. Project challenges included poor soils, a severe skew at the channel crossing and vessel impact analysis.
05/16 - 01/19	**SR 397 (John Sims Parkway) over Toms Bayou Bridge Replacement, FDOT District Three, Okaloosa County, FL** **Structures Engineer.** Josue was the Structures Engineer responsible for the design and plans preparation for the new northbound bridge which will replace the existing functionally obsolete northbound bridge (No. 570055). The bridge will span over Toms Bayou in eight 72-foot spans and two 54-foot spans for a total bridge length of 684 feet. The superstructure consists of four Florida-I 36 Beams spaced at 12'-3" with 5'-0¾" overhangs on 24" piles. The beams support an 8½" cast-in-place composite reinforced concrete deck. The total superstructure depth is 3'-11", including an 8½" deck, 2½" buildup and a 3'-0" beam. The deck will accommodate two 12-foot lanes, an eight-foot shoulder and a five-foot barrier protected sidewalk. This project includes the bolstering of existing revetments to resist wave impacts. The project also included field survey, geotechnical investigation and hydraulic analysis, roadway design, traffic control design, drainage design, environmental permitting, and public involvement.

16. STAFF EXPERIENCE:

Firm Employed By: DRMP, Inc.					
Name	**Nicole Catino, PE**			Years of Relevant Experience with this Employer	9
Title	Senior Structures Engineer			Years of Relevant Experience with Other(s) Employers	9
Degree(s)/Years/Specialization			BS / 2007 / Civil and Environmental Engineering		
Active Registration Number/State/Expiration Date			PE No. 74650 / FL / 2-28-2027		
Year Registered	FL - 2012	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Engineer			

Nicole serves as a Senior Structures Engineer for DRMP's Transportation Market Sector. Her primary duties consist of **design of structural elements**, production of structures plan sets, and calculation of quantities. She has been involved in all phases of design, from preliminary engineering to final design of **highway-related structures** for conventional and design-build projects.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
04/18 - 02/20 SECTION 17 PROJECT	**SR 528/SR 436 Interchange Improvements and SR 528 Widening from SR 436 to Goldenrod Road (Contract No. 528-143), Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Nicole was responsible for the overall interchange bridge layout, design of two bridges and plans QC of the curved and skewed steel box girders bridges for the reconstruction of the SR 528/SR 436 interchange and widening of SR 528 from four-lanes to six-lanes with an auxiliary lane eastbound to Goldenrod Road and westbound to Conway Road. This project includes construction of seven new bridges using a mix of steel box girders and concrete Florida-U Beams as well as the replacement of one box culvert. This project also involved extensive coordination with the Greater Orlando Aviation Authority and the Federal Aviation Administration as this interchange serves as the north entrance and exit to the Orlando International Airport. Other project design elements included complex maintenance of traffic, drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems and geotechnical analysis.
11/20 - 09/23 SECTION 17 PROJECT	**SR 516 (Lake Orange Expressway) from Orange/Lake County Line to SR 429 (Segment 3) (Contract No. 516-238), Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Nicole was a Structures Engineer for this new systems interchange connecting SR 429 to SR 516, a new 4-lane limited access toll facility that extends to US 27. This interchange includes five new bridges, with two using concrete Florida-U beams and three using steel box girders and four bridge widenings, where three are using Florida-I beams and one is using steel I-girders. This project also includes two miles of roadway improvements along SR 429, which includes widening, adding ramps, and milling and resurfacing of the remaining existing roadway, a new dual teardrop roundabout at the interchange with Valencia Parkway, permitting with FDEP and SFWMD, coordination with Orange County, Lake County, and local landowners, drainage, intelligent transportation systems, lighting, signing and pavement markings, tolling, aesthetics, and geotechnical services.

Nicole Catino resume continued

10/17 - 09/23	**Wekiva Parkway Section 8 Interchange Design-Build, The Lane Construction Corporation for FDOT District Five, Seminole County, FL** **Structures Engineer.** Nicole was responsible for the overall interchange bridge layout and all aspects of the superstructure design of three curved and skewed steel I-Girder bridges, including 3D finite element modeling. This $263.3 million project includes construction of 2.63 miles of limited access toll road starting from Orange Boulevard to east of Rinehart Road, a new system to system interchange that connects I-4, SR 417 and SR 429 as well as accommodates future express lanes. The project includes 20 new bridges and two bridge widenings. Bridge types include a combination of single and multi-span bridges, concrete Florida-I Beams and steel plate girders. The design-build team's approved interchange alternative control plan improves operations and safety during and after construction, while reducing overall impacts and long-term maintenance costs. Other project design elements include complex maintenance of traffic, drainage design,permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, geotechnical, tolling and surcharge areas to consolidate deep muck.
04/16 - 04/18	**SR 528 (Beachline Expressway) at Innovation Way Interchange Design-Build, The Lane Construction Corporation for Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Nicole was the Structures Engineer for this design-build project which involves bridge design for five bridge sites and the construction of a new interchange alignment between the proposed Innovation Way extension and existing SR 528. Roadway, signing and pavement marking, signalization, fiber optic network, lighting and retaining wall plans were complete upon initiating design. The five bridge sites include two ramp structures over the Brightline rail corridor, two structures carrying Innovation Way over Brightline and SR 528 and one widening at SR 528 over Innovation Way. The two ramp bridges consist of Florida-I Beams supported by post-tensioned, inverted-tee piers and are founded on prestressed concrete piles. In addition, the piers supporting the ramps are oriented at an approximate 60-degree skew angle and implement aesthetic column shapes. The Innovation Way bridges also utilize Florida-I Beams founded on prestressed concrete piles. The bridge widening at SR 528 implements AASHTO Type II Beams supported by standard piers and is founded on steel H-piles. The project includes the preparation of structural calculations and final plans for the bridge components, bridge load ratings and design and details for crash walls at the railroad crossings.
01/17 - Ongoing	**I-95 Express Lanes and Ramp Signals – Phase 3A-1 From South of Broward Boulevard to North of Commercial Boulevard, BCC Engineering, Inc./The de Moya Group, Inc. for FDOT District Four, Broward County, FL** **Structures Engineer.** Nicole was the Structures Engineer for the widening of I-95 over Powerline Road as part of a design-build project which involved the widening of I-95 for approximately 6.6 miles and included 13 bridge sites. The existing I-95 over Powerline Road Bridges are twin, 4-span steel girder bridges consisting of 97'-3" approach spans and 153'-3" main spans for an overall bridge length of 501-feet, with the two center spans being continuous. The substructures consist of reinforced concrete abutments and piers founded on prestressed concrete piles. The southbound bridge was widened 28'-2 5/8" and the northbound bridge was widened 27'-8 3/8" in order to incorporate two express lanes in each direction. The widening of the bridges was designed to match the existing structures, with the exception of the pier foundations. With the coordination of the design-build team, drilled shafts were used in place of driven piles to support the new piers in order to minimize the disruptions to traffic along Powerline Road during construction.
08/12 - 08/15	**Palm Bay Parkway Design-Build, Community Asphalt for City of Palm Bay, Brevard County, FL** **Structures Engineer.** Nicole was for this design-build LAP project which included the construction of a new 240-foot, 4-span Florida-I Beam bridge supported on pile bents and crossing the C-1 Canal as well as a new 100-foot double concrete box culvert. Responsibilities included bridge layout, production of calculations and plans, coordination with other engineering disciplines and permitting agencies as well as working closely with the Contractor as part of the design-build process.
08/11 - 10/13	**I-595 Express Corridor P3 and Design-Build, Dragados USA for FDOT District Four, Broward County, FL** **Structures Engineer.** Nicole was responsible for the design, analysis and plans production of the value engineering redesign of the new I-595 Ramp I over Hiatus Road from a steel girder to a Florida-I Beam superstructure. This 357-foot long, 3-span bridge contained the longest Florida-I Beams (160'-2" long FIB-72) used on the I-595 Express project.

16. STAFF EXPERIENCE:

Firm Employed By: DRMP, Inc.				
Name	**Hung Tu, PE, SE**		Years of Relevant Experience with this Employer	8
Title	Structures Engineer		Years of Relevant Experience with Other(s) Employers	0
Degree(s)/Years/Specialization		BS / 2015 / Civil Engineering | MS / 2018 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE No. 048629 / NC / 12-31-2025 | PE No. 89055 / FL / 02-28-2027 PE No. 048456 / GA / 12-31-2025 | SE No. 001365 / GA / 12-31-2025 SE No. 081008759 / IL / 11-30-2026		
Year Registered	PE FL - 2020 PE GA - 2022 SE GA - 2022 SE IL - 2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Engineer		

Hung serves as a Structures Engineer for DRMP's Transportation Market Sector. His primary duties consist of **design of structural elements** and production of structures plan sets. His design assignments have included **AASHTO Girder bridges**, Florida-I Beam bridges, pedestrian bridges, conventional reinforced concrete piers and **minor bridge widenings**. He has experience working on both conventional and design-build projects. He also has design experience in mast arms, cantilever signs, span signs, drilled shafts, **box culverts**, **bridge load ratings** and shop drawing reviews.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
11/20 - 09/23 SECTION 17 PROJECT	**SR 516 (Lake Orange Expressway) from Orange/Lake County Line to SR 429 (Segment 3) (Contract No. 516-238), Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Hung was the structural engineer for this new systems interchange connecting SR 429 to SR 516, a new 4-lane limited access toll facility that extends to US 27. This interchange includes five new bridges, with two using concrete Florida-U Beams and three using steel box girders and four bridge widenings, where three are using Florida-I Beams and one is using steel I-girders. This project also includes two miles of roadway improvements along SR 429, which includes widening, adding ramps and milling and resurfacing of the remaining existing roadway, a new dual teardrop roundabout at the interchange with Valencia Parkway, permitting with FDEP and SFWMD, coordination with Orange County, Lake County and local landowners, drainage, intelligent transportation systems, lighting, signing and pavement markings, tolling, aesthetics and geotechnical services.
04/18 - 02/20 SECTION 17 PROJECT	**SR 528/SR 436 Interchange Improvements and SR 528 Widening from SR 436 to Goldenrod Road (Contract No. 528-143), Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Hung was responsible for the preparation of structural calculations and final plans for the bridge components, bridge load ratings, quantity computations of all bridge sites and shop drawing review during post design for the design of the reconstruction of the SR 528/SR 436 interchange and widening of SR 528 from 4-lanes to 6-lanes with an auxiliary lane eastbound to Goldenrod Road and westbound to Conway Road. This project includes six new steel box girder bridges totaling $4.6 million pounds of steel, one new bridge using Florida-U Beams and the replacement of one box culvert. This interchange serves as the north entrance and exit to the Orlando International Airport and involved complex maintenance of traffic design. Other project design elements included drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems and geotechnical analysis.

Hung Tu resume continued

06/17 - 05/19	**SR 91 (Florida's Turnpike Mainline) Widening from SR 50 Interchange to Minneola Interchange (MP 273-279), Florida's Turnpike Enterprise, Orange and Lake Counties, FL** **Structures Engineer.** Hung was a structures engineer for the $162.3 million widening of six miles of SR 91 from a 4-lane to 8-lane limited access facility. The project included a Public Meeting, extensive coordination with local agencies and presentations to County Commissioners and City Councils along with the development of Interlocal Agreements. The design consisted of 6.5 miles of roadway reconstruction including two interchanges, phased maintenance of traffic including a diversion for the length of the project limits, and two roundabouts along CR 455 adjacent to an overpass structure. The structural design effort was from the concept stage through final design for all structural elements on this project which included the replacement of the twin mainline bridges over Jones Road and Old Highway 50, the replacement of the CR 438 and CR 455 bridges, the replacement of the West Orange Trail pedestrian bridge and the addition of a new bridge to convey Fosgate Road over the mainline. The most significant project challenge was the structural design to accommodate traffic control. This required the extensive use of temporary walls and the design of temporary bridges to convey mainline traffic at the three bridge sites. Plans included all electronic tolling facility toll gantries, roadway, drainage, utility coordination, signing and pavement markings, temporary traffic control, structures, lighting, intelligent information systems, environmental permitting and surveying. The project also included the purchase of right-of-way for ponds only.
04/17 - 04/18	**SR 528 (Beachline Expressway) at Innovation Way Design-Build, The Lane Construction Corporation for Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Hung was responsible for the preparation of structural calculations and final plans for this design-build project which involved bridge design for five bridge sites and construction of a new interchange alignment between the proposed Innovation Way extension and existing SR 528. Roadway, signing and pavement marking, signalization, fiber optic network, lighting and retaining wall plans were completed upon initiating design. The five bridge sites included two ramp structures over the Brightline rail corridor, two structures carrying Innovation Way over Brightline and SR 528 and one widening at SR 528 over Innovation Way. The two ramp bridges consisted of Florida-I Beams (FIB) supported by post-tensioned, inverted-tee piers and were founded on prestressed concrete piles. In addition, the piers supporting the ramps were oriented at an approximate 60 degree skew angle and implemented aesthetic column shapes. The Innovation Way bridges also used FIBs founded on prestressed concrete piles. The bridge widening at SR 528 implemented AASHTO Type II Beams supported by standard piers. The project included the preparation of structural calculations and final plans for the bridge component, bridge load ratings and design and details for crash walls at the railroad crossings.
10/17 - 09/23	**Wekiva Parkway Section 8 Interchange Design-Build, The Lane Construction Company for FDOT District Five, Seminole County, FL** **Structures Engineer.** Hung was responsible for the preparation of structural calculations and final plans for the bridge components, bridge load ratings, quantity computations of all bridge sites and shop drawing review during post design for the design of a limited access toll road starting from Orange Boulevard to east of Rinehart Road. This $263.3 million project includes a new system to system interchange that connects I-4, SR 417 and SR 429 as well as accommodates future express lanes. The project includes 20 new bridges and two bridge widenings. Bridge types include a combination of single and multi-span bridges, concrete Florida-I Beams and steel plate girders. The design-build team's approved interchange alternative technical concepts improves operations and safety during and after construction, while reducing overall impacts and long-term maintenance costs. Other project design elements include complex maintenance of traffic, drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, geotechnical, tolling and surcharge areas to consolidate deep muck.

16. STAFF EXPERIENCE:

Firm Employed By: DRMP, Inc.				
Name	**Sanjeev Howlader, PE**		Years of Relevant Experience with this Employer	2
Title	Senior Structures Engineer		Years of Relevant Experience with Other(s) Employers	13
Degree(s)/Years/Specialization		BS / 2004 / Civil Engineering | MS / 2008 / Structural Engineering		
Active Registration Number/State/Expiration Date		PE No. 048629 / NC / 12-31-2025 | PE No. 83578 / FL / 02-28-2027 PE No. 43568 / MD / 12-22-2025 | PE No. 0402057462 / VA / 03-31-2027 PE No. 2021039974 / MO / 12-31-2025 | PE No. 28847 / KS / 4-30-2026		
Year Registered	FL - 2017 MD - 2013 VA - 2017 MO - 2021 KS - 2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Bridge Design Engineer		

Sanjeev serves as a Structures Senior Engineer for DRMP's Transportation Market Sector. He has **15 years** of experience in structural design and is knowledgeable of current **AASHTO**, **AREMA**, **LRFD**, **AISC**, and **ACI** codes. Sanjeev has been involved in all phases of design, from preliminary engineering to the final design of highway-related structures for both conventional design and design-build projects. His design assignments have included **steel (straight, curved)**, **prestressed**, movable, and pedestrian bridges. He also has experience in the design of **box culverts**, MSE walls, retaining walls and **sign structures**, as well as, load ratings and bridge inspections.

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).
09/22 - Ongoing SECTION 17 PROJECT	**I-275 at I-4 Interchange Improvements Design-Build, The Lane Construction Corporation for FDOT District Seven, Hillsborough County, FL** **Senior Structure Engineer.** Sanjeev is responsible for preparing the superstructure calculations for the curved steel box bridge for this interchange improvements project, which includes the design and construction of six new bridges, eight bridge widenings/ modifications, four existing bridge coatings, and two existing bridge railing retrofits; widening the existing roadway from 2-lanes to 3-lanes in specific segments; improving existing drainage facilities, and providing complex temporary traffic control plans throughout each phase of the project to minimize disruption for all users. The design-build team's innovative alternative technical concept includes an innovative new dual-lane flyover bridge to accommodate the I-275 southbound traffic onto I-4 eastbound without needing a complex widening. This eliminates over 100 detours by performing off-line construction and provides FDOT with the opportunity to add a new I-4 eastbound auxiliary lane to the Selmon Expressway exit just east of the downtown interchange. Other project design elements include permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, and geotechnical.
01/23 - 09/23 SECTION 17 PROJECT	**SR 516 (Lake Orange Expressway) from Orange/Lake County Line to SR 429 (Segment 3) (Contract No. 516-238), Central Florida Expressway Authority, Orange County, FL** **Structures Engineer.** Sanjeeve was a structures engineer for this new systems interchange connecting SR 429 to SR 516, a new 4-lane limited access toll facility that extends to US 27. This interchange includes five new bridges, with two using concrete Florida-U Beams and three using steel box girders and four bridge widenings, where three are using Florida-I Beams and one is using steel I-girders. This project also includes two miles of roadway improvements along SR 429, which includes widening, adding ramps and milling and resurfacing of the remaining existing roadway, a new dual teardrop roundabout at the interchange with Valencia Parkway, permitting with FDEP and SFWMD, coordination with Orange County, Lake County and local landowners, drainage, intelligent transportation systems, lighting, signing and pavement markings, tolling, aesthetics and geotechnical services.

Sanjeev Howlader resume continued

01/23 - 09/23	**Wekiva Parkway Section 8 Interchange Design-Build, The Lane Construction Corporation for FDOT District Five, Seminole County, FL** **Senior Structure Engineer**. Sanjeev was responsible for reviewing RFIs and shop drawings for the design of a limited access toll road starting from Orange Boulevard to east of Rinehart Road. This $266 million project includes a new system to system interchange that connects I-4, SR 417 and SR 429 as well as accommodates future express lanes. The project includes 20 new bridges and two bridge widenings. Bridge types include a combination of single and multi-span bridges, concrete Florida-I Beams and steel plate girders. The design-build team's approved interchange alternative technical concept improves operations and safety during and after construction, while reducing overall impacts and long-term maintenance costs. Other project design elements include complex maintenance of traffic, drainage design, permitting, signing and pavement marking, lighting, signalization, intelligent transportation systems, landscape, geotechnical, tolling and surcharge areas to consolidate deep muck.
05/23 - Ongoing	**SR 534/SR 417 Systems and Service Interchange, Central Florida Expressway Authority, Orange County, FL** **Senior Structure Engineer.** Sanjeev is responsible for preparing the superstructure and substructure calculations for the curved steel box bridge and concrete bridge for this project that includes three main components: a new systems interchange that connects SR 534, a new limited access expressway, to SR 417; a new multi-level service interchange connecting Medical City Drive to SR 417; and a new limited access expressway from SR 417 to Laureate Boulevard. This project includes the design of over 15 miles of new roadway construction, three miles of resurfacing, and 20 ramps; five new pond sites and pond modifications to the existing system; as well as 14 bridges, including curved steel box girders, straddle bents, Florida-U beams, and four widenings, including one over a railroad. The new SR 534/SR 417 systems interchange is located between the closely spaced existing Boggy Creek Road/Jeff Fuqua Boulevard (South Access Road)/SR 417 systems interchange and Lake Nona Boulevard/SR 417 service interchange. The entire design accommodates for CFX's future ultimate typical section. The project requires extensive agency coordination with Orange County, City of Orlando, Tavistock Development Company, GOAA, FDEP, USACE, Water Management Districts, and numerous Utility Agency Owners. The project also includes aesthetics, temporary traffic control plans, intelligent transportation systems (ITS), lighting, signals, signing and pavement markings, nine all-electronic tolling sites, accommodations for flex lanes, geotechnical services, survey, and utility coordination.

16. STAFF EXPERIENCE:

Firm Employed By: DRMP, Inc.			
Name	**Mark Jones, PE**	Years of Relevant Experience with this Employer	6
Title	Georgia Area Leader	Years of Relevant Experience with Other(s) Employers	35
Degree(s)/Years/Specialization	BS / 1984 / Civil Engineering		
Active Registration Number/State/Expiration Date	PE No. 42104 / LA / 03-31-2026 | PE No. 20413 / TN / 04-30-2025 PE No. 55733 / FL / 02-28-2027 |PE No. 26793 / GA / 12-31-2025 PE No. 27283 / KN / 06-30-2027 |PE No. 108074 / TX / 12-31-2025 PE No. 30255 / SC / 06-30-2026		
Year Registered	LA - 2017 TN - 1989 FL - 2000 GA - 2001 KN - 2010 TX - 2011 SC - 2012	Discipline	Civil Engineering
Contract Role(s)/Brief Description of Responsibilities	Bridge Design Engineer		

Mark has 40 years of civil engineering experience. He started his career with three years of bridge construction, giving him firsthand experience in the practical approach to bridge design. Through the years, he has led many bridge design teams for both new construction and the **rehabilitation of existing structures**. He has a broad range of experience in **railway**, **highway and pedestrian bridges** including **plate girders**, **cast-in-place concrete and accelerated bridge construction**. He has designed, repaired and rehabilitated **bridges for Class 1 and Shortline railroads** like those contained in this proposal. He has inspected more than one thousand bridges in his career and has a comprehensive, working knowledge of **railroad safety practices and operations**. Mark is a member of the American Railroad Engineering and Maintenance-of-Way Association, Committee 10. As a committee member, he is involved in the formulation of inspection practices that are used throughout the railroad industry. Mark has worked as a **consultant to Norfolk Southern Railroad for the last 46 years** and is well-versed in the review process.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
11/20 - 09/23 SECTION 17 PROJECT	**SR 516 (Lake Orange Expressway) from Orange/Lake County Line to SR 429 (Segment 3) (Contract No. 516-238), Central Florida Expressway Authority, Orange County, FL** **QA/QC Manager.** Mark provided QA/QC for this new systems interchange connecting SR 429 to SR 516, a new 4-lane limited access toll facility that extends to US 27. This interchange includes five new bridges, with two using concrete Florida-U Beams and three using steel box girders and four bridge widenings, where three are using Florida-I Beams and one is using steel I-girders. This project also includes two miles of roadway improvements along SR 429, which includes widening, adding ramps and milling and resurfacing of the remaining existing roadway, a new dual teardrop roundabout at the interchange with Valencia Parkway, permitting with FDEP and SFWMD, coordination with Orange County, Lake County and local landowners, drainage, intelligent transportation systems, lighting, signing and pavement markings, tolling, aesthetics and geotechnical services.
11/21 - Ongoing	**Glynn Avenue Link Trail from Overlook Park to the F.J. Torras Causeway (PI No. 0015400), Glynn County, GA** **Division Manager.** For the locally sponsored GDOT TAP funded project, Mark served as the Division Manager. The new alignment project is an approximately 0.54-mile shared use path that connects Marshes of Glynn Overlook Park to the F.J. Torras Causeway. The shared use path will be 10-feet wide and primarily consist of an elevated boardwalk over marshland to minimize impacts to environmental resources. Improvements to include landscaping, covered overlook rest areas and specialized pedestrian lighting. The Bridge is founded on deep foundation piles and AASHTO Type II Beam superstructure. Total overall project estimate at $11 million.

Mark Jones resume continued

11/21 - 07/25	**Bridge Replacement CR 31 at Little Goose Creek (GDOT PI 0016564), GDOT, Wayne County, GA** **Project Manager.** Mark served as the project manager for the design of a three span; 160-ft bridge utilizing 27-inch Box Beams supported by Metal Shell pile bents to replace an existing 120-foot bridge structure. The bridge design included the preparation of 3500 Series plans in accordance with GDOT standards. The project included bridge design, hydrologic and hydraulic study (H&H), surveys, roadway approaches and environmental permitting coordination.
10/21 - 07/25	**Bridge Replacement CR 31 at Little Goose Creek (GDOT PI 0016565), GDOT, Wayne County, GA** **Project Manager.** Mark served as the project manager for the design of a three span; 150-ft bridge utilizing 27-inch Box Beams supported by concrete pile bents to replace an existing 108-foot bridge structure. The bridge design included the preparation of 3500 Series plans in accordance with GDOT standards. The project included bridge design, hydrologic and hydraulic study (H&H), surveys, roadway approaches and environmental permitting coordination.
09/21 - 07/25	**GDOT FY-2020 Bridge Bundles Batch 1 (PI No. 0016604), Bulloch County, GA** **Project Manager.** Mark served as the project manager for the design of one 2-lane, bridge utilizing a PSC cored slab superstructure supported by PSC pile bents across a non-navigable waterway. Bridge was composed of 40-foot spans for a total length of 200 feet. Services included, surveying, geotechnical investigations, subsurface utility locating, hydraulic and scour analysis, structural design and preliminary and final construction plans. [Date: 2020 - Ongoing I Cost $1,050,000]
07/21 - Ongoing	**Bridge Replacement SR 31 at Red Bluff Creek Tributary (GDOT PI 0016504), Atkinson County, GA** **Project Manager.** Mark served as the project manager for the design of a three span (130-foot) bridge utilizing AASHTO Type II beams supported by Metal Shell Pile bents to replace an existing, triple barrel box culvert. The bridge design included the preparation of 3500 Series plans in accordance with GDOT standards. The project included bridge design, hydrologic and hydraulic study (H&H), surveys, roadway approaches and environmental permitting coordination.
07/21 - Ongoing	**Bridge Replacement SR 31 at Red Bluff Creek (GDOT PI 0016505), Atkinson County, GA** **Project Manager.** Mark served as the project manager for the design of a five span (five at 40 inches) bridge utilizing AASHTO Type II beams supported by concrete pile bents to replace an existing, triple barrel box culvert. The bridge design included the preparation of 3500 Series plans in accordance with GDOT standards. The project included bridge design, hydrologic and hydraulic study (H&H), surveys, roadway approaches and environmental permitting coordination.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Alex Farr, PE**			Years of Relevant Experience with this Employer	11
Title	Project Manager			Years of Relevant Experience with Other(s) Employers	2
Degree(s)/Years/Specialization			BS / 2011 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 40426 / LA / 09-30-2026		
Year Registered	2016	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Discipline Lead - Roadway Design Engineer			

Alex will serve as the **roadway design lead** for this project. He has extensive experience in transportation infrastructure and **traffic safety.** He began his career at the LADOTD in the Highway/Traffic Safety Unit, where he gained expertise in **geometric design**, **traffic control**, and **construction planning**. Since joining Waggoner in 2014, Alex has led roadway design and plan preparation, cost estimating, budgeting, and contract negotiations. His technical proficiency in maintenance of traffic, construction signing plans, and cost analysis ensures the successful execution of roadway improvement projects.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/13 – 07/22 SECTION 17 PROJECT	**I-10: East Jct. I-49 to LA 328, Lafayette and St. Martin Parishes, LA (H.003003)** **I-10: LA 328 to LA 347, St. Martin Parish, LA (H.003014)** **I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish, LA (H.003014)** **Project Engineer.** Alex prepared road design plans for the interstate, ramps, and overpasses for all 3 segments of I-10. The TMPs pertained to alternate route analysis, public information, stakeholder involvement, traffic and safety data, temporary traffic control, and work zone impact management strategies. Alex was also responsible for the suggested sequence of construction, temporary signing, and quantity computations for each construction funding source and control section. Alex prepared road design plans for the interstate, ramps, and overpasses for all three segments of I-10.
01/17 - Ongoing SECTION 17 PROJECT	**I-49 South: US 90 & Ambassador Caffery Interchange, Lafayette Parish, LA (H.002868)** **Project Engineer.** Alex was responsible for the storm sewer drainage design along the northbound and southbound service roads for this project. Alex was also responsible for preparing a traffic signal plan including a traffic signal warrant analysis as well as an operational analysis concerning the two new proposed signals at the NB and SB service roads and Ambassador Caffery. Alex also developed the Transportation Management Plan (TMP) for this project to minimize impacts to the traveling public throughout construction.
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Project Engineer.** Alex was responsible for developing the proposed vertical profiles along the entire mainline corridor as well as their respective service roads, surface streets, entrance, and exit ramps. This included determining existing vertical clearance along the corridor and adjusting the profile to meet the minimum vertical clearance per LADOTD minimum design guidelines. This was performed along this corridor by using as-builts pertaining to their respective locations. Alex was also responsible for calculating the roadway and bridge construction costs for the Project Opinion of Probable Costs
2019 - Ongoing	**Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA** **Project Manager.** Waggoner was contracted by the East Baton Rouge Parish Department of Transportation and Drainage (EBR LADOTD) through the MOVEBR Program to design the extension of Jones Creek Road from the existing Tiger Bend Road intersection to a new terminus point on Airline Highway. The project includes a two-mile four-lane boulevard on new alignment, green infrastructure drainage features, a roundabout at Jefferson Highway, a new residential subdivision access point for an existing subdivision, a new bridge over Claycut Bayou, topographic and right-of-way mapping, and stormwater detention ponds to control outfall channel levels. Alex is serving as the Project Manager for this project, designing the roadway geometrics, typical sections, geometric details, cross sections, MOT, quantities, and construction cost estimates.

Alex Farr resume continued

10/20 - Ongoing	**Rural Bridge Replacement Initiative Phase II (South), LA (440001338)** **Project Manager.** Alex is responsible for the plan development of this project, which is for 16 state projects including 29 bridge replacement sites throughout south Louisiana. This includes preparing the Project Design Report (PDR) as well as the horizontal and vertical geometry. As some bridge sites are allowed to be closed for construction while others must remain open, Alex is also responsible for designing a detour route or diversion road, which includes a suggested sequence of construction. Alex is also responsible for the guardrail design at each bridge site. Along with plan development, Alex will be assisting the Project Manager in subconsultant coordination as well as invoicing and progress reporting to the LADOTD Project Manager.
08/18 – 10/22	**I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370)** **Project Engineer.** Alex was responsible for performing the design of the ramp's profiles, including the super elevation calculations as well as the graphical grades. Alex was also responsible for the permanent striping plans, clearing and grubbing plans, and the quantity estimate.
10/20 - Ongoing	**I-10 & I-12 College Drive Flyover Ramp Design-Build (CE&I/OV), E. Baton Rouge Parish, LA (H.013897)** **Road and Construction Sequencing Design Reviewer.** Alex is serving as a road and construction sequencing design reviewer, providing support services to LADOTD for this Project. This project consists of modifying the I-10 West/College Drive exit into separate I¬12 West and I-10 West exits. Mr. Farr's responsibilities include reviews of roadway plans and construction sequencing with consideration being given to LADOTD Design Guidelines and Standard Details and Specifications.
07/19 - 12/22	**MOVEBR Infrastructure Enhancement & Traffic Mitigation Project, East Baton Rouge Parish, LA** **Project Engineer.** Waggoner was part of the program management team for East Baton Rouge Parish's $1.0 billion MOVEBR Infrastructure Enhancement and Traffic Mitigation Program. Alex provided engineering design for projects included in the comprehensive initiative to improve roadways, intersections, and corridors throughout the parish. The MOVEBR program projects focused on capacity increases, safety enhancements, and mobility improvements. Waggoner's responsibilities include developing program design guidelines, managing design consultants, utility coordination, land management, and overseeing multiple corridor and enhancement projects. The program incorporates Complete Street elements, Americans with Disabilities Act (ADA) compliance features, and green infrastructure. Waggoner is involved in all phases from planning through construction, including public outreach, stakeholder engagement, and construction management.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Kelsie Bankston, PE**			Years of Relevant Experience with this Employer	4
Title	Project Engineer			Years of Relevant Experience with Other(s) Employers	3.5
Degree(s)/Years/Specialization			BS / 2018 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 47126 / LA / 03-31-2027		
Year Registered	2022	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Roadway Design Engineer			

For this project, Kelsie will serve on the roadway design team, creating **layouts and plans** in adherence to **LADOTD's required engineering standards** and provide **construction phase support**. She will consider **traffic flow, terrain, and environmental impacts** to optimize designs and minimize risk. She will ensure that all measurements, including travel lanes, shoulder widths, and utility locations, are accurately documented. Her work will contribute to the **preliminary and final plan preparations**, ensuring the designs meet the required LADOTD guidelines. She has over seven years of experience with a focus on **roadway, drainage and structural engineering.** Previously, Kelsie worked as an engineer intern at Forte & Tablada, Inc., where she conducted site visits, assisted with bridge inspections, prepared reports, and **designed bridge replacements**.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/21 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Project Engineer.** Kelsie has assisted in the preparation of various submittals for this project. She has assisted in the typical section design, plan, and profile preparation, required right-of-way and roadway geometrics for various sections and stages of this project, and is responsible for the graphical grading and superelevation design of multiple ramps throughout the corridor. She is responsible for documenting and tracking information, documents, and comments received from LADOTD and other consultants on the design team. Kelsie has performed quantity calculations and prepared quantity tables for various submittal stages.
2021 – 02/23	**LA 73: US 61 (Airline)-Essen Lane, East Baton Rouge, LA (H.010652)** **Project Engineer.** This roadway transfer project involves replacement of the existing LA 73 roadway with a new asphalt pavement section. Kelsie assisted in setting up the base geometry using as-built drawings and survey data for the reconstruction of LA 73, including curb and gutter and sidewalks throughout the limits of the project. She was responsible for all quantity calculations, including compiling the quantity book, and the summary sheets. She also performed the QA/QC of the geometric details.
05/21 – 03/23	**LA 352 Drainage Improvement, St. Martin Parish, LA (H.014415)** **Project Engineer.** This project involves channel improvements and adding subsurface drainage systems to an outfall channel adjacent to LA 352. Kelsie is responsible for the typical sections, plan profiles, developing a suggested sequence of construction, diversion road design for maintenance of traffic, quantity computations, pay item list, and documentation of comments and responses.
04/21 – Ongoing	**Rural Bridge Replacement Initiative Phase II, LA** **Project Engineer.** Kelsie is managing and designing four bridge replacement projects included in this contract. This work includes assessing site conditions, deciding the structure type and size based on the hydraulics of the channel, and designing the roadway approaches. She is responsible for project management, roadway and slab span bridge design, construction plan preparation, quantity computations, and developing an opinion of probable costs.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Charlotte Gremillion, PE**			Years of Relevant Experience with this Employer	5
Title	Project Engineer			Years of Relevant Experience with Other(s) Employers	2
Degree(s)/Years/Specialization			BS / 2018 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 47930 / LA / 09-30-2027		
Year Registered	2023	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Roadway Design Engineer			

Charlotte will be involved with the road design team for this project. She will be responsible for **developing roadway design criteria, performing geometric design,** and ensuring all plans adhere to engineering standards and regulator requirements. Charlotte is experienced with transportation and commercial projects, including **road design, geometric design, and on-site work.** She is trained and experienced in **AutoCAD, Civil 3D, MicroStation,** and **GlobalMapper,** which she uses for plan preparation and design, contributing to high-quality **deliverables that meet LADOTD standards.**

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Lead Design Engineer.** This project is to replace the urban interstate through downtown Baton Rouge under an alternative delivery process. Charlotte serves as a technical design engineer for urban freeways, grade separation interchanges, urban arterials, urban collectors, and local streets. She is the lead design engineer for roundabouts at the Dalrymple Drive Exit Ramp and Terrance Street at Braddock Street intersection. She prepares roadway design calculations, executes technical reviews, and prepares construction plans for several stages, phases, and segments of the project. She also performs quantity calculations and prepares quantity tables for various submittal stages. She is responsible for plan and profile preparation, cross sections, and roadway geometrics for various sections and stages of the project.
01/23 - Ongoing SECTION 17 PROJECT	**Hooper Road Widening (LA 3034 - LA 37), East Baton Rouge Parish, LA (H.009300)** **Project Manager.** Charlotte is the project manager for this comprehensive improvement project transforming Hooper Road from a two-lane rural road to a four-lane urban boulevard. Key elements involve roadway planning, environmental impact assessment, public involvement, and conceptual design of multiple roundabouts. Waggoner is now developing final design and construction plans, featuring a raised median boulevard and a two-lane roundabout at Lovett Road.
10/20 - Ongoing	**I-10/I-12 College Flyover, East Baton Rouge Parish, LA (H.013897)** **Technical Review Engineer.** This project includes design upgrades to a grade separation fully directional interchange of two interstates in Baton Rouge, LA. Charlotte serves as a technical review engineer for the owner verification team on the following design units: definitive design, clearing, and grubbing, roadway (multiple units), drainage, maintenance of traffic (multiple units), pavement marking and signing, SWPPP, and TMP Level 4. Her responsibilities include technical reviews of calculations and drawings for conformance to the minimum guidelines, project technical performance specifications, and contract documents. She manages all technical comments originating from her firm and take part in technical review meetings with the design-builder and owner.
04/21 - Ongoing	**Rural Bridge Replacement Initiative Phase II, LA** **Project Engineer.** Charlotte is in charge of managing a bridge replacement project included in this contract. This work includes assessing site conditions, deciding the structure type, and size based on the hydraulics of the channel, and designing the roadway approaches. She will be responsible for preparing the submittals for each of these bridges as well as submitting monthly progress reports.
09/22 - Ongoing	**LA 1088: Soult and Trinity Roundabouts, St. Tammany Parish, LA (H.010116)** **Project Engineer.** This project includes replacing two intersections and the connecting two-lane urban arterial with roundabouts and a four-lane boulevard section. Charlotte responsibilities include roadway geometrics, design reports, technical calculations, and plan development. She designed all typical sections through the addition of two new roundabouts. She identified and assessed the roadway design constraints in the area when deciding the location of the two roundabouts and roadway approaches. She connected the existing conditions to the new designs so that access would not be limited.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Name	**Steve Gilliam, PE**		Years of Relevant Experience with this Employer	1
Title	Project Engineer		Years of Relevant Experience with Other(s) Employers	7
Degree(s)/Years/Specialization		BS / 2015 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE No. 46515 / LA/ 09-30-2026		
Year Registered	2022	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Roadway Design / Drainage Design Engineer		

As part of the **roadway design** team, Steven will focus on the **topographic surveys,** particularly on the **stationing of the project centerline and measuring cross-sections** of the roadway. He will ensure that **drainage structures**, utilities, and other key features are accurately recorded and integrated into the **final plans**. Steve's attention to detail will ensure that the project designs align with the **LADOTD's requirements** and reflect the existing site conditions. Steven brings a solid understanding of roadway and site planning design principles, as well as experience with surface water and utility engineering. He has provided engineering design for both commercial and residential developments.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Project Engineer.** Steven designed the proposed drainage systems for the surface streets within the project corridor. This includes HydroWIN calculations for subsurface systems, drainage pump plan profiles, and design drainage maps.
01/23 - Ongoing SECTION 17 PROJECT	**Hooper Road Widening (LA 3034 - LA 37), East Baton Rouge Parish, LA (H.009300)** **Project Engineer.** Steven prepared the existing drainage map and designed the proposed drainage for this project. The design includes both open ditch and subsurface drainage streets. He prepared HEC-RAS models, HydroWIN calculations, drainage plan profiles, the drainage report, and both existing and design drainage maps.
04/21 - 08/23	**MoveBR Sherwood Forest Extension, Baton Rouge, LA** **Lead Designer.** Steven's role included civil design, site grading, drainage design, and utility coordination. The project included a new two-lane highway, intersections, and wetland mitigation. (previous experience)
02/23 - Ongoing	**Enterprise Boulevard Extension, Lake Charles, County, LA** **Design Engineer.** Waggoner was retained by the City of Lake Charles to perform engineering, surveying, bidding assistance, and construction administration. The project consists of extending the existing four-lane boulevard section of Enterprise Boulevard northward on a new alignment from its current intersection at Katherine Street to an intersection on N. Goos Boulevard near Woodring Street, widening N. Goos Boulevard northward to its intersection with Fitzenreiter Road, and widening Fitzenreiter Road eastward to its intersection with N. Simmons Street. The project also includes the addition of a bike path to the Riverside Park Complex consistent with the City of Lake Charles Bicycle and Pedestrian Master Plan.
03/22 - Ongoing	**Nail Road Extension - Polk Lane to Center Hill Road, DeSoto County, MS** **Review Engineer.** This project encompasses preliminary engineering design and bid documents for two miles of a new two-lane rural roadway, three-lanes at Polk and Center Hill for turn lanes, and five-lane earthwork on Nail Road from Polk Lane to Center Hill road.
01/19 - 02/20	**Eagle Bend Subdivision, Livingston Parish, LA** **Lead Designer.** For this 34-lot development, Steven's role included civil design, site grading, drainage design, and utility coordination for the subdivision. The project included a re-route of a minor drainage artery, required detention basin, and assuring streets and parking met Parish standards. (previous experience)

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Name	**Bryan Harmon, PE**		Years of Relevant Experience with this Employer	8
Title	Vice President | Special Projects Engineer		Years of Relevant Experience with Other(s) Employers	33
Degree(s)/Years/Specialization		BS / 1981 / Agricultural Engineering | BS / 1982 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE No. 22595 / LA / 01-31-2027		
Year Registered	1987	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Drainage Design Engineer		

Bryan will lead the **hydraulic engineering and drainage design services** ensuring alignment with engineering standards and regulatory requirements. His responsibilities will include providing **hydraulic analysis and design, developing type, size, and location parameters for drainage structures,** and establishing project design criteria. Additionally, Bryan will supervise the planning and implementation of **hydraulics and drainage systems,** ensuring compliance with engineering standards and environmental regulations.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/13 – 07/22 SECTION 17 PROJECT	**I-10: East Jct. I-49 to LA 328, Lafayette & St. Martin Parishes (H.003003)** **I-10: LA 328 to LA 347, St. Martin Parish (H.003014)** **I-10: LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish (H.003014)** **QA/QC.** Bryan performed roadway and drainage design for these three segments of I-10. He also performed superelevation computations and graphical grades to provide positive drainage along relatively flat grades in the median of the interstate. He was also responsible for QA/ QC of the roadway plans and sequence of construction for the LA 347 roundabouts and roadway improvements.
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **Supervising Drainage Engineer.** Bryan is serving as Waggoner's supervising drainage engineer for this major interstate improvement project from just east of the Mississippi River bridge crossing to just west of College Drive. Bryan is responsible for the final drainage design of the interstate collection systems, local frontage roads and drainage outfalls including the bridge hydraulic evaluation of the Acadian Thruway Bridge over Dawson Creek.
2016 - Ongoing SECTION 17 PROJECT	**Hooper Road (LA 408), East Baton Rouge Parish, LA (H.002316/CP#12-CS-HC-0017)** **Hydraulic Design QA/QC.** The project consists of improving Hooper Road in Central, LA from Blackwater Road to Sullivan Road. Bryan performed all QA/QC and hydraulic design oversight for the project including existing and proposed drainage computations, existing drainage areas, pre and post development stormwater parameters, HEC-RAS models of the five existing major cross drains to evaluate existing and proposed conditions, design of reinforced box culverts for cross drains, open ditches and/or drainage structures and piped systems for storm drainage collection. He was the plan checker for the drainage plan and profile, existing and proposed drainage, and the summary of drainage structure sheets. The design computations were performed using HYDRWIN, Global Mapper, HEC-RAS, Excel, and Civil3D.
10/20 - Ongoing	**Rural Bridge Replacement Initiative Phase II (South), LA (440001338)** **Supervising Hydraulic Design Engineer.** Bryan is serving as Waggoner's supervising hydraulic design engineer for the Phase II Rural Bridge Replacement Initiative. Hydrologic and hydraulic evaluations are being developed to provide a hydraulically suitable replacement for the existing bridge structures that have been designated for replacement under this program. All bridge hydraulic reports, data forms, and data tables are being prepared in accordance the current LADOTD Hydraulics manual and design directives.

Bryan Harmon resume continued

08/18 – 10/22	**I-220/I-20 Interchange and BAFB Access Design-Build, Bossier Parish, LA (H.003370)** Bryan was responsible for the evaluation and design of both the existing and proposed drainage systems for this new four-lane rural arterial and roadway. In addition to the standard LADOTD drainage evaluations for storm drain systems (inlets, pipes, box culverts, and bridges) consideration of impacts to the surrounding floodplain storage basins and wetlands had to be considered. The floodplain area along the southern limits of the project is also bisected by the KCSRR and is subject to significant backwater and overbank flooding from Red Chute Bayou. Due to the floodplain complexities associated with this lateral overflow storage area, coordination with the Bossier Levee District was required which included utilizing elements of their 2-D Unsteady Flow Hec Ras Model for this region. Due to the lateral overflows and interchange of flows, consideration of bridge scour was evaluated for the KCSRR Overpass utilizing the HEC -RAS computer model.
08/21 – 05/23	**LA 73: US 61 (Airline Hwy.) – LA 426 (Essen Lane), E. Baton Rouge Parish, LA (H.010652)** **Project Manager.** Bryan was the project manager for the development of preliminary and final plans to fully reconstruct existing LA 73, including complete pavement and base removal and replacement, curbs and gutters and sidewalks from Airline Highway to the I-12 on-ramp near Drusilla Lane, and for concrete pavement patching and repair of damaged curbs and sidewalks from the I-12 on-ramp to Essen Lane. This plan development consists of all engineering services including a summary of estimated of quantities and cost.
05/21 – 03/23	**LA 352 Drainage Improvement, St. Martin Parish, LA (H.014415)** **Lead Hydraulic Engineer.** Bryan is the lead hydraulic engineer for drainage improvements along LA 352 in Henderson, LA. The project includes removing several undersized side drains and side road cross drains with a 10x6 RCB to alleviate regional flooding problems near the I-10 Henderson exit. The design also incorporates a drainage bypass system to balance flows near the interchange. Bryan is responsible for performing HEC-RAS modeling and HYDRO-WIN calculations on the main outfall channel, developing drainage alternatives and associated costs, and QA/QC on the construction plans.
10/20 - Ongoing	**I-10 and I-12 College Drive Flyover Ramp Design-Build (CE&I/OV), E. Baton Rouge Parish, LA (H.013897)** **Road Design and Drainage Design Reviewer.** Bryan is serving as both a road design and drainage design reviewer, providing support services to LADOTD for this Project. This project consists of modifying the I-10 West/College Drive exit into separate I-12 West and I-10 West exits. Bryan's responsibilities include participation in the progress reviews of each Design Unit and Ready for Construction (RFC) Plan submittals. These reviews include roadway plans, construction sequencing, primary drainage systems, open channel design, with consideration being given to LADOTD Design Guidelines, Hydraulics Manual, Standard Details and Specifications, and to potential impacts to the Wards Creek drainage basin and adjoining infrastructure developments. Having served as the Drainage Engineer, Chief Engineer, and ultimately the Director of Public works for the East Baton Rouge City-Parish, Bryan brings significant institutional knowledge of the local drainage and roadway systems within the parish and how they may react to this Project modification. He clearly understands the concerns that may be expressed by the local community and the need for proper public-private communication and partnership on a project of this magnitude.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Name	**Gage Spell, LSI**		Years of Relevant Experience with this Employer	1
Title	Senior Project Designer		Years of Relevant Experience with Other(s) Employers	11
Degree(s)/Years/Specialization		BS / 2017 / Physical Geography		
Active Registration Number/State/Expiration Date		LSI No. 686 / LA / 3-31-2027		
Year Registered	2018	Discipline	Surveying	
Contract Role(s)/Brief Description of Responsibilities		Drainage Design Engineer		

Gage has 11 years of experience in **hydrology and hydraulics modeling, site investigation, and project management**. From 2017 to 2020, he worked on the Livingston Parish Watershed Modeling project, identifying capital improvement opportunities and conducting aerial drone inspections. Over the past decade, Gage has **led drainage design and impact studies** for over 100 commercial and residential developments. His expertise in hydrologic and hydraulic modeling, project coordination, and site analysis will enhance the **drainage design** efforts, ensuring **compliance with LADOTD standards** and effective flood mitigation strategies.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/23 - Ongoing SECTION 17 PROJECT	**Hooper Road Widening (LA 3034 - LA 37), East Baton Rouge Parish, LA** **Sr. Project Designer.** Gage is providing hydrological and hydraulic design for roadway improvements to Hooper Road from Sullivan Road to Greenwell Springs Road. The proposed drainage improvements will include a combination of subsurface and open channel features, as well as major cross drain improvements.
04/21 - 08/23	**MOVEBR, Sherwood Forest Extension, Baton Rouge, LA** **Modeler.** Gage served as the modeler for this project, which involved the extension of Sherwood Forest Boulevard from Greenwell Springs Road to Joor Rd. He created a two-dimensional (2D) hydraulic model to analyze the impacts of proposed roadway alignments and profiles in the Hurricane Creek and Comite River watersheds, ensuring compliance with all MOVEBR design guidelines.
03/25 - Ongoing	**LA 933 at Joe Sevario Road Roundabout, Ascension Parish, LA** **Senior Project Designer.** Waggoner's Baton Rouge Airline team is delivering engineering services for the LA 933 at Joe Sevario Road Roundabout project in Ascension Parish. The team is preparing preliminary and final design plans, right-of-way maps, and roadway lighting specifications to support construction of the new roundabout. This work improves traffic flow and enhances safety at a key intersection in the parish.
2/23 - Ongoing	**Bolivar and Sunflower County Watershed Plan, Cleveland, Bolivar and Sunflower County, MS** **Hydrologic and Hydraulic Modeler.** Gage modeled existing conditions and proposed improvements to identify effective solutions for repetitive flooding in the Bogue Chitto watershed. He analyzed and compared results to provide recommendations to local and state authorities and coordinated with the project team to develop Environmental Assessments in compliance with USDA NRCS standards and requirements. Bolivar County had expressed the desire to collaborate in the development of a Comprehensive Watershed Based Stormwater Management Program to identify, analyze, quantify, prioritize, and develop a short- and long-term implementation plan for both capital and maintenance requirements needed to address drainage-related deficiencies throughout the watershed area as directly related to preserving and enhancing municipal and/or county infrastructure. Waggoner was contracted with Mississippi Soil and Water Conservation Commission to provide engineering and technical support services for six HUC-12 watersheds in Bolivar County.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Joshua Renard, PE**			Years of Relevant Experience with this Employer	19
Title	Land Surveyor			Years of Relevant Experience with Other(s) Employers	1
Degree(s)/Years/Specialization			BS / 2006 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 36015 / LA / 03-31-2027		
Year Registered	2011	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities			Discipline Lead - Utility Coordination		

Joshua will provide utility coordination and develop utility conflict matrices. He will be responsible for **identifying and documenting all utilities,** ensuring **accurate location and mapping** within the project limits. His work will be crucial in coordinating with utility companies and integrating utility adjustments into the preliminary and final design plans, **adhering to LADOTD standards.** With over 19 years of experience, he will ensure effective management of utility related aspects of the project, minimizing risks and maintaining project timelines. Joshua has extensive knowledge in **HEC-RAS, HYDRWIN,** and **PondPack** software packages.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/22 - Ongoing SECTION 17 PROJECT	**LA 408: Hooper Road (Blackwater Bayou to Joor Road) East Baton Rouge Parish, LA (H.002316/CP#12-CS-HC-0017)** **Project Manager.** Joshua was the project manager for the four-lane road widening project in the city of Central. This two-mile rural road includes a new two-lane roundabout and accommodates pedestrians, bicyclists and vehicles. His responsibilities included roadway and drainage design, plan preparation, utility coordination, and SUE services including QL-B designations and QL-A locates.
05/20 - Ongoing SECTION 17 PROJECT	**I-10: LA 415 to Essen Lane on I-10/I-12 (CMAR), East Baton Rouge Parish, LA (H.004100)** **SUE Project Engineer.** Joshua designed the utility duct bank plans to relocate critical existing and new fiber optic and electrical power infrastructure. This immediate relocation served necessary for the fast upcoming I-10 widening project from LA 415 through Essen Lane.
2019 - Ongoing	**MOVEBR Program Management, East Baton Rouge Parish, LA** **Lead Utility Coordinator.** Joshua serves as the main point of contact for all utility companies on 50+ Enhancement Projects on the MOVEBR transportation, road, and traffic program. He is leading the effort to create the Utility Coordination Process and Design Guidelines for Designers- Utility Section. He will serve in this role during both the design and construction phase for the program. He will also utilize SUE services where appropriate to gain pertinent location information for design efforts. He will also work to ensure that relocations are successful and will resolve utility conflicts encountered during construction.
10/23 - Ongoing	**Slidell SUE Services, St. Tammany Parish, LA – Utility Coordination & Relocations** **Project Manager.** Waggoner is tasked with identifying and obtaining as-builts for all utilities at three new roundabout locations on US Hwy. 190 in the city of Slidell, LA. Joshua serves as the project manager for this project. After obtaining as-builts, Waggoner serves as the utility coordinator for the LADOTD and the project designer. Waggoner is assisting with mitigating conflicts through value engineering and is responsible for determining financial responsibility for necessary relocations, as well as negotiating and securing utility relocation agreements, owner commitments and sign-offs for each utility in conflict with the project. Waggoner's effort will ensure that these needed road construction upgrades progress without costly utility delays.
10/16 - 12/20	**I-10: Highland to LA 73 Design-Build Project, East Baton Rouge and Ascension Parishes, LA (H.009250)** **Utility Coordinator.** Joshua served as the utility coordinator for this interstate design-build project. He communicated with and gathered information from utility owners to ensure that the road was designed and the contractor could proceed without conflict. Joshua coordinated efforts to have telecommunications, water, and gas lines marked in the field and then led efforts to have Level A test holes performed to ensure a successful no-conflict design.

Joshua Renard resume continued

02/24 - Ongoing	**Saline Bayou Relief & Mill Cr. Brs. Water Lines Locate & Design - SUE – Utility Coordination, QL-A through D Locates, and Relocation Plans, Winn Parish, LA** **Project Manager.** Waggoner is locating existing water lines and preparing relocation plans for three bridge sites on LA 126 over Saline Bayou, Mill Creek and Cypress Creek in Winn Parish, LA. Josh obtained as-builts, and performed QL-B and QL-A SUE services at each site. He is the engineer of record for the utility relocation plans.
2022	**Subsurface Utility Engineering I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA (H.003370)** **Utility Coordinator.** Joshua coordinated with multiple utilities affected by this project. He was able to obtain detailed information on the size, type and location of the utilities in conflict or potential conflict with construction activities. These included abandoned pipelines, active fiber optic lines, buried cables with unknown ownership, and multiple utilities within KCS Railroad right of way. Joshua then led the SUE team in obtaining level A location information for these utilities.
2016 - 2022	**LA347: Roundabout at Melancon Road, St. Martin Parish, LA (H.009456)** **Project Engineer.** Joshua served as a project engineer for the design of a single lane roundabout in St. Martin Parish. He designed the typical sections and graphical grades for the approach legs, the splitter islands, and the transition to the existing roadways. He also prepared quantities for the project.
	Belle Chasse Bridge and Tunnel Replacement Public-Private Partnership Project, Plaquemines and Jefferson Parish, LA (H.004791) Project Engineer. Joshua served as the drainage design quality control checker for this road design project. His efforts ensure that the project's drainage meets the requirements of the owner, parish and project specifications. This included technical checking for the existing and design drainage maps, HydroWIN calculation checks, drainage plan profile checking, and hydraulic computation book checking.
10/16 - 12/20	**I-10: Highland to LA 73 Design-Build Project, East Baton Rouge and Ascension Parishes, LA (H.009250)** **Utility Coordinator.** Joshua served as the utility coordinator for this interstate design build project. He communicated with and gathered information from utility owners to ensure that the road was designed and the contractor could proceed without conflict. Joshua coordinated efforts to have telecommunications, water, and gas lines marked in the field and then led efforts to have Level A test holes performed to ensure a successful no-conflict design.
2018 - 2019	**Subsurface Utility Engineering Causeway Boulevard at Earhart, Jefferson Parish, LA** **Utility Coordinator.** Joshua managed this utility location project for LADOTD. The primary goal of this project was to locate sewer, water, and fiber lines to provide LADOTD's design team with sufficient information to adjust their design to miss the utilities or have the utilities relocated. Waggoner located utilities through all Quality Levels. He coordinated with utility owners and Waggoner's locating crew to identify, locate, and mark the utilities, as well as coordinated with Waggoner's survey team to have the lines surveyed. Based on the location crew's fieldwork he helped develop a final plan set as well as a Utility Owner Contact List and a Utility Conflict Matrix for delivery to LADOTD
2019	**Subsurface Utility Engineering I-220/I-20 Interchange & BAFB Access Design-Build, Bossier Parish, LA (H.003370)** **Utility Coordinator.** Joshua coordinated with multiple utilities affected by this project. He was able to obtain detailed information on the size, type and location of the utilities in conflict or potential conflict with construction activities. These included abandoned pipelines, active fiber optic lines, buried cables with unknown ownership, and multiple utilities within KCS Railroad right of way. Joshua then led the SUE team in obtaining Level A location information for these utilities.
2019	**Subsurface Utility Engineering Leesville Roundabout, Vernon Parish, LA (H.011909)** **Project Manager.** Joshua served as the project manager for this LADOTD project, which included Level A through D underground utility location at the intersection of Boone Street and US 171 in Leesville, LA. His responsibilities included coordination with utility companies and local government representatives to obtain as-built drawings, meeting with LADOTD representatives, design engineers, surveyors, and subcontractors to coordinate the location work, providing valuable utility location information to the design team. He was also responsible for traffic control plan development, Level A field investigations, SUE plan development, and utility conflict matrix preparation.

16. STAFF EXPERIENCE:

Firm Employed By: Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)					
Name	**Brandon Bollich, EI**			Years of Relevant Experience with this Employer	3
Title	Engineer Intern			Years of Relevant Experience with Other(s) Employers	6
Degree(s)/Years/Specialization			BS / 2015 / Civil Engineering		
Active Registration Number/State/Expiration Date			EI No. 32749 / LA / 09-30-2026		
Year Registered	2016	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Utility Coordination and Bridge Load Rating			

Brandon is an engineer intern with experience in **utility coordination**, **structural design**, and **roadway infrastructure** projects. Before joining Waggoner, he was a Task Manager for **LADOTD** for bridge replacement projects, overseeing project meetings, status tracking, and cost projections. His expertise in alignment studies, site assessments, and compliance with design specifications supports efficient utility coordination and permitting for transportation improvement projects. He has completed National Highway Institute courese in General Superstructure for **LRFD Bridge Design**, **Roadside Safety Design**, **Highway Bridge Superstructures** and **LRFD for Highway Bridge Superstructures**.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/22 - Ongoing SECTION 17 PROJECT	**LA 408: Hooper Road Widening, East Baton Rouge Parish, LA** **Engineer Intern.** Brandon provided bridge and structural design services for this project. This project was for the widening of an existing 2-lane roadway to a 4-lane boulevard to increase capacity. The project began with an Environmental Assessment (EA) and National Environmental Policy Act (NEPA) environmental documentation. Waggoner is facilitating the development of a traffic study with a subconsultant, following criteria established by Louisiana Department of Transportation and Development (LaDOTD). Multiple roadway sections and intersection arrangements are being evaluated through a tiered approach.
01/15 - Ongoing	**Pecue Lane/I-10 Interchange - Phase III, East Baton Rouge Parish, LA** **Engineer Intern.** Brandon served as engineer intern for the project that included the replacement of two slab span bridges over Ward's Creek along Pecue Lane. Brandon was responsible for providing quality control by reviewing and verifying plan sheets, checking reinforcement quantities, and ensuring calculations were correctly incorporated into the plans.
2024	**S. Campus Dr. over Corporation Canal, East Baton Rouge Parish, LA** **Engineer Intern.** Brandon served as an engineer intern for this project. Waggoner's scope of work involved a comprehensive evaluation of the existing lightweight precast concrete slab bridge, which is supported by a reinforced concrete cap and timber piling foundation. The project included an in-depth structural assessment to determine the bridge's current condition and load-carrying capacity. Advanced load rating techniques were employed to evaluate the performance of the precast slabs, reinforced cap, and timber piles under various loading scenarios, ensuring compliance with safety and regulatory standards.
2019 - Ongoing	**Jones Creek Road Improvements Phases 1A & 1B, East Baton Rouge Parish, LA** **Engineer Intern.** Brandon provided design services for this project. Waggoner was contracted by the East Baton Rouge Parish Department of Transportation and Drainage through the MOVEBR Program to design the extension of Jones Creek Road from the existing Tiger Bend Rd intersection to a new terminus point on Airline Highway. The project includes a 2-mile 4-lane boulevard on new alignment, green infrastructure drainage features, a roundabout at Jefferson Highway, a new residential subdivision access point for an existing subdivision, a new bridge over Claycut Bayou, topographic and right of way mapping, and stormwater detention ponds to control outfall channel levels.
2018	**Bridge Replacements, LADOTD, Statewide, LA** **Engineer Intern.** Brandon served as task manager of four state bridge replacement projects consisting of eight bridges at seven locations. His responsibilities included coordinating project meetings, tracking project statuses, generating divisional requests, and projecting costs. He performed several alignment studies for the bridge replacement projects and conducted site visits while analyzing relevant bridge and local conditions. Brandon created bridge plans (including general notes, general plans, superstructures, and substructures) in addition to designing bridge elements in accordance with AASHTO LRFD specifications and the LADOTD Bridge Design and Evaluation Manual.

16. STAFF EXPERIENCE:

Firm Employed By: Ardaman and Associates, LLC					
Name	**Megan Bourgeois, PE**			Years of Relevant Experience with this Employer	19
Title	Project Engineer / Assistant Branch Manager			Years of Relevant Experience with Other(s) Employers	0
Degree(s)/Years/Specialization			BS / 2006 / Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 36725 / LA / 03-31-2026 | Traffic Control Supervisor / LA / 6-21-2028 LADOTD Flagger / LA / 8-14-2028 | Certified NHI Drilled Shaft Inspector		
Year Registered	2011	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities			Geotechnical Engineering | **Meets MPR #5**		

Megan brings over 19 years of expertise in geotechnical engineering, with extensive experience supporting major **LADOTD bridge and roadway projects** across Louisiana. Her deep understanding of **local soil conditions** has significantly contributed to her proficiency in the geotechnical design of bridge foundation elements. Her technical capabilities include s**hallow foundation design**, **embankment settlement analysis**, and **deep foundation systems** such as piles and drilled shafts. She is well-versed in **LRFD**, **FHWA**, and **GEC design standards**, as well as **slope stability analysis** for embankments and excavations, and the design of earth retaining structures. Megan has led numerous geotechnical investigations and design evaluations, and currently serves as director of the geotechnical and CMT laboratories in Baton Rouge. In this role, she **oversees laboratory operations**, supervises staff, ensures compliance with testing protocols, maintains certifications (including AMRL, CCRL, DEQ, and USACE), and provides training materials to support quality and consistency in testing procedures.

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).
07/23-Ongoing	**MRB SOUTH GBRL: LA 1 TO LA 30 CONNECTOR: West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Project Engineer.** The project consists of an Enhanced Planning investigation into SP 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 Electronic Cone Penetration Testing (ECPT). The preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations.
07/21-01/22	**I-10 Calcasieu River Bridge, Calcasieu Parish, LA (H.003931)** **Project Manager.** Megan was responsible for managing 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 also assisted with development of a geotechnical database and preparation and submittal of a geotechnical data report. This project consisted of obtaining geotechnical data under a strict deadline to be used in the design of a replacement of the existing I-10 Calcasieu River Bridge with a new structure and improvements to various other interchanges.
04/21-Ongoing	**Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257)** **Project Engineer.** This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast LA which generally ranged in length from 100 to 400 feet, over various size rivers and creeks. Megan is leading the technical reviews pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses, construction testing program recommendations, and report preparation in accordance with LADOTD guidelines.

Megan Bourgeois resume continued

02/20-Ongoing	**Design Support Services LA 23, Belle Chasse Bridge & Tunnel, Plaquemine Parish, LA (H.004791)** **Project Engineer/Laboratory Director.** Ardaman's scope consists of review and acceptance of all geotechnical services including technical design reports, field documentation, drawings, and RFI's for the P3 Project consisting of replacing the Belle Chasse bridge and tunnel. In addition, Ardaman performs acceptance verification sampling and testing during the construction for soils and concrete. Megan is assisting in review and acceptance of geotechnical services as well as quality control and review of all acceptance verification sampling and testing during construction.
10/15-Ongoing	**Pecue Lane I-10 Interchange, East Baton Rouge Parish, LA (H.013579)** **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 is managing all aspects of the project which includes field investigations, laboratory testing, and engineering design. She is responsible for performing 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 LADOTD standards. She is currently assisting with the field construction monitoring.
10/09-Ongoing	**I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5)** **Project Manager.** Megan is managing this multi-million dollar, highly technical project focused on investigating movement of the I-20 Bridge in Vicksburg, MS. She leads a highly technical team that includes academia, experts, internationally recognized geotechnical engineers, geohydrologists, instrumentation specialists, and 3-D geotechnical modeling experts. She oversees a comprehensive laboratory testing program where she was responsible for refining the geotechnical site characterization of the bank/bluff area showing evidence of shifting creating movement in the bridge structure. The specialized testing she performs and manages includes x-ray diffraction, x-ray scanning to identify existing shearing planes and stress-reversal direct shear tests to determine true residual angles of critical strata. Megan is also responsible for the geotechnical instrumentation program including vibrating wire piezometers, Casagrande type piezometers, SAA inclinometers, and traditional inclinometers. In addition, Megan conducts seepage and drawdown analyses, slope stability analyses, evaluation of remedial measures including design and evaluation of large foundation structures and developes technically feasible solutions to mitigate ground movement. She also co-authored the geotechnical analysis and design report while currently overseeing the comprehensive monitoring program.
09/22-Ongoing	**EVANGELINE ROAD & CN RAILROAD CULVERT: St. Charles Parish, LA. 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, as well as pavement design in a final report.
07/23-Ongoing	**SP NO. H.012030 / US 371: KCS RAILROAD OVERPASSES HBI: Webster Parish, LA. 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: Ardaman and Associates, LLC				
Name	**Robert Jewell, PE**		Years of Relevant Experience with this Employer	18
Title	Project Engineer / Branch Manager		Years of Relevant Experience with Other(s) Employers	0
Degree(s)/Years/Specialization		BS / 2009 / Civil Engineering		
Active Registration Number/State/Expiration Date		PE No. 38579 / LA / 09-30-2026 | Traffic Control Supervisor / LA / 08-23-2028 LADOTD Flagger / LA / 07-31-2029		
Year Registered	2013	Discipline	Civil Engineering	
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering | **Meets MPR #s 6 & 7**		

Robert serves as the manager of Ardaman's Baton Rouge office 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 and 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**.

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).
07/23 - Ongoing	**MRB South GBRL: LA 1 TO LA 30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Project Manager.** The project consists of an Enhanced Planning investigation into 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. Robert is managing 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. He helped oversee the preliminary engineering analyses which 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.
07/21-Ongoing	**I-10: LA 415 To Essen Lane on I-10 & I-12 (CMAR), Baton Rouge Parish, LA (H.004100.5)** **Project Manager.** The project consists of 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. Robert is currently overseeing 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. Robert helped develop the geotechnical data reports, memorandums, and design reports for this project.
09/22-Ongoing	**Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA** **Project Manager.** Ardaman completed the subsurface exploration and geotechnical engineering evaluation for this project. This 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, LA in St. Charles Parish. Robert performed the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
07/23-Ongoing	**US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030)** **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. Robert performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.

Robert Jewell resume continued

04/21 - Ongoing	**Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257)** **Project Engineer.** This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast LA which generally ranged in length from 100 to 400 feet, over various size rivers and creeks. Robert oversees 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.
10/18-11/21	**I-220 / I-20 Interchange Improvement and Barksdale Air Force Base Access Road, Bossier Parish, LA (H.003370)** **Project Manager.** This was a Design Build project which included direct access to Interstate I-20 from the Barksdale Air Force Base (BAFB) and constructed an interchange and access road from Interstate 20 in Bossier City, LA. Robert managed and oversaw the preparation of the preliminary design and planning report. He also oversaw the field construction services consisting of PDA monitoring, bi-directional load cell load tests, and settlement monitoring. The PDA program consisted of monitoring PPC piles during initial drive and restrikes to allow for evaluation of setup and early acceptance of pile resistances.
10/15-Ongoing	**Pecue Lane I-10 Interchange, East Baton Rouge Parish, LA (H.013579)** **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 LADOTD standards. Robert is currently overseeing the construction phase which includes PDA monitoring, static load testing, and settlement monitoring.
07/15-Ongoing	**I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange), Lafayette Parish, LA (H.004273.5)** **Project Manager.** The project involves the construction of 5 miles of freeway consisting of a 3.5-mile elevated structure from I-10 to the Airport in Lafayette, LA. Robert oversaw the completion of the Phase I geotechnical investigation, which included 116 deep and shallow soil boring, and 15 CPT soundings, and laboratory testing program per LADOTD guidelines. He oversaw the completion of the geotechnical data report and assisted with technical reviews pertaining to selection of design reaches, geotechnical design of pile and drilled shaft foundations, drivability, slope stability, earth retaining structures, settlement analyses and construction testing program recommendations, including an advanced test pile program. He is currently overseeing development of the Phase 2 field and laboratory program for each segment.
04/14-Ongoing	**I-12 to Bush Segment 2, LA 3241 (LA 36-LA435), St. Tammany Parish, LA (H.004435)** **Project Manager.** Robert 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. He 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 PDA testing and settlement monitoring.
10/09 - Ongoing	**I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5)** **Project Engineer.** Robert assisted in several aspects of the geotechnical 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, MS. 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. Robert helped managed the field investigations and instrumentation programs, along with review of the field data and engineering reporting.

16. STAFF EXPERIENCE:

Firm Employed By: Ardaman and Associates, LLC			
Name	**Mark Woodward, PE**	Years of Relevant Experience with this Employer	7
Title	Principal Engineer	Years of Relevant Experience with Other(s) Employers	36
Degree(s)/Years/Specialization	MS / 2019 / Risk Management | MS / 1986 / Civil Engineering BS / 1982 / Civil Engineering		
Active Registration Number/State/Expiration Date	PE No. 24206 / LA / 9-30-2025		
Year Registered	1991	Discipline	Civil Engineering
Contract Role(s)/Brief Description of Responsibilities	Geotechnical Engineering		

Mark joined Ardaman in 2018 as Principal Geotechnical Engineer, providing oversight and design review for **major foundation elements** across LA, MS, AL, AR, and TX. His expertise includes foundations for dams, levees, **hydraulic structures**, floodwalls, and coastal restoration projects, often involving specialized marine and marsh drilling investigations. Mark retired from the **USACE New Orleans District** as Deputy Chief of the Geotechnical Branch and Dam and Levee Safety Program Manager, where he oversaw engineering, **drilling**, **laboratory testing**, and administrative operations. He brings decades of experience in **ground improvement**, **deep excavations**, **seepage control**, and beneficial use of dredged material.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
04/21 - 01/25	**Rural Bridges Phase I, Claiborne Parish, LA (H.013987)** **Principal Engineer.** The Rural Bridges project initiative consists of replacing many older bridges throughout the State of LA. Mark provided review of the geotechnical design including pile foundations for 3 bridges.
01/19 - 12/23	**Cheniere Spillway and Bridge Replacement, Ouachita Parish, LA (H.008226)** **Principal Engineer.** Mark served as the Principal Engineer for this project which included the replacement of the current damaged spillway and bridge structure in Ouachita Parish, LA.
10/18 - 11/21	**I-220 / I-20 Interchange Improvement and Barksdale Air Force Base Access Road, Bossier Parish, LA (H.003370)** **Principal Engineer.** This Design Build project consisted of direct access to Interstate I-20 from the Barksdale Air Force Base (BAFB) and an interchange and access road from Interstate 20 in Shreveport, LA. Mark provided quality assurance oversight for this project, reviewing the work during the design and construction phase.
05/18 - 08/19	**I-12 Widening (US 190 to LA 59), St. Tammany Parish, LA (H.011152.5)** **Principal Engineer.** Mark provided technical oversight for this project which included the widening of I-12 in St. Tammany Parish. Ardaman conducted a geotechnical investigation which included 23 deep soil borings, sampling, and laboratory testing along the 3-mile alignment between US 190 and LA 59 for lane widening which included four bridges structures. Mark provided oversight to perform additional soil borings, lab testing and engineering analyses for a retaining wall for one of the bridge abutments.
07/23 - Ongoing	**US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030)** **Principal 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.
05/18 - 09/19	**US 190: LA 437 to Use 190 Business, Phase I, St. Tammany Parish, LA (H.001344)** **Principal Engineer.** Mark provided technical oversight for this project which includes the widening of US 190 to a four-lane boulevard between US 437 and US 190.

Mark Woodward resume continued

05/18 - 07/18	**IMTT Access Road Pavement, Avondale, Jefferson Parish, LA** **Principal Engineer.** Mark served as senior engineer for 2,200-foot-long x 50-foot wide rigid and flexible roadway design for AASHTO loading per LADOTD guidelines, including subsurface exploration and testing, California Bearing Ratio, subbase material and thickness recommendations, wearing course thicknesses, and construction recommendations.
06/16 - 07/16	**Southeast Louisiana Urban Flood Control, Louisiana Avenue Paving, Orleans Parish, LA** **Chief of Structural Design.** *Mark* served as they key decision maker as Chief of Structural Design, USACE New Orleans, for asphalt or concrete paving, looking at factors such as construction cost, durability, maintenance cycles and costs, constructability, construction duration, etc.
2014 - 2018	**Dam and Levee Safety Program, USACE New Orleans District, LA** *Dam and Levee Safety Program Manager*. Mark served as the USACE New Orleans District Levee Safety Program Manager for over four years, responsible for Levee Evaluation Reports for Levee Certifications and the National Flood Insurance Program, Levee Inspection Reports on over 1300 miles of levee on an annual basis, Risk Assessments and Communication for all levees in the District's jurisdiction. Responsible for final Section 408 permitting approval to ensure that construction activities do not increase risk or diminish function of levees and do not cause harm to the public.
2006	**Homeplace Levee with Ground Improvement, P24: Plaquemines Parish, LA** **Lead Geotechnical Engineer.** In the aftermath of Hurricane Katrina, Mark was assigned to USACE Task Force Guardian as Geotechnical Engineer for Plaquemines Parish, LA to restore levee damage to pre-Katrina conditions. The Homeplace Floodwall had translated due to loading and had to be removed. In order to replace the risk reduction system with an earthen levee, the foundation had to be improved. Using knowledge gained from full scale test section Mark had coordinated pre-Katrina for Deep Mixing. Mark designed ground improvement, reviewed and approved all construction submittals and oversaw construction.

16. STAFF EXPERIENCE:

Firm Employed By: Ardaman and Associates, LLC					
Name	**Jarmon King, PE**			Years of Relevant Experience with this Employer	6
Title	Project Engineer			Years of Relevant Experience with Other(s) Employers	1
Degree(s)/Years/Specialization			BS / 2019 /Civil Engineering		
Active Registration Number/State/Expiration Date			PE No. 49179 / LA / 03-31-2027 | Traffic Control Supervisor / LA / 11-08-2027 LADOTD Flagger / LA / 05-29-2028		
Year Registered	2004	Discipline	Civil Engineering		
Contract Role(s)/Brief Description of Responsibilities		Geotechnical Engineering			

Jarmon brings over seven years of geotechnical engineering experience serving Ardaman's Baton Rouge office. He oversees and conducts geotechnical investigations and is responsible for preparing **soil boring logs** and analyzing **Cone Penetration Test (CPT) data**. His design experience includes shallow and deep foundations, embankment settlement, **LRFD, FHWA and GEC design**, slope stability, and earth retaining structures. Jarmon also has hands-on experience with **Pile Driving Analyzer (PDA) testing** during construction phases. His broad technical expertise supports a wide range of transportation, commercial, and infrastructure projects in various types of soils.

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).
07/23 - Ongoing	**MRB South GBRL: LA 1 TO LA 30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Project Engineer.** The project consists of an Enhanced Planning investigation into 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. Jarmon helped oversee the field program, development of the laboratory testing program, development of an interactive geotechnical database to compile all the soil borings and ECPT. He helped perform the preliminary engineering analyses included caisson design, driven piles, drilled shafts, embankments, proposed alignment comparisons, environmental concerns, and testing program recommendations. He also assisted in preparation of the Data and Design reports for this project.
07/21 - Ongoing	**I-10: LA 415 To Essen Lane on I-10 & I-12 (CMAR), Baton Rouge Parish, LA (H.004100.5)** **Project Engineer.** The project consists of 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. Jarmon co-manages and oversees the 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. He also helped develop the geotechnical data reports, memorandums, and design reports for this project.
04/21 - Ongoing	**Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257)** **Assistant Project Engineer.** 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. Jarmon assisted in engineering design pertaining to selection of design reaches, geotechnical design of pile foundations, drivability, slope stability, settlement analyses, construction testing program recommendations, and report preparation in accordance with LADOTD guidelines.
07/23 - Ongoing	**US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030)** **Assistant 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. Jarmon performed the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.

Jarmon King resume continued

07/21 - 01/22	**I-10 Calcasieu River Bridge, Calcasieu Parish, LA (H.003931)** **Assistant Project Engineer.** *Jarmon* assisted with 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. Most 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. He also assisted with the laboratory testing program, processing and analyzing of the ECPT and ER data, 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.
06/20 - 11/22	**Nicholson Drive (LA HWY 30) Segment 1: East Baton Rouge Parish, LA (H.002825)** **Assistant Project Engineer.** This project consisted of the reconstruction and widening of a section of Nicholson Drive between the intersections of Brightside Lane and Burbank Drive for the MOVEBR Program. Thirteen shallow soil borings and two deep soil borings were drilled at the subject site and associated laboratory testing was performed. Jarmon oversaw the field investigation and engineering analyses which included pavement and culvert crossing design recommendations in accordance with LADOTD specifications.
10/18 - 06/21	**Chef Menteur Pass Bridge and Approach, Orleans Parish, LA (H.000263)** **Assistant Project Engineer.** Jarmon assisted in the production of soil boring logs and CPT soundings in LADOTD format. He also assisted with the development of the data report.
10/18 - 11/21	**I-220 / I-20 Interchange Improvement and Barksdale Air Force Base Access Road, Bossier Parish, LA (H.003370)** **Assistant Project Engineer.** This was a Design Build project which provides direct access to Interstate I-20 from the Barksdale Air Force Base (BAFB) and constructing an interchange and access road from Interstate 20 in Bossier City, LA. Jarmon assisted with the construction monitoring aspect of the project which included PDA testing and CAPWAP analyses.
03/19 - 07/20	**I-10 Widening (LA 415 to Howard Street), East Baton Rouge Parish, LA (H.004100.5-2)** **Assistant Project Engineer.** Jarmon evaluated the laboratory test results and produced logs for the widening of the East and Westbound lanes, elevated structures, and construction of interchange and ramps on Westbound lanes along I-10 between LA 415 and Howard Street spanning approximately 1 mile. The geotechnical investigation included 58 deep borings and 11 cone penetrometer (CPT) soundings, associated laboratory testing and the preparation of a geotechnical data report.
03/25 - Ongoing	**Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (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)** **Project Engineer.** This project consists of geotechnical field investigations throughout LA consisting of ten soil borings to depths ranging from 100 to 120 feet, associated laboratory testing, and reporting for new box culvert structures. Jarmon is assisting in the production of soil boring logs and CPT soundings in LADOTD format and developed the data reports.
09/22 - Ongoing	**Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA** **Project Manager.** Ardaman completed subsurface exploration and geotechnical engineering evaluation. This 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, LA in St. Charles Parish. Jarmon is performing the geotechnical fieldwork and engineering evaluation including recommendations for site preparation, shoring and bedding recommendations, and pavement design in a final report.
07/23 - Ongoing	**US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030)** **Project Manager.** This project consists of construction of three bridges for US 371 KC Railroad overpasses that replaced two parallel bridges and one standalone bridge. Jarmon is performing the geotechnical investigation and engineering analysis for drilled shafts and made advanced test shaft recommendations.

16. STAFF EXPERIENCE:

Ardaman & Associates, Inc.	Firm Employed By: Ardaman and Associates, LLC				
	Name	**Jessica Litt**		Years of Relevant Experience with this Employer	12
	Title	Laboratory Manager		Years of Relevant Experience with Other(s) Employers	0
	Degree(s)/Years/Specialization		BS / 2010 / Biology		
	Active Registration Number/State/Expiration Date		NICET / Generalist, Laboratory No. 141243 / 10-01-2027		
	Year Registered	N/A	Discipline	N/A	
Contract Role(s)/Brief Description of Responsibilities			Geotechnical Engineering - Laboratory Manager		

Jessica manages Ardaman's AMRL Certified, DEQ Accredited, and USACE-validated laboratory in Baton Rouge, LA, under the direction of Megan Bourgeois, PE. She oversees **laboratory testing operations**, organizes, and schedules testing, trains, develops and supervises five laboratory technicians and ensures quality control across all assignments. Jessica is experienced in **soil mechanics laboratory testing** in accordance with appropriate **AASHTO** and **LADOTD testing protocol**, which includes Soil Classification, Atterberg Limits, Grain Size Analysis, Gradation Testing, Organic Content, Hydrometer Analysis, Moisture Content, Consolidation Testing, Hydraulic Conductivity, pH, Resistivity, Strength Testing (Unconfined, Unconsolidated-Undrained Triaxial, Consolidated-Undrained Triaxial), Direct Shear, Specific Gravity, and Permeability of Granular Soils.)

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/25 - Ongoing	**Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (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)** **Laboratory Manager.** Jessica is responsible for managing the completion of a comprehensive laboratory testing program for 100 deep soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Organic Content, Particle Size Analysis, Hydrometer, Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Jessica entered the laboratory test results into gINT in order to produce the LADOTD soil boring logs.
08/24 - Ongoing	**LA 44 Roundabouts and Widening, Ascension Parish, LA (H.015568.5, H.015569)** **Laboratory Manager.** Oversaw the completion of a comprehensive laboratory testing program for 10 deep and 14 shallow soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Jessica entered the laboratory test results into gINT to produce the LADOTD soil boring logs.
07/23 - Ongoing	**MRB South GBRL: LA 1 TO LA 30 Connector, West Baton Rouge, Iberville, Ascension, and East Baton Rouge Parishes, LA (H.013284) Lab**oratory Manager. Jessica oversaw the completion of a comprehensive laboratory testing program for 18 deep soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Jessica reviewed the consolidation test results and entered the laboratory test results into gINT in order to produce the LADOTD soil boring logs.
07/23 - Ongoing	**IIJA Off-System Bridges, Allen, Beauregard, and Calcasieu Parishes, LA (H.015489, H.015490, H.015491, H.015492)** **Laboratory Manager.** *Jessica* oversaw the completion of a comprehensive laboratory testing program for 10 deep soil borings that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests in accordance with LADOTD guidelines. Ms. Litt entered the laboratory test results into gINT to produce the LADOTD soil boring logs.

Jessica Litt resume continued

07/23 - Ongoing	**US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030)** **Laboratory 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.
10/18 - 06/21	**Chef Menteur Pass Bridge and Approach, Orleans Parish, LA (H.000263.5-1)** **Laboratory Technician.** Jessica assisted with the completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.
09/22 - Ongoing	**Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA** **Laboratory Technician.** 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, LA 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.
11/15 - 01/21	**Macarthur Interchange Completion Phase 2, Route US 90-Z, Jefferson Parish, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257)** **Laboratory Technician.** Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content and Visual Classification, Fines Content, Sieve Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.
04/14 - 03/22	**I-12 to Bush Segment 2, LA 3241, St. Tammany Parish, LA (H.004435)** **Laboratory Technician.** Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.
04/14 - 05/18	**I-12 to Bush Segment 3, LA HWY. 3241 (LA 435 to LA 40 / 41),St. Tammany Parish, LA (H.004113)** **Laboratory Technician.** Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content and Visual Classification, Fines Content, Sieve Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Unit Weight, Particle Size Analysis (Hydrometer), and UU Strength Tests.
10/09 - Ongoing	**I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5)** **Laboratory Manager.** Jessica assisted with completion of a comprehensive laboratory testing program that included Atterberg Limits, Moisture Content, Visual Classification, Fines Content, Gradation Analysis, Triaxial Permeability (constant head), Conventional Incremental Consolidation, Organic Content, Particle Size Analysis (Hydrometer), Unit Weight of Undisturbed Samples, and UU Strength Tests.

16. STAFF EXPERIENCE:

Ardaman & Associates, Inc.	Firm Employed By: Ardaman and Associates, LLC				
	Name	**Casey Floyd**		Years of Relevant Experience with this Employer	4
	Title	Drilling Supervisor		Years of Relevant Experience with Other(s) Employers	30
	Degree(s)/Years/Specialization		High School Diploma		
	Active Registration Number/State/Expiration Date		Traffic Control Technician / LA / 9-5-2027 | Traffic Control Supervisor / LA / 9-6-2027 LADOTD Flagger / LA / 6-04-2028 | LA Water Well Driller's License #WWC-212 / 6-30-2026		
	Year Registered	N/A	Discipline	N/A	
Contract Role(s)/Brief Description of Responsibilities			Geotechnical Engineering - Drilling Supervisor		

Casey has over 30 years of experience drilling in the **LA Gulf Coast Region** including performing **soil borings** (on land and over water), **CPT soundings**, monitor **well installation and abandonment**, and **installation of geotechnical monitoring instrumentation**. He has planned and supervised numerous geotechnical investigation projects in accordance with **LADOTD requirements**. These projects consist of shallow borings and deep soil borings to depths of approximately 300 feet. Casey's experience also includes arranged right of entry, utility locations, site clearing, arranging for police assistance (as required) and traffic control/crew safety, and coordinating between engineering staff and drill crew.

Experience Dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/25 - Ongoing	**Culvert Replacements, Rapides, Richland, Vernon, Winn, Evangeline, Jackson, St. Landry Parishes, LA (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)** **Drilling Supervisor.** This project consists of geotechnical field investigations throughout LA consisting of ten soil borings to depths ranging from 100 to 120 feet. Casey oversaw the field investigation program consisting of 10 deep soil borings in accordance with LADOTD guidelines. He performed site reconnaissance at each location and coordinated the access along with traffic control.
08/24 - Ongoing	**LA 44 Roundabouts and Widening, Ascension Parish, LA (H.015568.5, H.015569)** **Drilling Supervisor.** Casey oversaw the field investigation program consisting of 10 deep and 14 shallow soil borings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring.
07/23 - Ongoing	**IIJA Off-System Bridges, Allen, Beauregard, and Calcasieu Parishes, LA (H.015489, H.015490, H.015491, H.015492)** **Drilling Supervisor.** Casey oversaw the field investigation program consisting of 10 deep soil borings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring.
03/22 - 01/25	**Boudreaux Canal Bridge Replacement, Terrebonne Parish, LA (H.002244.5)** **Drilling Supervisor.** The project consisted of replacement of the existing LA 56: Boudreaux Canal Bridge with a new bridge just west of the center line of the existing bridge. Casey oversaw the field investigation program consisting of 8 deep soil borings and 4 CPT soundings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring. Casey oversaw the completion of one of the soil borings that was performed on a barge.
07/23 - Ongoing	**US 371: KCS Railroad Overpasses HBI, Webster Parish, LA (H.012030)** **Drilling Supervisor.** 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.

Casey Floyd resume continued

07/21 - 01/22	**I-10 Calcasieu River Bridge, Calcasieu Parish, LA (H.003931)** **Drilling Crew Chief.** Casey helped manage and oversee all aspects of an extensive field investigations program which included 37 deep soil borings and 39 CPT soundings in accordance with LADOTD guidelines. Most 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.
09/22 - Ongoing	**Evangeline Road and CN Railroad Culvert, St. Charles Parish, LA** **Drilling Supervisor.** 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, LA 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.
04/21 - Ongoing	**Rural Bridge Initiative Phase II, West Feliciana, East Feliciana, Livingston, St. Bernard Parishes, LA (700-29-0112, 700-29-0130, H.012565, H.012891, H.014251, H.014252, H.014253, H.014254, H.014256, H.014257)** **Drilling Crew Chief.** This project consists of the replacement of multiple small two-lane bridges throughout rural areas of Southeast LA which generally ranged in length from 100 to 400 feet, mainly over small rivers and creeks. Casey oversaw all aspects of this project pertaining to coordination of fieldwork including 31 deep soil borings. Some of these borings were performed through the middle of bridges and at hard access locations.
03/19 - 07/20	**I-10 Widening (LA 415 to Howard Street), East Baton Rouge Parish, LA (H.004100.5-2)** **Drilling Crew Chief.** Casey helped oversee the field investigation included 58 deep borings and 11 cone penetrometer (CPT) soundings in accordance with LADOTD guidelines, and electrical resistivity imaging along the entire alignment for the widening of I-10 project. He performed site reconnaissance at each location and coordinated the access along with traffic control.
10/18 - 06/21	**Chef Menteur Pass Bridge and Approach, Orleans Parish, LA (H.000263.5-1)** **Drilling Crew Chief.** Casey helped manage and oversee all aspects of an extensive field investigation program which included 37 deep soil borings in accordance with LADOTD guidelines, including borings over 200 feet in over 80 feet deep of high flow water.
07/15 - Ongoing	**I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange), Lafayette Parish, LA (H.004273.5)** **Drilling Supervisor.** The project consists of construction of 5 miles of freeway consisting of a 3.5-mile elevated structure from I-10 to the Airport in Lafayette, LA. Casey managed and oversaw the completion of the Phase 2 Kaliste-Saloom Interchange field investigation program which included 26 deep soil borings and 10 CPT soundings in accordance with LADOTD guidelines. He performed site reconnaissance, coordinated the access along with traffic control and pavement coring.
10/09 - Ongoing	**I-20 Mississippi River Bridge Review, Vicksburg, MS (H.004646.5)** **Drilling Supervisor.** Casey has performed and supervised all aspects of field operations associated with this multi-million-dollar, high technical needs project consisting of investigating the movement of the I-20 Bridge in Vicksburg, MS. Ardaman managed a comprehensive laboratory testing program and refined a geotechnical site characterization for the bank/bluff where there was evidence of shifting creating movement in the bridge structure. To allow for this advanced testing program, it was imperative to obtain high quality undisturbed soil samples in difficult drilling conditions. Casey was instrumental in completing these tasks as well as installing all types of instrumentation to maintain a highly extensive automated monitoring program at the site including vibrating wire piezometers, SAA inclinometers and traditional inclinometers.

Section 17

Two large drainage retention ponds exist on the southeast end of the existing bridge crossing near Indiana Avenue and the northwest end of the existing bridge near Addis Boulevard. The full roadway build-out will be vetted for all drainage impacts on the existing drainage network. We will use existing drainage maps along with LADOTD HYDRWIN Programs to ensure the proposed new geometry and typical sections satisfy all governing requirements and do not introduce any adverse impacts to the surrounding project area.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)			
Project Name	I-10: East Junction I-49 to Atchafalaya Floodway Bridge	Past Performance Evaluation Category(ies)*	Road	
		Firm Responsibility	Prime	
Project Number	H.003003, H.010106, H.003014	Owner's Name	LADOTD	
Project Location	Lafayette & St. Martin Parishes, LA	Owners Project Manager	Nick Olivier, PE	
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70802 | 225.379.1133 | nicholas.olivier@la.gov			
Services Commenced by this Firm (mm/yy)	6/13	Total Consultant Contract Cost ($1,000's)	$3,174.7	
Services Completed by this Firm (mm/yy)	7/22	Cost of Consultant Services Provided by this Firm ($1,000's)	$2,846.7	

Project Description:

Waggoner was the prime consultant for surveying and **engineering services to replace and widen 15 miles of I-10** near Lafayette, LA. These projects were designed under 3 task orders in an IDIQ Roadway Design contract, two of which were designed concurrently under an accelerated delivery schedule. Waggoner was responsible for **coordinating the multi-discipline project** and preparing the **final plan package**. This included subconsultants and LADOTD in-house staff responsible for bridge design, permanent signing, weigh-in-motion, roadway lighting, and SUE designations.

Project management responsibilities included scheduling, attending, and documenting all project design and review meetings, evaluating value engineering recommendations, developing a PMP for each segment, preparing a Financial Plan for Segment 1, and supporting LADOTD for FASTLANE grant applications. Falcon questions were also addressed during letting.

The project includes **adding one lane in each direction** to the inside of I-10, a median barrier, bridge widening (designed by LADOTD), WIM system relocations, and **complex traffic management/ sequencing to maintain two lanes of traffic throughout construction, interchange improvements** at LA 328 (Breaux Bridge) and LA 347 (Henderson). The Henderson interchange was **modified to incorporate roundabouts** at the eastbound and westbound ramp termini.

The road and traffic design components include **typical sections** for both asphalt and concrete alternatives, **horizontal and vertical geometrics** with existing bridge structures constraining the design parameters, **geometric details**, and a **detailed analysis of the sequence of construction** that will maintain two lanes of traffic in each direction. Detailed **hydraulic analysis of cross drains** and a major outfall channel adjacent to LA 352 including **HEC-RAS** modeling was conducted to alleviate flooding problems at the Henderson interchange. A **Level 4 Traffic Management Plan (TMP)** was also developed by Waggoner for each Segment.

Waggoner performed the topographic survey which included establishing GPS control for the entire 15-mile corridor, topography of the existing roadways, bridges, a depressed median, drainage structures and outfalls, interchanges, roadways along Melvin Dupuis, LA 347, LA 352, and **utility crossings**. LADOTD survey and linework codes were used in the field. Inroads Survey, CADconform, and LADOTD codes were used to prepare the topographic map and required location and survey deliverables. Waggoner coordinated with LADOTD's right-of-way consultant for required right-of-way and COA modifications at Melvin Dupuis.

SUE Services included QLD mapping and QLC surveys, utility conflict matrices for each segment, assisting LADOTD with utility coordination, and as-builts of relocated utilities prior to construction.

Waggoner also prepared **permit sketches**, public meeting exhibits, and attended public meetings for CE environmental clearance.

Waggoner provided **construction support** for all three segments. This included responding to RFIs, construction drawing reviews, reviewing contractor proposals, plan changes, and attending partnering meetings.

Project Relevance:

- √ Project Management & Support
- √ Quality Control & Peer Reviews
- √ Environmental/Permitting
- √ Traffic Engineering & Design
- √ Surveying Services
- √ SUE & Utility Relocation
- √ Roadway & Hydraulics
- √ PP/FP Roadway Design, Plan Development, Cost Estimate
- √ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Alex Farr, Bryan Harmon, Andrew Windmann

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Project Name	I-49 South: Ambassador Caffery & US 190 Interchange	Past Performance Evaluation Category(ies)*		Road, Bridge	
		Firm Responsibility	Subcontractor		
Project Number	H.002868	Owner's Name	LADOTD		
Project Location	Lafayette Parish, LA	Owners Project Manager	Ryan Morvant, PE		
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70802 | 225.379.1067 | Ryan.Morvant@la.gov				
Services Commenced by this Firm (mm/yy)	1/13	Total Consultant Contract Cost ($1,000's)	Unknown		
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm ($1,000's)	$1,294.8		

Project Description:

The I-49 Ambassador Caffery project upgrades an existing **at-grade intersection** on US 190 with a **grade separated X-Pattern interchange** on Future I-49. It includes two-lane one-way frontage roads, U-turns, **MSE Walls**, **subsurface and open drainage systems**, and signalized ramp intersections. The project also was designed to accommodate future flyover directional ramps to Ambassador Caffery Pkwy and continuation of the interstate and frontage roads southward.

Waggoner is a major subconsultant for this project and was responsible for all **roadway geometrics** for the interstate, frontage roads, urban arterials, ramp connections, intersections, and transitions to existing roadways. Waggoner also prepared all existing and **design drainage calculations and drainage plan profiles**. All **bridge design** for the I-49 bridges over Ambassador Caffery were designed by Waggoner. Our team coordinated with Huval & Associates who designed the bridges over the BNSF Railroad at the north end of the project. Additional design responsibilities included traffic signal design, utility conflict matrix development, and construction support.

Waggoner is currently providing **construction support**, including **shop drawing reviews**, RFI's, change orders, and **on-call services as needed**.

Project Relevance:

- √ Project Management & Support
- √ Quality Control & Peer Reviews
- √ Traffic Engineering & Design
- √ Roadway & Hydraulics
- √ Bridge Design
- √ PP/FP Roadway Design, Plan Development, Cost Estimate
- √ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Andrew Windmann, Joshua Olivier, Alex Farr, Bryan Harmon, Kelsie Bankston

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)			
Project Name	Hooper Road Widening (LA408) Blackwater - Joor	Past Performance Evaluation Category(ies)*	Road	
		Firm Responsibility	Prime	
Project Number	H.002316	Owner's Name	East Baton Rouge Department of Transportation and Drainage	
Project Location	East Baton Rouge Parish, LA	Owners Project Manager	Tom Stephens, PE	
Owners Address, Phone, Email	222 Saint Louis Street, 8th Floor, Baton Rouge, LA 70802 | 225.389.3186 | tstephens@brla.gov			
Services Commenced by this Firm (mm/yy)	10/12	Total Consultant Contract Cost ($1,000's)	$1,818	
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm ($1,000's)	$1,111	

Project Description:

Waggoner was contracted by East Baton Rouge Parish Department of Transportation and Drainage, in cooperation with the FHWA and LADOTD, to provide NEPA environmental documentation, planning, topographic and property surveying, right-of-way mapping, and preliminary and final plans for this MOVEBR program project. Hooper Road is an existing two-lane rural roadway with steep open ditch drainage from Blackwater Road to Sullivan Road in suburban Central, LA. MovEBR is proposing **capacity and safety upgrades to the corridor using a 4-lane boulevard with subsurface drainage, sidewalks, bike paths, and intersection improvements.**

A formal Environmental Assessment was prepared by Waggoner and a FONSI was granted by FHWA. Waggoner prepared **preliminary and final roadway and drainage plans** for this 2.2 mile long corridor. The four-lane boulevard features a 16 foot wide **raised median**, 11 foot lanes, a dedicated five foot bike lane in both eastbound and westbound directions, five foot sidewalks, and a new two-lane **roundabout** at the intersection of Hooper Road and Lovett Road. The s**idewalks and pedestrian accommodations are ADA compliant** and consistent with PROWAG guidelines. **Turn lanes and R-CUT bulb outs** were added to safely accommodate U-Turn movements throughout the boulevard section.

The construction plans include the following:

- Typical Sections
- Pay Item Quantities
- Roadway Plan and Profiles
- Drainage Plan and Profiles w/subsurface drainage systems
- Existing and Design Drainage Maps
- Geometric Layouts and Details
- PCC Pavement Joint Layouts and Graphical Grades
- Suggested Sequence of Construction
- Pedestrian Signal Plans
- Permanent Striping and Signing Layout
- Roadway Lighting Plans
- Utility Relocation Space Allocation Layouts
- Cross Sections

The topographic and property surveys and right-of-way maps were prepared in accordance to LADOTD Location & Survey standards and deliverables. The ROW maps were reviewed by Location & Survey since this is a state highway.

Waggoner also performed QLD, QLC, QLB, and QLA SUE Services for the project. Test holes were performed at critical conflict points. A utility conflict matrix was prepared and updated throughout the design process.

As the prime consultant, Waggoner **managed the project schedule**, held and documented design meetings and status meetings with the client, and **participated in cost risk assessments.**

Project Relevance:

- √ Project Management
- √ Quality Control & Peer Reviews
- √ Road Design During Environmental Process
- √ Traffic Engineering & Design
- √ Surveying Services
- √ Hydraulic Analysis & Design
- √ PP/FP Roadway Design, Plan
- √ Development, Cost Estimate
- √ Special Provisions Write-Ups
- √ Transportation Management Plans
- √ Technical Research & Guidance
- √ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Alex Farr, Bryan Harmon, Kelsie Bankston, Jace Ricard

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Project Name	LA 3213: Gramercy Bridge over UPRR	Past Performance Evaluation Category(ies)*		Road, Bridge	
		Firm Responsibility	Prime		
Project Number	H.002960	Owner's Name	LADOTD		
Project Location	St. John the Baptist Parish, LA	Owners Project Manager	Jared Ray, PE		
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70802 | 225.379.1038 | Jared.Ray@la.gov				
Services Commenced by this Firm (mm/yy)	11/2013	Total Consultant Contract Cost ($1,000's)		$544.5	
Services Completed by this Firm (mm/yy)	03/2019	Cost of Consultant Services Provided by this Firm ($1,000's)		$481.4	

Project Description:

The project consisted of constructing an **overpass along the existing horizontal alignment** on LA 3213 in St. John the Baptist Parish, LA to create a **grade separation** over the **existing** Union Pacific **railroad tracks** while remaining inside the existing right-of way.

This project required close coordination with numerous team members. First, Waggoner worked with both LADOTD's Railroad Construction Program Manager and UPRR representatives in meeting all design criteria required by the railroad. Waggoner worked closely with our field surveying subconsultant to create the base topographic mapping and field roll necessary for plan production. Waggoner also worked with LADOTD Geotechnical Section who provided the foundation design on this project.

The project **required that two lanes of traffic be maintained during construction**. Therefore, Waggoner designed on-site diversion to route traffic around the bridge construction site. This required construction of approximately 2000 feet of temporary road but was able to remain within the existing right-of-way.

Road Design (Rural)

- Plan Profiles
- Cross Sections
- Sequences of Constructions
- Diversions Design
- Quantities and Pay Items

Bridge Design

- LRFD Design for Bridge Widening
- Type Size and Location Study
- Substructure and Superstructure Design
- New Louisiana LG Prestressed-precast concrete girders
- Punch List & Substantial Complete

All drafting was performed with **CadConform** software for compliance with LADOTD standards.

Project Relevance:

- √ Project Management & Support
- √ Environmental/Permitting
- √ Traffic Engineering & Design
- √ Surveying Services
- √ SUE & Utility Relocation
- √ Roadway & Hydraulics
- √ Bridge Design
- √ Plan Development & Letting Support
- √ Construction Support

Team Members Involved:

Robert Lear, Josh Olivier, Bryan Harmon

17. FIRM EXPERIENCE:

Firm Name	Waggoner Engineering, Inc. (formerly Sigma Consulting Group, Inc.)				
Project Name	I-10: LA 415 to Essen Lane on I-10 and I-12 CMAR	Past Performance Evaluation Category(ies)*		Road, Traffic	
		Firm Responsibility	Subconsultant		
Project Number	H.004100	Owner's Name	LADOTD		
Project Location	East Baton Rouge & West Baton Rouge Parishes, LA	Owners Project Manager	Nick Olivier, PE		
Owners Address, Phone, Email	PO Box 94245, Baton Rouge, LA 70806 | 225.379.1133 | Nicholas.Olivier@la.gov				
Services Commenced by this Firm (mm/yy)	10/20	Total Consultant Contract Cost ($1,000's)		$29,583	
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm ($1,000's)		$4,170	

Project Description:

Waggoner is the lead **roadway design** team member for this transformational transportation improvement project for the Capital Region. It is being delivered in an accelerated time frame by an alternative delivery CMAR process. Our primary responsibility includes geometrics and **road design** for the frontage roads, ramps, and local roadway upgrades. We are also responsible for the **drainage design** for the entire project, which includes subsurface and open ditch systems.

The road design components include typical sections, plan profiles, drainage plan profiles, geometric layouts, geometric details, graphical grades, cross sections, complete streets pedestrian and bicycle facilities, **pay item and quantity computations**, and non-standard special provisions. Waggoner prepared all **design reports** for the project which included interstate, ramp, urban arterial, urban collector, local roads, and roundabout classifications. All associated **design waivers** and **design exception documentation** was also prepared by Waggoner. All plan development is being performed in accordance with LADOTD **electronic delivery standards**.

Traffic engineering responsibilities include providing geometrics and alternatives for the IMR, complex urban and freeway geometrics, construction phasing, and **suggested sequence of construction/MOT**.

Waggoner also served as a subconsultant for the Environmental Assessment NEPA process. Waggoner was responsible for the line and grade study geometrics, interchange alternatives, community connections meetings, public meetings and workshops, researching and compiling as-built plans, constructability reviews, opinion of probable costs, and ROW limits.

Waggoner also prepared SUE and **utility relocation** plans to consolidate utilities into a major duct bank. The duct bank minimizes the need for multiple relocations during project phasing and is a significant cost savings. We participated in utility coordination with LADOTD, East Baton Rouge Parish, and several utility companies.

Construction support includes shop drawings reviews, review and responses to RFIs, and review of contractor proposals made throughout the CMAR process.

Project Relevance:

- √ Project Management
- √ Road Design
- √ Traffic Control Design, Traffic Signal Analysis & Design
- √ Electronic Plan Development
- √ PP/FP Roadway Design, Plan Development, Cost Estimate
- √ ROW Map
- √ Hydraulic Analysis & Design
- √ Road Design During Environmental Process
- √ Special Provisions Write-Ups
- √ Transportation Management Plans
- √ Quality Plan Reviews
- √ Technical Research & Guidance
- √ Construction Support

Team Members Involved:

Robert Lear, Miles Williams, Josh Olivier, Alex Farr, Kelsie Bankston, Charlotte Gremillion, Steve Gilliam, Bryan Harmon, Jace Ricard

17. FIRM EXPERIENCE:

Firm Name	DRMP, Inc.			
Project Name	I-275 at I-4 Interchange Improvements	Past Performance Evaluation Category(ies)*		Bridge, Road
		Firm Responsibility	Subconsultant	
Project Number	E7R70	Owner's Name	The Lane Construction Corporate for FDOT District Seven	
Project Location	Hillsborough County, FL	Owners Project Manager	Dyelan Phillips	
Owners Address, Phone, Email	2601 Maitland Center Parkway, Maitland, FL 32751 | 407.331.3100 | DJPhillips@laneconstruct.com			
Services Commenced by this Firm (mm/yy)	09/22	Total Consultant Contract Cost ($1,000's)		$17,340,233
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm ($1,000's)		$7,926,168

Project Description:

DRMP is serving as the lead designer for this $226.2 million design-build interchange improvements project for FDOT District Seven. The project includes the design and construction of **six new bridges, eight bridge widenings/modifications**, four existing bridge coatings, and two existing bridge railing retrofits. The **existing roadway is being widened** from 2-lanes to 3-lanes in specific segments, **improving existing drainage facilities**, and providing complex temporary traffic control plans throughout each phase of the project to minimize disruption for all users. Other project design elements include permitting; signing and pavement markings; lighting; signalization; and intelligent transportation systems.

Our team's innovative alternative technical concept (ATC) includes a new dual-lane flyover bridge to accommodate the I-275 southbound traffic onto I-4 eastbound without needing complex widening. This innovation has numerous benefits to FDOT and the community, including eliminating over 100 detours by performing off-line construction, provides FDOT with the opportunity to add a new I-4 eastbound auxiliary lane to the Selmon Expressway exit east of the downtown interchange, minimizes noise and visual impacts within the community, reduces overall traffic system delay, increases operational speeds, reduces long-term maintenance over the 75-year design life, and improves safety to the traveling public.

When completed, this project will improve roadway safety and efficiency for all users, making travel times more reliable throughout the corridor. This route will also continue to serve as one of the **main hurricane evacuation routes** for the greater Tampa Bay region.

Project Relevance:

- √ Alternative Delivery
- √ Bridge Design
- √ Project Management and Support
- √ Quality Control Reviews and Peer Reviews

Team Members Involved:

Leo Rodriguez, Nicole Catino, Scott Benson, Hung Tu, Sanjeev Howlader, Christopher Snee, Chad Schroeder

17. FIRM EXPERIENCE:

Firm Name	DRMP, Inc.			
Project Name	SR 516 (Lake Orange Expressway) from Orange/Lake County Line to SR 429	Past Performance Evaluation Category(ies)*	Bridge, Road	
		Firm Responsibility	Prime	
Project Number	516-238	Owner's Name	Central Florida Expressway Authority	
Project Location	Orange County, FL	Owners Project Manager	Will Hawthorne	
Owners Address, Phone, Email	4974 ORL Tower Road, Orlando, FL | 407.690.5000 | Will.Hawthorne@cfxway.com			
Services Commenced by this Firm (mm/yy)	11/20	Total Consultant Contract Cost ($1,000's)	$12,195,740	
Services Completed by this Firm (mm/yy)	09/23	Cost of Consultant Services Provided by this Firm ($1,000's)	$3,257,357	

Project Description:

DRMP provided services for a new system interchange connecting SR 429 to SR 516, a four-lane limited-access toll facility extending to US 27. The interchange construction included **five new bridges**, with two utilizing concrete Florida-U Beams and three constructed with steel box girders, as well as four bridge widenings, which incorporated **Florida-I Beams** and one I-girders structure.

In addition to the bridge work, this project also **included two miles of roadway improvements** along SR 429, which involved widening, ramp additions, and milling and resurfacing of the remaining existing roadway. A new dual teardrop roundabout was constructed at the interchange with Valencia Parkway. The scope also encompassed environmental permitting with FDEP and SFWMD, coordination with Orange County, Lake County and local landowners, **drainage**, intelligent transportation systems, lighting, signing and pavement markings, tolling, aesthetics and **geotechnical services**.

Project Relevance:

- √ Alternative Delivery
- √ Bridge Design
- √ Project Management and Support
- √ Quality Control Reviews and Peer Reviews

Team Members Involved:

Nicole Catino, Josue Herrera, Sanjeev Howlader, Mark Jones, Hung Tu, Chad Schroeder

17. FIRM EXPERIENCE:

Firm Name	DRMP, Inc.			
Project Name	SR 528/SR 436 Interchange Improvements	Past Performance Evaluation Category(ies)*	Bridge, Road	
		Firm Responsibility	Prime	
Project Number	528-143	Owner's Name	Central Florida Expressway Authority	
Project Location	Orange County, FL	Owners Project Manager	Will Hawthorne	
Owners Address, Phone, Email	4974 ORL Tower Road, Orlando, FL | 407.690.5000 | Will.Hawthorne@cfxway.com			
Services Commenced by this Firm (mm/yy)	04/18	Total Consultant Contract Cost ($1,000's)	$7,994,000	
Services Completed by this Firm (mm/yy)	02/20	Cost of Consultant Services Provided by this Firm ($1,000's)	$1,947,000	

Project Description:

The SR 528/SR436 interchange serves as the northern entrance of the Orlando International Airport which is currently experiencing record passenger growth, welcoming over 50 million visitors in 2019 and becoming the busiest airport in Florida. This, coupled with the record population growth in Central Florida, created the need to provide additional capacity along SR 528 and at this interchange.

DRMP served as the Engineer of Record for the reconstruction of the interchange and **widening** of SR 528 from four to six lanes with an auxiliary lane eastbound to Goldenrod Road and westbound to Conway Road. This project included construction of **seven new bridges** using a mix of steel box girders and concrete Florida U-Beams as well as the replacement of one box culvert. The project features enhanced aesthetics common to CFX roadways including a planted median separated by barrier wall, planter walls adjacent to the ends of the bridges, pylons at the bridge abutments, and many areas for future landscaping. This project also involved **extensive coordination** with the Greater Orlando Aviation Authority, Federal Aviation Administration and **Brightline**.

The reconstructed interchange provides an additional lane of capacity at each of the critical movements within the interchange as well as additional lanes of capacity along SR 528 to better serve the growing airport and overall region. The interchange also provides semi-directional flyovers for all movements to help assist tourist and local commuters through this busy interchange.

Project Relevance:

- √ Alternative Delivery
- √ Bridge Design
- √ Project Management and Support
- √ Quality Control Reviews and Peer Reviews
- √ Railroad Overpass
- √ Straddle Bent

Team Members Involved:

Nicole Catino, Josue Herrera, Mark Jones, Hung Tu

17. FIRM EXPERIENCE:

Firm Name	Ardaman & Associates, Inc.				
Project Name	I-20 Mississippi River Bridge Review	Past Performance Evaluation Category(ies)*		Geotech	
		Firm Responsibility	Prime		
Project Number	SP No. H.004646 09-L1049 | H.010603.6 13-3720 | H.010612.6 20-3729 | H.004647.6 22-3746, 22-3753, 24-3707	Owner's Name	LADOTD		
Project Location	Madison Parish, LA	Owners Project Manager	Chris Nickel		
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA; 225.379.1100; Chris.Nickel@la.gov				
Services Commenced by this Firm (mm/yy)	10/09	Total Consultant Contract Cost ($1,000's)		$10,881	
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm ($1,000's)		$10,881	

Project Description:

Ardaman conducted a geotechnical study to develop a list of technically feasible remedial alternatives to decrease the potential for ground movements to occur at the site of the I-20 Bridge. Movement of the east abutment of the bridge was first realized in 2001 during an inspection. Over the years Mississippi DOT has retained several consultants who have studied the problem, but no viable solution was identified. Ardaman conducted a comprehensive review of past slope stability evaluations and recommendations. This task was followed by developing a refined geotechnical site characterization plan for the bank/bluff area for further analyses. Drilling operations included obtaining extremely sensitive samples containing prehistoric shear planes from the river via barge and on land, all with extremely difficult access conditions. The drilling program also included installation of geotechnical instrumentation such as Shape Accelerator Arrays, inclinometers, and vibrating wire piezometers. Engineering analyses performed included seepage and drawdown analyses and both equilibrium and finite element numerical modeling slope stability analyses.

As part of the project, Ardaman developed a full slope stabilization design and construction remediation strategy and a monitoring program for the bluff instability and ground movements affecting the existing I-20 Mississippi River Bridge.

Ardaman is currently managing a phase of the project which involves upgrading the entire instrumentation communication system. It also includes gathering and continuously monitoring various types of instrumentation data, inspects of the site and monitoring changes in topography by obtaining periodic survey data.

Project Relevance:

√ Project Management & Support
√ Geotechnical Engineering

Team Members Involved:

Megan Bourgeois, Robert Jewell, Jarmon King, Casey Floyd, Jessica Lit

17. FIRM EXPERIENCE:

Firm Name	Ardaman & Associates, Inc.				
Project Name	I-10: LA 415 to Essen Lane on I-10 & I-12 (CMAR)	Past Performance Evaluation Category(ies)*		Geotech	
		Firm Responsibility	Subconsultant		
Project Number	SP No. H.004100.5	Owner's Name	LADOTD		
Project Location	East Baton Rouge Parish, LA	Owners Project Manager	Nicholas Olivier		
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA | 225.379.1133 | 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	

Project Description:

Project Relevance:
√ Geotechnical Engineering

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 their 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 selection 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.

Team Members Involved:
Megan Bourgeois, Robert Jewell, Ross McGillivray, Jarmon King, Chandler Willis, Casey Floyd

17. FIRM EXPERIENCE:

Firm Name	Ardaman & Associates, Inc.				
Project Name	US 371: KCS Railroad Overpasses HBI	Past Performance Evaluation Category(ies)*		Geotech	
		Firm Responsibility	Subconsultant		
Project Number	H.012030	Owner's Name	LADOTD		
Project Location	Webster Parish, LA	Owners Project Manager	Hamed Babaizadeh		
Owners Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA | 225.379.1937 | Hamed Babaizadeh@la.gov				
Services Commenced by this Firm (mm/yy)	07/23	Total Consultant Contract Cost ($1,000's)	$956.8		
Services Completed by this Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by this Firm ($1,000's)	$231.4		

Project Description:

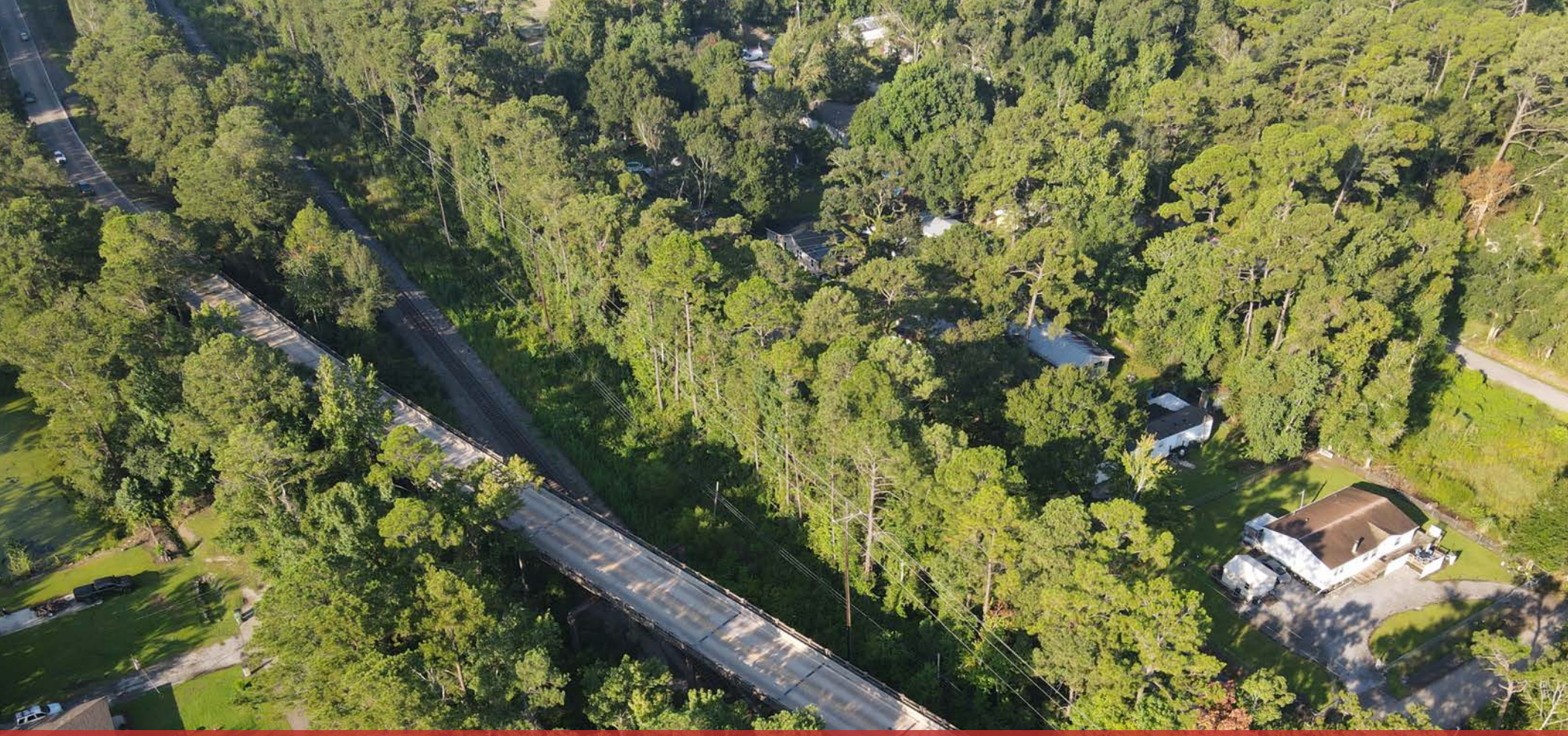
Project Relevance:
√ Geotechnical Engineering

The project consists of a geotechnical subsurface exploration and recommendations for S.P. No. H.012030, 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, LA. The bridges cross over Kansas City (KC) Railroad at each site. The standalone bridge near Sibley, LA 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.

Team Members Involved:
Megan Bourgeois, Robert Jewell, Jarmon King, Casey Floyd, Jessica Litt



Section 18

US 11 currently intersects Norfolk Southern Railroad at an extreme skew. Any proposed replacement structure will avoid ground placement of substructure and foundation components within the existing right-of-way of the Norfolk Southern Railroad. Additionally, construction phasing of the new bridge will accommodate the continued passage of vehicular traffic along the existing US 11 alignment.

The following pages provide more detail on our solution to satisfying the purpose and need of the project, while satisfying Norfolk Southern Railroad requirements and maintaining US 11 traffic.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

18. APPROACH AND METHODOLOGY:

PROJECT BACKGROUND AND UNDERSTANDING

Waggoner understands the purpose and need of the project: to replace an existing bridge [1937] having a superstructure and substructure in Poor/ Serious condition and burdened by a legal load posting limit of 15T/25T. US Highway 11 is a principal arterial located in the city of Slidell just west of Interstate 10. This portion of US 11 has a posted speed limit of 45 mph with an average daily traffic of more than 15,000 vpd. The main drivers of the proposed project include the removal and replacement of the bridge structure overpassing Norfolk Southern Railroad (NSRR) and roadway widening from Lafayette Street north to Powell Drive, incorporating complete streets features and introducing intersection improvements for enhanced traffic flow and maneuverability. Secondary drivers of the project will be ongoing maintenance of traffic considerations, coordination with NSRR, and commitment to minimizing impacts to the surrounding residential/ commercial properties, and various environmental adverse effects.

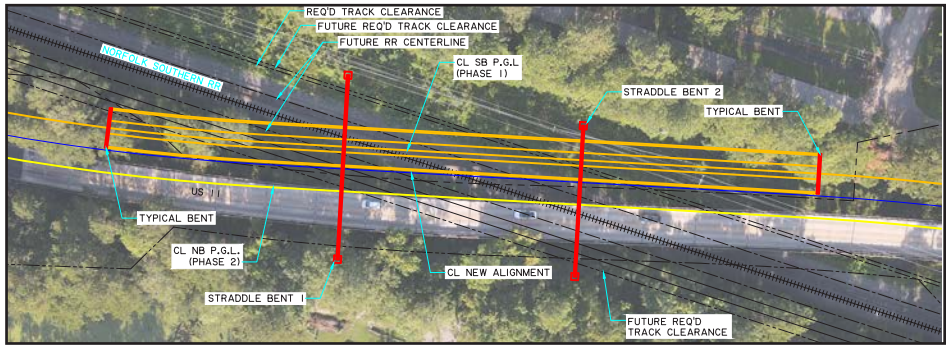
Our approach & methodology emphasizes early problem-solving during the Line-and-Grade phase, continuous communication amongst stakeholders, and a rigorous QA/QC process to ensure that the proposed design is safe, constructable, and maintains existing traffic along US 11 throughout the duration of the project.

Waggoner performed a site visit on 8/17/2025 to better assess the overall project area and identify any potential items of concern. The following discussion summarizes identified project challenges and our proposed ideas to meet those challenges with practical solutions.

Bridge Constructability & Railroad Coordination:
The existing bridge overpass traverses the railroad at a very sharp skew while also being confined to a tight corridor sandwiched between established residential neighborhoods. Without significant realignment and right-of-way takings outside of the approved Environmental Assessment, the new bridge will also need to remain at a sharp skew with the railroad.

The previous Line and Grade study proposed highly skewed bents along with very long steel girder spans. This raised issues with how the girders would get erected in the field. Multiple temporary towers would need to be installed within the railroad right-of-way and near an operable rail line. The substructure installation alone for this would be very difficult to get approval for, much less the proximity of the towers to the track. Additionally, the final bridge product would result in a lot of forces during construction that would need numerous complex cross framings and bracing and geometric control would bring additional issues.

Our solution would be to introduce a long straddle bent substructure that traverses the entirety of the NSRR right-of-way. We anticipate the longest bent to be approximately 120 feet long and as such, we would propose both pre-tensioning and post-tensioning mechanics to make this design work. This set up would allow for a zero-skew joint alignment throughout the new bridge and would allow for 160-foot-long spans, opening up the window for large precast, prestressed concrete girders to be used. Providing concrete superstructure elements over the railroad in lieu of steel elements will allow for large construction equipment to remain outside of the rail's R/W, and elminate excessive future maintenance coordination with NSRR. An aerial showing the proposed bent layout over the railroad track is provided in the following figure.



Maintenance of Traffic:
With the proposed substruction design of using a 120-ft. straddle bent, more focus will be given to the geometric constraints imposed by the new elements onto the existing bridge during each phase of construction. Due to the existing bridge's proximity and angle of crossing with the railroad, the straddle bent will need to be constructed above the existing top of bridge. An Inverted Tee cap will be used to reduce the overall structure depth from finished grade of the new bridge to the bottom of the cap. The bottom of the Inverted-T will still need to clear the top surface of the existing bridge by 14ft-16ft (to be determined during this study). Close attention will need to be given to the required bridge length to get back down to at-grade on each end of the bridge. Early inspection of this option would require a longer bridge than what is proposed in the existing Line and Grade study, however, the bridge will get back down to grade prior to the realigned Addis Boulevard.

Utility Conflicts and Advanced Relocations: Utility impacts will be assessed for both Alternative 1 (Full Build) and Alternative 2 (Bridge Replacement Only) as part of the line and grade study. The widening proposed in Alternative 1 has a higher potential for conflicts with overhead and underground facilities, including power, telecommunications, water, sewer, and drainage, while Alternative 2 is expected to have fewer impacts, primarily limited to utilities near the bridge. Using LADOTD's Subsurface Utility Engineering (SUE) survey, our team will identify conflicts, adjust alignments where possible to avoid relocations, and coordinate with utility owners to develop cost-effective relocation strategies.

Drainage: Drainage will be a critical element of the line and grade study, with both open-channel and subsurface systems designed to handle stormwater across the entire project corridor. Existing features, including a large cross drain just south of North Boulevard, will be evaluated as part of the overall system, but the primary focus will be on developing a coordinated drainage plan that meets LADOTD standards and project needs. Two large retention ponds near the limits will also be accounted for, along with one smaller retention pond of which will be impacted by the proposed roundabout at Powell Drive and will require modifications to ensure adequate stormwater capacity and long-term functionality.

PROJECT TEAM

The Waggoner team brings proven experience on LADOTD bridge overpass projects, urban roadway projects, and roundabout projects, combining leadership, design expertise, and effective communication to ensure successful delivery of the US 11 Norfolk Southern Railroad bridge replacement.

Robbie Lear, QA/QC Manager
Robbie will serve as the QA/QC Manager, bringing extensive roadway and roundabout design expertise to ensure all deliverables meet LADOTD's standards of quality. He has played key roles on the **I-10 Corridor Widening from US 90 to the Atchafalaya Floodway Bridge** near Lafayette, LA and the **I-10 Corridor Widening project through Baton Rouge (CMAR),** providing roadway design expertise and ensuring compliance with LADOTD standards.

Andrew Windmann, Project Manager and Bridge Lead
Andrew will serve as Project Manager and main point of contact for LADOTD. He has a strong background in LADOTD project management and bridge design, having spent 13 years working in the state's Bridge Design Section. His collaborative leadership style, combined with his proven record of success on LADOTD projects, ensures a well-managed and efficient delivery for the US 11 overpass replacement.

Alex Farr, Roadway Lead
Alex will lead the roadway design effort, offering focused experience on LADOTD roadway projects. He worked alongside Robbie on the previously mentioned projects, and many more, gaining hands-on experience managing complex roundabout and urban roadway designs. Alex's history with subsurface drainage design and construction sequencings for corridor widenings and, more particularly, roundabouts, will provide practical solutions that meet LADOTD standards and minimize construction impacts.

In addition to Waggoner's core team, we have assembled specialized subconsultants to provide expertise critical to the success of the US 11 NSRR Overpass replacement. **DRMP** will perform bridge design services for the main span (superstructure and substructure), bringing extensive experience in complex and unique bridge design concepts. Ardaman will provide geotechnical services, with a focus on evaluating subsurface conditions related to the **overpass structure.** Their expertise in soil characterization, settlement analysis, and foundation recommendations for bridge overpass replacements will be essential in developing a safe, durable, and cost-effective design solution while considering site-specific special limitations.

PROJECT APPROACH & METHODOLOGY

The project team will adopt a structured, phased approach to deliver the US 11 Norfolk Southern Railroad Overpass Line & Grade Study. This approach will ensure full considerations and compliance with LADOTD, FHWA, and NS requirements while addressing environmental commitments, constructability constraints, and stakeholder objectives.

Project Initiation and Coordination
Upon receiving Notice to Proceed from LADOTD, the team will conduct a **kick-off meeting** with LADOTD, NS representatives, and other federal and local stakeholders to confirm project objectives, design criteria, and permitting requirements. During this phase, we will:

- Review the **Environmental Assessment findings** to ensure all mitigation commitments are incorporated into the design.
  We understand that the objective is to avoid the need to re-open the Environmental Assessment document and/or negate the FONSI previously determined by FHWA.
- Coordinate with NSRR through LADOTD to establish and document the Railroad's requirements for horizontal & vertical clearances, design requirements, and right-of-entry approvals as outlined in the NS Public Improvements Manual.
- Engage with LADOTD survey and geotechnical teams to review existing topographic data, SUE investigations, and available deep borings for use in conceptual design of the bridge foundations.

- Establish a **project communication protocol with LADOTD** Project Manager for monthly project status and schedule updates, as well as opportunities for our team to address any comments or concerns from the LADOTD team.

Alternatives Development and Line & Grade Design

The team will develop and evaluate the following two alternatives, culminating in separate line and grade study reports compiling the information mentioned below:

1. **Alternative 1 – Full Build:** A four-lane divided roadway with roundabout construction at Powell Drive, full-width shoulders, sidewalks, and intersection improvements north and south of the bridge, including at-grade railroad crossings at North Boulevard and at the entrance to The Crossing Shopping Center.
2. **Alternative 2 – Bridge Replacement Only:** A two-lane bridge structure designed to accommodate **future widening** to four lanes without full reconstruction. Our proposed structure concept for the Full Build alternative's bridge replacement would also work for this alternative. A significant advantage of this would be that the substructure adjacent and overpassing the NSRR track would already be in place for the future widening once funding became available. This would minimize future construction costs, construction time, and railroad impacts near the bridge site.

For each alternative, we will:

- Conduct a **horizontal and vertical alignment analysis** to minimize right-of-way impacts and avoid conflicts with adjacent residential/commercial properties. Once again, a primary goal will be to stay within the existing footprint established and evaluated in the Environmental Assessment document.
- **Evaluate bridge geometry options** to satisfy NS clearance requirements, including the mandated **76-foot horizontal clearance and minimum** vertical clearances as specified in the NS manual. The proposed straddle bent will clear both of these windows.
- Perform **preliminary drainage analysis** for stormwater conveyance and nearby retention ponds to ensure no adverse impacts to adjacent properties. More in-depth drainage design will be performed during the 60% Preliminary Plan stage as part of the additional services of this contract.
- Develop **preliminary construction sequencing plans** to maintain US 11 traffic flow and railroad operations, utilizing staged construction. Utility relocations and drainage installations will be sequenced ahead of roadway and bridge construction activities to minimize construction delays and overlaps.
- Prepare **preliminary cost estimates** for both alternatives for LADOTD review and decision-making.

SUPPLEMENTAL SERVICES

Contract Development & Kick-Off Meeting:
Immediately after selection, Waggoner will work with the DOTD Project Manager to develop the supplemental contract scope and items necessary to deliver the project. We will work with the project manager to develop and complete negotiations in a quick timeframe, so that work can continue seamlessly between the initial stage and the design stage.

Upon receipt of the Notice to Proceed, Waggoner will facilitate a Project Kick-Off meeting with LADOTD's project team and the consultant design team. This should be an abbreviated meeting since most of the information and direction will have been already known, however, expectations and project schedule will be key discussion points during this meeting.

KEY PROJECT MILESTONES	
30% PP	Include this milestone with the geometric review portion of the 60% PP due to the existing line and grade study.
60% PP	Establish limits of construction, drainage review, geotechnical field investigation, LADOTD property survey, and preliminary bridge concept.
90% PP	Team site visit, review design for constructability and ensure no major pitfalls.
100% PP	Finalize property survey, finalize required R/W and base R/W Maps.
Environmental Clearance	Complete and proceed with final design and plan development.
Permit Submittals	Prepare and submit Section 404/401 Water Quality Permit, NPDES Stormwater Permit, LDNR Coastal Use Permit, Section 106/4(f) for SHPO Historic Bridge Compliance, and USACE Nationwide or Standard wetland permit.
60% FP	Initiate final bridge design and drainage review.
90% FP	Final plan review of majorly completed bridge design.
Joint Plan Review	Meet with location and survey to ensure final construction plans agree with final R/W maps.
98% FP	Full-sized sealed plans, final QC/QA, final calculations and files, special provisions, and construction cost estimate provided.
100% FP	Project signed by the LADOTD Chief Engineer.

Preliminary and Final Plan Preparation: The preliminary and final plan development process will typically follow the Road Design Tasks for Completion Milestones chart shown as Figure 1-03 in the DOTD Road Design Manual as well as **Appendix K** of the Bridge Design Policy for QC/QA. These submittals will include plans and associated calculations as defined in the advertisement. Bridge and roadway design will work in conjunction to ensure that the approach roadway and proposed bridge sections are compatible, including during intermediate construction stages that will be required.

All required documentation such as review comments and responses, QA/QC certifications, constructability review forms, opinions of probably construction cost (OPCC), and calculations will be submitted with each appropriate delivery milestone.

Road and Drainage Design: The Project Team will prepare roadway and drainage design in accordance with the LADOTD Road Design Manual, LADOTD Minimum Design Guidelines, LADOTD Hydraulics Manual, LADOTD Roadway Design Procedures and Details Manual, the AASHTO "Green Book" (2018), the Roadside Design Guide, and other applicable LADOTD reference materials. Where applicable, design waivers or exceptions will be identified and documented consistent with LADOTD requirements.

As part of the line and grade study, horizontal and vertical alignments for Alternative 1 (Full Build) and Alternative 2 (Bridge Replacement Only) will be developed to minimize impacts to existing utilities and right-of-way, particularly in areas adjacent to the Norfolk Southern Railroad. The proposed alignments will also account for the proposed roundabout at Powell Drive, which will be designed in accordance with current LADOTD and AASHTO standards while incorporating guidance from the NCHRP Research Report 1043 – Guide for Roundabouts (2023) where practical to enhance safety, multimodal accommodations, and overall operational performance. In addition, the sequence of construction will be carefully planned to maintain one northbound and one southbound lane of traffic throughout the project duration, with an emphasis on minimizing disruption to surrounding businesses, local access, and through traffic along the US 11 corridor.

The drainage design for this project will include both surface and subsurface systems, with analysis and modeling performed using LADOTD's HydroWin software as the primary design tool. The design will address storm drain networks, cross drains, and open-ditch systems as required to ensure proper conveyance and compliance with LADOTD Hydraulics Manual standards. In addition, the two existing retention ponds located within the project limits will be carefully evaluated and integrated into the overall drainage plan to maintain capacity, minimize downstream impacts, and provide effective stormwater management consistent with current LADOTD requirements.

Bridge Design: The new bridge will adhere to the bridge design criteria document and be designed in accordance with the latest incorporated edition of the AASHTO LRFD Bridge Design Specifications, LADOTD Bridge Design & Evaluation Manual (BDEM), and applicable Bridge Design Technical Memoranda (BDTM).

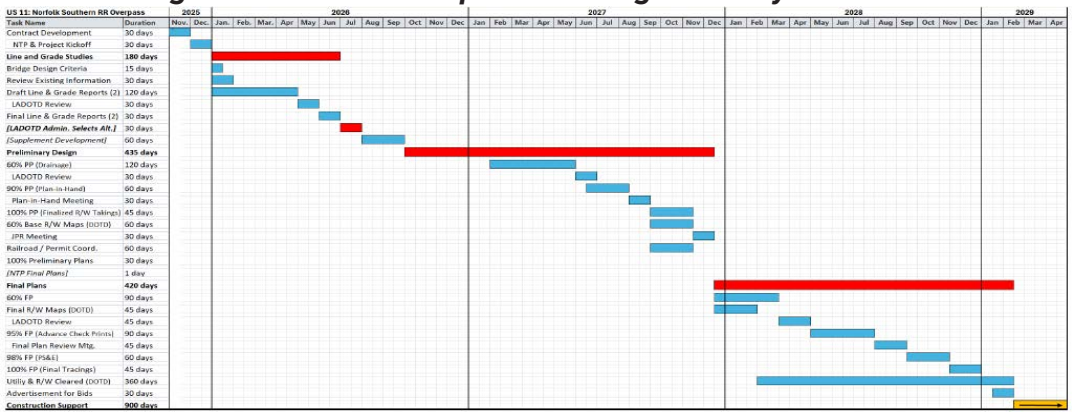
Waggoner will create an as-designed load and resistance factor rating (LRFR) for the proposed new bridge in accordance with AASHTO Manual for Bridge Evaluation, BDEM Part II, Volume 5 – Bridge Evaluation/Rating, and applicable BDTMs. The results of the load rating will be summarized in a report and provided to LADOTD Bridge Maintenance. All design criteria, assumptions, calculations, and backup information will be collected and included in a Final Calculations book included with the signed and sealed final plans.

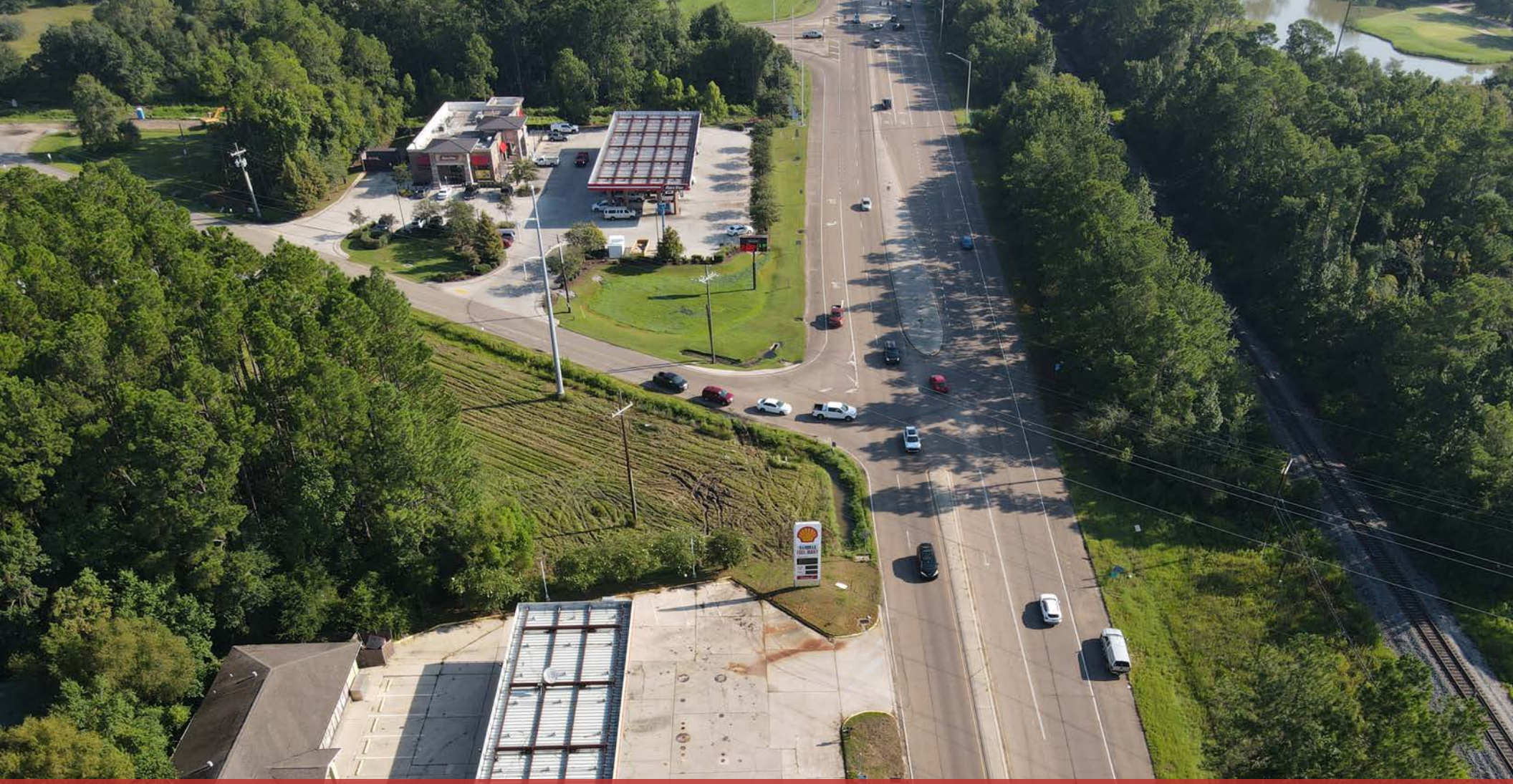
Opinion of Probable Construction Costs, Pay Items and Quantities: Opinions of probable construction costs (OPCC) will be prepared, beginning with the 90% Preliminary Plan submittal and updates will be included with every subsequent submittal. Our design professionals have familiarized themselves with the new LADOTD 2026 Standard Specifications and pay item list and will lean on our extensive experience with the 2016 Standard Specifications to ensure all updates are incorporated into the plans and pay item lists. Waggoner will develop special provisions and assist with developing non-standard items when appropriate.

Quality Assurance/Quality Control (QA/QC): Waggoner proposes to utilize our currently implemented quality control plan for this contract, which includes LADOTD's QA/QC requirements and forms. Built around LADOTD's philosophy and internal QA/QC plans, the key components to this plan include communication, redundancy, and application of experience.

Alternative Delivery: In the event the Department determines and decides that alternative delivery other than the typical design-bid-build process would be the superior contract structure, our team has vast experience with both options. Waggoner is currently on the design team for the ongoing I-10 Widening CMAR contract in Baton Rouge and has been on a handful of design-build teams across the state. Our partner firm, DRMP, has a vast portfolio of design-build projects involving large bridge structure interchanges and widenings. We will be ready to leverage our experience working more directly with contractors, and our preexisting familiarity with the project to jump into the CMAR process immediately if the Department opts to go that route.

Project Schedule: Waggoner has worked on Line and Grade studies that have continued into the design phase on multiple large-scale DOTD projects and understands the delivery and production processes for these types of projects. This allows us to "hit the ground running" and accelerates the project initiation phase. We have prepared a schedule of the major milestones and deliverables anticipated in this contract, including future supplemental agreements. ***Note that the provided schedule represents a design-bid-build schedule post-line and grade study.***





Section 19-23

Powell Drive intersects with US 11 approximately 750 feet south of the I-12 Eastbound exit/entrance Ramp Termini. This intersection improvement will allow large commercial trucks leaving the RaceTrac gas station to turn left towards I-12 and also add dual right-turn lane and signal from the I-12 Eastbound off-ramp. Special attention will be given to the drainage impacts on the small retention pond next to the RaceTrac sign when developing the roundabout geometry.

(Photo Source: Waggoner Engineering, Inc. Drone Imagery)

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
WAGGONER	Road	44-19010, H.010652	LA 73: US 61 (Airline) – Essen Lane	$2,349
		44-19010, H.010116	LA 1088: Soult and Trinity Roundabouts	N/A
		unavailable, H.004791	Belle Chase Bridge & Tunnel Replacement	N/A
		44-18646, H.004100	I-10: LA 415 to Essen Lane on I-10 and I-12	$1,058,156
		44-24084, H.009300	CMAR Contract for Hooper Road Widening (LA 3034 - LA 37)	$175,238
		4400004666, H.002868	Ambassador Caffery & US 90 Interchange Construction Support	N/A
	Bridge	4400029912 (formerly 4400019338)	Rural Bridge Replacement Initiative Phase II (South) (16 Project #s)	$342,708
		4400029918 (formerly 4400025041)	IIJA Off-System Bridge Program, District 62 (6 Project #'s)	$124,620
		4400029197, H.016093	US 84: Grand Cane Bayou & Relief Bridges	$351,186
DRMP		N/A	N/A	$-

Ardaman & Associates, Inc.	Geotech	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	I-10 CMAR Design Continuation: LA 415 TO ESSEN ON	$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 at Bayou Bienvenue Bridge Replacement PDA	$23,059
		44-25025; H.015337, H.015452, H.015453, H.015454, H.015455, H.015456, H.015457, H.015458, H.015459, H.015460, H.015461, H.015462, 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,	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
		44-21887; H.012542, H.012453, H.012544, H.012047	Replacement of 15 Bridges	$579,165
		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
		H.015429, H.015430, H.015432	IIJA	$14,545

20. CERTIFICATIONS/LICENSES:

Waggoner Engineering, Inc.

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
WAGGONER ENGINEERING, INC.	Business Corporation (Non-Louisiana)	JACKSON	Active

Previous Names

Business: WAGGONER ENGINEERING, INC.
Charter Number: 34954531F
Registration Date: 6/16/2000
Domicile Address
143 A LEFLEURS SQUARE
JACKSON, MS 39211
Mailing Address
143 A LEFLEURS SQUARE
JACKSON, MS 39211
Principal Business Office
143 A LEFLEURS SQUARE
JACKSON, MS 39211
Registered Office in Louisiana
450 LAUREL STREET, 8TH FLOOR
BATON ROUGE, LA 70801
Principal Business Establishment in Louisiana
450 LAUREL STREET
8TH FLOOR
BATON ROUGE, LA 70801

Status

Status: **Active**
Annual Report Status: **In Good Standing**
Qualified: 6/16/2000

20. CERTIFICATIONS/LICENSES:

Waggoner Engineering, Inc. - Alex Farr

Certificate of Completion

presented to

Alex Farr

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Alex Farr

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Alex Farr

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 18, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Alex Farr
has attended
Louisiana Traffic Control Supervisor Refresher
Training Course

11/10/2023 to 11/10/2027
Training Valid Through

Vice President of Education and Technical Services

Baton Rouge, LA
Location

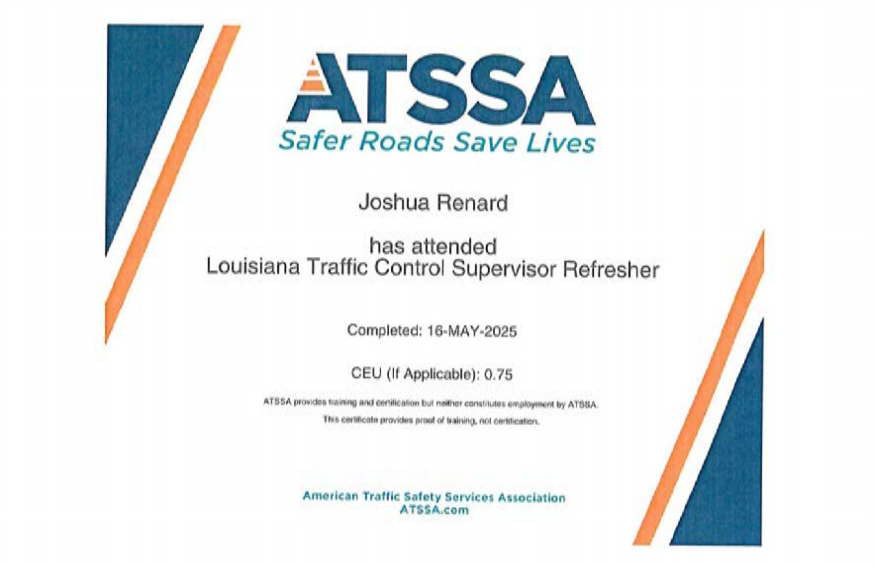
President, CEO

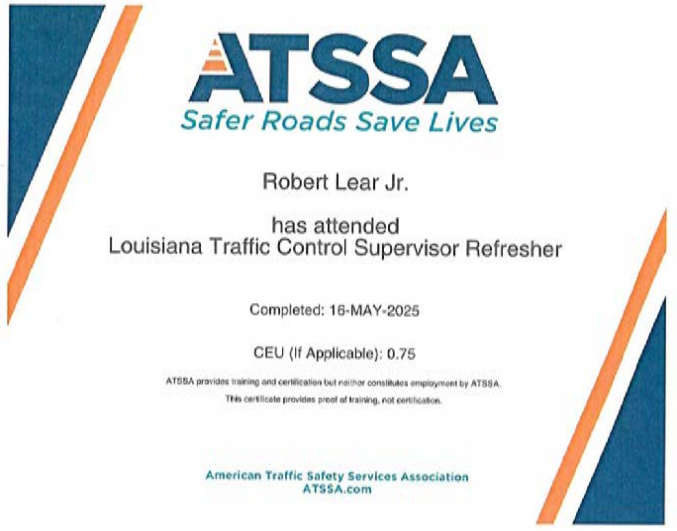
ATSSA provides training and certification but neither constitutes employment by ATSSA

ATSSA American Traffic Safety Services Association ATSSA.com

20. CERTIFICATIONS/LICENSES:

Waggoner Engineering, Inc. - Joshua Renard and Robert Lear





20. CERTIFICATIONS/LICENSES:

Ardaman & Associates, Inc.

AASHTO ACCREDITED

CERTIFICATE OF ACCREDITATION

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AASHTO

Ardaman & Associates, Inc.

in

Baton Rouge, Louisiana, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).

Jim Tymon,
AASHTO Executive Director

Matt Linneman,
AASHTO COMP Chair

This certificate was generated on 08/14/2025 at 3:48 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

DEQ LOUISIANA

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Louisiana Environmental Laboratory Accreditation Program
LELAP

Is hereby granting a Louisiana Environmental Laboratory Accreditation to

Ardaman & Associates Inc
316 Highlandia Dr
Baton Rouge, Louisiana 70810-5904

Agency Interest No. 30726
Activity No. ACC20250001

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of data generated by the laboratory. Accreditation of the environmental laboratory does not imply that a product, process, system, or person is approved by LELAP. To be accredited initially and maintain accreditation, the laboratory agrees to participate in a non-single-blind, variable-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:I.4711.

Tonya Landry
Administrator
Public Participation and Permit Support Division

Issued Date: 10/2/2025
Effective Date: July 1, 2025
Expiration Date: June 30, 2026
Certificate Number: 02052

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

Status

Status: Active
Annual Report Status: In Good Standing
Qualified: 12/13/1991
Last Report Filed: 11/19/2024

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Effective Date: July 1, 2025

Ardaman & Associates Inc
AI Number: 30726
Activity No. ACC20250001
Expiration Date: June 30, 2026

316 Highlandia Dr, Baton Rouge, Louisiana 70810-5904
Certificate Number: 02052

Air Emissions

Analyte	Method Name	Method Code	Type	Alt

Non Potable Water

Analyte	Method Name	Method Code	Type	Alt

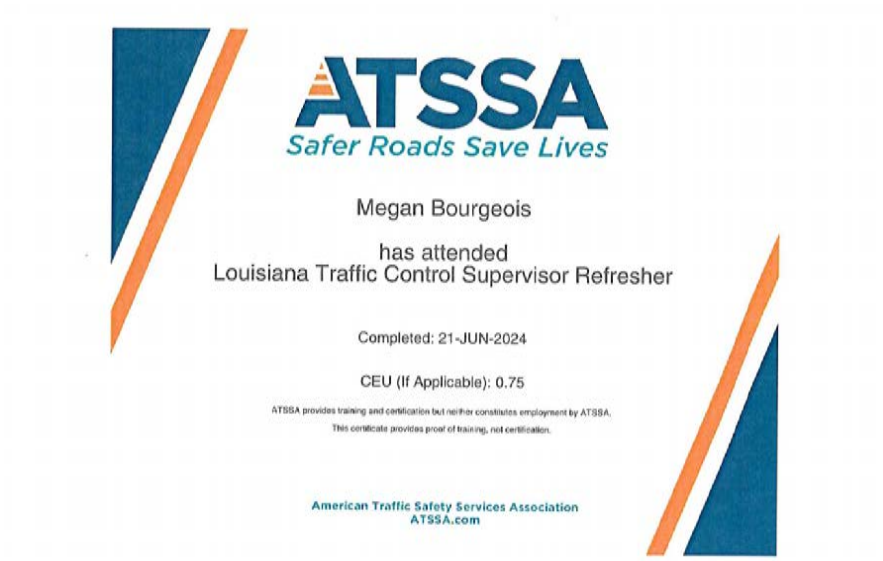
Solid Chemical Materials

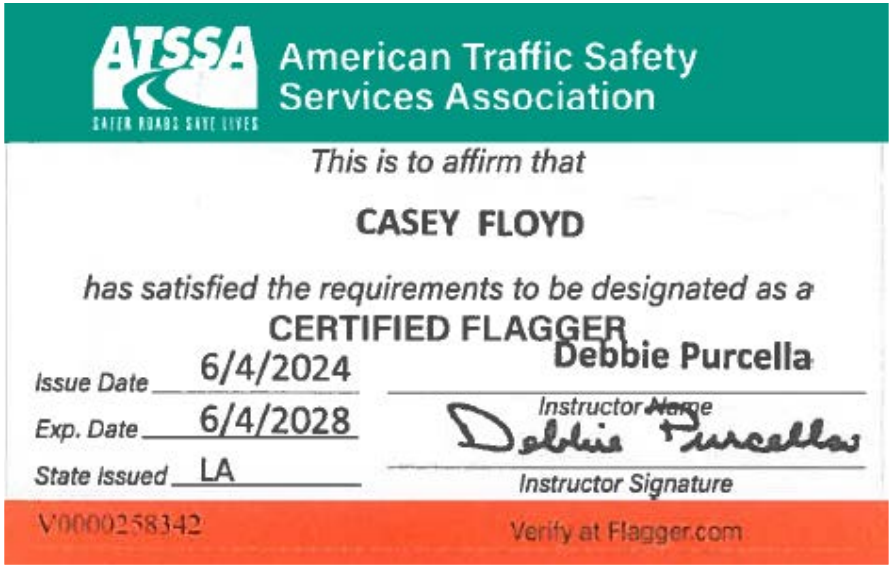
Analyte	Method Name	Method Code	Type	Alt
1730 - Amount Of Soil Finer Than The No. 200 Sieve	ASTM D1140	3550	AASHTO	AAP
1731 - Laboratory Compaction Of Soils (Proctor Density)	ASTM D1557	3551	AASHTO	AAP
1731 - Laboratory Compaction Of Soils (Proctor Density)	ASTM D698	3561	AASHTO	AAP
1732 - Unconfined Compressive Strength Of Soil	ASTM D2166	3552	AASHTO	AAP
1734 - Classification Of Soils For Engineering Purposes (Unified Soil Classification System	ASTM D2487	3554	AASHTO	AAP
1735 - Soil Classification Visual - Manual (Field)	ASTM D2488	3555	AASHTO	AAP
1736 - Unconsolidated, Undrained Triaxial Compression	ASTM D2850	3556	AASHTO	AAP
1738 - Particle Size Analysis Of Soils	ASTM D422-63 (7)	30030854	AASHTO	AAP
1739 - Atterberg Limits of Soils	ASTM D4318	3559	AASHTO	AAP
1740 - Liquid Limit	ASTM D4318	3559	AASHTO	AAP
1741 - Plastic Limit	ASTM D4318	3559	AASHTO	AAP
1742 - Plasticity Index	ASTM D4318	3559	AASHTO	AAP
1743 - Specific Gravity Of Soils	ASTM D854	3562	AASHTO	AAP
1744 - Hydraulic Conductivity (Flexible Wall Permeameter)	ASTM D5084	3563	AASHTO	AAP
1900 - pH	ASTM D4972	3560	AASHTO	AAP
1919 - Hydraulic Conductivity	ASTM D2434	3834	AASHTO	AAP
1954 - In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	ASTM D6938	3854	AASHTO	AAP
2073 - Dry Preparation of Samples	ASTM D421	3972	AASHTO	AAP
2086 - One-Dimensional Consolidation Properties of Soils	ASTM D2435	3994	AASHTO	AAP
2439 - Hydraulic Conductivity (granular material)	ASTM D2434	3834	AASHTO	AAP
2464 - Particle Size Distribution	ASTM D6913	4324	AASHTO	AAP
3830 - Moisture content	ASTM D2216-10	30025106	AASHTO	AAP
7987 - Organic Content of Soil by Ignition	ASTM D2974-07A	30026450	AASHTO	AAP

Clients and Customers are urged to verify the laboratory's current certification status with the Louisiana Environmental Laboratory Accreditation Program.

20. CERTIFICATIONS/LICENSES:

Ardaman & Associates, Inc. - Megan Bourgeois, PE and Casey Floyd





20. CERTIFICATIONS/LICENSES:

Ardaman & Associates, Inc. - Robert Jewell, PE

ATSSA
Safer Roads Save Lives

Robert Jewell

has attended
Louisiana Traffic Control Supervisor Refresher

Completed: 23-AUG-2024

CEU (If Applicable): 0.75

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

American Traffic Safety Services Association
ATSSA.com

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

ATSSA
Safer Roads Save Lives
American Traffic Safety Services Association

This is to affirm that

ROBERT JEWELL

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Issue Date 7/31/2025
Exp. Date 7/31/2029
State Issued LA
V0000394058

Debbie Purcella
Instructor Name
Debbie Purcella
Instructor Signature

Verify at Flagger.com

20. CERTIFICATIONS/LICENSES:

Ardaman & Associates, Inc. - Jarmon King, PE

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jarmon King
has attended
Louisiana Traffic Control Supervisor
Training Course

11/8/2023 to 11/8/2027
Training Valid Through

Vice President of Education and Technical Services

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

ATSSA American Traffic Safety Services Association
SAFER ROADS SAVE LIVES

This is to affirm that

JARMON KING

has satisfied the requirements to be designated as a
CERTIFIED FLAGGER

Issue Date 5/29/2024
Exp. Date 5/29/2028
State Issued LA

Debbie Purcella
Instructor Name
Debbie Purcella
Instructor Signature

V0000258173
Verify at Flagger.com

PDCA
PILE DRIVING CONTRACTORS ASSOCIATION

Pile Dynamics, Inc.

This documents that

Jarmon E. King
Ardaman and Associates, Inc.

has on March 15, 2019 achieved the rank of

BASIC

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.

Frank T. Peters, Executive Director
Pile Driving Contractors Association

Garland Likins, Senior Partner
Pile Dynamics, Inc.

No. 2891

20. CERTIFICATIONS/LICENSES:

DRMP, Inc.

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
DRMP, INC.	Business Corporation (Non-Louisiana)	ORLANDO	Active

Previous Names

Business: DRMP, INC.
Charter Number: 45281809F
Registration Date: 2/23/2023
Domicile Address
941 LAKE BALDWIN LANE
ORLANDO, FL 32814
Mailing Address
941 LAKE BALDWIN LANE
ORLANDO, FL 32814
Principal Business Office
941 LAKE BALDWIN LANE
ORLANDO, FL 32814
Registered Office in Louisiana
450 LAUREL STREET, 8TH FLOOR
BATON ROUGE, LA 70801
Principal Business Establishment in Louisiana
450 LAUREL STREET, 8TH FLOOR
BATON ROUGE, LA 70801

Status

Status: **Active**
Annual Report Status: **In Good Standing**
Qualified: 2/23/2023
Last Report Filed: 5/8/2025

21. QA/QC PLAN:

If the advertisement requires submission of QA/QC plan, include it here. Otherwise, leave this section blank.

Waggoner Engineering, Inc.
(formerly Sigma Consulting Group, Inc.)

Quality Assurance/Quality Control Plan for Bridge Design Projects

Contract for LADOTD Off-System Highway Bridge Program
US 11 Norfolk Southern RR Overpass (HBI)
Route: US 11, St. Tammany Parish

Contract No. 4400032800 | State Project No. H.000688.5 | Federal Aid Project No. H000688

This document is a supplement to Waggoner's Quality Assurance/Quality Control Plan dated August 2020

September 2025

CONTENTS

I. Introduction

At Waggoner Engineering, Inc. (formerly Sigma Consulting Group Inc.), we emphasize good communication as the key component in achieving excellence. This communication begins with our firm's mission, and continues with goals, company procedures, and then periodic feedback for making changes.

The procedures are what guide our day to day quality efforts. They are organized into company procedures and project procedures. Our method for assuring quality over the long term is addressed in our mission, quality goal, and feedback.

This document establishes the minimum requirements for the Quality Control (QC) and Quality Assurance (QA) for all LADOTD bridge design projects, with specific references to this project.

Waggoner is fully responsible for the QC/QA of our work, and the work of all subconsultants. All subconsultants are to adhere to these guidelines also. **LADOTD is not responsible for performing QC/QA of Waggoner's or their subconsultants' work.**

II. References

- Quality Control/Quality Assurance Plan. 2020. Waggoner Engineering, Inc.
- LADOTD Bridge Design and Evaluation Manual, Part I – Policies and Procedures, Chapter 3: Policy for QC/QA
- Policy on Quality Control and Quality Assurance. 2012. Louisiana Department of Transportation and Development, Bridge Design Section
- Guidance on Quality Control and Quality Assurance (QC/QA) in Bridge Design. 2011. Federal Highway Administration.

III. Definitions

Quality Control (QC) - Procedures of checking the accuracy of the calculations and consistency of the drawings, detecting and correcting design omissions and errors before the design plans are finalized, and verifying the specifications for the load-carrying members are adequate for the service and operation loads.

Quality Assurance (QA) - Procedures of reviewing the work to ensure the quality controls are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications.

Designer - An individual directly responsible for the development of design calculations, drawings, specifications and contract documents, and review of shop drawings related to a specific bridge design with a level of technical skills and experience commensurate with the complexity of the subject structure or structures being designed. The designer must be licensed by the State of Louisiana as an engineer intern or a professional engineer.

Detailer - The detailer is the individual directly responsible for the creation of CAD drawings.

Checker - An individual responsible for performing a full technical review of the structural design calculations, drawings, specifications, and contract documents. The checker must be licensed by the State of Louisiana as an engineer intern or a professional engineer. If the designer is an engineer intern, then the checker must be a professional engineer.

Reviewer - An individual responsible for performing QA procedures for assuring that QC procedures have been performed. The reviewer must be licensed by the State of Louisiana as a professional engineer and have substantial experience in the design of similar structures.

Engineer of Record - An individual responsible for all bridge structural aspects of the design of the structure including the design of all of the bridge's systems and components. The EOR must be licensed by the State of Louisiana as a professional engineer and must have commensurate experience in the design of similar structures. The EOR can be the designer, the design checker, the reviewer, or the supervisor/team leader who is directly involved in the project development. The Engineer of Record normally seals and signs the final contract plans and specifications.

Area	Team Member	Responsible For
Bridge Lead	Andrew Windmann, PE	Determining appropriate staff to assign work. Overall Bridge Design scope delivery.
QA/QC	Andrew Windmann, PE (All except main spans)	Ensures established QA/QC policies for Waggoner and DRMP are followed and properly documented. Reviews calculations and plans for conformance with established engineering practices and design codes and verifies agreement with project specifications. Reviews project for biddability and constructability.
	Scott Benson, PE (Main Spans)	
Designers/EORs	Joshua Gonya, PE	Bridge and Structural Design related to the approach spans, retaining walls, and modifications to concrete box culverts. Approach spans will consist of medium-length precast concrete girder superstructures founded on column bents that consisted of concrete caps, columns, and pile-supported footings. All components will have corresponding as-design load ratings performed and documented.
	Joshua Olivier, PE	
	Leah Bourg, EI	
	Brandon Bollich, PE	
	Leo Rodriguez, PE	Bridge and Structural Design related to the main bridge spans. Large precast, prestressed concrete girder design founded on Inverted T-shape concrete straddle bent consisting of cap, precast columns and pile-supported footings. All components will have corresponding as-design load ratings performed and documented.
	Josue Herrera, PE	
	Nicole Catino, PE	
	Hung Tu, PE, SE	
	Sanjeev Howlader, PE	
Checkers	All members listed above	Provides in-depth check of designer's calculations and plans. This can be independent design or markups to the designer's calculations.

IV. Project Procedure

A. Development of Project Design Criteria

Design criteria (bridge) must be developed and submitted for LADOTD for review and approval. Though the design criteria may change throughout the project, a current list of the criteria shall be maintained at all times. Any design assumptions made, or design exemptions obtained shall be listed in the design criteria and referenced in the calculations and drawings as appropriate. A design criteria checklist is included in the Appendix.

B. Design Process

During the design process, the designer must follow the design criteria established for the project. A bridge type, size and location (TS&L) study must be developed first and approved by the supervisor or team leader prior to proceeding with the design of structural components. The design calculations shall be organized and maintained in a standard calculation book format.

- The designer has the responsibility to ensure that his calculations or drawings have been checked and signed by a checker.
- All project calculations will be filed as directed by the Project Manager. Except for very small projects, the calculations should be maintained in a 3-ring binder/folder with a Table of Contents and page numbers.
- All calculations will be prepared neatly. These calculations will always be checked by an independent checker and signed by both the designer and the checker. Calculations performed on CAD, such as quantities, will be documented on printouts or drawings (preferably half-size), and checked independently. If such documentation is not readily available from the software, calculations shall be manually documented or performed using other methods.
- The calculations or drawings should be readable without the designer explaining the content. It may be necessary for the designer to explain the philosophy behind the design to the checker.
- All assumptions used in the calculations shall be listed, verified and approved by the Project Manager. Where code dictates a requirement, the code, code date, section number and applicable table will be listed. Where information is obtained from other calculations, disciplines or reference material, the source shall be identified.
- During development of design calculations, the designer should keep in mind that proper sketches and details should be presented as others may use these calculations in developing construction drawings.
- Computer programs (both commercial and in-house) are a great time-saver to the design process. However, it is the designer's responsibility to be familiar with the program, and its design assumptions and internal design routines and methods to the extent that he could duplicate a given result.
- Compute and document input for the computer programs, as you would design calculations. These should be attached to the computer printout when passed to checking. It is not necessary to copy (for checking) lengthy computer printouts.

- The checking of calculations shall be on a copy of the original and shall be retained with the original. After all corrections have been made, the checker shall sign the original. The checker shall sign every page of the calculations to ensure that pages are not added to the end of what he checked. No erasing is permitted after the checker has signed the original calculations.
- All drawings prepared in CAD will be plotted by the technician and checked for correctness and accuracy (by the technician) prior to delivering the drawing to the designer/engineer. It is the CAD technician's responsibility to ensure that the drawing is drawn correctly. The drawing designated as the check print should be in the format of the final deliverable.
- As a general rule, all engineers and technicians should review the plans, specifications and calculations during the development process not only for accuracy, but also that the elements fit together. This is especially true with inter-discipline projects. Checks should also be made on how revisions to one element of a project might affect other portions of the project.
- Each submittal should include a QC/QA certification that the process is being followed and the plan documents and information presented is accurate and meets the requirements of the submittal.

C. Checking Process

The checker may begin the checking process at the completion of the entire design/detail process or may check components of the designer/detailer's work as it is completed. Likewise, the checker may provide feedback at the completion of the entire checking process or as each component of check is completed.

During the design check process, the design checker must verify the accuracy of the designer's calculations, pay items, quantities, special provisions including Non-Standard items, and cost estimate. Regardless of the checking method employed, the designer's calculations are the calculations of record and must be updated to correct any errors or omissions discovered by the design checker. The design checker should also ensure that the drawings adequately and accurately present the design information.

During the detail check process, the d esign information and CAD standards. All dimensions and quantity calculatio Check Print drawing.

No: _____ Date: _____

CHECK PRINT

Dwg. Checked against calcs. And calc check confirmed

by: _____ Date: _____

Checked: _____ Date: _____

Backchecked: _____ Date: _____

Corrected: _____ Date: _____

Verified: _____ Date: _____

Any discrepancies that arise should be resolved between the designer/detailer and the checker, and the calculations and plan details should be corrected accordingly. If the designer/detailer and the checker are unable to resolve their discrepancies, the issue should be brought to the

attention of the supervisor or team leader.

The checker shall be free to follow his own procedure for checking; however, the following must be adhered to regardless of his/her other methods.

- The checking of calculations shall be on a copy of the original and shall be retained with the original. After all corrections have been made, the checker shall sign the original. The checker shall sign every page of the calculations to ensure that pages are not added to the end of what he checked. No erasing is permitted after the checker has signed the original calculations.
- Checker is to show all additions or changes (noted in red) in sufficient detail for a draftman's complete understanding. Avoid verbal instructions. Checker should initial and date each drawing as it is checked.
- If reasons for errors are not clearly apparent, consult draftsman before making change.
- Various checklists (both department and client) exist and should be used where applicable.
- To minimize the number of marked-up drawings being circulated, only the stick file or a clearly designated "Check Print" set should be used for corrections.
- The checker of both the calculations and the drawings should compare the two. They must match.
- After drawings have been checked, notify disciplines concerned, of additional requirements, omissions, or changes.
- After checking is completed the check print should be returned to the original designer for his/her back-check and pick-ups. The original designer shall initial and date each sheet as back-checked.
- Any markups not completely addressed shall be indicated and discussed with Checker before the Back-Check print is returned.
- After Back-Check pickups are made, the drawings should be returned to the checker for final review. The CAD technician shall initial and date each sheet as corrected. After a final review, the checker shall initial and date each sheet as verified.
- All changes or approvals to checked design package shall be color coded as described in the Waggoner drafting standards. Below is a list of colors and intent for use:

YELLOW	indicates checked and complete
RED	indicates addition
GREEN	indicates "remove the item in green"
BLUE	indicates checkers comments are picked-up and complete
BLACK	to be used to write specific instructions or comments
CIRCLED AREA	indicates "not satisfactory" with a pencil comment explaining why, be specific.

The drawings should be locked when the checking process begins and then locked again when complete. This keeps unauthorized changes from occurring and ensures that the entire project team is using accurate and up-to-date information.

After the designer, design checker, detailer, and detail checker are satisfied with the state of the design calculations, drawings, special provisions, and cost estimate as appropriate, the design and detail check shall be considered complete. This shall be no later than the 95% Final

Plans stage.

D. Quality Assurance/Review Process

Upon completion of the design and detail check, the designer is responsible for preparing a QA information package. A QA information package checklist is included in the Appendix. This QA package is given to a reviewer; the reviewer is the engineer responsible for ensuring that the QC process was followed and is complete.

During quality assurance process, the reviewer shall perform a cursory review of all documents in the QA information package submitted by the designer. This review should focus on the constructability of the plan details; areas of critical structural importance; areas where, based on the reviewer's experience, mistakes may be typically found; and areas that may be new to the design practice. The reviewer may, but need not, produce independent calculations to verify submitted information. The reviewer shall provide feedback to the designer and resolve all issues. The QA process shall be completed no later than the 98% final plans stage. At this point, the QC/QA certification (included in Appendix) shall be signed by the designer, design checker, detailer, detail checker, and reviewer.

E. Responsibilities of the EOR

- Ensure the QC/QA certification is signed by all responsible parties. Ensure the geotechnical design information shown on bridge plans is co-stamped by a Geotechnical Engineer and the hydraulic information shown on bridge plans is co-stamped by a Hydraulic Engineer.
- Assemble design calculations from all designers, finalize the calculation book, and seal the cover sheet of the calculation book.
- Ensure the names of the designer, design checker, detailer, detail checker, and reviewer are correctly shown on the title block of each plan sheet. Stamp all plan sheets or designate a designer, design checker, or reviewer who shall be licensed by the State of Louisiana as a professional engineer to stamp the sheets developed under their supervision. The EOR must stamp the general note sheets.
- Ensure all special provisions are accurately shown on the construction proposal. The special provisions are typically stamped by the Specification Engineer as part of the construction proposal; however, if the Specification Engineer is not qualified or not willing to stamp the special provisions, the EOR must stamp these provisions.

F. Responsibilities of the LADOTD Bridge Task Manager:

The LADOTD bridge task manager will participate in the following:

- Initiate a design kick-off meeting as soon as the project is awarded to discuss project expectations, design criteria, submittal schedule, implementation of QC/QA plan document, as well as to become familiar with the consultant's design team members who are identified as the designers, design checkers, and reviewers.
- Review and approve design criteria and TS&L and ensure the design criteria is updated as the project progresses.
- Review consultant's submittals - **LADOTD Bridge Task Managers shall not perform QC/QA of consultants' work.** However, they will selectively check the plans for constructability, consistency, and clarity.

V. Plan Development

The following procedures help with our quality in the production of drawings and specifications:

- Use department-generated CADD standards and CADD drafting manual, as required.
- Each drawing has an automatic date stamp, along with a correct title block.
- Each drawing should always have a status stamp (Preliminary, For Review, For Approval, etc.) that also identifies the Engineer-of-Record.
- Dimensions and data should be shown only once, to reduce possible discrepancies.
- Cross referencing should be as simple and as clear as possible.
- Coordinate the drawings and specifications with each other.
- Use LADOTD standard specifications and standard plans when appropriate.
- When specifying products, use the LADOTD accepted Qualified Products List when possible.
- If the Qualified Products List does not contain the desired product, document the decision process for approving a product along with any relevant codes.
- Document for the files: relevant communications, alternatives, and reasoning for picking an alternative.

Appendix

- Design Criteria Checklist
- QA Information Package Checklist
- Consultant Submittal QC/QA Certification
- QC/QA Certification (Final)

Appendix
Design Criteria Checklist

Design criteria for each project shall include, but not limited to, the following sections:

Cover Sheet
The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- Revision date
- The Supervisor or Team Leader's signature and date

Governing Design and Construction Specifications and Other References
A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.

Design Assumptions and Design Exceptions
All design assumptions and design exceptions received must be included in this section along with supporting documents.

General Information
The general information as listed below should be included in this section:

- Bridge information (number of bridges, bridge clear width, length, number of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Hydraulic design information (design water elevations, scour depth and scour elevation, etc.)
- Other relevant information

Hydraulic Design Criteria
All hydraulic design criteria (design year, design water elevations, scour depth and scour elevation, etc.) shall be included in this section and the information shall be provided by the Hydraulic Engineer.

Design Factors
The ductility factor, redundancy factor, and operational importance factor shall be listed in this section.

Design Loads
All design loads (dead load, live load, wind load, thermal loads, vessel collision loads, seismic load, wave loads, etc.) used for the project shall be included in this section.

Limit States
All applicable limit states for this project shall be listed in this section.

Bridge Barrier
The design criteria, types, and test levels for bridge barriers shall be listed in this section. Standard plans and special details should be listed if they are utilized.

Guardrail
The design criteria, types, and test levels for guardrails shall be listed in this section. Standard plans and special details should be listed if they are utilized.

Approach Slab
Design criteria for approach slab shall be included in this section. Standard plans and special details should be listed if they are utilized.

Deck and Deck Drainage
All design criteria for deck and deck drainage design shall be included in this section. Standard plans and special details should be listed if they are utilized.

Bearing
All bearing types and design criteria for each bearing type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Joint
All joint types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Superstructure
All superstructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Substructure
All substructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Piles and Drilled Shafts
All pile types, sizes, and structural design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.

Geotechnical Design
All geotechnical design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.

Mechanical Design
All mechanical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

Electrical Design
All electrical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

As-Designed Bridge Rating Criteria
All as-designed bridge rating criteria shall be included in this section.

Software
All software used for design and check shall be included in this section.

Appendix
QA Information Package
Checklist

Project No:
Project Description:

___Calculation Book

___Plans

___Special Provisions

___Cost Estimates

___Other Documents

Appendix
Consultant Submittal QA/QC Certification

Project No:
Project Description:

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 QA/QC plan documents and the information presented is accurate and meets the requirements of this submittal.

_____
Submittal Description

_____	_____	_____
Supervisor or Team Leader Name	Signature	Date

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
DRMP, Inc.	941 Lake Baldwin Lane Orlando, FL 32814	**Leo Rodriguez, PE** Tampa Structures Group Leader lrodriguez@drmp.com	813.462.2661
Ardaman & Associates, Inc.	101 Teal Street St. Rose, LA 70087	**Robb Jewell, PE,** Vice President, Branch Manager rjewell@ardaman.com	225.752.4790

23. LOCATION:

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

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We transform communities.