





# **CONTRACT FOR OFF-SYSTEM HIGHWAY BRIDGE PROGRAM** | PICARD RD OVER BAYOU D'INDE

Contract No. 4400030635 State Project Number H.015942.5 January 29, 2025

# section **01–13**

Bayou Gardens Blvd. over St. Louis Bayou Houma, LA Engineer of Record: Dennis Hymel, Jr., PE

#### (Revised December 12, 2024)

#### DOTD FORM: 24-102 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.

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

1.	Contract title as shown in the advertisement	CONTRACT FOR OFF-SYSTEM HIGHWAY BRIDGE PROGRAM PICARD RD OVER BAYOU D'INDE
2.	Contract number(s) as shown in the advertisement	4400030635
3.	State Project Number(s), if shown in the advertisement	H.015942.5
4.	Prime consultant name (name must match <u>exactly</u> as registered with the Louisiana Secretary of State (SOS) where such registration is re- quired by law; including punctuation; include screenshot from SOS at the end of Section 20)	Crescent Engineering & Mapping, LLC
5.	Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	Engineering: EF-0007140   Surveying: VF-0000871
6.	Prime consultant mailing address	PO Box 370, Vacherie, LA 70090
7.	Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	1815 LA 18, Vacherie, LA 70090
8.	Name, title, phone number, and email address of prime consultant's contract point of contact	Dennis M. Hymel, Jr., PE, President/Manager 225.329.1742   Dennis.Hymel@crescentengla.com
9.	Name, title, phone number, and email address of the official with signing authority for this proposal	Dennis M. Hymel, Jr., PE, President/Manager 225.329.1742   Dennis.Hymel@crescentengla.com



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

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

 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.

Signature (shall be the same person as #9):

Kull Date: 2025

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Firm(s):



Firm(s)' %:

# 12. Discipline Table:

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

Evaluation Discipline(s)	% of Overall Contract	Crescent	ELOS	Each Discipline must total 100%
Survey	24%	100%		100%
Bridge	68%	100%		100%
Environmental	8%		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%	92%	8%	
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\*The disciplines are: Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic.

If sub-consultants are used, the prime consultant must perform greater than 50% of the work for the overall contract.

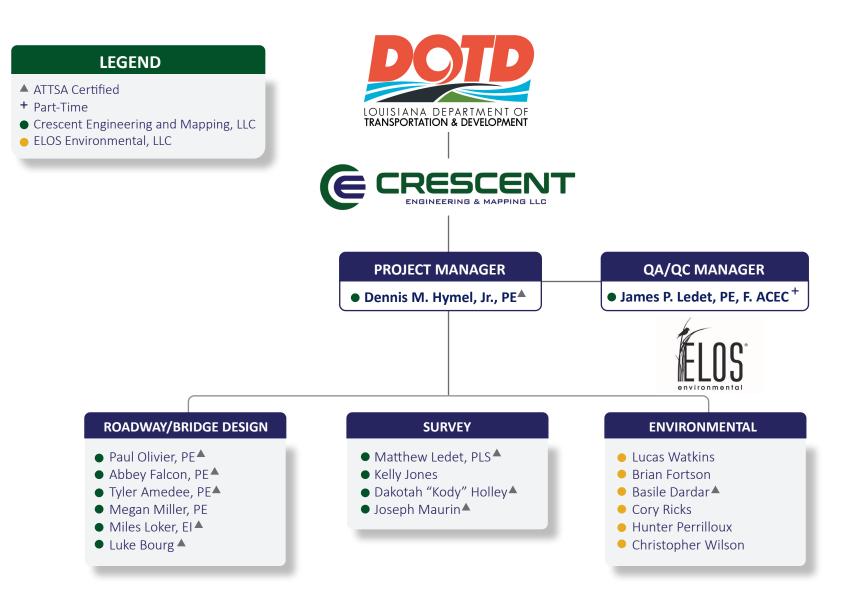


Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
	Supervisor - Engineer	1	2
Crescent Engineering and Mapping, LLC	Engineer	1	4
	Engineer Intern	1	1
	Senior Technician	2	2
CRESCENT ENGINEERING & MAPPING LLC	Surveyor	1	1
	Party Chief	1	2
	Instrument Man	1	1
	Administrative	0	1
	Biologist/Wetlands	1	5
ELOS Environmental, LLC	Environmental Professional	1	2
	Environmental Manager	1	2
	GIS Analyst	1	3
MLLUJ	Archaeologist	0	2
environmental	Technician	1	5



# section 14-16

S.P. No. H.011806 Gracie Lane Bridge over Bayou Sorrel Bayou Sorrel, LA Engineer of Record: Dennis Hymel, Jr., PE





# 15. Minimum Personnel Requirements:

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR.

MPR No.	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	Dennis Hymel Jr., PE		PE #38172 - Civil	LA	09/30/2025
2	Dennis Hymel Jr., PE	P ENGINEERING & MAPPING LLC P	PE #38172 - Civil	LA	09/30/2025
2	Dennis Hymel Jr., PE		PE #38172 - Civil	LA	09/30/2025
3	Paul I. Olivier, PE		PE #39967 - Civil	LA	03/31/2026
4	Matthew J. Ledet, PLS		LA Registered Surveyor PLS - 5104	LA	09/30/2026
	Basile Dardar	6-	5 years' wetland delineation		
	Brian Fortson		5 years' wetland delineation		
5	Cory Ricks		5 years' wetland delineation		
	Hunter Perrilloux	environmental	5 years' wetland delineation		



#### Firm employed by: Crescent Engineering & Mapping, LLC Years of relevant experience with this 3 employer Dennis M. Hymel, Jr., PE Years of relevant experience with other 17 President/Manager employer(s) Degree(s) / Years / Specialization Bachelor of Science/2009/Civil Engineering Active registration number / state / expiration date 38172 / LA / 09-30-2025 Year registered 2013 Discipline PE/Civil Engineering Contract role(s) / brief description of responsibilities Project Manager - Dennis will serve as the Project Manager, oversee road and bridge design and plan production. His 20 years of experience meets MPRs #1-#3. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed **Experience dates** intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). (mm/yy-mm/yy) S.P. No. H.015025, McLin Road over Darling Creek, St. Helena Parish, LA (LADOTD) – Project Manager. Responsible for the coordination and production of topographic surveys and all roadway and bridge design elements including H&V geometrics, drainage design, hydraulics and scour analysis, foundation layout, non-standard curved slab span design, curved approach slabs, guardrail design, GP&E, low profile 04/23 - 05/24runaround, inroads modeling, bridge TS&L, and oversight of road and bridge plan production for the 4-span Off-System Bridge replacement in St. Helena Parish. Project was completed under an accelerated design schedule. EN22-0181, Rousseau Rd. Bridge over Tchefuncte River, St. Tammany Parish, LA (St. Tammany Parish Government) – Project Manager/ Supervising Engineer. Responsible for the coordination and oversight of topographic surveys, ROW Mapping, roadway and bridge design elements including H&V geometrics, channel hydraulics, roadside drainage, bridge design elements including non-standard slab spans and 05/22 - Ongoingbents to accommodate phased construction. LRFR of replacement bridge and rehabilitated structure, and served as the EOR for the bridge rehabilitation design using steel framed helper bents. Responsible for environmental assistance and subconsultant coordination for the replacement of the existing 4-span bridge with a 7-span concrete, slab span Off System Bridge near Covington, LA. S.P. No. H.014993 Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) - Project Manager. Responsible for the coordination and production of topographic surveys and all roadway and bridge design elements including H&V geometrics, roadside drainage design, hydraulics and scour analysis, foundation layout, end bent and approach slab details to accommodate tapered barrier 03/23 - 06/24railing, guardrail design, GP&E, bridge TS&L, and oversight of road and bridge plan production for the 4-span Off-System Bridge replacement near Slaughter, LA. S.P. No. H.014984 Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) - Project Manager. Responsible for the coordination and production of topographic surveys and all roadway and bridge design elements including H&V geometrics, roadside drainage design, 03/23 - Ongoing hydraulics and scour analysis, foundation layout, non-standard curved slab span design, curved approach slabs, guardrail design, GP&E, bridge TS&L, and oversight of road and bridge plan production for the 5-span Off-System Bridge replacement near Pineville, LA. S.P. No.s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Project Manager/ Engineer of Record. Responsible for project coordination, design and plan production, and performed QC reviews of topographic surveys. Served as the EOR for hydraulic analysis, EOR for roadway and urban and rural bridge design elements including H&V geometry, roadside 03/22 - Ongoingdrainage, QA of plan production, LRFR for RCB structures for the replacement of four (4) Off-System Bridge sites in Tangipahoa with RC slab spans and RCB's.



16. Staff Experience	<u>ce:</u>
05/20 – 08/21 (previous employer)	<b>Contract 44-17598 - Rural Bridge Replacement Initiative Phase I (47 bridge structures), Districts 04, 05, 08, 58 (LADOTD) -</b> Project Manager/Supervising Engineer. Performed QC review of topographic surveys and R/W Maps and served as the supervising engineer for roadway, geometrics, and bridge design elements including hydraulics analysis, scour, horizontal/vertical alignments, Level 1/2 TMP's, bridge design & LRFR (non-standard structures) including RC Slab Span and LG-25 girders, coordination and oversight of geotechnical and environmental services, SOV's, CE document preparation and permit applications for the spot replacement of <b>47 bridge structures in northern Louisiana containing nine (9) Off-System Bridges</b> .
03/18 – 04/21 (previous employer)	S.P. No. H.013080, McLemore Road/Bee Bayou, Richland Parish, LA (LADOTD) - Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, SOV's, hydraulics, foundation layout, roadway and bridge plan production for the 6-span Off-System Bridge replacement near Rayville, LA.
05/15 – 03/18 (previous employer)	<b>S.P. No. H.011788, Oak St. Bridge/Poydras Bayou, West Baton Rouge Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for topographic surveys, roadway and bridge design, special LRFD bent and span design to accommodate hydraulic conditions, 25' slab spans, LRFR, hydraulic analyses, steel bulkhead design and detailing, preliminary and final plans for the <b>3-span Off-System Bridge replacement.</b>
03/15 – 08/20 (previous employer)	<b>S.P. No. H.010867, Jude &amp; Placide Road Bridges, Vermilion Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, hydraulics, SOV's, foundation layout, special guard rails, special bridge spans and bents (25'), LRFR, roadway and bridge plan production for the replacement of two (2) Off-System Bridges, 1 @ 50'; 1 @ 60' near Erath and Maurice, LA.
03/13 – 03/15 (previous employer)	<b>S.P. No. H.010598, Derrick Road Bridge, Iberville Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, hydraulics, SOV's, foundation layout, special guard rails, special bridge bents, LRFR, roadway and bridge plan production for the 3-span Off-System Bridge replacement project.
06/15 – 04/18 (previous employer)	<b>S.P. No. H.011806, Gracie Lane Bridge, Iberville Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, hydraulics, foundation layout, SOV's, guardrail layout, roadway and bridge plan production for the <b>7-span Off-System Bridge replacement</b> project.
03/13 — 03/18 (previous employer)	<b>S.P. No. H.011524, Katie Ln. &amp; Leo Morrow Rd. Bridges, Avoyelles Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, SOV's, hydraulics, foundation layout, special bridge bents & spans, LRFR, roadway and bridge plan production for the replacement of two (2) Off-System Bridges near Plaucheville, LA.
04/13 – 03/16 (previous employer)	<b>S.P. No. H.010559, Bayou Mercier Road/Berard Canal Bayou, St. Martin Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, SOV's, hydraulics, foundation layout, Quad-Beam Superstructure and Substructure, Bearing design, LRFR, roadway and bridge plan production for the 200' long, <b>5-span Quad Beam Off-System Bridge replacement project</b> near Catahoula, LA.
03/15 – 01/17 (previous employer)	<b>S.P. No. H.011767, Bayou Crab Road Bridge, Assumption Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for all roadway and bridge design including geometrics, bridge TS&L, hydraulics, foundation layout, special bridge spans (25'), LRFR, roadway and bridge plan production for the 3-span Off-System Bridge replacement project.
02/14 – 07/21 (previous employer)	<b>S.P. No. H.010724, Pecan Island Road Bridge over The Chenal, Point Coupee Parish, LA (LADOTD)</b> – Supervising Engineer. Responsible for oversight and QC reviews of all roadway design and plan preparation, vertical and horizontal geometry, drainage and geometrics, hydraulics design; performed QC reviews of bridge design and bridge plan production for 150' long Off-System Bridge using special detail 25' precast deck and CIP substructure, design of steel pipe piles, anchored steel bulkhead.
01/12 – 08/15 (previous employer)	<b>S.P. No. 713-29-0103, Tiger Drive Bridge over Bayou Lafourche, Lafourche Parish, LA (LADOTD)</b> – Project Engineer. Responsible for roadway and bridge design elements including H&V alignments, bridge TS&L and non-standard bridge design elements to accommodate a 23' long span and water line attached to the bent caps for the <b>183' long Off-System Bridge</b> over Bayou Lafourche, in Thibodaux, LA.



#### Firm employed by: Crescent Engineering & Mapping, LLC Years of relevant experience with this 2 employer Paul I. Olivier. PE 13 Years of relevant experience with other **Engineering Manager** employer(s) Degree(s) / Years / Specialization Bachelor of Science/2010/Civil Engineering Active registration number / state / expiration date 39967 / LA / 03-31-2026 Year registered 2015 Discipline PE/Civil Engineering Contract role(s) / brief description of responsibilities Supervising Engineer – Paul will supervise road, hydraulic and bridge design as well as preliminary and final plan preparation. Paul's experience meets MPR #3. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed **Experience dates** intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). (mm/yy-mm/yy) S.P. No. H.015025 McLin Road over Darling Creek, St. Helena Parish, LA (LADOTD) - Supervising Engineer. Responsible for the oversight of all roadway and bridge design elements including H&V geometrics, drainage design, hydraulics and scour analysis, foundation layout, non-standard curved slab span design, approach slabs, guardrail design, GP&E, low profile runaround, inroads modeling, bridge TS&L, and 04/23 - 05/24oversight of road and bridge plan production for the 4-span Off-System Bridge replacement in St. Helena Parish. Project was completed under an accelerated design schedule. S.P. No.s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Supervising Engineer. Responsible for the oversight of all roadway H&V alignments, roadway and bridge hydraulic analysis, structure selections, retaining wall design, and plan preparation. Also responsible for coordination and oversight of geotechnical and environmental services for the 03/23 - Ongoingreplacement of four (4) Off-System Bridge replacements with RC Slab Spans and RCB's throughout Tangipahoa Parish on E. Lewiston Rd., Easley Rd. and Old Genessee Rd. (2 sites). EN22-0181, Rousseau Rd. over Tchefuncte River, St. Tammany Parish, LA (St. Tammany Parish Government) - Engineer of Record. Responsible for all roadway design elements including H&V geometrics, roadside and channel hydraulics, roadway/bridge construction 02/23 - Ongoingphasing, superelevation design, pavement design, inroads modeling, quantity calculations and cost estimating for the replacement of the existing 4-span bridge with a 7-span concrete, slab span Off System Bridge near Covington, LA. S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) – Supervising Engineer/EOR. Responsible for 03/23 - 06/24the design and plan production of all project elements including H&V alignments, channel hydraulics and scour analysis, roadside drainage, guardrail design, inroads modeling, and quantity calculations for the 4-span Off-System Bridge replacement near Slaughter, LA. S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) – Supervising Engineer/Engineer of Record. Responsible for the design and plan production of all project elements including H&V alignments, channel hydraulics and scour analysis, 03/23 - Ongoingroadside drainage, superelevation design, guardrail design, striping/signing, inroads modeling and quantity calculations for the 5-span Off-System Bridge replacement near Pineville, LA. S.P. No. H.014980, Chinaberry Drive over Unnamed Coulee, Acadia Parish, LA (LADOTD) - Supervising Engineer/EOR. Responsible for 03/23 - Ongoingall roadway and bridge design elements and plan production including H&V alignments, channel hydraulics and scour analysis, roadside drainage, guardrail design, inroads modeling and quantity calculations for the **3-span Off-System Bridge replacement** in Acadia Parish.



16. Staff Experience	<u>:e:</u>
06/21 – 01/23 (previous employer)	<b>Contract 44-19336 – Rural Bridge Replacement Initiative Phase II (40 bridge structures), Districts 04, 05 (LADOTD) –</b> Project Manager/ Supervising Engineer. Performed QC review of topographic surveys and ROW Maps and served as the supervising engineer for all roadway and bridge design elements including roadway geometrics, channel hydraulics analysis, scour, horizontal/vertical alignments, Level 1&2 TMP, bridge TS&L, and superstructure/substructure design and detailing. Also provided coordination and oversight of geotechnical services and environmental permitting, SOV's, CE document preparation and permitting for the <b>replacement of forty (40) bridge structures in northern Louisiana containing twelve (12) State Project Numbers</b> .
02/14 – 07/21 (previous employer)	S.P. No. H.010724, Pecan Island Road Bridge over The Chenal, Point Coupee Parish, LA (LADOTD) – Engineer of Record. Responsible for all roadway design elements and plan preparation, H&V alignments, roadside drainage, roadway geometrics, hydraulic analysis and design, and oversaw bridge design and plan production for single lane, 150' long RC slab span Off System Bridge using special detail precast deck and CIP substructure, design of steel pipe piles and steel retaining walls.
12/18 – 09/22 (previous employer)	<b>S.P. No. H.013144, Pine Bluff Road/Drain to Cypress Creek; Tack Allen Road/Drain to Cypress Creek, Ouachita Parish, LA (LADOTD)</b> – Supervising Engineer/Engineer of Record. Responsible for review of topographic surveys, and all roadway and bridge design elements and plan production for the <b>replacement of two (2) Off System Bridge sites</b> in Ouachita Parish including one RC slab span bridge and on RC Box Culvert.
03/15 – 07/18 (previous employer)	S.P. No. H.011767, Bayou Crab Road Bridge/Norman Canal Assumption Parish, LA (LADOTD) – Lead Engineer. Assisted with topographic survey reviews, and led bridge and roadway design including H&V alignments, hydraulic analysis, steel bulkhead design, design of special bridge elements, quantity calculations and inroads modeling. Lead preliminary and final plan production for the replacement of a 3-span Off-System Bridge in Assumption Parish.
12/23 – Ongoing	<b>S.P. No. H.015334, 9th Street over St. Louis Canal, Terrebonne Parish, LA (LADOTD)</b> – Project Manager/Engineer of Record. Responsible for review of topographic surveys and R/W Maps and supervision of all roadway and bridge design elements including H&V alignments, hydraulic analysis, roadside drainage, quantity calculations and preliminary plan preparation for the <b>4-span RC slab span Off System Bridge</b> in Houma, LA.
03/16 – 10/18 (previous employer)	S.P. No. H.011540 Babin Road Bridge/Bayou Narcisse, Ascension Parish, LA (LADOTD) - Engineer of Record. Responsible for topographic surveys, hydraulic analysis, roadway and bridge design, and oversaw preparation of preliminary and final plans including special bridge elements for the 80' long Off-System Bridge in Gonzales, LA.
09/15 – 09/17 (previous employer)	<b>S.P. No. H.011788, Oak St. Bridge/Poydras Bayou, West Baton Rouge Parish, LA (LADOTD)</b> - Project Engineer. Assisted with roadway design elements including horizontal and vertical alignments, roadside drainage, hydraulic analysis, and inroads modeling and served as the roadway plan production lead for the <b>replacement of 3-span Off-System Bridge</b> near Erwinville, LA.
06/15 – 03/18 (previous employer)	S.P. No. H.011524, Katie Lane & Leo Morrow Road Bridges, Avoyelles Parish, LA (LADOTD) – Project Engineer. Reviewed topographic surveys and assisted with roadway design elements including H&V alignments, hydraulic analysis, quantity calculations and inroads modeling. Also served as plan production lead for two (2) Off-System Bridge replacements in Avoyelles Parish.
04/14 – 01/18 (previous employer)	<b>S.P. No. H.010867, Jude &amp; Placide Road Bridges, Vermilion Parish, LA (LADOTD)</b> – Project Engineer. Assisted with topographic survey reviews, performed channel hydraulic analysis, and assisted with roadway and bridge design elements including special bridge spans for the <b>replacement of two (2) Off-System Bridges</b> in Vermilion Parish.
09/13 – 03/16 (previous employer)	S.P. No. H.010559, Bayou Mercier Road/Berard Canal Bayou, St. Martin Parish, LA (LADOTD) – Project Engineer. Reviewed topographic field survey data, assisted with bridge design, hydraulic analysis and roadway design for the replacement of the existing timber structure with a 5-span, 200' long quad-beam concrete structure for the Off-System Bridge Program.
01/12 – 08/15 (previous employer)	<b>S.P. No. 713-29-0103, Tiger Drive Bridge over Bayou Lafourche, Lafourche Parish, LA (LADOTD)</b> – Engineering Support. Performed topographic field surveys and assisted with roadway and bridge design elements including H&V alignments, bridge TS&L, striping/signing, guardrail design and non-standard bridge design elements to accommodate a 23' long span and water line attached to the bent caps for the <b>183' long Off-System Bridge</b> over Bayou Lafourche, in Thibodaux, LA.



#### Firm employed by: Crescent Engineering & Mapping, LLC Years of relevant experience with this 2.5 employer Abbey F. Falcon, PE Years of relevant experience with other 5 **Project Engineer** employer(s) Degree(s) / Years / Specialization Bachelor of Science/2017/Civil Engineering Active registration number / state / expiration date 46035 / LA / 03-31-2026 Year registered 2021 Discipline PE/Civil Engineering Contract role(s) / brief description of responsibilities Road Design Lead Engineer – Abbey will lead the road design, perform hydraulics analysis and assist with plan preparation and Inroads modeling. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed **Experience dates** intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). (mm/yy-mm/yy) S.P. H.015025 McLin Road over Darling Creek, St. Helena Parish, LA (LADOTD) - Roadway Engineer of Record. Responsible for the review of topographic surveys and design of all roadway elements including H&V geometrics, drainage design, channel hydraulics, scour analysis, 04/23 - 05/24quantity calculations, and inroads modeling. Also responsible for the development of preliminary and final roadway plans. Project was completed under an accelerated design schedule. S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) - Project Engineer. Responsible for the review of topographic surveys and assisted with the design effort of all roadway elements including H&V alignments, roadside drainage, channel 04/23 - 05/24hydraulics, scour analysis, guardrail design, quantity calculations and inroads modeling. Also assisted with the preparation and review of preliminary and final plans for the 4-span, Off-System Bridge replacement near Slaughter, LA. S.P. No. H.014984 Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) - Project Engineer. Responsible for the review of topographic surveys and assisted with the design effort of all roadway elements including H&V alignments, channel hydraulics, scour 04/23 - Ongoinganalysis, superelevation design, guardrail design, guantity calculations and inroads modeling. Also assisted with the preparation and review of preliminary and final plans for the 5-span, Off-System Bridge replacement near Pineville, LA. S.P. No. H.014992, McHugh Road over Brushy Bayou, East Baton Rouge Parish, LA (LADOTD) - Engineer of Record. Responsible for the review of topographic surveys and all project design elements including hydraulics analysis, H&V alignments, storm drain design, 03/23 - OngoingInroads modeling, structure selection, and complete streets accommodations. Also responsible for the development of preliminary plans associated with the replacement of an existing 3-span bridge with a reinforced concrete box Off-System Bridge structure near Baker, LA. EN22-0181, Rousseau Rd. over Tchefuncte River, St. Tammany Parish, LA (St. Tammany Parish Government) - Project Engineer. Led several roadway design elements including H&V alignments, mainline and intersection geometrics, construction phasing, storm drain 06/22 - Ongoingdesign, hydraulic analysis, guardrail design, superelevation design and inroads modeling associated with the replacement of the existing 4-span bridge with a 7-span concrete, slab span Off-System Bridge near Covington, LA. S.P. No.'s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Lead Project Engineer. Led design and plan production involved with the spot replacement of four (4) Off-System Bridge structures located along Old Genessee 06/22 – Ongoing Rd. (2 sites), Easley Rd. and Lewiston Rd. located throughout Tangipahoa Parish. Responsible for design elements including H&V geometrics, roadside and structure hydraulics, construction phasing, detour plans, inroads modeling, quantity calculations and cost estimates.



16. Staff Experien	<u>ce:</u>
04/20 – 04/22 (previous employer)	S.P. No. H.013953, McManus Road Bridge/Cypress Creek, Richland Parish, LA (LADOTD) – Engineer of Record. Responsible for the review of topographic surveys and all roadway and bridge design elements including H&V alignments, hydraulics & scour analysis, guardrail design, quantity calculations and inroads modeling. Also responsible for the preparation of roadway and bridge plans, design report forms, and design criteria for the eight (8) span Off-System Bridge replacement.
06/18 – 04/21 (previous employer)	S.P. No. H.013080, McLemore Road/Bee Bayou, Richland Parish, LA (LADOTD) – Project Engineer. Assisted with roadway and bridge design including Inroads modeling, geometrics, bridge TS&L, hydraulics, foundation layout, and bridge plan production for the 6-span Off-System Bridge replacement near Rayville, LA.
04/20 – 02/22 (previous employer)	S.P. No. H.013954, Pleasant Ridge/Rabbit Branch, LaSalle Parish, LA (LADOTD) – Engineer of Record. Responsible for all roadway and bridge design elements including H&V alignments, hydraulics & scour analysis, roadside drainage design, bridge TS&L, quantity calculations, inroads modeling and cost estimates. Also responsible for the preparation of Preliminary and Final Plans, design report forms, and design criteria for the 3-span Off-System Bridge replacement.
04/20 – 05/22 (previous employer)	S.P. No. H.013955, LA 507, 514, Local: Bayou and Cr BRs, Red River Parish, LA (LADOTD) – Engineer of Record. Responsible for all roadway and bridge design elements including H&V alignments, hydraulics & scour analysis, roadside drainage design, bridge TS&L, quantity calculations, inroads modeling and cost estimates. Also responsible for the preparation of Preliminary and Final Plans, design report forms, and design criteria for the <b>replacement of five (5) LADOTD On-System Bridges and one (1) Off-System Bridge</b> .
04/20 – 04/22 (previous employer)	<b>S.P. No. H.013987, LA 521: Bridges Near Dykesville, Claiborne Parish, LA (LADOTD)</b> – Engineer of Record. Responsible for all roadway and bridge design elements including H&V alignments, hydraulics & scour analysis, roadside drainage design, bridge TS&L, quantity calculations, inroads modeling and cost estimates. Also responsible for the preparation of Preliminary and Final Plans, design report forms, and design criteria for the <b>replacement of three (3) LADOTD On-System Bridges</b> .
03/21 – 07/22 (previous employer)	S.P. No. H.014233, LA 160: Cypress Bayou and Relief Bridges, Bossier Parish, LA (LADOTD)– Lead Project Engineer. Responsible for topographic survey reviews and design elements including H&V alignments, hydraulics & scour analysis, and bridge TS&L. Also responsible for the preparation of Preliminary Plans and design criteria for the replacement of two (2) LADOTD On-System Bridges.
03/21 – 07/22 (previous employer)	S.P. No. H.014231, LA 153: Topy Creek Relief & Drain Bridges, Bienville Parish, LA (LADOTD) – Lead Project Engineer. Responsible for topographic survey reviews and design elements including H&V alignments, hydraulics & scour analysis, and bridge TS&L. Also responsible for the preparation of Preliminary Plans and design criteria for the replacement of four (4) LADOTD On-System Bridges.
03/21 – 07/22 (previous employer)	<b>S.P. No. H.014217, LA 537: Bridges Near Plain Dealing, Bossier Parish, LA (LADOTD)</b> – Lead Project Engineer. Responsible for topographic survey reviews and design elements including H&V alignments, hydraulics & scour analysis, and bridge TS&L. Also responsible for the preparation of Preliminary Plans and design criteria for the replacement of three (3) LADOTD On-System Bridges.
07/17 — 09/18 (previous employer)	S.P. No. H.011540, Babin Road Bridge/Bayou Narcisse, Ascension Parish, LA (LADOTD) – Engineering Support. Assisted with H&V geometrics, roadway drainage design, roadway and bridge plan production, Inroads modeling, quantity calculations for the 3-span Off-System Bridge near Gonzales, LA.
12/18 — 07/19 (previous employer)	S.P. No. H.013144 Pine Bluff Rd./Drain to Cypress Creek; Tack Allen Rd./Drain to Cypress Creek, Ouachita Parish, LA (LADOTD) – Engineering Support. Assisted with roadway and bridge design including hydraulics, H&V geometry, assisted in preparation of roadway and bridge plan production for the replacement of two (2) Off-System Bridge sites in Ouachita Parish.
07/17 – 12/18 (previous employer)	S.P. No. H.010724, Pecan Island Road Bridge over The Chenal, Point Coupee Parish, LA (LADOTD) – Engineering Support. Assisted with roadway design and plan preparation, quantity calculations and summary sheets, assisted with bridge plan production and quantities for 150' long Off-System Bridge using special detail 25' precast deck and CIP substructure, steel pipe piles, and anchored steel bulkhead.



Firm employed by:	Crescent Engineering	& Mapping, LI	LC		
	Megan M. Miller, PE	6		Years of relevant experience with this employer	1
	ge Design Project Engi	neer E		Years of relevant experience with other employer(s)	13
Degree(s) / Years /	Specialization		Bachelor of Science/2010/Civil	Engineering	_
Active registration	number / state / expi	ration date	39897 / LA / 09-30-2025		
Year registered	2015	Discipline	Civil Engineering		
Contract role(s) / brief description of responsibilities		Bridge Design Lead Engineer – and review of bridge plans.	Megan will lead the bridge design and assist with the prepa	ration	
Experience dates (mm/yy–mm/yy)	Experience and qual intersection", etc. Ex	ifications relev operience date	ant to the proposed contract; s should cover the time specif	i.e., "designed drainage", "designed girders", "designe ied in the applicable MPR(s).	d
02/24 – 05/24 S.P. No. H.015025, Mclin Road over Darling Creek, St. Helena Parish, LA (LADOTD) – Bridge Engineer of Record. Responsible for the bridge design elements of a 4-span, 24' clear width, curved, concrete slab span bridge utilizing STAAD and OpenBridge bridge design software programs. Reviewed bridge superstructure and substructure details and performed As-Designed LRFR utilizing AASHTOWare BrR 7.4 of the bridge replacement in St. Helena Parish as a part of the Off-System Bridge Replacement Program.					software
02/24 – Ongoing	<b>EN22-0181, Rousseau Rd. over Tchefuncte River, St. Tammany Parish, LA (St. Tammany Parish)</b> – Bridge Engineer of Record. Responsible for designing rehabilitation plans for the existing structure which includes structural steel helper bents and existing bridge load ratings. Lec				ings. Led ned LRFR
07/24 – Ongoing       S.P. No. H.014984 Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) - Bridge Engineer of Record. Responsible for bridge design elements of a 5-span, 28' clear width, curved, concrete slab span bridge utilizing STAAD and OpenBridge bridge of software programs. Reviewed bridge superstructure and substructure details and performed As-Designed LRFR utilizing AASHTOWar 7.4 of the bridge replacement in Rapides Parish as a part of the Off-System Bridge Replacement Program.			e design		
03/24 – 06/24	S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) - Bridge Engineer of Record. Responsible for non-standard bridge design elements including end bents and approach slabs associated with the inclusion of a concrete tapered barrier railing. Reviewed bridge substructure and approach slab details and performed As-Designed LRFR utilizing AASHTOWare BrR 7.4 for the 4-span, 28' clear width Off-System Bridge replacement near Slaughter, LA.				
04/24 – Ongoing	Engineer. Responsible culvert in Tangipahoa	e for the As-Des Parish. Also re	signed LRFR for three (3) reinfor	Replacements, Tangipahoa Parish, LA (LADOTD) – Bridge reed concrete bridge replacements and 1 reinforced conce in preparation of a steel sheet pile wall along E. Lewiston projects.	rete box



16. Staff Experien	<u>ce:</u>
02/17 — 07/21 (previous employer)	<b>S.P. No. H.010724, Pecan Island Road Bridge over The Chenal, Pointe Coupee Parish, LA (LADOTD)</b> – Bridge Design Project Engineer. Responsible for bridge design of entire structure including CIP and Precast special 25' slab spans and bents founded on Steel Pipe Piles utilizing Bentley STAAD and LEAP CONSPAN, prepared bridge details and oversaw bridge plan production for Final Plans, performed As-Designed LRFR utilizing AASHTOware BrR 6.8 (Virtis) for the <b>150' long Off-System Bridge replacement</b> project in Pointe Coupee Parish for the off-system bridge replacement program.
05/20 – 01/24 (previous employer)	<b>Contract No's. 44-17598 &amp; 44-19336 - Rural Bridge Replacement Initiative Phases I &amp; II (87 bridge structures), Districts 04, 05, 08, 58 (LADOTD)</b> – Lead Bridge Engineer. Led the design of all non-standard bridge superstructure and substructure elements utilizing STAAD and OpenBridge design software programs as well as performed As-Designed LRFR for all non-standard structural elements. Oversaw plan preparation of superstructure and substructure details and provided QC plan reviews of preliminary and final plans for several of the replacement structures within Phases I & II of the Rural Bridge Replacement Initiative.
02/17 – 04/18 (previous employer)	<b>S.P. No. H.010557, Lajaunie Road/Lateral 1 Bayou St. Clair, Lafayette Parish, LA (LADOTD)</b> – Lead Bridge Design Engineer. Performed all bridge design tasks for the replacement of the existing bridge with a <b>3-span, curved, super elevated Quad Beam Off-System Bridge</b> structure using various programs for superstructure and substructure including LEAP CONSPAN and STAAD ProV8i, prepared foundation details, miscellaneous bridge details, designed bearings, prepared bridge plans and special provisions.
09/18 – 12/23 (previous employer)	S.P. No. H.001344, US 190: LA 437 to US 190 (BUS) (Ph. 1), St. Tammany Parish, LA (LADOTD) – Bridge Engineer of Record. Responsible for bridge design tasks including development of TS&L, typical sections, foundation plan, General Plan. Elevation, superstructure modeling using LEAP CONSPAN, and development of bridge plans for a 1400-foot-long, curved, superelevated bridge over the Bouge Falaya River in Covington, LA using LG-36 and LG-54 prestressed concrete girders. Performed reviews of contractor bridge submittals and shop drawings.
02/17 – 08/19 (previous employer)	<b>S.P. No. H.011152, I-12 Widening (US 190 to LA 59), St. Tammany Parish, LA (LADOTD)</b> – Lead Bridge Design Engineer/Engineer of Record. Performed all bridge design tasks associated with the <b>widening of the I-12 bridges over the Tammany Trace Bike Path</b> utilizing AASHTO Type III Precast, Pre-stressed concrete girders with multiple, varying skewed spans in a vertical curve. Designed girders and deck using various programs including LEAP CONSPAN, STAAD, and BrR (Virtis). Performed substructure design using STAAD ProV8i and LEAP CONSPAN, designed bearing pads, framing and foundation plans. Assisted with bridge plan production including partial demolition and construction phasing plans for the interstate widening project. Also provided construction support in the form of contractor shop drawing reviews.
03/17 – 06/22 (previous employer)	<b>S.P. No. H.013116, LA 20 Widening (LA 307 to S. Vacherie), St. James and Lafourche Parishes, LA (LADOTD)</b> - Lead Bridge Design Engineer. Performed all bridge design tasks for the widening of LA 20 including <b>bridge replacement using split-phase construction</b> methods. Performed superstructure and substructure design using various programs including LEAP CONSPAN, STAAD ProV8i, prepared construction phasing details, foundation plans and assisted with bridge plan production.
02/18 – 10/19 (previous employer)	West 11th Ave. Bridge/Mile Branch Creek, St. Tammany Parish, LA (City of Covington) - Quality Control Engineer. Performed LRFR, bridge inspection and Quality Control reviews on bridge plans for the replacement of a 5-span, 100' long, 24' clear width Off-System reinforced concrete slab bridge and roadway approach reconstruction on W. 11th Avenue in Covington, LA. Bridge included special bents for precast and CIP deck options to accommodate utilities, tapered rails and subsurface drainage.
2010 — 2014 (previous employer)	<b>Bridge Inspection &amp; Rating ID/IQ, Statewide (INDOT)</b> - Project Engineer. Performed all phases of multiple county bridge inspection contracts ranging from \$100K to \$1MM, including assisting in routine and special feature bridge inspection (including fracture critical), performed modeling and analysis of bridge structures for LRFR using BrR and SACS, prepared field documentation and sketches, inputting field data into INDOT's Bridge Inspection Application System (BIAS). Structure types included timber, reinforced concrete, pre-stressed concrete girders and steel plate girders.
2010 – 2014 (previous employer)	<b>US 31 Bridges, South Bend, IN (INDOT)</b> - Project Engineer. Performed bridge design including modeling and analysis, design computations, quantity calculations, cost estimates and developed final plans for the design of the US 31 bridges including AASHTO Precast, Pre-stressed concrete girders, reinforced concrete slab spans, post tensioned segmental concrete girders and steel plate girders.



#### Firm employed by: Crescent Engineering & Mapping, LLC Years of relevant experience with this 2 employer James P. Ledet, PE, F. ACEC **Quality Control Engineer** Years of relevant experience with other 44 employer(s) Degree(s) / Years / Specialization Bachelor of Science/1982/Civil Engineering Active registration number / state / expiration date 22428 / LA / 03-31-2026 Year registered 1986 Discipline PE/Civil Engineering Contract role(s) / brief description of responsibilities Bridge Quality Control Engineer – Jimmy will serve as the bridge Quality Control Manager and review design elements, preliminary plans and final plans. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed **Experience dates** intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). (mm/yy-mm/yy) S.P. No. H.015025, Mclin Road over Darling Creek, St. Helena Parish, LA (LADOTD) – Quality Control Engineer. Responsible for performing QC reviews of roadway and bridge design elements including channel hydraulics and report, scour calculations, H&V alignments, low profile 07/23 - 05/24runaround geometrics and drainage design, quantity calculations and roadway and bridge plan reviews for the 4-span, 24' clear width, curved, concrete slab span Off-System Bridge. S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) – Quality Control Engineer. Responsible for performing QC reviews of roadway and bridge design elements including channel hydraulics and report, scour calculations, H&V 05/23 - 06/24alignments, roadside drainage, quantity calculations and roadway and bridge plan reviews for the 4-span Off-System Bridge replacement near Slaughter, LA. S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) – Quality Control Engineer. Responsible for performing QC reviews of roadway and bridge design elements including channel hydraulics and report, scour calculations, H&V alignments, 05/23 - Ongoingroadside drainage, quantity calculations and roadway and bridge plan reviews for the 5-span, 28' clear width, curved, concrete slab span **Off-System Bridge.** S.P. No.'s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Quality Control Engineer. Responsible for performing QC reviews of roadway and bridge design elements including channel hydraulics and report, scour 07/22 - Ongoingcalculations, H&V alignments, roadside drainage, quantity calculations and roadway and bridge plan reviews for the replacement of three (3) RC slab span Off-System Bridges and one (1) reinforced concrete box culvert throughout Tangipahoa Parish. S.P. No. H.014992, McHugh Road over Brushy Bayou, East Baton Rouge Parish, LA (LADOTD) – Quality Control Engineer. Responsible for 04/23 - Ongoingperforming QC reviews of roadway and bridge design elements including channel hydraulics and report, H&V alignments, storm drain calculations, quantity calculations and roadway and bridge plan reviews for the Off-System Bridge replacement near Baker, LA. S.P. No. 713-29-0103, Tiger Drive Bridge over Bayou Lafourche, Lafourche Parish, LA (LADOTD) – Engineer of Record. Responsible for 11/10 - 06/14topographic surveying, roadway design including approaches, utility relocations, bulkheads and drainage, and bridge design including (previous employer) special span lengths, curved spans, special bents and rail elements, oversight of construction support and shop drawing review for the 183' long Off-System Bridge replacement.



16. Staff Experien	<u>ce:</u>
11/13 – 11/18 (previous employer)	<b>S.P. No. H.010557, Lajaunie Road/Lateral 1 Bridge over Bayou St. Clair, Lafayette Parish, LA (LADOTD)</b> – Senior Professional/QA/QC. Supervision of topographic surveying and engineering design including roadway and bridge design for preliminary plans of the <b>80' RC Slab</b> and quad-beam, superelevated, curved Off-System Bridge structure including roadway upgrades to RL-3 criteria.
03/23 – Ongoing	<b>S.P. No. H.014980, Chinaberry Drive over Unnamed Coulee, Acadia Parish, LA (LADOTD)</b> – Quality Control Engineer. Responsible for performing QC reviews of roadway and bridge design elements including channel hydraulics and report, H&V alignments, quantity calculations and roadway and bridge plan reviews for the <b>3-span, Off-System Bridge replacement</b> in Acadia Parish.
01/24 – Ongoing	<b>S.P. No. H.015334, 9th Street over St. Louis Canal, Terrebonne Parish, LA (LADOTD)</b> – Quality Control Engineer. Responsible for performing QC reviews of roadway and bridge design elements including channel hydraulics and report, H&V alignments, roadside drainage, quantity calculations and roadway and bridge plan reviews for the 5-span concrete slab span Off-System Bridge replacement in Houma, LA.
03/10 – 05/14 (previous employer)	<b>S.P. No. 713-04-0002, LA 400 Bridge over Cancienne Canal, Assumption Parish, LA (LADOTD)</b> – Engineer of Record. Responsible for topographic surveying, roadway design including approaches, and bridge design, supervised roadway and bridge plan production including bridge details, roadway details for the 7-span, Off-System Bridge replacement.
10/09 — 11/17 (previous employer)	<b>07-EXT-22, Bayou Gardens Blvd. Extension: LA 660 to LA 316, Terrebonne Parish, LA (Terrebonne Parish Consolidated Government)</b> – Engineer of Record (Ph. I)/Supervising Engineer (Ph. II). Responsible for topographic surveying, oversight of roadway design including drainage and geometrics, and oversight of <b>160' Off-System RC Slab Span bridge</b> design including special/curved spans for 1.6-mile, four-lane roadway extension (UA-2) including signal upgrades and turn lanes on state routes.
1997 – 2011 (previous employer)	<b>S.P. No. 713-55-0100, St. Ann Bridge Replacement, Terrebonne Parish, LA (LADOTD)</b> – Engineer of Record. Responsible for topographic surveying and all roadway design aspects, bridge design and approaches for the <b>Off-System moveable Bridge replacement</b> with a single-leaf, bascule span bridge.
1993 – 1997 (previous employer)	S.P. No. 065-91-0011; S.P. 855-04-0052; S.P. 855-08-00340, Howard Avenue Bridge and Approaches, Terrebonne Parish, LA (LADOTD) – Engineer of Record. Responsible for roadway design including subsurface drainage, geometrics, and bridge design of Off-System steel lift span bridge replacement (using towers from Pinhook Rd. bridge) for preliminary and final plans.
1985 — 1991 (previous employer)	S.P. No. 700-26-100, Off-System Bridge Replacement Program, Lafourche Parish, LA (LADOTD) – Engineer of Record/Project Manager. Responsible for engineering design services for the replacement of four (4) Off-System Bridges and associated roadway approaches: S.P. 713-46-98, Parish Road 16 (Choctaw Road) over St. James Canal; S.P. 713-53-93, Parish Road 18 (60 Arpent Road) over Bayou Boudreaux; S.P. 713-53-94, Parish Road 11 (Lepine Rd. #1) over unnamed canal; and S.P. 713-53-92 Parish Road 579 (Hamilton Road) over 40 Arpent Canal.
1994 – 1995 (previous employer)	S.P. No. 742-05-0042, Combon Bridge and Approaches, Terrebonne Parish, LA (LADOTD) – Project Manager. Responsible for EIS document and design supervision of the Off-System 100 Ft. vertical lift span across Grand Caillou including roadway approaches and shop drawing reviews during construction.
1984 – 1986 (previous employer)	<b>S.P. No. 855-14-08 &amp; 65-90-23, LA 3087: Bridge over Bayou Terrebonne at East Street, Terrebonne Parish, LA (LADOTD)</b> – Project Manager. Responsible for the roadway and bridge design services to retrofit the existing Prospect Street bridge to be relocated to construct a vertical lift bridge at East Street, and associated intersection improvements at LA 24 and LA 659.



# Firm employed by: Crescent Engineering & Mapping, LLC



Tyler H. Amedee, PE Project Engineer



Years of relevant experience with this	
employer	
Years of relevant experience with other	

employer(s)

<1

8

Degree(s) / Years / Specialization			Bachelor of Science/2016/Civil Engineering
Active registration	number / state / expir	ation date	45334 / LA / 09-30-2025
Year registered	2021	Discipline	PE/Civil Engineering
Contract role(s) / bi	ief description of resp	onsibilities	Project Engineer - Tyler will assist with project design, hydraulics, and plan development.
Experience dates (mm/yy–mm/yy)	Experience and qualif intersection", etc. Exp	ications relevations relevations relevations relevations and the second se	ant to the proposed contract; i.e., "designed drainage", "designed girders", "designed s should cover the time specified in the applicable MPR(s).
04/20 – 02/22 (previous employer)	of topographic surveys design, guardrail desigr Preliminary and Final Pl	and led all roa n, bridge TS&L, ans, design rep	<b>2 to Haynesville), Claiborne Parish, LA (LADOTD)</b> – Lead Project Engineer. Responsible for the review adway design elements including H&V alignments, hydraulics & scour analysis, roadside drainage quantity calculations, inroads modeling and cost estimates. Also responsible for the preparation of ort forms, design waivers and exceptions and design criteria for the <b>replacement of ten (10) LADOTD</b> aghout Claiborne Parish.
10/24 – Ongoing	including H&V alignme	nts, GeoHEC-R/	<b>St. Tammany Parish)</b> – Project Engineer. Responsible for the review of project design elements AS modeling, temporary detour geometrics and storm drain design for the <b>replacement of a single</b> to assisted with preliminary plan reviews.
12/18 – 02/22 (previous employer)			
12/18 – 02/22 (previous employer)	S.P. No. H.013199, Country Estates Dr. over St. Louis Bayou, Terrebonne Parish, LA (LADOTD) – Lead Project Engineer. Led the design of a roadway and bridge project elements including H&V alignments, hydraulic modeling and reports, quantity calculations inroads modelin and plan production associated with the replacement of an Off-System Bridge in Terrebonne Parish.		
06/20 – 02/22 (previous employer)	S.P. No. H.013942, LA 9: Middle Fork Bayou and Creek Bridges, Claiborne Parish, LA (LADOTD) – Project Engineer. Assisted with several roadway design elements including hydraulic modeling, H&V alignments, guardrail design and plan reviews associated with the replacement of three (3) LADOTD On-System Bridges along LA 9 throughout Claiborne Parish.		
07/20 – 02/22 (previous employer)	S.P. No. H.013986, LA 155 Bridges Near Coushatta, Red River Parish, LA (LADOTD) – Project Engineer. Assisted with several roadway design elements including hydraulic modeling, H&V alignments, guardrail design and plan reviews associated with the replacement of four (4 LADOTD On-System Bridges along LA 155 throughout Red River Parish.		

# Firm employed by: Crescent Engineering & Mapping, LLC



Luke Bourg Senior Technician



Years of relevant experience with this employer
Years of relevant experience with other
employer(s)

1.5

15

Degree(s) / Years /	Degree(s) / Years / Specialization			Associate of Applied Science/Drafting and Design/2008	
Active registration number / state / expiration date		ration date	N/A		
Year registered		N/A	Discipline	N/A	
Contract role(s) / b	rief de	escription of res	ponsibilities	Senior Design Technician - Luke will assist in development of preliminary and final plans.	
Experience dates (mm/yy–mm/yy)	Expe inter	rience and quali section", etc. Ex	fications relev perience date	rant to the proposed contract; i.e., "designed drainage", "designed girders", "designed s should cover the time specified in the applicable MPR(s).	
06/23 – 05/24	<b>S.P. No. H.015025, McLin Road over Darling Creek, St. Helena Parish, LA (LADOTD)</b> – Senior Project Technician. Responsible for the creation, development and Microstation drafting of all roadway and bridge preliminary and final plan sheets including Title Sheet, Typical Sections, Plan & Profiles, Summary Sheets, Embankment Widening, GP&E, Bridge Superstructure and Substructure Details associated with the non-standard, curved, 4-span Off-System Bridge replacement structure. Also responsible for the development of the inroads model, cross sections and earthwork quantity calculations.				
04/23 – Ongoing	S.P. No.s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Senior Project Technician. Responsible for the development and Microstation drafting of all roadway and bridge plans throughout the final plans phase of the project. Also responsible for the development of the inroads model, cross sections and earthwork quantity calculations for all four (4) Off-System Bridge sites in Tangipahoa Parish.				
05/23 – 06/24	S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) – Senior Project Technician. Responsible for the creation, development and Microstation drafting of all roadway and bridge preliminary and final plan sheets including Title Sheet, Typica Sections, Plan & Profiles, Summary Sheets, Embankment Widening, GP&E, Bridge Superstructure and Substructure Details associated wit the 4-span Off-System Bridge replacement structure. Also responsible for the development of the inroads model, cross sections an earthwork quantity calculations.		Typica ed with		
05/23 – Ongoing	S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) – Senior Project Technician. Responsible for the creation, development and Microstation drafting of all roadway and bridge preliminary and final plan sheets including Title Sheet, Typica Sections, Plan & Profiles, Summary Sheets, Embankment Widening, GP&E, Bridge Superstructure and Substructure Details associated with the non-standard, 5-span, curved Off-System Bridge replacement structure. Also responsible for the development of the inroads mode cross sections and earthwork quantity calculations.				
05/23 – Ongoing	S.P. No. H.014992, McHugh Road over Brushy Bayou, East Baton Rouge Parish, LA (LADOTD) – Senior Project Technician. Responsion of the creation, development and Microstation drafting all preliminary plan sheets including Title Sheet, Typical Sections, and Pla for the urban, Off-System Bridge structure replacement near Baker, LA. Also responsible for the development of the inroads n sections and earthwork quantity calculations.			Profiles	



#### Firm employed by: Crescent Engineering & Mapping, LLC



Year registered

**Experience dates** 

(mm/yy-mm/yy)

05/24 - Ongoing

Miles Loker. El **Engineer Intern** 



employer
Years of relevant experience with other

>1

2

Years of relevant experience with this

employer(s) Degree(s) / Years / Specialization Bachelor of Science/2024/Civil Engineering Active registration number / state / expiration date EI 35876 / LA / 03-31-2025 N/A Discipline N/A Contract role(s) / brief description of responsibilities Engineer Intern - Miles will perform hydraulic modeling and assist with road and bridge design elements and plan preparation. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). EN22-0181, Rousseau Rd. over Tchefuncte River, St. Tammany Parish, LA (St. Tammany Parish) - Engineer Intern. Assisted with the development of several roadway and bridge plan sheets including plan & profile sheets, geometric layouts, summary of drainage sheets, phased construction sheets, general plan & elevation, foundation layout and cross sections for replacement of the existing 4-span Off-System Bridge near Covington, LA. Also responsible for the development of quantity calculations and summary tables. Brownswitch Rd. Bridge, Slidell, LA (St. Tammany Parish) - Engineer Intern. Responsible for the review of the topographic survey and

roadway design elements including H&V alignments, onsite detour road geometrics and drainage design, roadside design, structure 06/24 - Ongoingselection and hydraulic modeling and report in Geo-HECRAS for the replacement of a single span bridge along Brownswitch Rd. in Slidell, LA. Also responsible for the development of all Preliminary Plan Sheets and project quantities.

S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) – Engineer Intern. Responsible for the development of Final Plan sheets including Permanent Striping and Signing, Summary Sheets, Temporary Erosion Control and assisted with the creation 06/24 - Ongoingand development of bridge superstructure and substructure detail sheets included in the design of a 5-span, 28' clear width, curved slab span Off-System Bridge.

S.P. No. H.015333, H.015404, H.015407 – Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Engineer Intern. Assisted with the preparation of Final Plans for four (4) Off-System Bridge replacement structures throughout Tangipahoa Parish. 05/24 - OngoingResponsible for the creation of temporary erosion control sheets, permanent marking layouts and summary of drainage structure sheets. Also assisted with development of project quantities and summary tables.

S.P. No. H.015334 – 9th St. Bridge over St. Louis Canal, Terrebonne Parish, LA (LADOTD) – Engineer Intern. Responsible for the creation 04/24 - Ongoingand development of Preliminary Plan sheets including typical sections, plan & profile sheets, sequence of construction, detail of detour, GP&E and foundation layout for the replacement of a 3-span Off-System Bridge in Houma, LA.

Contract No. 4400019336, Rural Bridge Replacement Initiative (Phase 2) (40 bridge structures), LADOTD, Districts 04 and 05 - Project Technician. Assisted with the development of several plan sheets including typical sections, plan & profiles, sequence of construction, 05/22 - 03/24embankment widening and guard rail layout, summary sheets, summary of drainage structures, temporary erosion control and cross (previous employer) sections for the replacement of forty (40) On-System Bridge structures in northern LA. Also assisted with the creation and development of permit drawings to be used in obtaining environmental clearance.



# <u>16. Staff Experience:</u>

Firm employed by:	Cresc	ent Engineering 8	Mapping, LI	-C				
Ma	tthew	v J. Ledet, PLS	6		Years of relevant experience with this employer	3		
		y Manager	E		Years of relevant experience with other employer(s)	17		
Degree(s) / Years /	Speci	ialization			Bachelor of Science/2008/Manufacturing Engineering Technology Bachelor of Science/2010/Geomatics			
Active registration	numb	per / state / expira	ation date	5104 / LA / 09-30-2026				
Year registered		2014	Discipline	PLS/Surveying				
Contract role(s) / b	rief d	escription of resp	onsibilities		ord – Matthew will oversee topographic surveys, property s years of experience meets <b>MPR #4.</b>	surveys		
Experience dates (mm/yy–mm/yy)	Expe inte	erience and qualifi rsection", etc. Exp	ications relev perience date	ant to the proposed contract; s should cover the time specif	i.e., "designed drainage", "designed girders", "designe red in the applicable MPR(s).	d		
05/20 — 12/21 (previous employer)	Contract 44-17598 – Rural Bridge Replacement Initiative Phase I (47 bridge structures), Districts 04, 05, 08, 58 (LADOTD) – Lead Surveyor Surveyor of Record. Led survey effort including GPS control establishment, topographic surveys, data processing, deliverable preparation property surveys and Right of Way Mapping for the replacement of forty-seven (47) bridge structures in northern Louisiana containin nine (9) Off-System Bridges.				paration,			
05/23 – 06/23	for t	opographic survey,	crew coordinate	ation, oversight of data process	h, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Resping, LiDAR processing, field book documentation, develop eplacement of a 4-span, Off-System Bridge in St. Helena Parage	ment of		
03/23 – 04/23	S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic survey, crew coordination, oversight of data processing, LiDAR processing, field book documentation, development of topographic field roll, and channel cross sections associated with the replacement of a 4-span, Off-System Bridge near Slaughter, LA.							
04/23 – 05/23	for t	<b>S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD)</b> – Lead Surveyor/Surveyor of Record. Responsible for topographic survey, crew coordination, oversight of data processing, LiDAR processing, field book documentation, development of topographic field roll, and channel cross sections associated with the replacement of an Off-System Bridge near Pineville, LA.						
07/22 – 08/24	<b>EN22-0181, Rousseau Rd. over Tchefuncte River, St. Tammany Parish, LA (St. Tammany Parish Government)</b> – Lead Surveyor/Survey Record. Responsible for topographic survey, crew coordination, data processing, deliverable preparation, title take offs, property sur and base and final right-of-way maps associated with the roadway re-alignment and <b>Off-System bridge replacement</b> along Rousseau in Covington, LA.			, surveys				
11/23 – Ongoing	S.P. No. H.015334, 9th Street over St. Louis Canal, Terrebonne Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible to topographic survey, crew coordination, oversight of data processing, LiDAR processing, field book documentation, deliverable preparation title take-offs, property surveys and base right-of-way maps associated with the replacement of a 4-span, Off-System bridge in Houma, L			paration,				



16. Staff Experien	<u>ce:</u>
03/23 - 04/23	S.P. No. H.014992, McHugh Road over Brushy Bayou, East Baton Rouge Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic survey, crew coordination, oversight of data processing, LiDAR processing, field book documentation, development of topographic field roll, and channel cross sections associated with the urban replacement of an Off-System Bridge near Baker, LA.
08/15 – 08/18 (previous employer)	S.P. No. H.011540, Babin Road Bridge/Bayou Narcisse, Ascension Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic surveys, crew coordination, oversight of data processing, LiDAR processing for surface generation and use in existing drainage maps, deliverable preparation, title take off, property surveys, prepared base, and final right-of-way maps for the 80' long Off-System Bridge replacement project.
11/13 – 05/14 (previous employer)	S.P. No. H.010557, Lajaunie Road/Lateral 1 Bridge over Bayou St. Clair, Lafayette Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic surveys, crew coordination, oversight of data processing, LiDAR processing, existing drainage maps, deliverable preparation, title take off, property surveys, prepared base, and final right-of-way maps for the Off-System Bridge replacement project.
03/22 – 07/22	S.P. No.s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Lead/Surveyor of Record. Responsible for topographic surveys, crew coordination, data processing, LiDAR processing for surface generation and use in existing drainage maps for the replacement of four (4) Off-System Bridge replacements with RC Slab Span sites throughout Tangipahoa Parish.
07/21 — 12/21 (previous employer)	<b>Contract 44-19336 – Rural Bridge Replacement Initiative Phase II (40 bridge structures), Districts 04 &amp; 05, (LADOTD) –</b> Lead Surveyor/ Surveyor of Record. Led survey effort including GPS control establishment, topographic surveys, data processing, deliverable preparation for the <b>replacement of forty (40) On-System Bridge structures</b> in northern Louisiana.
03/10 — 10/10 (previous employer)	S.P. No. 713-04-0002, LA 400 Bridge over Cancienne Canal, Assumption Parish, LA (LADOTD) – Survey Support. Performed field topographic surveys, processed data and prepared topographic survey deliverables on field roll for the Off-System Bridge replacement project in Assumption Parish.
06/18 — 10/18 (previous employer)	S.P. No. H.013080, McLemore Road/Bee Bayou, Richland Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic surveys, crew coordination, oversight of data processing, deliverable preparation for the 6-span, Off-System Bridge replacement near Rayville, LA.
04/13 — 08/13 (previous employer)	S.P. No. H.010559, Bayou Mercier Road/Berard Canal Bayou, St. Martin Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic surveys, crew coordination, oversight of data processing, deliverable preparation for the 200' long, 5-span Quad Beam Off-System Bridge replacement project near Catahoula, LA.
06/15 – 08/15 (previous employer)	S.P. No. H.011806, Gracie Lane Bridge, Iberville Parish, LA (LADOTD) – Lead Surveyor/Surveyor of Record. Responsible for topographic surveys, crew coordination, oversight of data processing, topographic survey deliverable preparation for the 7-span, Off-System Bridge replacement project near Bayou Sorrel, LA.
02/18 — 12/18 (previous employer)	<b>ENG-17-013, LA 3127 Extension (LA 70 to LA 1), Ascension Parish, LA (Ascension Parish Government)</b> – Lead Project Surveyor. Responsible for topographic surveys, crew coordination, oversight of data processing, deliverable preparation, title take off, title research reports, property surveys, prepared base right of way maps including 12 parcels for the 6.8-mile roadway extension project including several Off and On-System Bridges.
02/11 – 01/13 (previous employer)	S.P. No. 713-29-0103, Tiger Drive Bridge over Bayou Lafourche, Lafourche Parish, LA (LADOTD) – Survey Support. Performed field topographic and property surveys, prepared topographic survey deliverables, prepared base, and final right of way maps for the urban, 3-lane Off-System Bridge replacement project in Thibodaux, LA.
09/04 – 06/07 (previous employer)	S.P. No. 742-55-0102, Country Drive Widening, Terrebonne Parish, LA (LADOTD) – Survey Support. Assisted with calculating 107 parcels on base and final right-of-way maps; performing topographic survey; boundary survey for 2.7 miles roadway widening project.



#### Firm employed by: Crescent Engineering & Mapping, LLC Years of relevant experience with this 2 employer Kelly G. Jones Senior Technician 3 Years of relevant experience with other ENGINEERING & MAPPING L employer(s) Degree(s) / Years / Specialization Bachelor of Arts/2012/Mathematics & English Active registration number / state / expiration date N/A N/A Discipline N/A Year registered Contract role(s) / brief description of responsibilities Survey Technician - Kelly will assist with data processing, topographic survey deliverables, and development of property surveys and right-of-way maps. **Experience dates** Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). (mm/yy-mm/yy) S.P. No.s H.015333, H.015404, H.015407 – Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Survey Technician. Processed survey data and prepared survey deliverables for the survey of four (4) Off-System Bridge sites, prepared GPS control sketches, 04/22 - 08/22survey alignments, survey .DTM surfaces, prepared survey control reports, forms and letters for the LADOTD topographic survey deliverables in Microstation, Inroads and CAD Conform. S.P. No. H.015025, McLin Road over Darling Creek, St. Helena Parish, LA (LADOTD) – Survey Technician. Processed survey data and prepared survey deliverables for the survey of a single **Off-System Bridge** replacement, prepared GPS control sketches, survey alignments, 05/23 - 06/23survey .DTM surfaces, prepared survey control reports, forms and letters and LADOTD survey deliverables in Microstation. Inroads and CAD Conform. S.P. No. H.014993, Lemon Road over Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) – Survey Technician. Processed survey data and prepared survey deliverables for the survey of a single Off-System Bridge replacement, prepared GPS control sketches, survey 03/23 - 04/23alignments, survey .DTM surfaces, prepared survey control reports, forms and letters and LADOTD survey deliverables in Microstation, Inroads and CAD Conform. S.P. No. H.014984, Libuse Cutoff Road/Flagon Bayou, Rapides Parish, LA (LADOTD) – Survey Technician. Processed survey data and prepared survey deliverables for the survey of a single Off-System Bridge replacement, prepared GPS control sketches, survey alignments, 04/23 - 05/23survey .DTM surfaces, prepared survey control reports, forms and letters and LADOTD survey deliverables in Microstation, Inroads and CAD Conform. Contract 44-17598 - Rural Bridge Replacement Initiative Phase I (47 bridge structures), Districts 04, 05, 08, 58 (LADOTD) - Survey 05/20 - 12/21Technician. Processed survey data and prepared survey deliverables for the replacement of 47 bridge structures in northern Louisiana (previous employer) containing **nine (9) Off-System Bridges**. Also assisted with the creation and development of property surveys and right-of-way maps. Contract 44-19336 – Rural Bridge Replacement Initiative Phase II (40 bridge structures), Districts 04 & 05, (LADOTD) – Survey Technician. 07/21 - 05/22 Processed survey data and prepared survey deliverables for the replacement of forty (40) bridge structures in northern Louisiana. Also (previous employer) assisted with the creation and development of property surveys and right-of-way maps. S.P. No. H.014980. Chinaberry Dr. over Unnamed Coulee. Acadia Parish. LA (LADOTD) – Survey Technician. Processed survey data and prepared survey deliverables for the survey of a single Off-System Bridge replacement, prepared GPS control sketches, survey alignments, 12/22 - 04/23survey .DTM surfaces, prepared survey control reports, forms and letters and LADOTD survey deliverables in Microstation, Inroads and CAD



Conform.

## Firm employed by: Crescent Engineering & Mapping, LLC



Dakotah "Kody" Holley Survey Party Chief



Years of relevant experience with this employer

Years of relevant experience with other employer(s)

Degree(s) / Years / Specialization			High School Diploma/2017
Active registration number / state / expiration date		piration date	N/A
Year registered	N/A	Discipline	N/A
Contract role(s) / b	rief description of re	esponsibilities	Survey Party Chief
Experience dates (mm/yy–mm/yy)	Experience and qua intersection", etc.	alifications relev Experience date	ant to the proposed contract; i.e., "designed drainage", "designed girders", "designed s should cover the time specified in the applicable MPR(s).
05/23 – 06/23	digital levels, and fiel	d topographic sur	<b>rling Creek, St. Helena Parish, LA (LADOTD)</b> – Party Chief. Performed GPS static control establishment veys of the existing bridge site, roadway, utilities and other features associated with the <b>replacement</b> Parish using LADOTD codes and procedures.
03/23 – 04/23	establishment, digita	l levels, and field	Drainage Bayou, East Baton Rouge Parish, LA (LADOTD) – Party Chief. Performed GPS static contro topographic surveys of the existing bridge site, roadway, utilities and other features associated with dge near Slaughter, LA using LADOTD codes and procedures.
04/23 – 05/23	<b>S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD)</b> – Party Chief. Performed GPS static correstablishment, digital levels, and field topographic surveys of the existing bridge site, roadway, utilities and other features associated with the <b>replacement of an Off-System Bridge</b> near Pineville, LA using LADOTD codes and procedures.		topographic surveys of the existing bridge site, roadway, utilities and other features associated with
03/22 – 06/22	S.P. No.s H.015333, H.015404, H.015407 - Tangipahoa IIJA Bridge Replacements, Tangipahoa Parish, LA (LADOTD) – Party Chief. Perform GPS static control establishment, digital levels, and field topographic surveys of the existing bridge sites, roadways, utilities and oth features associated with four (4) Off-System Bridge replacements throughout Tangipahoa Parish as a part of the District 62 IIJA Program		
10/23 – 06/24	S.P. No. H.015334, 9th Street over St. Louis Canal, Terrebonne Parish, LA (LADOTD) – Party Chief. Performed GPS static control establishment, digital levels, property surveys and field topographic surveys of the existing bridge site, roadway, utilities and other features associated with the Off-System Bridge replacement in Houma, LA as a part of the District 02 IIJA Program.		
03/23 – 04/23	<b>S.P. No. H.014992, McHugh Road over Brushy Bayou, East Baton Rouge Parish, LA (LADOTD)</b> – Party Chief. Performed GPS static control establishment, digital levels, and field topographic surveys of the existing bridge site, roadway, utilities and other features associated with the <b>replacement of an urban Off-System Bridge</b> near Baker, LA using LADOTD codes and procedures.		
12/22 – 03/23	S.P. No. H.014980, Chinaberry Drive over Unnamed Coulee, Acadia Parish, LA (LADOTD) – Party Chief. Performed GPS static control establishment, digital levels, and field topographic surveys of the existing bridge site, roadway, utilities and other features associated with the replacement of an Off-System Bridge in Acadia Parish using LADOTD codes and procedures.		



2

4

# Firm employed by: Crescent Engineering & Mapping, LLC



Joseph Maurin Survey Party Chief



Years of relevant experience with this employer

<1

5.5

Years of relevant experience with other employer(s)

Degree(s) / Years /	Specialization		High School Diploma/2017	
Active registration	number / state / ex	piration date	N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / b	rief description of r	esponsibilities	Survey Party Chief	
Experience dates (mm/yy–mm/yy)	Experience and quintersection", etc.	alifications relevent Experience dates	ant to the proposed contract; i.e., "designed drainage", "designed girders", "designed s should cover the time specified in the applicable MPR(s).	
05/24 – 06/24	-		<b>r St. Louis Canal, Terrebonne Parish, LA (LADOTD)</b> - Party Chief. Performed GPS and conventional os including 6 parcels for the <b>Off-System Bridge</b> replacement project in Houma, LA.	
07/24 – 09/24		els, topographic su	r, <b>St. Tammany Parish (St. Tammany Parish Government)</b> - Party Chief. Performed GPS static control rveys and property surveys for Right of Way maps including 6 parcels for the <b>Off-System Bridge</b> Slidell, LA.	
05/24 – 09/24	<b>LA 1256 at Carlyss Dr., Calcasieu Parish, LA (Calcasieu Parish Government)</b> - Party Chief. Performed GPS static control establishment digital levels, field topographic surveys of the existing roadway, utilities, SUE locates, drainage and other features, survey for property map for intersection improvements with a 250' wide .DTM, using LADOTD codes and procedures.			
11/24 – Ongoing	S.P. No. H.014056, I-69 Frontage Road Connector (Stonewall Frierson), Desoto & Caddo Parishes, LA (LADOTD) – Survey Party Chi Installed stainless steel deep-rod monuments for long-term, primary control, performed GPS static control surveys, ran digital levels three (3) State projects over 10 miles long, performed topographic surveys for the I-69 Frontage Road segment SIU 15 near Stonewall, I			
10/24 – Ongoing	S.P. No. H.015605, S. Tangipahoa Pavement Rehabilitation Phase 2, Tangipahoa Parish, LA (Tangipahoa) – Party Chief. Performed GP static control establishment, ran digital levels, field topographic surveys of existing roadways, utilities, drainage and other features alon, W. Club Deluxe, Bankston and Old US 51 totaling nearly 8 miles of roadway using LADOTD codes and procedures.			
05/24 – 06/24	St. James Parish Road Improvements (FY2024), St. James Parish, LA (St. James Parish) – Party Chief. Performed GPS control establishmen and field topographic surveys of approximately seven (7) miles of roadways, driveways, utilities and roadside drainage features in St. Jame Parish, LA.			
05/24 – 10/24	S.P. H.015101, Lowes Ave at LA 44 Roundabout, Ascension Parish, LA (Ascension Parish Government) – Party Chief. Performed GF topographic surveys of the existing drainage features for use in construction of drainage maps using LADOTD codes and procedures.			
06/24 – 07/24	S.P. No. H.014984, Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD) – Party Chief. Performed additional field topographic surveys of the existing bridge site, roadway, utilities and other features associated with the replacement of an Off-System Bridge near Pineville, LA.			



Firm employed by:	<b>ELOS Environmental</b>	, LLC			
<b>Lucas Watkins</b> Principal/Environn	nental Scientist	Ĩ		Years of relevant experience with this employer Years of relevant experience with other	18
		env	vironmental	employer(s)	
Degree(s) / Years /	Specialization		MS / 2005 / Biological Sciences BS / 2000 / Forest Managemen		i
Active registration	number / state / exp	piration date	N/A		
Year registered	N/A	Discipline	N/A		
Contract role(s) / b	rief description of re	esponsibilities	Lucas will serve as the Principa NEPA clearance, and agency co	I/Environmental Scientist, providing assitance in project ordination.	: oversight,
Experience dates (mm/yy–mm/yy)	Experience and qua intersection", etc.	alifications relev Experience date	ant to the proposed contract; s should cover the time speci	i.e., "designed drainage", "designed girders", "desi fied in the applicable MPR(s).	gned
09/20 – Ongoing	<b>Rural Bridges, Phases I &amp; II; Statewide, LA (LADOTD)</b> - ELOS has been contracted to provide environmental services for the LADOTD Rur Bridge Replacement Initiative projects in six districts across the state. Mr. Watkins ensures that all phases of the project adhere to feder and state environmental regulations. He facilitates effective communication among DOTD officials, environmental organizations, and othe stakeholders to address concerns and maintain transparency throughout the project.			re to federa	
09/22 – Ongoing	<b>Contract No. 44-25041 - IIJA Off-System Bridges, District 62 (LADOTD) -</b> This off-system bridge project involves the replacement of s bridges; ELOS is performing wetland delineations, completing permit applications, completing solicitation of views to document categoric exclusions for the work proposed, completing cultural resources research, tribal packets, and reports, and write navigability determination reports. Mr. Watkins has reviewed the findings reports prior to client submission.				t categorica
10/23 – Ongoing	of Engineers (USACE) of project and detaile	to include comp ed verbal descript ACE for a permit	leting permit application packet tion of the project location. ELOS under Section 10/404 of the C	ed to prepare and submit permit applications to the U.S. , documenting the rationale for the project, providing the is also responsible for generating one site plan for each ean Water Act. Mr. Watkins the permit application thre	he summar i project and
08/22 – 08/24	<b>Rousseau Bridge Replacement; St. Tammany Parish, LA (St. Tammany Parish)</b> - ELOS was contracted to provide professional environment for the Rousseau Bridge Replacement Project located on approximately 2.62 acres in St. Tammany Parish. Mr. Watkins directed to comprehensive assessment of potential environmental impacts related to transportation infrastructure projects. He ensured the accurate completeness, and integrity of environmental reports and documentation submitted to regulatory agencies for review and approval.			directed the	
02/22 – Ongoing	Lock No. 3 Replacement, St. Tammany Parish, LA (St. Tammany Parish) - ELOS has been contracted to perform wetland delineatic submit joint permit applications, perform a State Historic Preservation Office (SHPO) Section 106 desktop review and Consultation, a perform a U.S. Fish and Wildlife (USFWS) Endangered Species Act (ESA) Biological assessment for the St. Tammany Parish Lock No. 3 Brid Replacement project. Mr. Watkins ensures that all phases of each step of the project complies with all state and federal regulations.			ultation, and No. 3 Bridg	



16. Staff Experier	<u>nce:</u>
03/24 – Ongoing	<b>Brownswitch Rd. Bridge Replacement, St. Tammany Parish (St. Tammany Parish Government)</b> - ELOS was contracted to collect data and prepare a report to support a Wetland Delineation and manage the permit process with the USACE. ELOS will facilitate compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 by completing a Section 106 Desktop Review. ELOS will conduct a biological survey to determine potential effects on species protected under the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA) and all other applicable law and regulations. Mr. Watkins has overseen every step of the process ensuring compliance with all regulations and transparency between all stakeholders in the project.
04/22 – Ongoing	Yellow Water Road Bridge Replacement - ELOS has been contracted to prepare a Early Section 106 Tribal coordination packet and submit it to the DOTD Project Manager (ELOS will not directly communicate with the tribal governments). ELOS will conduct biological assessment and a review of previous Historic Reviews. Mr. Watkins will review the finding of all reviews and the permit packet prior to submission.
12/22 – Ongoing	<b>Wildwood Dr. Bridge -</b> ELOS was contracted to perform a Wetlands Delineation Assessment, a Biological Assessment, and a Cultural Resource Survey. Mr. Watkins directed the assessments and ensured the accuracy of the Cultural Resource Survey. He supervised the submission of all pertinent documentation to the appropriate agencies.
11/17 – Ongoing	<b>Move Ascension, Phases I, II, &amp; III; Ascension Parish, LA</b> - ELOS is contracted to plan projects, perform wetland delineations, conduct cultural resource surveys, and submit permit applications for 60 roadway projects, varying from roundabouts to constructing new lanes and connecting roadways, located throughout Ascension Parish. Mr. Watkins has reviewed delineation details, edited cultural resource reports, developed and analyzed alternatives, reviewed scheduled, assisted with wetland mitigation, and reviewed permit applications.
08/22 – Ongoing	S.P. No. H.014362, Lake Road; St. Tammany Parish, LA - ELOS was contracted to complete the solicitation of views and categorical exclusion notices, conduct a wetland delineation, and submit a joint permit application, scenic rivers permit application, and USCG bridge permit application for the project. Mr. Watkins reviewed the categorical exclusion packet and assisted with agency coordination and requests for more information.
02/23 – Ongoing	S.P. No. H.014340, E. Minnesota Park Rd at Range Rd, Tangipahoa Parish, LA (LADOTD) - ELOS is contracted to complete a wetland delineation report, submit a permit application, as well as assist with a CATEX, Phase I ESA, and the solicitation of views (SOVs) for the roundabout project at the intersection of Minnesota Park and Range Road. Mr. Watkins monitors the project timelines, milestones, and budgets to ensure timely delivery of environmental assessments that align with project schedules. He also reviewed the SOVs and supporting documentation prior to initiating the process with agencies.
08/22 – Ongoing	<b>MoveBR Mickens Road; East Baton Rouge Parish, LA</b> - ELOS is contracted to provide environmental services for a 2.8-mile-long roadway improvements project on Mickens Road from Hooper Road to Joor Road in East Baton Rouge. Services included a wetland delineation, a Phase I ESA, and a permit application to USACE. Mr. Watkins has reviewed the wetland delineation report, coordinated staff for the Phase I ESA tasks, reviewed final reports, and consulted with the Parish leadership.



Firm employed by:	ELOS Environmental, LLC			
<b>Brian Fortson</b> Senior Project Mar	nager/Biologist	ELOS ELOS	Years of relevant experience with this employer Years of relevant experience with other	23
		environmental	employer(s)	
Degree(s) / Years /	Specialization	JD / 2006 / Civil Law BS / 1995 / Wetland Ecology		
Active registration	number / state / expiration date	N/A		
Year registered	N/A Discipline	e N/A		
Contract role(s) / b	rief description of responsibilitie	Brian will serve as the Senior analysis, and agency coordina	Project Manager/Biologist and assist with NEPA clearance tion. Brian meets <b>MPR #5.</b>	, feasibility
Experience dates (mm/yy–mm/yy)	Experience and qualifications re intersection", etc. Experience data	levant to the proposed contract ates should cover the time spec	; i.e., "designed drainage", "designed girders", "desig ified in the applicable MPR(s).	ned
08/23 – Ongoing		<b>Off-System Bridge Program, East Baton Rouge Parish -</b> Mr. Fortson has coordinated with the environmental scientists to review the wetland delineation reports and assist with USACE permit applications for 13 bridge replacements.		
09/20 – Ongoing	<b>Rural Bridges Phases I &amp; II; Statewide, LA (LADOTD)</b> - ELOS has been contracted to provide professional environmental consulting services for the Department of Transportation and Development (LADOTD) Rural Bridge Replacement Initiative for two project phases. Phase I involved bridge replacements under 16 state project numbers and supplemental task orders, impacting 33 structures in Districts 03, 07, 61, and 62. Phase 2 is ongoing and involves bridge replacements under 9 state project numbers and supplemental task orders, impacting multiple structures in Districts 05, 08, 58. Almost all the projects have included a wetland delineation, permit applications, cultural resource survey, and a T&E survey. Mr. Fortson has reviewed wetland delineation reports and categorial exclusion documentation, discussed findings and reviewed data for final reports, and met with staff internally to develop threatened and endangered species surveys.			
09/22 – Ongoing	bridges; ELOS is performing wetland	delineations, completing permit a ompleting cultural resources resea	<b>TD)</b> - This off-system bridge project involves the replace applications, completing solicitation of views to document arch, tribal packets, and reports, and write navigability de submission.	categorical
10/22 – 09/23	<b>Rousseau Bridge Replacement; St. Tammany Parish, LA (St. Tammany Parish)</b> - ELOS was contracted to provide environmental services for the Rousseau Bridge Replacement Project located on approximately 2.62 acres in St. Tammany Parish. Services included a wetland delineation, Scenic Rivers permit application, emergency authorization application to USACE, SOVs, and a final report. Mr. Fortson assisted with the report drafts and permit applications.			
05/21 – 05/22	<b>Chris Kennedy Rd Bridge Replacement, St. Tammany Parish, LA (St. Tammany Parish)</b> - ELOS was contracted to provide professional environmental engineering services to collect data to further prepare reports for wetland delineation, biological assessment and cultural impact in accordance with the removal and replacement plans. Mr. Fortson coordinated with internal teams to review reports, correlative maps, and environmental data to complete the approved contract.			



<u>16. Staff Experier</u>	<u>nce:</u>
03/22 – 12/23	Lock No. 2 Bridge Replacement, St. Tammany Parish, LA (St. Tammany Parish) - Mr. Fortson assisted with internal teams to provide Cultural resource services for the Lock No. 2 Bridge replacement located on approximately 4.83-acres in St. Tammany Parish. ELOS was contracted to provide Section 106 of NHPA, Terrestrial Phase I Culture Resource Survey and Cultural Resource Assessment No Findings report.
11/17 – Ongoing	<b>Move Ascension - Phases I, II, &amp; III; Ascension Parish, LA</b> - ELOS has been contracted to plan projects, perform wetland delineations, conduct cultural resource surveys, and submit permit applications for 60 roadway projects, varying from roundabouts to constructing new lanes and connecting roadways, located throughout Ascension Parish. Mr. Fortson leads multi-disciplinary teams of environmental specialists, engineers, and consultants to achieve project objectives efficiently and effectively through the complexities of environmental compliance, ensuring that infrastructure development meets regulatory standards while minimizing environmental impacts and maximizing community benefits.
02/23 – Ongoing	<b>S.P. No. H.014340, E. Minnesota Park Rd at Range Rd, Tangipahoa Parish, LA (LADOTD)</b> - ELOS is contracted to complete a wetland delineation report, submit a permit application, as well as assist with a CATEX, Phase I ESA, and the solicitation of views (SOVs) for the roundabout project at the intersection of Minnesota Park and Range Road. Mr. Fortson monitors the project timelines, milestones, and budgets to ensure timely delivery of environmental assessments that align with overall project schedules.
01/21 – Ongoing	LA 22 Gapping; Ascension Parish, LA - ELOS is contracted to perform a wetland delineation, complete a joint permit application, complete a biological survey, monitor for bald and golden eagle protection, complete a Phase I ESA, complete a Section 106 review and report, and assist with wetland mitigation planning. Mr. Fortson has served as the project manager to assist in determining the potential jurisdictional wetlands and other waters, preparing and submitting permit applications, and reviewing the desktop Section 106 review. He will also oversee the Phase I ESA and wetland mitigation planning.
01/22 – 09/22	Judge Dufresne Parkway Extension; St. Charles Parish, LA - ELOS was contracted to conduct a Wetland Delineation, submit Permit Applications, perform a Phase I ESA, and provide a Section 106 Desktop Review for a 161.5-acre site to extend Judge Dufresne Parkway to include several adjacent, privately owned parcels. Mr. Fortson oversaw the environmental consulting project for the parkway extension, ensuring that environmental considerations were integrated into all project phases, regulatory requirements were met, and the project was completed successfully while minimizing environmental impacts. He implemented quality assurance and control measures to ensure that deliverables meet established standards and client expectations. Mr. Fortson maintained accurate project documentation, including reports, permits, correspondence, and regulatory filings.
08/17 – 11/19	I-10 Highland to LA 73 Design Build; East Baton Rouge Parish to Ascension Parish, LA - ELOS was contracted to act as the environmental compliance manager responsible for permitting and construction monitoring for the fast-track interstate widening project from Highland Road in Baton Rouge to LA 73 in Prairieville. Mr. Fortson provided senior-level environmental project management for the project, overseeing complex environmental aspects of transportation infrastructure initiatives. He assisted in the development of a comprehensive environmental management strategy, wrote and assisted with amending the SWPPP as the project progressed, and assisted in preparing and reviewing the permit applications.
01/15 - 01/16	S.P. No. H.011402, US 51 BUS: I-12 to Coleman Corridor Study– Environmental Services; Tangipahoa Parish, LA (LADOTD)- ELOS was contracted to complete a biological survey and report, a Phase I ESA, and a draft environmental assessment, in addition to analyzing natural resource impacts and assisting with public outreach for this roadway improvement project. Mr. Fortson supervised and participated in field investigations to support wetlands delineations and findings reports, biological surveys, and threatened and endangered species reports. He also provided coordination among regulatory agencies, landowners, and public stakeholders.
07/20 – 08/21	<b>Trace Connection to Heritage Park Stage 0, St. Tammany Parish, LA</b> - ELOS was contracted to provide a Louisiana DOTD Stage 0 Environmental Checklist for the Trace Connection to Heritage Park project. The project determined the feasibility of two proposed alternatives for the extension of the Tammany Trace from U.S. Highway 190 West/Gause Blvd near Cherry Street eastward for approximately 2.7 miles with a 100-ft wide corridor. Mr. Fortson served as the project manager overseeing all fieldwork and coordinating between clients and government agencies.



# Firm employed by: ELOS Environmental, LLC

Basile Dardar				Years of relevant experience with this employer	3
Environmental Spe	cialist/Project Manage	er M		Years of relevant experience with other employer(s)	7
Degree(s) / Years /	Specialization		BS / 2014 / Biology		
Active registration number / state / expiration date			N/A		
Year registered	N/A	Discipline	N/A		
Contract role(s) / brief description of responsibilities		Basile will serve as the Environmental Specialist/Project Manager, providing his expertise in wetland studies, endangered species survey including tri-colored bat, environmental permits, NEPA clearance and stage 0 checklists. Basile meets <b>MPR #5</b> .			
Experience dates (mm/yy–mm/yy)				i.e., "designed drainage", "designed girders", "designed fied in the applicable MPR(s).	d
08/23 – Ongoing	<b>Off-System Bridge Program, East Baton Rouge Parish</b> - Mr. Dardar has coordinated with the field team to conduct wetland delineation complete wetland findings reports, work with the USACE for jurisdictional determinations of wetlands, and assist with USACE permapplications and supporting documentation for 13 bridge replacements.				
09/22 – Ongoing	<b>Contract No. 44-25041 - IIJA Off-System Bridges, District 62 (LADOTD)</b> - ELOS is contracted to provide comprehensive services to repla bridges throughout various parishes located in Southeast Louisiana in several phases until completion. Mr. Dardar has coordinat with field teams to assess cultural and environmental impacts. Through ongoing efforts, Mr. Dardar has maintained the required da and documentation and reviewed deliverables and reports applicable to SOVs, wetland delineations, and categorical exclusion of t construction activities. He has assisted with preparing applicable permits, maps, forms, and supplemental documentation.			rdinated red data	
04/22 – Ongoing	S.P. No.'s H.015404, H.015407, H.015333, Tangipahoa IIJA Bridges, Tangipahoa Parish, LA (LADOTD) - ELOS is contracted to provide environmental services including wetland delineations, Solicitation of Views (SOVs), Categorical Exclusion (CE) documents, and permapplications and drawings for six bridges to be replaced in District 62. Mr. Dardar has conducted wetland delineations, prepared ar submitted permit applications, and led the team in completing the SOVs and CE documentation.			d permit	
06/22 – 09/23	<b>Rousseau Bridge Replacement, St. Tammany Parish, LA (St. Tammany Parish)</b> - ELOS was contracted to provide environmental service for the Rousseau Bridge Replacement Project located on approximately 2.62 acres in St. Tammany Parish. Services included a wetlar delineation, Scenic Rivers permit application, emergency authorization application to USACE, SOVs, and a final report. Mr. Dardar has conducted a wetland delineation, submitted reports to USACE, coordinated with the field team regarding SOVs and information neede and reviewed permit drawings.			wetland rdar has	
11/21 – Ongoing	cultural resource surve and connecting roadw	eys, and submit ays, located the ation of wetlan	permit applications for 60 road roughout Ascension Parish. Mr.	n contracted to plan projects, perform wetland delineations, lway projects, varying from roundabouts to constructing ne Dardar has worked on the wetland findings report for the graphs and maps, and reviewed corresponding figures and	ew lanes e USACE



16. Staff Experien	<u>ce:</u>
11/21 – Ongoing	<b>Rural Bridges Phases I &amp; II; Statewide, LA (LADOTD)</b> - ELOS has been contracted to provide professional environmental consulting services for replacing bridges in rural areas for two project phases. Phase I involved bridge replacements under 16 state project numbers and supplemental task orders, impacting 33 structures in Districts 03, 07, 61, and 62. Phase 2 is ongoing and involves bridge replacements under 9 state project numbers and supplemental task orders, impacting task orders, impacting multiple structures in Districts 05, 08, and 58. Almost all the projects have included a wetland delineation, permit applications, a cultural resource survey, and a threatened and endangered species survey. Mr. Dardar has coordinated field crews, performed wetland delineations, collected and inputted data, written and produced reports, developed timelines, coordinated with LADOTD, worked on permit applications with state and federal agencies, and assisted with the surveys.
01/22 – 09/22	<b>Judge Dufresne Parkway Extension; St. Charles Parish, LA</b> - ELOS was contracted to conduct a Wetland Delineation, submit Permit Applications, perform a Phase I ESA, and provide a Section 106 Desktop Review for a 161.5-acre tract of land referred to as Judge Dufresne Parkway Extension located in St. Charles Parish, Louisiana. Mr. Dardar performed the wetland delineation, completed the Phase I ESA and its report, and assisted with the USACE permit application and follow-up.
06/24 – Ongoing	<b>S.P. No. H.014375 US 190 Roundabouts, St. Tammany Parish, LA (LADOTD)</b> - ELOS has been contracted to perform a wetland delineation, prepare and submit joint permit applications, complete Section 106 reviews, and conduct threatened and endangered species surveys for a 28-acre area for the installation of roundabouts on US 190. Mr. Dardar has assisted with writing and reviewing the threatened and endangered species report.
02/23 – Ongoing	<b>S.P. No. H.014340, E. Minnesota Park Rd at Range Rd, Tangipahoa Parish, LA (LADOTD)</b> - ELOS is contracted to complete a wetland delineation report to obtain a jurisdictional determination from the U.S. Army Corps of Engineers (USACE), submit a permit application, if necessary, as well as assist with a Categorical Exclusion (CATEX), Phase I Environmental Site Assessment (ESA), and the Solicitation of Views (SOVs) for a roundabout project (H.014340) covering 2.5 acres in Tangipahoa Parish. Mr. Dardar has worked on the SOVs, reviewed the CATEX sections and documentation, written permit applications, and coordinated with LADOTD.
05/20 – 11/21 (previous employer)	<b>Contract 44-17598 – Rural Bridge Replacement Initiative Phase I (47 Bridge Structures), Districts 04, 05, 08, 58 (LADOTD)</b> – Environmental/ Wetlands Biologist. Performed wetland delineations, compiled data and wetlands reports, prepared and submitted permit applications, assisted with CATEX document preparation, threatened and endangered species evaluation, coordinated crews, prepared reports and supported the overall environmental clearance effort for the replacement of 47 bridge structures in northern Louisiana.
06/21 – 02/22 (previous employer)	<b>Contract 44-119336 – Rural Bridge Replacement Initiative Phase II (40 Bridge Structures), Districts 04, 05 (LADOTD)</b> – Environmental/ Wetlands Biologist. Performed wetland delineations, compiled data and wetlands reports, prepared and submitted permit applications, assisted with CATEX document preparation, threatened and endangered species evaluation, coordinated crews, prepared reports and supported the overall environmental clearance effort for the replacement of 40 bridge structures in northern Louisiana including nine (9) Off-System Bridges.



Firm employed by:	ELOS Environmental	, LLC				
<b>Cory Ricks</b> Environmental Scien	ntist	env	LOS	Years of relevant experience with this employer Years of relevant experience with other employer(s)	7	
Degree(s) / Years /	Specialization		BS / 2015 / Biology			
Active registration number / state / expiration date		N/A				
Year registered	Year registered N/A Discipline		N/A			
Contract role(s) / brief description of responsibilities		Cory will serve as the Environmental Scientist providing his expertise for wetland delineations and jurisdictional determinations, as well as managing the collection of field data and the development of reports. Cory meets <b>MPR #5</b> .				
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).					
09/20 – Ongoing	<b>Rural Bridges Phases I &amp; II; Statewide, LA (LADOTD)</b> - ELOS has been contracted to provide professional environmental consulting services for the Department of Transportation and Development (LADOTD) Rural Bridge Replacement Initiative for two project phases. Phase involved bridge replacements under 16 state project numbers and supplemental task orders, impacting 33 structures in Districts 03, 07 61, and 62. Phase 2 is ongoing and involves bridge replacements under 9 state project numbers and supplemental task orders, impacting multiple structures in Districts 05, 08, 58. Almost all the projects have included a wetland delineation, permit applications, cultural resource survey, and a threatened and endangered species survey. Mr. Ricks has coordinated field crews, performed wetland delineations, writter and produced reports, developed timelines, coordinated with LADOTD, and assisted with the surveys.				5. Phase 1 cts 03, 07, impacting I resource	
06/22 – 09/23	<b>Rousseau Bridge Replacement, St. Tammany Parish, LA (St. Tammany Parish)</b> - ELOS was contracted to provide environmental services for the Rousseau Bridge Replacement Project located on approximately 2.62 acres in St. Tammany Parish. Services included a wetlan delineation, Scenic Rivers permit application, emergency authorization application to USACE, SOVs, and a final report. Mr. Ricks worke on the emergency authorization application since the bridge was the only way to access a neighborhood, assisted with the Scenic River permit application, and provided project updates to St. Tammany Parish.				a wetland <s td="" worked<=""></s>	
04/22 – 02/24	<b>S.P. No.'s H.015404, H.015407, H.015333, Tangipahoa IIJA Bridges, Tangipahoa Parish, LA (LADOTD)</b> - ELOS is contracted to provide environmental services including wetland delineations, Solicitation of Views (SOVs), Categorical Exclusion (CE) documents, and permit applications and drawings for six bridges to be replaced in District 62. Mr. Ricks conducted a gopher turtle survey, wrote the findings report completed permit applications with supporting documentation, and assisted with agency coordination.				nd permit	
11/17 – Ongoing	Move Ascension - Phases I, II, & III; Ascension Parish, LA - ELOS has been contracted to plan projects, perform wetland delineation conduct cultural resource surveys, and submit permit applications for 60 roadway projects, varying from roundabouts to constructing ne lanes and connecting roadways, located throughout Ascension Parish. Mr. Ricks leads a team of field members to perform the wetlan delineations. He has also assisted with cultural resources field investigations and with permit applications to state and federal agencie (USACE, LEDNR, DOTD).				cting new e wetland	



16. Staff Experier	<u>nce:</u>					
05/21	Tammany Trace Bridge Replacement, St. Tammany Parish, LA - Mr. Ricks performed the wetland delineation, entered the wetforms, revis transmittals, reviewed the photographs/logs, coordinated with the GIS team to update maps, and submitted the wetland findings report					
05/22 – 03/24	<b>S.P. No. H.015408, North Brickyard Road Bridge, Tangipahoa Parish, LA (LADOTD)</b> - Mr. Ricks initiated the Solicitation of Views (SPVs), Categorical Exclusion (CE) documents, and reviewed all supporting documentation as it was sent and received from the agencies. He also assisted with permit applications and agency coordination when asked for additional information.					
02/23 – Ongoing	S.P. No. H.014340, E. Minnesota Park Rd at Range Rd, Tangipahoa Parish, LA (LADOTD) - ELOS is contracted to complete a wetland delineation report to obtain a jurisdictional determination from the U.S. Army Corps of Engineers (USACE), submit a permit application, if necessary, as well as assist with a Categorical Exclusion (CATEX), Phase I Environmental Site Assessment (ESA), and the Solicitation of Views (SOVs) for a roundabout project (H.014340) covering 2.5 acres in Tangipahoa Parish. Mr. Ricks has researched additional information for reports, worked on files related to the CATEX, and assisted with reviewing agency requests for more information.					
07/21-08/22	LA Trace Road Widening, Ascension Parish, LA - ELOS was contracted to complete a wetland delineation report and prepare and submit road widening and culvert replacement joint application permits to the USACE and LDENR. Mr. Ricks worked with the team on the wetland delineation and reviewed the final figures and reports, prepared the joint application permits, met with the landowner for right-of-way, provided follow-up information and permit revisions to USACE and LDENR, and reviewed project invoicing.					
09/16 –06/20	LA 3234 Extension to Hammond Airport Environmental Assessment, Tangipahoa Parish, LA - ELOS was contracted to provide environmental services for the LA-3234 Extension from LA-1065 to Hammond Airport. These services included preparing estimates of environmental mitigation costs so that ELOS will estimate the cost of mitigation of any unavoidable environmental impacts, such as wetland mitigation, hazardous waste mitigation, or cultural resource mitigation. Mr. Ricks performed the wetland delineation for all three routes and provided a report of the findings. Mr. Ricks also assisted in GIS mapping of the Wetlands Findings Report, Phase I Environmental Site Assessment, and the Biological Assessment Survey. Mr. Ricks also provided a report of the threatened and endangered species known in the project area. Mr. Ricks led efforts on providing stream and waterbody data for each report.					
08/17 – 11/19	I-10 Highland to LA 73 Design Build, East Baton Rouge Parish to Ascension Parish, LA - ELOS was contracted to act as the environmental compliance manager responsible for permitting and construction monitoring for the fast-track interstate widening project from Highland Road in Baton Rouge to LA 73 in Prairieville (H.009250). The project included widening an approximately 6-mile segment of I-10 and expanding two bridges/overpasses. Mr. Ricks worked on documentation for the CATEX, wrote and revised several permits to state and federal agencies, and coordinated field crews for completing stormwater inspections and monitoring construction activities for environmental impacts and compliance.					



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Hunter Perrilloux			Years of relevant experience with this employer	4
Environmental Scie	ntist		Years of relevant experience with other employer(s)	1
Degree(s) / Years /	Specialization	BS / 2018 / Biology		
Active registration number / state / expiration date		N/A		
Year registered	N/A Discipline	N/A		
Contract role(s) / b	rief description of responsibilities		nmental Scientist, providing his expertise for collecting and and jurisdictional determinations. Hunter meets <b>MPR #5.</b>	analyzin
Experience dates (mm/yy–mm/yy)	Experience and qualifications rele intersection", etc. Experience da		; i.e., "designed drainage", "designed girders", "designe fied in the applicable MPR(s).	ed
09/20 – Ongoing	<b>Rural Bridges Phases I &amp; II, Statewide, LA (LADOTD)</b> - ELOS is contracted to provide wetland delineations, threatened and endangered species surveys, and permit applications for the replacement of rural bridges throughout Louisiana. Mr. Perrilloux has worked on phase of the project and has conducted the fieldwork for the wetland delineations. He has also conducted endangered species surveys for the long-eared northern bat.			
07/23 – 12/23	<b>S.P. No. H.014984 Libuse Cutoff Road over Flagon Bayou, Rapides Parish, LA (LADOTD)</b> - Mr. Perrilloux performed a wetland delineat for the off-system bridge project. He identified and mapped out the boundaries of wetlands within the project area. He assisted with field surveys, reviewing relevant data, and applying the appropriate wetland delineation methods as outlined by regulatory agencies.			
05/22 – 05/23	environmental services for the off-sy project area. He performed a detaid data to support the delineation and	vstem bridge project, including co led wetland delineation, accurated d compiled all documents to crea	gipahoa Parish, LA (LADOTD) - Mr. Perrilloux provided compo ordination with GIS specialists to create accurate map outlin ely identifying and mapping wetland boundaries. He colle ate a wetlands findings report. In addition, Mr. Perrilloux ce with environmental regulations, facilitating a smooth re	nes of th cted fiel prepare
10/21 – 11/21	<b>Fox Hollow Bridge II</b> - Mr. Perrilloux performed a thorough wetland delineation for the project area, accurately identifying wetland boundaries based on field observations. He collected essential data during the fieldwork, which was then input into a detailed Wetland Delineation Report, along with creating a photo log to document visual evidence of wetland features. Additionally, he assisted in the preparation of permit applications and supported the transmittal of reports to relevant regulatory agencies, ensuring all documentation was submitted in a timely and accurate manner for project compliance.			
07/20	mapping wetland boundaries based	on vegetation, hydrology, and soil environmental regulations. Also,	and delineation for the bridge replacement project, identi types. He completed the necessary wetland forms to docum he collaborated with engineers and regulatory agencies,	ent thes



<u>16. Staff Experie</u>	nce:
06/22 – 07/22	Lock No. 2 Bridge Replacement, St. Tammany Parish, LA (St. Tammany Parish) - Mr. Perrilloux coordinated with the GIS team to develop a site outline and assist in the desktop wetland delineation process, ensuring accurate mapping of potential wetland areas. He contributed to the impacts section of the environmental application by documenting potential wetland impacts and providing necessary data for review. Also, he reviewed environmental documents for accuracy and sent shapefiles to the U.S. Army Corps of Engineers (USACE) for their approval. In the field, he performed wetland delineation by collecting data on vegetation, soil, and hydrology, helping to determine wetland boundaries, then compiled the findings into a detailed wetland delineation report and submitted it to regulatory agencies for review.
06/23	<b>S.P. No. H.014340, E. Minnesota Park Rd at Range Rd, Tangipahoa Parish, LA (LADOTD)</b> - Mr. Perrilloux performed wetland delineation for a DOTD roundabout project, identifying and mapping wetland boundaries based on vegetation, soil, and hydrology, while collecting field data necessary for accurate delineation. He created and finalized a comprehensive wetland delineation report in compliance with regulatory requirements, submitting it for review by the appropriate agencies. He also coordinated with the GIS team to ensure the accurate creation of wetland maps and worked closely with the client and regulatory agencies to keep all stakeholders informed about the project's progress and environmental concerns. Throughout the process, Mr. Perrilloux provided regular updates to the Project Manager, ensuring timely communication regarding field work, report status, and regulatory coordination.
06/23 – 12/23	<b>CRMC Greenwell Springs Road Site</b> - Mr. Perrilloux performed wetlands delineation, identifying and mapping wetland boundaries based on field data, then compiled the findings into a comprehensive wetland delineation report. He submitted the report to the relevant parish authorities for review. Also, he reviewed the restoration plan, ensuring it addressed environmental requirements and mitigation strategies. Additionally, Mr. Perrilloux prepared for a site visit by organizing necessary details for the field crew to assess the project area and its potential impact on surrounding wetlands.
08/22 – 02/23	<b>Military Road Development</b> - Mr. Perrilloux played a key role in supporting the road project by assisting with the preparation for site visits, coordinating with the field crew, project manager, and client to ensure effective communication and smooth operations. He reviewed the wetlands delineation report, providing edits to ensure accuracy and compliance with regulatory standards. After finalizing the report, the employee submitted it to the USACE for approval. Also, he inputted data and created a photo log to document the wetlands delineation process and support the completion of the report. In the field, he performed the wetland delineation, collecting essential data on vegetation, soil, and hydrology. Additionally, he reviewed relevant project documents to ensure alignment with environmental guidelines and regulatory requirements.



# 16. Staff Experience:

Firm employed by:	ELOS Environmental,				
Christopher Wilson		The second se		Years of relevant experience with this employer	1
Archaeologist		env	LUS vironmental	Years of relevant experience with other employer(s)	5
Degree(s) / Years /	Specialization		MA/2023/Art History and Cura MA/2022/Archaeology BA/2021/Art and Archaeology	torial Studies	
Active registration	number / state / expi	ration date	Registered Professional Archae	ologist	
Year registered	N/A	Discipline	N/A		
Contract role(s) / b	rief description of res	ponsibilities		Archaeologist, providing his expertise for Terrestrial and N Cultural Resource Surveys, and construction monitoring.	/laritime
Experience dates (mm/yy–mm/yy)			ant to the proposed contract; s should cover the time speci	i.e., "designed drainage", "designed girders", "designed fied in the applicable MPR(s).	d
08/23 – 11/24	Management) services and managing STP (Sh Register of Historic Pla Inventory) forms, man	for a DOTD rur ovel Test Pit) da ces), and DOTD aging the Surve	ral bridge replacement project. Heta. He coordinated with agencie Additional tasks include preparey 123 platform, overseeing field	Mr. Wilson was responsible for providing CRM (Cultural R His duties included conducting research, preparing a Phase I es such as SHPO (State Historic Preservation Office), NRHP (I ing transmittal letters, completing LHRI (Louisiana Historic R crew activities, and preparing and submitting the final rep uirements for cultural resource assessments.	l report, National esource
12/23 – 09/24	services for the DOTD ( and overseeing field cr tribal packet research, with agencies such as	Off-System Bridg www.activities. He and collected Cl LHRI, DOTD, an	ges District 62 project. His tasks ir e utilized topographical maps an RM information necessary for Ca d SHPO to ensure compliance w	<b>D)</b> - Mr. Wilson was responsible for providing comprehensincluded conducting background research, preparing desktop d aerial investigations to gather critical data, created and su tegorical Exclusion (CATEX) evaluations. Additionally, he coor with regulations. Mr. Wilson prepared a Section 106 desktop oject aligns with cultural resource preservation requirement	reports, bmitted rdinated report,
10/24 – Ongoing	project, Mr. Wilson pro desktop review to asse for historic properties, and aerial images to su	ovides CRM servess the potentia conducting a c ipport the cultu and ensuring co	vices, focusing on Section 106 co al impacts of the bridge replacen cemetery review to identify any ral resource assessment. He also	<b>Tany Parish Government)</b> - For the St. Tammany bridge replation mpliance. His responsibilities include conducting a CRM Sector nent on cultural resources. This involves reviewing SHPO date burial sites in the area, and assisting with the preparation of compiles and creates a detailed Section 106 desktop review ation requirements, while addressing potential impacts to	tion 106 atabases of maps v report,
11/23	Prioritization Project, I	Mr. Wilson prov	vided a review of the project site	<b>Fangipahoa Parish, LA (LADOTD)</b> - For the DOTD Off-System e to assess the potential effects of bridge replacements on project to move forward in accordance with regulatory require	cultural



16. Staff Experie	nce:
11/23	<b>S.P. No. H.015408, North Brickyard Road Bridge, Tangipahoa Parish, LA (LADOTD)</b> - Mr. Wilson reviewed the project site to assess with the potential effects of the bridge replacement on cultural resources. He verified no cultural resources were needed, allowing the project to move forward in accordance with regulatory requirements.
07/24 – 08/24	<b>S.P. No. H.014375 US 190 Roundabouts, St. Tammany Parish, LA (LADOTD)-</b> Mr. Wilson was responsible for CRM services for the construction of three roundabouts along Highway 190 in St. Tammany in support of Section 106 compliance. His responsibilities included SHPO files to include all previously recorded cultural resource surveys, archaeological sites, and historic structures within a 1-mile radius. He also compiles reviews and reports to summarize findings and addresses any potential impacts on cultural resources, including cemetery reviews.
10/24	<b>Livingston Parish Old Mill Settlement Road</b> - Mr. Wilson was responsible for performing a Section 106 desktop review in support of Livingston Parish Government for their proposed road project. His responsibilities included but were not limited to working with all applicable state agencies and adhering to the regulations of 36 CFR Part 800. He verified that the site had experienced some disturbances due to road construction and that there was a high probability of possible Cultural resources due to the proximity of the Amite River and the previously recorded archaeological sites.
07/24 – 09/24	Juban North Extension - Mr. Wilson provided a Section 190n desktop review for Livingston Parish Juban Road Extension. He researched and reviewed historical maps, aerial photographs, and the online database of archaeological and historic sites maintained by SHPO. He found that there had been 11 cultural resource investigations within 1-mile of the project area. He also reviewed historical topographical maps and aerials. Mr. Wilson found that because the site had not been heavily altered through construction previously a historic structure survey was recommended.
03/24 – 04/24	<b>5th Street Improvements (H.012885)</b> - Mr. Wilson performed a Phase I Cultural Resource Survey of 0.5-mile radius of the projected improvement project. This included a pedestrian survey, taking systematic photos, recording addresses of all historic structures, and completing all Louisiana Historic Resource Inventory forms. The buildings were found to not be eligible but it was noted that they are in a district that is potentially eligible as a Postwar Commercial Strip. He developed a plan for any cultural material encountered would be labeled with provenance and temporarily curated by ELOS. In the end, he recommended the project proceed as planned after concluding no significant cultural resources would be impacted.
06/24 – 10/24	<b>Move Ascension, Phase III</b> - Mr. Wilson was responsible for conducting a Section 106 Desktop Review of the Roddy Road area as part of the third phase of Move Ascension project. This review included identifying potential historic structures by using SHPO databases and files. He also reviewed historic aerial images for structures in the area. He was able to identify from the multiple sources that there were historical structures. He compiled his findings and met with GIS to report them.
10/23 - 02/24	<b>Tangipahoa USDOT BIP Services 2023</b> - Mr. Wilson performed a Cultural Resource Review of previous investigations. These investigations included surveys, cemeteries, and listings of historic structures. He coordinated with the project manager and SHPO while conducting and documenting the review.



# SECTION

SP No. H.011788 Oak Street Bridge over Poydras Bayou Erwinville, LA Engineer of Record: Dennis Hymel, Jr., PE

-

Firm name Cre	scent Engineeri	ng & Mappin	g, LLC			Discipline(s)*		Survey, Bridge
McLin Road ove	r Dutchman (	Creek	Firm responsibi	Prime				
Project number	oject number H.015025 Owner's name Louisiana Department of Tra					sportation & Dev	velopment (LADOTD)	
<b>Project location</b>	St. Helena Pa	rish			<b>Owner's Project Manage</b>	er	Barbara Ostuno, P.E.	
Owner's address,	ohone, email	1201 Capitol	Access I	Rd.,	Baton Rouge, LA 70802 2	225-379-1047 b	arbara.ostuno@la.gov	,
Services commend	Services commenced by this firm (mm/yy) 04/23				Total consultant contract cost (\$1,000's)			\$160
Services completed by this firm (mm/yy) 05/24					Cost of consultant servic	es provided by t	his firm (\$1,000's)	\$148

The McLin Road over Dutchman Creek project involved the replacement of an existing 15' x 50', 3-span timber bridge and adjacent roadway, drainage and guard rail improvements in St. Helena Parish near Pine Grove, LA and was administered through the LADOTD Off-System Bridge Replacement Program. The project includes topographic surveys, roadway design, bridge design, and environmental support services. The selected replacement structure was a 24' clear x 80' long, reinforced concrete slab span bridge with horizontally curved spans, curved approach slabs and 36" MASH TL-4 rails. The bridge was designed using OpenBridge Designer, STAAD, and LRFR using AASHTOWare BrR Ver. 7.5.1.

Crescent Engineering & Mapping, LLC was the Prime Consultant for the project and is responsible for the topographic surveys, hydraulic analysis and report of structure crossing, scour calculations, guardrail design, roadway design, temporary diversion layout and channel hydraulics, special, non-standard bridge design elements including span, bent and approach slabs in accordance with the LADOTD BDEM and AASHTO guidelines, roadway and bridge plan production. Hydraulic analysis of the channel was performed using GeoHEC-RAS and plans were produced in accordance with all LADOTD requirements including Bentley Microstation/

Inroads, ProjectWise and certified by CadConform. Horizontal and vertical alignments and bridge guard rail were specifically designed to minimize right-of-way impacts and eliminate conflicts with adjacent wetlands in order to streamline the environmental and right-of-way acquisition process.

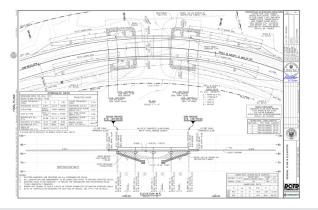
Crescent has completed all services and the **project was let in June 2024** and is currently under construction.

**Team Members Highlighted in this Proposal:** Dennis M. Hymel Jr., P.E., Paul Olivier, P.E., Abbey Falcon, P.E., James Ledet, P.E., Megan Miller, P.E., Luke Bourg, Matthew Ledet, P.L.S., Kelly Jones, Dakotah Holley

Crescent completed the project from survey through Preliminary Plans, Environmental, Final Plans, and Letting **in only 13 months** due to an accelerated schedule.









Firm name Cr	escent Engineer	ing & Mapp	ng & Mapping, LLC				s)*	Survey, Bridge		
Lemon Road ov				Firm	responsibility	(prime or sub?)	Prime			
Project number	H.014993	Owner's	name	Louis	siana Departme	ent of Trans	porta	ition & Develop	pment (LADOTD)	
Project location	East Baton R	ouge Parish			Owner's Proj	ect Manag	er	Barbara Ostur	no, P.E.	
Owner's address,	phone, email	1201 Capi	tol Acces	s Rd.,	Baton Rouge,	LA 70802	225	5-379-1047	barbara.ostuno@	la.gov
Services commenced by this firm (mm/yy) 03/23 To					Fotal consultant contract cost (\$1,000's)				\$142	
Services complete	ed by this firm	(mm/yy)	06/24		Cost of consulta	ant service	s prov	vided by this fi	irm (\$1,000's)	\$131

The Lemon Road over Drainage Bayou project involved the replacement of an existing 24' x 38', 2-span concrete bridge and adjacent roadway, drainage and guard rail improvements in East Baton Rouge Parish near Slaughter, LA and was administered through the LADOTD Off-System Bridge Replacement Program. The project includes topographic surveys, roadway design, bridge design, and environmental support services. The selected replacement structure was a 28' clear x 80' long, reinforced concrete slab span bridge including a modified end bent and approach slab to accommodate a concrete tapered barrier railing to avoid adjacent driveway impacts. The bridge elements were designed using OpenBridge Designer, STAAD, and LRFR performed using AASHTOWare BrR Ver. 7.5.1.

Crescent Engineering & Mapping, LLC was the Prime Consultant for the project and is responsible for the topographic surveys, hydraulic analysis and report of structure crossing, scour calculations, storm drain design, guardrail design, roadway design, non-standard bridge design elements including bent and approach slab design, and roadway and bridge plan production. Hydraulic analysis of the channel was performed using GeoHEC-RAS and plans were produced in accordance with all LADOTD requirements including Bentley Microstation/Inroads, ProjectWise and certified by CadConform.

Crescent has completed all services and the project was let in November 2024 (Project Completed in 15 Months)

**Team Members Highlighted in this Proposal:** Dennis M. Hymel Jr., PE, Paul I. Olivier, PE, Abbey Falcon, PE, Megan M. Miller, PE, James Ledet, PE, Luke Bourg, Matthew J. Ledet, PLS, Kelly Jones, Dakotah Holley





Firm name Cro	escent Enginee	ring & Mapping, L	LC	Di	iscipline(s)*		Survey, Bridge	
Tangipahoa IIJA	Bridge Repl	acements		Fi	irm responsibility (prime	or sub?)	Prime	
Project number	H.015404, H.0	15407 <i>,</i> H.015333	Owner's name	Tangipahoa Parish/LADOTD				
<b>Project location</b>	Tangipahoa F	Parish/Dist. 62		Owner's Project Manager Kevin Greer/Ryan Rodney				
Owner's address,	phone, email	206 E. Mulberry S	St., Amite, LA 704	22	985-244-6880 kgree	r@tangipahoa.org		
Services commen	Services commenced by this firm (mm/yy) 04/22					st (\$1,000's)	\$677	
Services completed by this firm (mm/yy) Ongoing					st of consultant services   ,000's)	provided by this firm	\$447	

The Tangipahoa Parish IIJA Bridges is part of the District 62 IIJA (BIL) bridge replacement project and involves the replacement of 4 bridge structures along E. Lewiston, Easley and Old Gennessee Roads in Tangipahoa Parish. Grouped into three (3) state projects, each project includes topographic surveys, hydraulics and scour analysis and reports, bridge design, roadway design, geotechnical, environmental and contract management.

Crescent Engineering & Mapping, LLC is the prime consultant for the project and is responsible for the topographic surveys, hydraulic analyses and modeling, scour analyses, bridge design, roadway design, LRFR, utility surveys and roadway/bridge plan production. Hydraulic analysis was performed using GeoHEC-RAS as well as LADOTD's HYDRWIN for roadside drainage. Bridge structures and RCB's are being rating using AASHTOWare BrR. The project's design and drawings are being developed per LADOTD design guidelines and plan requirements using Microstation/Inroads.

Crescent has completed the topographic surveys, hydraulic analysis, road design, bridge design, Preliminary Plans and received environmental clearance for all 3 projects. Crescent has submitted 98% Final Plans on 2 of the 3 state projects (H.015407 & H.015333) and 95% Final Plans on the third project (H.015404).

**Team Members Highlighted in this Proposal:** Dennis M. Hymel Jr., P.E., Paul Olivier, P.E., Abbey Falcon, P.E., Megan Miller, P.E., James Ledet, P.E., Luke Bourg, Miles Loker, E.I., Matthew Ledet, P.L.S., Kelly Jones, Dakotah Holley





Firm name C	rescent Engine	ering & Map	ing & Mapping, LLC				5)*	Survey, Bridge	
Libuse Cutoff I	Road over Fl	agon Bayou	l				Firm	responsibility (prime or sub?)	Prime
Project number	H.014984	014984 <b>Owner's name</b> Louisiana Department of Transportation & Development (LADOTD)							
<b>Project location</b>	Rapides P	rish			Owner's Proj	ject Manage	er	Barbara Ostuno, P.E.	
<b>Owner's address</b>	, phone, emai	1201 Capi	tol Access	s Rd.,	Baton Rouge,	LA 70802	225-3	79-1047 barbara.ostuno@la.g	v
Services commenced by this firm (mm/yy) 04/23 To					Total consultant contract cost (\$1,000's)			\$1,000's)	\$163
Services completed by this firm (mm/yy) Ongoing Cost of cons						ant services	s prov	vided by this firm (\$1,000's)	\$151

The Libuse Cutoff Rd. over Flagon Bayou project involves the replacement of an existing 21' x 63', 3-span precast concrete bridge and associated roadway in Rapides Parish near Pineville, LA. Due to a sharp curve at the end of the existing bridge, the new structure was designed on an offset alignment to improve safety and operations of the roadway and the bridge bents are skewed to better align with the channel. The project includes topographic surveys, roadway design, bridge design, and environmental support services. The selected replacement bridge structure was a 28' x 100', horizontally curved, superelevated, skewed (15°), reinforced concrete slab span bridge with 20' approach slabs and 36" MASH TL-4 rails. The bridge structure was fully designed and detailed by Crescent using OpenBridge Designer, STAAD, and LRFR produced using AASHTOWare BrR Ver. 7.5.

Crescent Engineering & Mapping, LLC was the Prime Consultant for the project and is responsible for the topographic surveys, hydraulic analysis and report, scour calculations, curved guardrail design, roadway design (including re-alignment), and design of special bridge design elements including span, bent and approach slabs in accordance with LADOTD BDEM and AASHTO guidelines. Crescent also prepared all roadway plans and fully detailed all bridge plans for the non-standard bridge design. Hydraulic analysis of the channel was performed using GeoHEC-RAS and plans were produced in accordance with all LADOTD requirements including Bentley Microstation/Inroads, ProjectWise and certified by CadConform. Additional safety elements not typically used for Off-System bridges were incorporated into the design including rumble strips, striping, signage and raised pavement markers.

Crescent completed the 95% Final (ACP) Plans in September, 2024 and is awaiting NTP for 100% Final Plans.

**Team Members Highlighted in this Proposal:** Dennis M. Hymel Jr., PE, Paul I. Olivier, PE, Abbey F. Falcon, PE, James Ledet, PE, Megan M. Miller, PE, Luke Bourg, Matthew Ledet, PLS, Kelly Jones, Dakotah Holley





Firm name	Cres	cent Engineeri	gineering & Mapping, LLC					(s)*		Survey, Bridge
McHugh Road	ver Brushy Ba	ayou					Firm	responsibility (prime or sub?)	Prime	
Project number	I	H.014992	Owner's	name	Louis	siana Departme	ent of Trans	porta	tion and Development (LADOTI	)
<b>Project location</b>		East Baton Ro	uge Parish			Owner's Proj	ect Manag	er	Barbara Ostuno, P.E.	
Owner's addres	s, pl	hone, email	1201 Capit	ol Access	s Rd.,	, Baton Rouge,	LA 70802	225	5-379-1047 barbara.ostuno@	la.gov
Services comme	Services commenced by this firm (mm/yy) 03/23						Total consultant contract cost (\$1,000's)			\$173
Services completed by this firm (mm/yy) Ongoing Cost						Cost of consult	ant service	s pro	vided by this firm (\$1,000's)	\$161

The McHugh Road over Brushy Bayou project involves the replacement of an existing 24' x 57', 3-span concrete bridge and adjacent shared use pedestrian/bicycle path in East Baton Rouge Parish near Baker, LA and is administered through the LADOTD Off-System Bridge Replacement Program. Included in this urban bridge replacement project are associated roadway and pedestrian facilities as well as storm drain network improvements. The replacement structure includes (3) 8'x7' Reinforced Concrete Box Culverts (RCB) with extended barrel length to satisfy future complete streets accommodations on both sides of the roadway. The project includes topographic surveys, roadway design, and environmental services. RCB's were implemented in lieu of a replacement bridge to mitigate utility conflicts which would interfere with pile driving operations.

Crescent Engineering & Mapping, LLC is the prime consultant for the project and is responsible for the topographic surveys, hydraulic analysis, roadway design, and plan production. Hydraulic analysis was performed using GeoHEC-RAS as well as LADOTD HYDRWIN programs for storm drainage networks. LRFR for the RCB's is being performed using AASHTOWare BrR Ver. 7.5.1. The project's design and plans were developed per LADOTD design guidelines, BDEM and plans produced in accordance with all LADOTD requirements using Microstation/Inroads, ProjectWise and certified by CadConform.

Crescent has completed the topographic survey, hydraulic analysis and report and 90% Preliminary Plans.

**Team Members Highlighted in this Proposal:** Dennis M. Hymel Jr., PE, Paul Olivier, P.E., Abbey Falcon, P.E., James Ledet, P.E., Miles Loker, E.I., Luke Bourg, Matthew Ledet, P.L.S., Kelly Jones, Dakotah Holley





Firm name El	OS Enviro	onmenta	al, LLC Discipline(s)*								Environmental
DOTD IIJA Off-System Bridges District 62 Firm res									sponsibility (prime or s	sub?)	Sub
Project number         Multiple         Owner's name         Louisiana Department of Transporta							tion and	Development (LADOTE	))		
<b>Project location</b>	Tangi	pahoa Pa	arish, LA			Owner's Proj	ect Manager	Greg Sepeda (Sigma)			
<b>Owner's address</b>	, phone, e	email	10305 Airl	ine Hwy,	Bato	n Rouge, LA 70	816 (225)810	-3100	gsepeda@sigmacg.cc	m	
Services commenced by this firm (mm/yy) 09/22						Total consultant contract cost (\$1,000's)				Unkno	own
Services completed by this firm (mm/yy) Ongoing						Cost of consult	ant services pro	vided by	this firm (\$1,000's)	\$127	

The Off-System Bridge Program, established under the Infrastructure Investment and Jobs Act (IIJA), is a key federal initiative aimed at improving bridges not located on the federal-aid highway system. The program is designed to address the needs of local and rural bridges, which often fall outside the primary focus of traditional federal bridge programs.

ELOS is currently contracted for the DOTD IIJA Off-System Bridge Program. The objective of this program was to replace as many poor condition, off-system bridges as possible by initial screenings of eligible "off-system" structures and create a Preliminary Screening Matrix/Spreadsheet. ELOS conducted appropriate technical and environmental studies and prepared necessary environmental documentation for approval from the Federal Highway Administration (FHWA), in accordance with the provisions of the National Environmental Policy Act (NEPA), FHWA Technical Advisory 6640.8a, and applicable laws, rules, guidance, and regulations. ELOS services encompass a comprehensive range of tasks aimed at ensuring compliance with environmental regulations and facilitating the necessary approvals for infrastructure projects. These services include environmental consulting to advise on regulatory requirements, NEPA (National Environmental Policy Act) compliance to assess and mitigate potential environmental impacts, and agency coordination to engage relevant federal, state, and local authorities. Additionally, services involve preparing section 106 tribal packets for consultation with native American tribes, solicitation of views to gather input from stakeholders, and conducting detailed studies such as wetland studies, cultural resources studies, and cultural resources surveys to evaluate the impact on natural and cultural resources. Surveys for threatened & endangered species and the preparation of a navigability determination packet help ensure environmental protections are

met. The process also includes the development of an environmental determination checklist and the acquisition of necessary environmental permits to ensure all legal and regulatory requirements are fulfilled before the project proceeds.

Project Numbers: H.015429, H.015430, H.015431, H.015432, H.015432, H.015433, and H.015434

**Team Members Highlighted in this Proposal:** Lucas Watkins, Basile Dardar, and Christopher Wilson.





Firm name EL	OS Environmenta	l, LLC				Environmental		
LADOTD Rural	Bridges: Phase	s I & II	Firm responsibility (prime or s	sub?) Sub				
Project number	Multiple	Owner's	name Lo	ouisiana Departm	ent of Transporta	tion and Development		
Project location	Statewide, LA Districts 3, 5,		and 62	Owner's Pro	ject Manager	Brian Allen, P.E.		
Owner's address,	phone, email	1201 Capit	ol Access R	Road, Baton Roug	e, LA, 70802 22	25-379-1840 brian.allen@la.g	jov	
Services commen	ced by this firm (	mm/yy)	08/20	Total consultar	Total consultant contract cost (\$1,000's) Unl			
Services complete	ed by this firm (I	mm/yy)	Ongoing	Cost of consult	Cost of consultant services provided by this firm (\$1,000's) \$541.8			

ELOS has been contracted by BKI to provide professional environmental consulting services for the Louisiana Department of Transportation and Development (LADOTD) Rural Bridge Replacement Initiative for two project phases. Phase I involved bridge replacements under 16 state project numbers and supplemental task orders, impacting 33 structures in Districts 03, 07, 61, and 62. Phase II is ongoing and involves bridge replacements under 9 state project numbers and supplemental task orders, impacting multiple structures in Districts 05, 08, and 58. Almost all the projects have included wetland delineations, permit applications, cultural resource surveys, and threatened and endangered species surveys. ELOS has also assisted in the early planning stages of some of these projects to identify any possible adverse economic, social, or environmental effects or concerns.

ELOS has performed all environmental services according to the standards of the Federal Highway Administration (FHWA). Permits have been coordinated through several federal and state agencies including joint applications to the USACE and the Louisiana Department of Energy and Natural Resources (LDENR) / Office of Coastal Management, Scenic Rivers permits through the Louisiana Department of Wildlife & Fisheries, and cultural resource surveys in coordination with the Louisiana State Historic Preservation Office. ELOS also has personnel recently trained in the tricolored bat identification and surveys, which have been used for some of these bridge replacement projects.

Project Numbers: H.013952, H.013955, H.013956, H.013957, H.013958, H.013959, H.013963, H.013966, H.013968, H.013970, H.013976, H.013982, H.013984, H.013989, H.013996, H.013997 (Phase 1) and H.014242, H.014243, H.014245, H.014246, H.014247, H.014248, H.014249, H.014250, H.014268, H.015685 (Phase II)

#### Team Members Highlighted in this Proposal:

Lucas Watkins, Brian Fortson, Cory Ricks, Hunter Perrilloux, Basile Dardar, and Christopher Wilson.





Firm name	ELOS	Environment	al, LLC					Environmental		
Tangipahoa I	IJA (	Off-System E	Bridges						Firm responsibility (prime or sub?)	Sub
Project numbe	r I	H.015404, H.0	15407, H.015333	Owner's	name	Tangi	pahoa Parish/	LADOTD		
Project location	n	Tangipahoa F	Parish, LA				Owner's Proj	ject Manager	Ryan Rodney	
Owner's addre	ss, pl	hone, email	206 E. Mulberry St	., Amite, L	A 7042	2 98	85-244-6880	kgreer@tang	gipahoa.org	
Services comm	ence	d by this firm	(mm/yy)		03/22		Total consulta	ant contract co	ost (\$1,000's)	\$677
Services compl	eted	by this firm	(mm/yy)		Ongoir	g	Cost of consu (\$1,000's)	ltant services	provided by this firm	\$78

The DOTD Off-System Bridge Replacement program focuses on replacing or rehabilitating bridges that are located on roads not part of the state highway system. These bridges typically serve local and rural areas, providing essential infrastructure for communities. Tangipahoa Parish is a participating parish with a list of qualified structures. The program is designed to address structural deficiencies, improve safety, and ensure compliance with modern design and environmental standards. It involves the evaluation, planning, and execution of bridge replacements to enhance transportation networks while minimizing disruptions to the affected communities.

ELOS is currently contracted to provide all professional environmental services as required to provide the documentation necessary for a Categorical Exclusion from the Federal Highway Administration (FHWA). This includes preparing a Categorical Exclusion (CE) Document, both preliminary and final, which assesses potential environmental impacts and supports exclusion from more extensive reviews under the National Environmental Policy Act (NEPA). The Wetland Findings Report evaluates the presence and impact of wetlands on the project sites, identifying mitigation measures if needed. Additionally, the preparation and submission of a US Army Corps of Engineers (USACE) Permit application ensures that the project complies with federal regulations governing activities that affect wetlands and waters of the U.S., including wetland delineations and necessary coordination with regulatory agencies. These services collectively ensure environmental compliance and smooth project execution.

ELOS is handling the solicitation of views, preparing the CE document in compliance with NEPA guidelines, and addressing potential environmental impacts such as wetlands, endangered species, hazardous materials, and more. The CE document includes detailed assessments of project alternatives, impacts, and coordination with stakeholders. We are also conducting a Wetland Findings Report, including wetland delineation, vegetation analysis, and impact quantification.

Additionally, ELOS is preparing and submitting the US Army Corps of Engineers (USACE) Nationwide Permit application to meet all regulatory requirements. All deliverables, including the CE document, Wetland Findings Report, and permit application, are being prepared in accordance with FHWA and DOTD standards, with high-resolution photographs, maps, and comprehensive environmental documentation.

#### Project Numbers: H.015407, H.015333, H.015404

#### Team Members Highlighted in this Proposal:

Lucas Watkins, Brian Fortson, Cory Ricks, Basile Dardar, Hunter Perrilloux, and Christopher Wilson.





# section 18

STOP

S.P. No. H.010559 Bayou Mercier Rd. over Berard Canal Catahoula, LA Engineer of Record: Dennis Hymel, Jr., PE

#### INTRODUCTION

The Crescent Engineering & Mapping (Crescent) team provides LADOTD with a combined over **80 years' of LADOTD Off-System Bridge Replacement** (OSBR) experience through its staff who have a proven record of project delivery for the OSBR program. Our staff members have **worked together for over the past decade for LADOTD's OSBR program**, surveying and preparing plans for OSBR projects involving both standard plan and non-standard structures in accordance with all LADOTD procedures and manuals including roadway and bridge design, environmental and OSBR guidelines.

Crescent's team is led by **Dennis Hymel, Jr., P.E.** and **Paul I. Olivier, P.E.**, who together have successfully delivered/led design on over **125 LADOTD bridge replacements**, including both On and Off-System bridges. Crescent's survey manager, **Matthew J. Ledet, PLS** has led the survey effort on over **80 LADOTD bridge replacements** and our QC Manager, **James "Jimmy" Ledet, PE** has been involved in the OSBR program **since 1986**. Crescent's team includes **ELOS Environmental**, who has a long history of performing environmental services for Crescent and LADOTD.



#### **PROJECT UNDERSTANDING & SITE VISIT**

Crescent visited the Picard Rd./Bayou d'Inde Bridge site on 2/29/2024 to assess the project conditions and identify potential design challenges. The bridge is situated in a tight, urban environment with multiple site constraints that will dictate several project design elements. The bridge is positioned between Frasch Park on the west side and a lateral drainage canal running parallel to Picard Rd. which outfalls into Bayou d'Inde at the downstream face of the bridge on the east side. Both Bayou d'Inde and the adjacent lateral include lined concrete revetment slopes which will need to be carried out in the design of the replacement structure. The northern abutment of the bridge

has an existing timber retaining wall, while the northeast quadrant includes a concrete retaining wall atop the revetment slope running through the northern extent of the project limits. It is imperative to reduce the footprint of this project during design to minimize or eliminate impacts to adjacent hydraulic features, parks and utilities.



Picard Rd./Bayou D'Inde Northeast bridge quadrant - Site Visit (2/29/2024)

#### LADOTD & PARISH KICKOFF MEETING

Following the NTP, Crescent will meet with the OSBR Program Manager and staff to discuss the project, review the schedule, receive LADOTD field books, review the new program changes involving R/W, invoice requirements, and establish communication protocols. Our project schedule will be based on critical path items with concurrent items being utilized to **expedite project delivery. Crescent recently completed an OSBR project for LADOTD in just 13 months from survey to letting.** 

Crescent will also meet with Calcasieu Parish representatives prior to the start of topographic surveys as required by the OSBR Guidelines. Additional items such as planned corridor improvements, hydraulics, structure preferences and corridor users will be discussed. Previous 5-years crash history will also be requested at this meeting. Meeting minutes for both meetings will be provided within 3 days of the meeting for review.

#### TOPOGRAPHIC & PROPERTY SURVEYS (Stage 3, Part I a-b)

Crescent will perform the topographic and property surveys for the project. Providing the **topographic and property surveys in-house** offers a distinct advantage for scheduling and delivery of these services.



Crescent's engineering staff works closely with survey staff during this phase to ensure that all required data is collected. Surveys will be completed in accordance with LADOTD Off-System Bridge Guidelines and Location & Survey requirements. GPS control will be established using at minimum four (4) control points set in concrete with digital levels run between these points.

#### **Crescent Engineering & Mapping ADVANTAGE**

Crescent owns the latest in Trimble® Survey equipment, operated by our in-house survey crews for roadway and bridge projects. Providing surveys in-house allows for seamless coordination and communication of survey needs directly from our engineering staff to the field. Additionally, in-house survey services allow for immediate deployment of survey crews and near instantaneous data review, eliminating missing data and ensuring the most expedient project delivery. Lastly, should additional data be required during design, these services can be immediately performed, eliminating costly delays caused by subconsultant coordination.



Once control is established and sketches complete, the topographic surveys will continue for the existing roadway, bridge, and channel/river. Surveys will be extended beyond traditional limits to incorporate any curves or additional geometric changes needed for design. Additional data points needed to show .DTM break lines and surface anomalies will be collected, and any upstream structures in the channel/river will be surveyed.

Bridge sketches will be provided and the channel/river traverses shown on the field roll. Survey data will be processed in Inroads daily and reviewed by the project's engineering staff for completeness prior to preparation of survey deliverables and field rolls. The survey submittal will include all items required by the LADOTD OSBR Guidelines including photographs, point listing and plotted cross sections. Surveys will undergo extensive QC/QA by both the survey and engineering teams prior to submittal to LADOTD and will meet all LADOTD deliverable standards for electronic plans and will be accompanied by the surveyor's transmittal and design engineer's acceptance letters.

While Title Take Offs and Property Surveys may be new to the OSBR program, Crescent's staff are well versed in providing these services for LADOTD. Title Take Off data searches will be conducted prior to survey crew mobilization in order to gather parcel data and enable survey crews to locate potential property monuments and **complete the property survey field work concurrent with the topographic surveys**. This provides the designer with R/W and parcel information early in design, potentially mitigating R/W takings, or, confirming the need for R/W and allowing Base R/W Maps to begin earlier via Supplemental Agreement.

Crescent's survey team will prepare the Property Survey submittal in accordance with the Location and Survey Manual + Addendum A, and deliver the ASCII, PDF and DGN files to the Project Manager prior to beginning Preliminary Plans and the hydraulics analysis.

#### **50% PRELIMINARY PLANS & HYDRAULICS ANALYSIS**

After surveys are reviewed and approved by LADOTD, Crescent will begin the hydraulics analysis and preparation of 50% Preliminary Plans.

#### <u>Design Criteria</u>

Picard Rd. is classified as a **Minor Urban Collector** as per LADOTD's Highway Functional Classification Map of Lake Charles. The existing corridor consists of 2-12' travel lanes, 2-2' outside shoulders and a 5' sidewalk on the west side of the bridge. Traffic counts and crash history at the site will be the primary drivers in determining the roadway cross-sectional elements, but Design Exceptions may be required to minimize the project footprint and to avoid impacts to the adjacent lateral canal and Frasch Park. **In order to satisfy complete streets accommodations, a 7' wide, cantilevered sidewalk is likely to be incorporated into the bridge design which would tie into the existing facilities on either side of the bridge**. The project site also includes a major underground telecommunications hub on the southeast quadrant.

Special consideration to avoid impacts to these utilities should be given when designing the approach guardrail in relation to the subsurface drainage network. Upon review of supplied data, bridge design criteria and LADOTD Design Report Forms will be submitted for review and approval, guiding the remainder of plan development.

Hydraulics & Scour Analysis



Photo showing existing sidewalk and overhead utilities (2/29/24)

Crescent will begin the hydraulics and scour analysis by reviewing additional data including topographic maps, FEMA Firm maps, USGS Quadrangle maps and LiDAR to delineate the site's drainage basin. Peak discharges and water surface elevations will be developed using a suite of software including LADOTD's HYDR1130 and GeoHECRAS. Hydraulic design will be conducted in accordance with the LADOTD Hydraulics Manual and the results prepared in report format along with the Hydraulic Data table.

#### Bridge TS&L

The bridge Type, Size and Location (TS&L), which will determine the appropriate bridge length, revetment slopes and hydraulic opening, will be developed at the start of the hydraulics analysis.



The replacement structure could include several non-standard design elements including cantilevered sidewalks, extended spans, modified guardrails, retaining walls and steel pipe pile design. Due to the proximity of the bridge in relation to residential housing and nearby tennis courts, minimal vibratory pile driving methods should be considered during design, including the potential use of steel pipe piles at the site. The channel width compresses at the site, therefore additional span length will likely be required in order to clear Bayou d'Inde and eliminate conflicts with existing piles. A retaining wall is required at the northern bridge abutment and will wrap along the northeast quadrant to eliminate impacts to the existing lateral channel. Modified guardrails are anticipated at all guadrants, possibly aside from the northbound approach, to reduce drainage and R/W impacts. Assuming the project includes a nonstandard bridge design, Crescent has ample experience to perform the design of these elements in-house per LADOTD BDEM and AASHTO requirements as well as conduct the Load Ratings using AASHTOWare BrR 7.5.1. 50% Preliminary Plans

Once hydraulics is completed, the remainder of the 50% PP will be developed including the roadway horizontal and vertical geometry, guardrail and embankment widening, roadside drainage, cross-sectional geometrics and transitions. The roadway will be modeled in Bentley<sup>®</sup> Inroads to determine the limits of construction at this early stage and potential R/W takings, if any. Plans will be developed in accordance with LADOTD plan preparation and OSBR Guidelines. If Design Exceptions or Waivers are needed, Draft forms will be completed upon structure approval and submitted for review by DOTD and/or the Parish. A Safety Analysis will be included in all Design Exceptions.

Crescent uses all LADOTD approved software including: Microstation/Inroads, Open Roads Designer, ProjectWise, Interplot Organizer, CADConform, BlueBeam Revu.

#### 75% PRELIMINARY PLANS (PRE-PIH) & SOLICITATION OF VIEWS (SOV's)

After review of the 50% Preliminary Plans, Crescent will address all comments, and if necessary, will prepare the Pre-PIH plans. Crescent's recent OSBR projects have had few comments and proceeded to Plan in Hand without the submittal of Pre-PIH plans, expediting project delivery. Upon approval of the replacement structure, Crescent and ELOS Environmental will prepare the Solicitation of Views (SOVs), receive DOTD approval thereof and mail these to the recipient list provided by LADOTD Environmental Section. Responses will be logged and loops closed to all SOV responses. If R/W will be needed, negotiations for Base and Final R/W maps can be initiated after structure approval or once R/W takings and parcels affected are known.

#### 95% PRELIMINARY PLANS (PLAN IN HAND)

Comments from the 50% PP or, 75% PP (if necessary) will be addressed in the Plan in Hand submittal. The roadway model, typical sections, plan & profiles,

general notes, bridge GPE, summary of estimated quantities, and construction signing will continue to be developed from the previous plan submittal(s). If superelevation is required, the superelevation diagrams will be further developed and completed by the end of preliminary plans along with the foundation layouts. Standard Plan lists, cost estimate and the Constructability & Biddability Review form will be provided. Crescent will attend the Plan in Hand meeting onsite with LADOTD and Parish representatives. Meeting notes will be provided within three (3) days.

#### **Crescent Engineering & Mapping ADVANTAGE**

- ✓ Extreme familiarity with OSBR Program ✓ In-house survey resources
- ✓ Extensive history with LADOTD
- ✓ Commitment to LADOTD Processes
- ✓ Open Roads transition ready

# ✓ Project Specific QC/QA Manager

#### 60% BASE & FINAL R/W MAPS

If R/W acquisition will be required, Crescent will begin the 60% Base R/W Maps using the limits of construction and taking lines from the latest set of preliminary plans. 60% Base Maps will be developed in accordance with the Location and Survey Manual + Addendum A and will be scheduled to be submitted along with the 100% Preliminary Plans due to the early development of the Property Survey. Crescent will attend the Joint Plan Review (JPR) meeting and will update the maps as necessary to coincide with the construction drawings. Upon receiving the Title Reports (or updates), the Final R/W Maps will be prepared and sealed by Crescent's Professional Land Surveyor and the Draft R/W Agreements sent to the OSBR Program Manager. By producing the topographic survey, property survey and R/W maps all in-house, Crescent eliminates third party involvement, providing seamless project delivery, and expediting the R/W mapping process to completion early in Final Plans.

#### **100% PRELIMINARY PLANS (POST PLAN IN HAND PRINTS)**

Plan development will continue to progress as comments are addressed and major design elements are completed. Items discussed at the PIH meeting will be addressed and added to the plans per the PIH Meeting Memorandum. Environmental

The wetland delineation will be conducted onsite and a wetland findings report prepared in accordance with US Army Corps of Engineers (USACE) guidelines. A Preliminary Jurisdictional Determination (PJD) will be requested from the USACE upon report completion. Permit sketches sized 8.5"x11" will be prepared to accompany the wetlands report, SOV packet, and Environmental Determination Checklist.



ELOS Environmental is also available to assist with additional consultation as needed including Cultural Resources and **Tri-Colored Bat Species**, on which **ELOS has been recently trained in technology used to identify** this newly endangered species.

#### **Other Documents**

A draft utility conflict matrix will be provided to the Parish to aide in their responsibility to relocate utilities. In addition to the 100% Preliminary Plans and environmental package, the Design Report forms will be finalized and sealed by Crescent's Engineer of Record. The Level 1 or Level 2 TMP checklists will also be prepared and submitted. Pile length requests with all supporting documentation will be submitted at this stage for use by the geotechnical engineer.

#### 60% FINAL PLANS (PRE-ADVANCED CHECK PRINTS)

Following the environmental approval and receipt of the NTP for Final Plans, Crescent will immediately begin the development of additional plan sheets required including embankment widening details, geometric layout (if necessary), erosion control plans, quantity summary sheets, Pile Data & Elevation, and concrete surface finish. All bridge structure and pile elevations will be finalized. Any special design superstructure or substructure bridge elements or special approach slabs will be fully detailed and placed on bridge sheets. Bridge railing, joint and bearing details will also be completed. If a non-standard structure is chosen for the site, a draft of the bridge calculations and Load Resistance and Factor Rating (LRFR) will be prepared at this stage to ensure adequacy of reviews.

#### 95% & 98% FINAL PLANS (ADVANCED CHECK PRINTS)

Comments from the 60% Final Plans (Pre-ACP) will be reviewed with LADOTD and addressed. Additional details, notes or changes will be added to the plans and quantities will be completed. The ACP Plans will be provided to the Plan Quality Unit (PQU), if necessary. Crescent has received very few comments from DOTD on recent OSBR projects. An ACP review meeting will be held to ensure all comments are addressed. Upon resolution, a 98% Final Plan set will be prepared for review by the Chief Engineer and use by General Files to prepare the proposal. Crescent will work with LADOTD staff to input pay items and quantities into AASHTOWARE and generate final cost estimates.

#### **100% FINAL PLANS (TRACINGS)**

Crescent will provide the 100% Final Plans (Tracings) as per OSBR Guidelines with the Title Sheet on Mylar for Chief Engineer signature. This submittal will be prepared once all comments are addressed from task managers, PQU and/or the Chief Engineer. Parish granted Design Exceptions will be noted on the Title

Sheet. A bound calculations book will be prepared and submitted with the original field books and an electronic copy of the Hydraulics Report.

#### QUALITY CONTROL AND QUALITY ASSURANCE (QC/QA)

A project specific QC/QA plan has been included Section 21. Proper QC/ QA is a critical component of any successful bridge project and Crescent has designated a QC/QA manager for the project, **James "Jimmy" Ledet**, **PE, with 45 years of experience** involving LADOTD projects and specifically Off-System Bridges. Each submittal will be accompanied by LADOTD QC/QA certification forms. Design and plan comments, along with their resolutions will be documented in Crescent's Design Comment Review forms.

#### LETTING

Crescent will respond to Falcon questions and assist LADOTD during letting. Upon receiving the bid results and tabulations, Crescent will provide additional information to LADOTD as needed regarding contract award, etc.

#### **STAGE 5: CONSTRUCTION**

Crescent's staff will be available to provide LADOTD with Construction Support (if necessary) by assisting with RFI's, reviewing shop drawings, evaluating contractor submittals, attending meetings, and providing design review assistance in the event of bridge component changes during construction such as bent modifications due to pile misalignment.

#### PROPOSED PROJECT SCHEDULE





# section **19–23**

S.P. No. H.006147 Tiger Drive Bridge over Bayou Lafourche Thibodaux, LA Engineer of Record: James P. Ledet, PE, F. ACEC

# 19. Workload:

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

1) one of the team's firms is responsible for the performance of the work;

2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;

- 3) the work has not yet been performed and invoiced; and
- 4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.

List only the portion of the fees attributable to firms on the team.

Firm(s)	Discipline(s) *	Contract Number and State project number	Project name	Remaining Unpaid Balance**
Crescent Engineering & Mapping, LLC	Road	44-24591; H.014992	McHugh Road Over Brushy Bayou	\$2,323
Crescent Engineering & Mapping, LLC	Bridge	44-24591; H.014992	McHugh Road Over Brushy Bayou	\$995
Crescent Engineering & Mapping, LLC	Planning	44-27180; H.016012	Transportation Alternatives Program (T.O. #1)	\$361
Crescent Engineering & Mapping, LLC	Road	44-25035; H.014984	Libuse Cutoff Road Over Flagon Bayou	\$7,073
Crescent Engineering & Mapping, LLC	Bridge	44-25035; H.014984	Libuse Cutoff Road Over Flagon Bayou	\$10,610
Crescent Engineering & Mapping, LLC	Road	44-28434; H.015568	LA 44: Pelican Point Roundabout and Widen	\$318,421
Crescent Engineering & Mapping, LLC	Bridge	44-28434; H.015568	LA 44: Pelican Point Roundabout and Widen	\$56,192
Crescent Engineering & Mapping, LLC	Survey	44-27735; H.014056	I-69 Frontage Road Connector (Stonewall Frierson)	\$672,223
Crescent Engineering & Mapping, LLC	Road	44-27735; H.014056	I-69 Frontage Road Connector (Stonewall Frierson)	\$379,580
Crescent Engineering & Mapping, LLC	Bridge	44-27735; H.014054	I-69 Frtg. Rd. Conn. (Ellerbe Rd. to LA 1)	\$119,262
ELOS Environmental, LLC	Environmental	44-0019337 / H.014245	LA-119 Bayou Pierre and Creek Bridges	\$15
ELOS Environmental, LLC	Environmental	44-0019337 / H.014246	LA-1199 Creeks & Spring Creek	\$19
ELOS Environmental, LLC	Environmental	44-0019337 / H.014247	LA-399 Creeks, Little 6 Mile Creek, Flat Branch	\$45
ELOS Environmental, LLC	Environmental	44-0019337 / H.014248	LA-124 Creeks, Broke Leg Bayou, Boggy Bayou	\$14
ELOS Environmental, LLC	Environmental	44-0019337 / H.014248.5	LA-124 On site Detours - Supplemental Task Order	\$308
ELOS Environmental, LLC	Environmental	44-0019337 / H.014249	LA-126 Creek	\$849
ELOS Environmental, LLC	Environmental	44-0019337 / H.014242.5	LA-124 Bridges/Detours – Supplemental Task Order	\$21,473
ELOS Environmental, LLC	Environmental	44-0019337 / H.014250	LA-577 Bull Bayou and Creek Bridges	\$38
ELOS Environmental, LLC	Environmental	44-0019337 / H.014268	LA-4 Creeks, Bear, Squirrel, Sugar, Bill's and Lost Creek Relief	\$30



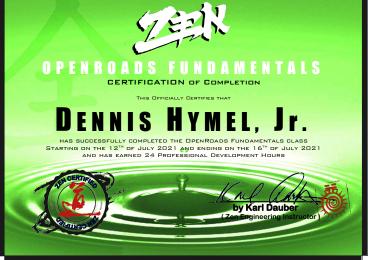
# 19. Workload:

Firm(s)	Discipline(s) *	Contract Number and State project number	Project name	Remaining Unpaid Balance**
ELOS Environmental, LLC	Environmental	44-0019337 / H.014268.5	LA-4 Creeks, Bear, Squirrel, Sugar, Bill's and Lost Creek Relief – Additional Tasks	\$398
<b>ELOS Environmental, LLC</b>	Environmental	44-0027734 / H.014362	Lake Road in St. Tammany Parish	\$22,877
ELOS Environmental, LLC	Environmental	44-0025041 / H.015429	Carroll Ave, Middle Colyell Creek - IIJA Off-System Bridges District 62	\$61
ELOS Environmental, LLC	Environmental	44-0025041 / H.015430	Hood Rd, Middle Colyell Creek - IIJA Off-System Bridges District 62	\$51
ELOS Environmental, LLC	Environmental	44-0025041 / H.015431	Sawmill Rd, Unnamed Creek - IIJA Off-System Bridges District 62	\$53
ELOS Environmental, LLC	Environmental	44-0025041 / H.015432	M. Williams Rd, Spring Creek - IIJA Off-System Bridges District 62	\$53
ELOS Environmental, LLC	Environmental	44-0025041 / H.015433	George Jenkins Rd, Berrys Creek - IIJA Off-System Bridges District 62	\$64
ELOS Environmental, LLC	Environmental	44-0025041 / H.015434	Mitch Rd, Peters Creek - IIJA Off-System Bridges District 62	\$49
ELOS Environmental, LLC	Environmental	44-0021326	DOTD Stage 0 IDIQ-LA 3089 Serve Rd/LA 70 Up	\$2,760





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U.S. Department of Transportation Federal Highway	Certificate o	1 institute	U.S. Department of Transportation Federal Highway Administration	Certificat	e of Training
Administration	2	Hymel		Dennis	s Hymel
	hasparticip, FHWA-NHI-130053 Bridge )			NHI Course No.	<i>rticipated in</i> FHWA-NHI-134006A ordination for Highway Projects
	hosted by Louisiana Department of Tr	ansportation & Development		•	osted by
	Date: January 12-14, 2021 Location: Virtual Delivery, LA	Hours of Instruction: 18	Local	National Hi tion: Web-Based Course	ghway Institute Hours of Instruction: 4 ho
	J-PBy- Instructor Instructor Instructor	Allison H. Landry Local Coordinator <u>ThOMAS HAYMAM</u> Thomas Harman, Director National Highway Institute	Date:	<u>4/1/2019</u>	Valerie Briggs, Director National Highway Institute



#### nstitute

urs of Instruction: 4 hours



has participated in NHI Course No. FHWA-NHI-135086

Stream Stability Factors and Concepts (Prerequisite) WEB-BASED

#### Hosted by: National Highway Institute

Location: Web-Based Course <u>12/29/2022</u> Date:

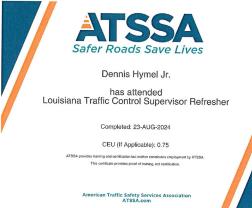
Hours of Instruction: 1 hours Thomas Harman Thomas Harman, Director National Highway Institute











Certificate of Professional Development Hours presented to

Dennis M. Hymel, Jr.

for attending the

Highway Safety Manual Workshop 12.0 PDHs

December 3-4, 2014

on Baton Rouge, Louisiana











Certificate of Attendance

Local Public Agency Construction Engineering and Inspection (CE&I) Training

PRESENTED BY

Louisiana Department of Transportation and Development Louisiana Local Technical Assistance Program And

The Federal Highway Administration

TO CERTIFY THAT

# Dennis Hymel, Jr.

HAS SATISFACTORILY COMPLETED 6.5 HOURS OF TRAINING

Mathe m Wills Director of Local Public

Agency Program

August 15, 2013

Lafayette, Louisiana Location





Herman Lee, P.E., PMP Michael Baker International ichael S. Pichura, P.E.

Michael Baker International

Local Co

Michael Davies, Director National Highway Institute





National Highman Ind		U.S. Department of Transportation	c	ghway Institute J	
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Dennis Hym	nel				
has participated in			•	rticipated in	
FHWA - NHI Course No.				FHWA-NHI-130101	
NEPA and the Transportation Decision-ma	aking Process (3 Days)		Introduction to Safety Inspection	1 of In-Service Bridges - WEB-BASED	
LA DOTD/LTRC			h	osted by	
			National Hi	ghway Institute	
Date:         December 8-10, 2015         Hours           Location:         Baton Rouge, LA	s of Instruction: 18		Location: Web-Based Course	Hours of Instruction: 14 ho	ours
A.0	Goon H. Landry		Date: <u>1/4/2016</u>		
Instructor Local Co	Coordinator			Valerie Buggs	_
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	Paul	Olivier
	For com	pletion of
		E SEMINAR
		ations & Mix Design Design
	February 20, 2014	Thibodaux, Louisiana
This	seminar has been approved for two (2)	PDHs and CEUs for Engineers and Contractors
	NCRETE &	AGGREGATES
0.7	u H. Temple	



mSchelling

Allison H. Landry

Value Burgy Valerie Briggs, Director National Highway Institut



ATSSA **PROOF OF TRAINING** THIS CERTIFICATE HEREBY RECOGNIZES THAT Paul Olivier has attended Louisiana Traffic Control Supervisor Training Course 10/18/2023 to 10/18/2027 Training Valid Through Dome H. Clark Vice President of Education and Technical Services Alaces Terretan New Orleans, LA Location President, CEO ATTSA provides training and certification but neither co

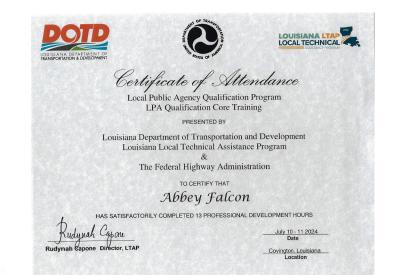
ATSSA

Page 61

Firm Name: CRESCENT ENGINEERING & MAPPING, LLC



PROO	F OF TRAINING
THIS CERTIF	ICATE HEREBY RECOGNIZES THAT
	Abbey Falcon has attended
Louisiai	na Traffic Control Supervisor
	Training Course
<u>11/8/2023</u> to <u>11/8/2027</u> Training Valid Through	() Jone H. Clark_ Vice President of Education and Technical Services
Baton Rouge, LA	Alacen Texachuer
Location	President, CEO
	Treadent, OLO
ATSSA provides training	g and certification but neither constitutes employment by ATSSA.
	American Traffic Safety Services Association ATSSA.com











# **Megan Miller**

has participated in

NHI Course No. FHWA-NHI-130081C

LRFD Design of Common Bridge Elements: Decks and Bearings

#### Hosted by: National Highway Institute

Location: Web-Based Course Date: <u>7/24/2024</u>

Hours of Instruction: 3 hours

Stacey J. Caston Stacey J. Caston, Director National Highway Institute



# Megan Miller

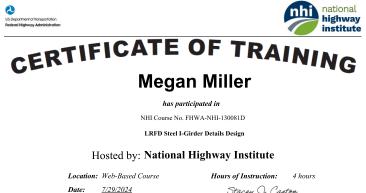
has successfully completed Introduction to FRP Materials and Applications for Concrete Structures

Date: 07/30/2024 Continuing Education Units: 0.3

Stacey J. Caston Stacey J. Caston, Director National Highway Institute







Hours of Instruction: 4 hours
 Stacey Q. Caston
 Stacey J. Caston, Director
 National Highway Institute



has participated in

NHI Course No. FHWA-NHI-130081E

Prestressed Concrete Girder Topics

#### Hosted by: National Highway Institute

Location: Web-Based Course

Date: 7/29/2024

Hours of Instruction: 2 hours

Stacey J. Caston Stacey J. Caston, Director National Highway Institute



U.S. Department of Transportation Federal Highway Administration National Highway Institute

Certificate of Training



# **Megan Miller**

has participated in

NHI Course No. FHWA-NHI-130101

Introduction to Safety Inspection of In-Service Bridges - WEB-BASED

hosted by

#### **National Highway Institute**

Location: Web-Based Course

Date:

3/26/2019

Hours of Instruction: 14 hours

Valerie Bingos Valerie Briggs, Director National Highway Institute





ATSSA TRAINED	
PROOF OF TRAINING THIS CERTIFICATE HEREBY RECOGNIZES THAT	
Luke Bourg has attended Louisiana Traffic Control Supervisor Training Course	
10/18/2023 to 10/18/2027     Image: Constraining Valid Through       Training Valid Through     Vice President of Education and Technical Services       New Orleans, LA     Alacs. Telesher       Location     President, CEO	
ATSSL provides training and certification but neither constitutes employment by ATSSL American Tatlic Safety Services Association ATS3A.com	





Miles Loker

has attended Louisiana Traffic Control Technician

Completed: 30-JUL-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





Miles Loker

has attended Louisiana Traffic Control Supervisor

Completed: 01-AUG-2024

CEU (If Applicable): 1.5

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> American Traffic Safety Services Association ATSSA.com









Joseph Mavrin

has attended Louisiana Traffic Control Technician

Completed: 30-JUL-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



Joseph Mavrin

has attended Louisiana Traffic Control Supervisor

Completed: 01-AUG-2024

CEU (If Applicable): 1.5

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> American Traffic Safety Services Association ATSSA.com



Joseph Maurin

has attended National Flagger Certification Training Course

Completed: 03-SEP-2024

CEU (If Applicable): 0

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> American Traffic Safety Services Association ATSSA.com



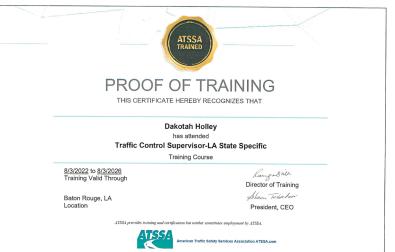




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	ATSSA
	F OF TRAINING
Louisiana Tra	Matt Ledet has attended affic Control Supervisor Refresher Training Course
5/10/2021 to 5/10/2025 Training Valid Through	Worw H. Club. Vice President of Education and Technical Services
Baton Rouge, LA Location	Alaces Technologo President, CEO
	g and certification but neither constitutes employment by ATSSA.
	American Traffic Safety Services Association ATSSA.com

# LOUISIANA STATE CIVIL SERVICE

acknowledges that

Matthew J. Ledet

has successfully completed the training course:

**CPTP SCS Cybersecurity WBT** 

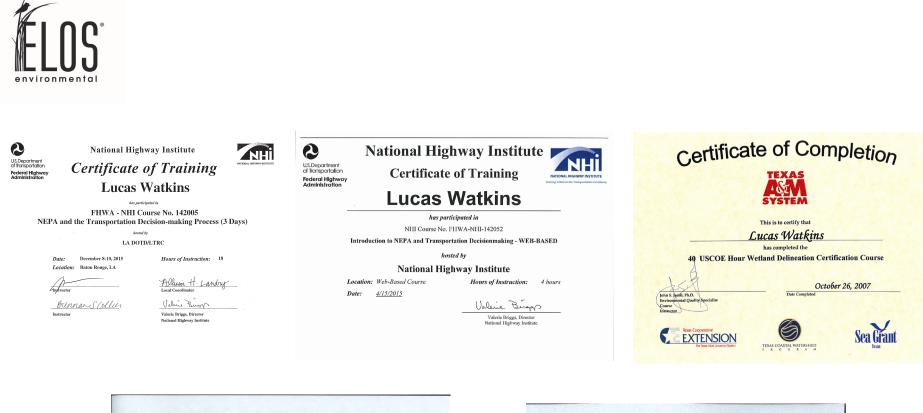
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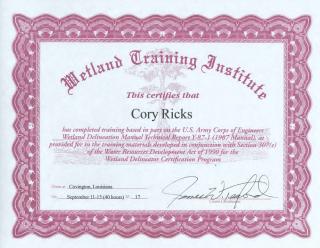
October 07, 2024

This document is intended to be used solely for the purpose of documenting the individual's completion of SCS's web-based training: CPTP SCS Cybersecurity WBT

















Search for Louisiana Business Filings						
Buy Certificates and Certified Copies	Subscribe to Electronic Notification Pri	Detailed Record				
Name		Туре	City	Status		
CRESCENT ENGINEERING	& MAPPING, LLC	Limited Liability Company	VACHERIE	Active		

Search for Louisiana Business Filings						
Buy Certificates and Certified Copies	Buy Certificates and Certified Copies Subscribe to Electronic Notification Print Detailed Record					
Name		Туре	City	Status		
ELOS ENVIRONMENTAL, LL	С	Limited Liability Company (Non-Louisiana)	WILMINGTON	Active		





LADOTD CONTRACT No. 4400030635

S.P. No. H.015942.5

F.A.P. No. H015942

PICARD RD OVER BAYOU D'INDE

BRIDGE DESIGN QC/QA PLAN

"Committed to Excellence, Focused on Delivery"

January, 2025



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

## **Table of Contents**

Introduction	74
Definitions	74
Roles and Responsibilities	75
QC/QA Procedures	76
Description of Appendices	80

Appendix A	LADOTD Checklists & Worksheets
Appendix B	Crescent Design Comment Review Forms
Appendix C	LADOTD QC/QA Submittal Certifications



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

#### Introduction

Crescent Engineering & Mapping, LLC (Crescent) understands that proper QC/QA is vital to the success of any bridge project. When a clearly outlined, known and repeatable process is followed by a team of bridge designers and technicians, design errors are eliminated, and plan accuracy is greatly enhanced. These QA/QC procedures and guidelines have been developed to ensure that bridge design team develops and accurately confirms that the project's design and resulting drawings meet LADOTD and AASHTO criteria and are in accordance with the requirements of the Contract. LADOTD's Bridge Design and Evaluation Manual requires that the Department's Policy for Quality Control and Quality Assurance is followed for all LADOTD projects. This QC/QA plan establishes the basis for Crescent to continue to be Committed to Excellence and Focused on Delivery.

This QC/QA plan has been developed consistent with LADOTD and Crescent policies specially for:

## Contract No. 4400030635 S.P. No. H.015942.5 Picard Rd over Bayou D'Inde

Crescent will manager design and design quality control/quality assurance program throughout the development of bridge design and production of bridge plans and specifications for this project. Our designated QC/QA manager for this project will be responsible for overseeing the overall quality program, performing independent Quality Assurance reviews as well as the preparation and implementation of the QC/QA plan. Crescent fully understands that it is the LADOTD's expectation that it's consulting engineers take full responsibility for their design and bridge plan submittals throughout the design process. We further understand that review and comments by LADOTD does not relieve Crescent of this responsibility.

This QA/QC plan has been prepared in accordance with the requirements set forth in "Guidance on QC/QA in Bridge Design in Response to NTSB Recommendation (H-08-17)," FHWA, AASHTO, August 2011. Additionally, requirements of BDTM.37 and "Policy on Quality Control and Quality Assurance," Louisiana Department of Transportation and Development, Bridge Design Section, October 2012, as amended and the requirements of the LADOTD's Bridge Design and Evaluation Manual will be followed throughout the project.

Crescent has committed to this process and has dedicated resources to deliver bridge design projects for LADOTD. We strive for continuous improvement to our processes to the benefit of our team members, the clients we serve and the public as a whole. We are committed to partnering with our clients by properly planning our work efforts to achieve a repeatable, consistent and a seamless delivery of our bridge projects. Crescent is committed to continuing education, offering our employees ample opportunities to remain on the leading edge of technology, bridge modeling and design methodology improvements, changes and innovation.

#### **Definitions**

Quality Control (QC): This process involves the procedures of checking the accuracy of the calculations and consistency of the drawings, detecting and correction design omission and errors before the design plans are finalized, and verifying that bridge components are adequately designed for the requirements of the AASHTO LRFD Bridge Design Specifications, LADOTD Bridge Design and Evaluation Manual and other technical memoranda.

Quality Assurance (QA): This process involves the procedures of reviewing the work to ensure the quality control procedures and processes are in place and effective in preventing mistakes, and consistency in the development of bridge design plans.

Designer: An individual directly responsible for the development of design calculations, drawings, specifications, and contract documents and, potentially, in the 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. A designer shall be either a Professional Engineer licensed in the State of Louisiana or certified as an Engineer Intern under the direct supervision of a licensed Professional Engineer. The designer's experience should be commensurate with the complexity of the structure being designed.



Design Checker: An individual responsible for performing full technical review of the structural calculations, drawings, specifications and contract documents. A Design Checker shall be a Professional Engineer licensed in the State of Louisiana or certified as an Engineer Intern under the direct supervision of a licensed Professional Engineer. If the Designer is an Engineer Intern, the Design Checker should be a Professional Engineer. The checker's experience should be commensurate with the complexity of the structure being designed/checked.

Detailer: An individual responsible for the necessary Microstation/CAD duties of producing bridge design plans which reflect the designer's intentions and calculations. The Detailer shall be competent in operating Microstation/CAD software, able to read design sketches and drawings and shall communicate with the designer throughout the development of bridge design plans.

Reviewer: An individual responsible for performing QA procedures for assuring that QA/QC procedures have been performed.

Engineer of Record: A Licensed Professional Engineer responsible for all bridge structural aspects of the design of the structure including the design of all the bridge's systems and components. This individual is responsible for sealing and signing the final project plans.

#### **QC/QA Roles and Responsibilities**

The following tables outline the team members who have been selected to perform the individual QC/QA assignments for this project's bridge elements. These assignments are subject to change with comparable personnel depending upon contract execution and timeline.

Brid	e Structural Design*	Constructio	n Support & Shop Drawings
Designer:	Megan M. Miller, P.E.	Drawing Review:	Dennis M. Hymel, PE.
Design Checker:	Dennis M. Hymel, Jr., P.E.	Review Checker:	Abbey F. Falcon, P.E.
Detailer:	Luke Bourg	QA Review:	James P. Ledet, P.E.
Detail Checker:	Paul I. Olivier, P.E.		
QA Review:	James P. Ledet, P.E.		
Hydraulics Design & Scour Analysis			
Hydraulic	s Design & Scour Analysis	Brid	ge Geometric Design
Hydraulic Designer:	s Design & Scour Analysis Abbey F. Falcon, P.E.	Brid Designer:	ge Geometric Design Abbey F. Falcon, PE.
			<u> </u>
Designer:	Abbey F. Falcon, P.E.	Designer:	Abbey F. Falcon, PE.
Designer: Design Checker:	Abbey F. Falcon, P.E. Paul I. Olivier, P.E.	Designer: Design Checker:	Abbey F. Falcon, PE. Paul I. Olivier, P.E.

\*For Non-Standard Structure Elements

Bridge Engineer of Record: Dennis M. Hymel, Jr., P.E.

QC/QA Manager: James P. Le

James P. Ledet, P.E.



#### QC/QA Procedures

#### 1. CALCULATIONS

#### INTRODUCTION

Calculations are to be done on calculation tablet sheets for each design organization. Calculation tablets shall bear the name and address of the firm preparing the design. Calculations shall include sketches which are legible to detailers which may augment or clarify the calculations, list all assumptions, references, units, and conclusions. The calculations shall reference the specific component for which they apply and shall cite specific AASHTO codes being used for specific calculations being made.

#### RESPONSIBILITIES

Engineer of Record – Ensures that staff assigned to the project are capable of performing the analysis and calculations and that their experience is commensurate with the complexity of the structure or component being tasked. Responsible for direct oversight and supervision of the design of the bridge components and structure. Assembles or assigns personnel to assemble and maintain original calculations and calculation checks for the project.

Designers – Prepare all calculations in a neat and logical manner which is conducive to checking. Provide the calculations to the Checker in a timely fashion with time to properly and adequately check calculations prior to detailing.

Checkers – Thoroughly check the design calculations starting with assumptions, mandated parameters, references, given values and formulas, AASHTO codes, omissions, and correctness of arithmetic. The Checker is responsible for asking questions of the Designer in areas that are not clear or seeking technical advice if warranted for a particular element of the calculation.

QC/QA Manager – Performs independent review of the checked calculations and random audits to ensure that QC procedures are being followed for checking of calculations.

#### PROCEDURES

- 1. Identify each sheet of calculations with designer's initials, date, project name, and sheet number. Indicate portion of project being designed in the upper right corner of each sheet below the title block. For example: Bent 5 Design, Intermediate Bent Design, Span 3 Design, etc. A component of a project shall be checked promptly upon completion of calculations. Normally, design and quantity calculations are not combined.
- 2. The Designer shall make a copy (checking copy) of the calculation set and give to the checker. The originals shall then be placed in a designated binder or folder, in a convenient location, which can be accessed by the entire design team.
- 3. The checker shall fill in the checking copy headings with initials and date in red. All errors and disagreements shall be marked in red. Yellow shall be used to indicate information that has been checked is correct.
- 4. The checker shall promptly return the checking copy to the Designer for review. If the Designer agrees with the checker's markup then the Designer shall put a green check on red marks. When the Designer and Checker disagree, then the Engineer of Record shall resolve the dispute.
- 5. The Designer shall change the originals and return the originals and the checking copy to the checker for the checker's initials and date to be placed on the original.
- 6. The originals shall immediately be placed back into the calculation folder or binder. The checking copy shall be kept as required.



#### 2. DRAWINGS

#### **INTRODUCTION**

Timely checking of drawings is important for efficient performance of plan producing and to minimize errors and prevent compounded error. A drawing used as a base file by several disciplines (road, bridge, hydraulics) should be checked and corrected before further additions are made; this will eliminate the need to check and correct the same items on subsequent drawings.

#### **RESPONSIBILITIES**

The Engineer of Record, with the help of the QC/QA Manager, will ensure that this procedure is implemented on all project drawings and that the check prints are assembled and available for audit for each submittal milestone during project delivery.

The Designer of the structure or the bridge element on the drawing has the primary responsibility for accuracy and adequacy. It is not intended that the Designer rely upon the checking system to complete the drawing.

The Designer of each drawing or set of drawings is responsible for making the Check Print, stamping and dating it, following that Check Print through the process, and obtaining the required sign-offs.

Checkers are responsible for checking the drawings, independent of the Designer, for accuracy and adequacy of all the information shown, including geometrics, reinforcing and quantities.

QA/QC Manager performs particular QA reviews and audits to ensure that procedures are being followed in regard to the checking of drawings.

#### **PROCEDURES**

- 1. As each drawing individually is completed and deemed ready for checking, the Designer signs or initials the title block of drawings, makes a Check Print copy, and affixes, numbers, and dates the Check Print stamp on the print of each drawing. This is to be done on each drawing print separately, not on the set of prints as a whole, even if the same information is put on the check print stamp.
- 2. The Checker checks the Check Print of the drawing for technical adequacy and conformance to any applicable standards and format, and performs specific accuracy checks required for that type of drawing. Checking activity is recorded directly on the Check Print. The Checker is responsible for ascertaining that the drawing is consistent with the corresponding calculations, and signing off that those calculations have been properly checked. In order to document the check-ing process, the Checker highlights in yellow on the Check Print each part checked that is found to be correct and marks in red on the Check Print corrections, additions, or deletions.



Use of Colors

Instrument	Use For	User
Yellow Highlight	Checker confirmation	Checker
Red Pen	Correction to be made	Checker
Blue Pen	Discussion Item, Design Issue	Checker
Green Pen	Concur or Alternate Resolution	Designer
Orange Highlight	Confirmation of Correction	Detailer
Pink Highlight	Verification of Corrections Made	Designer/EOR

The Checker signs and dates the Check Print stamp upon completion of the checking. The Checker completes the Design Review Form concurrently with the checking of the Check Prints in order to augment suggested corrections, provide additional information or suggestions.

In the case where no corrections, additions or deletions are found, there is no need for backchecking or further signatures on the Check Print stamp. The Check Print and original drawing, signed in the appropriate checked block, should be returned to the Designer for placement in the projects file.

3. The Designer (or designee, as Backchecker) reviews the Checker's marks on the Check Print as well as the Design Review Form with the Checker to ensure that comments are conveyed accurately and to discuss suggestions or other issues. The Designer then personally makes or supervises the update of the Drawing Original.

To document the backchecking process, the Designer:

- Check-marks in green each of the Checker's red-marked changes if in agreement that the Original should be changed and adds in green, with the concurrence of the Checker, any additional changes not picked up by the Checker.
- Crosses out in green each of the Checker's red-marked changes that both the Designer and the Checker agree should not be changed. The Backchecker should not obliterate the Checker's marks.

NOTE: The Backchecker and Checker should resolve differences encountered during the checking process so they are not repeated. If resolution cannot be achieved by the two individuals, the appropriate Design Unit Engineer or Design Manager should be requested to resolve the differences.

• Signs and dates the Check Print stamp.



4. Correction of the Drawing Original should be supervised by (or drafted by) either the Designer or Checker, since both are familiar with the changes to be made.

When making the Check Print corrections to the Drawing Original, the engineer, draftsperson, or CADD operator highlights in orange each correction as incorporated. The person correcting the drawing signs and dates the Check Prints stamp upon completion of the corrections.

5. When corrections are made by a third party (not the Designer or checker), the Check Print should be verified by the Checker or Designer to assure that the agreed-to corrections have been incorporated without error. If the corrections are not made or are erroneous, the Check Print with penciled instructions is returned to the corrector. The Verifier puts a pink check mark next to or pink highlight over the item after reviewing its incorporation on the Original Drawing.

The Verifier signs and dates the Check Print stamp, as applicable.

After the corrections have been verified the Checker initials the "checked by" block on the title block of the Drawing Original.

6. The completed original (or CADD file) is put under the control of the Engineer of Record or a designee in order to prevent further changes in the drawing that could invalidate the checking which has been done. The Engineer of Record or a designee releases the checked drawing to other disciplines to use as a baseline for their input, or to the client.

NOTE: When there is a change to a checked drawing, a new Check Print must be made to check the area that has been changed. The Check Print is stamped and labeled Check Print 2, 3, 4, etc. as applicable and attached to the previous check print(s). The checking follows the same procedure as that of the original Check Print, except that only the portions that changed are marked up as having been checked.

7. If changes mandated by the client at the final review are simple in nature, the Engineer of Record or a designee may abbreviate the checking process by noting the changes in red on a new Check Print (which should be sequentially numbered) and signing the Check Print as the Backchecker, indicating that the changes do not materially affect the design. Then the normal correcting and verifying processes should be utilized.

Exceptions to the procedural documentation of the Check Prints can be given only by the QC/QA Manager based upon the size, character and complexity of the project.



#### **Description of Appendices:**

The following review forms, checklists and certifications within the Appendices will be used during the project's QC/QA process as required by LADOTD's Bridge Design Section BDTM.37. The checklists and certification forms are included in the Appendices for reference.

#### Appendix A

- LADOTD Design Criteria Worksheet
- LADOTD Project Activity Log Sheet
- LADOTD Consultant Project Bridge Design Kick-Off Meeting Agenda Checklist
- LADOTD Consultant Submittal Review Checklist
- Final Calculation Book Index Checklist

#### Appendix B

Crescent Design Comment Review Forms

#### Appendix C

- LADOTD QA Information Package Checklist
- LADOTD QC/QA Certification
- LADOTD Consultant Submittal QC/QA Certification

The Consultant Submittal QC-QA Certification will accompany all submittals as required by the Bridge Design Section QC-QA Policy. Additional checklist(s) may be added by the QC/QA Manager based upon the scope, character and complexity of the project, should this change throughout the course of design.



#### **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 (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
    - Road information (roadway classifications, design speed, traffic data, etc.)
    - Vertical datum
    - Vertical and horizontal clearances
    - 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 ηD, redundancy factor ηR, and operational importance factor ηI 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 Railing The design criteria, types, and test levels for bridge barrier railing shall be listed in this section. Standard plans 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 should be listed if they are utilized. Approach Slab Design criteria for approach slab shall be included in this section. Standard plans 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 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 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 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 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 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 should be listed if they are utilized. Geotechnical Design All geotechnical design criteria shall be included in this section and the information shall be provided by the Geotechnical Engineer. Standard plans should be listed if they are utilized. Mechanical Design All mechanical design criteria shall be included in this section if applicable. Standard plans should be listed if they are utilized. Electrical/Lighting Design All electrical design criteria shall be included in this section if applicable. Standard plans 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 J-PROJECT ACTIVITY LOG SHEET

Project No .:

Project Name:

Bridge Task Manager:

Date	Project Activity	Comments

11/17/2014

1.Ch3-23



APPENDIX H—CONSULTANT PROJECT BRIDGE DESIGN KICK-OFF MEETING AGENDA. CHECKLIST

A kick-off meeting with the Consultant's bridge design team shall be initiated by the LADOTD Bridge Design Task Manager once the project is awarded. The meeting agenda shall include, but not be limited to, the following items:

- Introduce LADOTD Bridge Task Manager and the Consultant's Key Team Members (The Supervisor or Team Leader and Key Designers/Design Checkers/Reviewers)
- Discuss Consultant's Staffing Plan and Implementation of QC/QA Plan Document (The staffing plan should include names and responsibilities of the designers, detailers, checkers, reviewers, and the BOR.)
- Determine Schedules for Project Submittals (Design Criteria, TS & L, 30%, 60%, 90%, 100% of Preliminary Plans and Final Plans, Final Calculations, etc.)
- Share Expectations and Consultant Rating Criteria (Consultant rating will be performed for all project submittals shown on the project submittal schedule.)
- Discuss Design Criteria
- Discuss Budget, Supplemental Requests, Invoices, and Importance of Avoiding Claims (Staff shown on invoices will be reviewed in accordance with the staffing plan.)

11/17/2014



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APPENDIX K-CONSULTANT SUBMITTAL REVIEW CHECKLIST

	Sabaiitak												
from:	Design Criteria	TS&L	ас 1	12 12	<b>*</b> *	100%s 77	895 17	<b>85</b>	<b>*</b> *	100% 17	Find Calculation Back	Plan Revisions	Change Onders
Consultant Submittal QC/QA Certification			R	R	R	R	R	R	R	R	R	R	R
Design Criteria	C												
TSAL		C											
Bridge Index			- D	D	Ð	- D	- D	D .	- C	- 8			
-General Notes			D	D	Ð	D .	Ð	D	C	- 8			
Summary of Estimated Quantities			D	в	с	с	в	D	с	8			
Ganaral Plans			D	D	С	С	C	C	C	- 5			
Typical Sections			B	D	C	с							
Superclavation Diagram				Ð	Ð	¢	e	¢	c	8			
Conduction Phoning Details				D	D	с	¢	¢	с	5			
Traffic Controls Datails				Ð	Ð	с	с	c	с	5			
Foundation/Pile Layout				Ð	Ð	c	e	¢	c	5			
Pile Leads/Details					D	D	B	C	C	8			
Pile Data Tables							Ð	D	C	- 5			
Bent Dotails							Ð	D	с	- 5			
Fender Details							D	D	C	- 5			
Girder Details							D	D	C	- 5			
Span Details							D	D	C	- 8			
Joint Details								D	C	- 3			
Bearing Details								D	C	- 5			
Approach Slab								D	C	5			
Guardiail Details								D	С	5			
Bridge Barrier Railing Details								D	с	5			
Bridge Desirage Details								D	с	8			
Deteour Bridge Details								D	С	8			
Revenuent Dytails								D	C	3			
Signing Lighting Details								D	с	8			
Year Plate								D.	C	- 5			
Rebar Support								D.	- C	- 5			
Misc. Details								D	с	8			
Project Specific Standard Plane								D	с	5			
Electrical Lighting Details								D	С	8			
Mechanical Details								D.	Ċ	- 5			
As-Dailt Plans								D	С	с			
Special Provisions/NS- Items							в	D	е	e			
Cest Estimate					D	D	D	D	C	¢			
Final Calculations											8		
Revised Plans Calculations												8	8

Legende: "R." = The item is required and shall be included in the submittal. "C." = The item shall be complete and shall be included in the submittal. "D." = The item shall be in development and shall be included in the submittal. "S." = The item is stamped by the EOR and shall be included in the submittal.

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#### **Final Calculation Book Checklist**

The final calculation book 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
- The title of "Final Calculation Book"
- The EOR's seal with signature and date
- \_\_\_\_ Final Calculation Book Check List
- \_\_\_\_\_ QC/QA Certifications
- \_\_\_\_ Peer Review Resolution Agreement (if peer review is performed)
- \_\_\_\_ Design Criteria
- \_\_\_\_ Final Hydraulic Analysis Report from Hydraulic Engineer
- \_\_\_\_ Final Geotechnical Analysis Report from Geotechnical Engineer
- \_\_\_\_ Superstructure Design Calculations
- \_\_\_\_ Substructure Design Calculations
- \_\_\_\_ Quantity Calculations
- \_\_\_\_ Special Provisions/NS-Items
- \_\_\_ Construction Cost Estimate
- \_\_\_\_ As-Designed Rating Report
- \_\_\_\_ List of All Final Electronic Design Files and File Locations (ProjectWise directory name)

Consultants shall submit the final calculation book to LADOTD bridge task managers; the submittal shall be on a CD or Flash Drive or placed to a designated ProjectWise folder and include the following information:

- \_\_\_\_ A PDF File of the Calculation Book
- \_\_\_\_ All Electronic Design Files
- \_\_\_\_ A PDF File of the As-Designed Rating Report Only



QC/QA REVIEW COMMENT SUM	PERPONSE CODE		
Project Name: XXX		Date: XXXXX	RESPONSE CODE 1. Concur / Accept comment 2. Non-Concur / Disagree with comment
Project Number: H.0XXXX	Engineer: Dennis Hymel, Jr., P.E.		<ol> <li>Conflicts with previous directive</li> <li>For Information Only</li> <li>Clarify or discussion required</li> <li>Delete comment</li> </ol>
Submittal: 60% Preliminary	Reviewer: XXX	Page: 1 of 1	<ol> <li>Resolution of comment in next phase</li> <li>See additional comment</li> </ol>

•	GENERAL USE (THIS SECTION)								
Item No.	Date	(1)Source	Reviewer Comments	(2)Code	(2)Date	<sup>(3)</sup> Responses		Final olution Date	
							Code		
1	8/31	2a	Revise typical section to include X.	1	9/10	Will Incorporate.	1	9/15	

If no comment, write "NO COMMENT"	Signature of Reviewer	Agency/Company Sign-off
	el , or use "G" for General Comment code & date to reviewer comment	<ul> <li>(3) Design Firm/Agency response to reviewer comment</li> <li>(4) To be filled out during back check / subsequent meeting/discussion</li> </ul>



## QA Information Package Checklist

Project No.:

Project Description:

 Calculation Book
 Plans
 Special Provisions
 Cost Estimate
 Other Documents



## QC/QA Certification

Project No.:

Project Name:

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

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



## **Consultant Submittal QC/QA Certification**

Project No.:

Project Name:

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

Submittal Description

Supervisor or Team Leader Name

Signature

Date



## 22. Sub-consultant information:

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

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
ELOS Environmental, LLC	607 W. Morris Avenue Hammond, LA 70403	Lucas Watkins lwatkins@elosenv.com	985-662-5501

## 23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank.





"Committed to Excellence, Focused on Delivery"

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