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	US 190: UPRR OVERPASS NEAR OPELOUSAS
2.	Contract number(s) as shown in the advertisement	4400023434
3.	State Project Number(s), if shown in the advertisement	H.000445
4.	Prime consultant name (as registered with the Louisiana	Huval & Associates, Inc.
	Secretary of State where such registration is required by	,
	law)	
5.	Prime consultant license number (as registered with the	Professional Engineering – EF.0001542
	Louisiana Professional Engineering and Land Surveying	Land Surveying – VF.0000285
	Board (LAPELS) if registration is required under	<u>DUNNS - 84-067-2406</u>
	Louisiana law)	
6.	Prime consultant mailing address	Huval & Associates, Inc.
		922 West Pont Des Mouton Rd
		Louisiana, LA 70507
7.	Prime consultant physical address (existing or to be	922 West Pont Des Mouton Rd
	established, if location is used as an evaluation criteria)	Louisiana, LA 70507
8.	Name, title, phone number, and email address of prime	Colby Guidry, P.E., – Vice President, Project Manager
	consultant's contract point of contact	(337) 234-3798
		cguidry@huvalassoc.com
9.	Name, title, phone number, and email address of the	David S. Huval, Sr. P.E., -President
	official with signing authority for this proposal	(337) 234-3798
		<u>dshuval@huvalassoc.com</u>

Page 1 of 86 Prime consultant name: Huval & Associates, Inc.

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	Signature (shall be the same person as #9): MiMMMM Date: 2/10/2022	
to terminate any contract awarded based on such a false response.		
11. If a Disadvantaged Business Enterprise (DBE) goal has	Firm(s):	<u>Firm(s)' %:</u>
been set for this advertisement, indicate which firm(s)	N/A	
will be used to meet the DBE goal and each firm(s)'		
percentage.		

12. Past Performance Evaluation 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.

Sub-consultants are allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102*, the name of each firm that is part of the proposal, and the percentage of work in each past performance evaluation discipline to be performed by that firm. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. 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.

(Add rows as needed)

Evaluation Discipline(s)	% of Overall Contract	Huval & Associates, Inc.	Civil Design & Construction, Inc.	Bluewing Civil Consulting, LLC		
Bridge	60%	100%				
Road	25%	90%		10%		
Traffic	5%	100%				
Survey	10%		100%			
Identify the percenta	ge of work for t	he <u>overall contr</u>	act to be performed	by the prime consu	ltant and each sub-co	onsultant.
Percent of Contract	100%	87.5%	10.0%	2.5%		

13. Firm Size:

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Huval & Associates, Inc.	Principal	1	1
Huval & Associates, Inc.	Supervisor Engineer	2	5
Huval & Associates, Inc.	Engineer	3	12
Huval & Associates, Inc.	Engineer Intern	2	6
Huval & Associates, Inc.	Technician	1	2
Huval & Associates, Inc.	CADD Technician	1	3
Huval & Associates, Inc.	CADD Drafter	2	4
Huval & Associates, Inc.	Inspector-Certified	0	6
Civil Design & Construction, Inc. (CD&C)	Surveyor	2	2
Civil Design & Construction, Inc. (CD&C)	Party Chief	2	4
Civil Design & Construction, Inc. (CD&C)	Instrument Man	2	2
Civil Design & Construction, Inc. (CD&C)	Rodman	2	2
Civil Design & Construction, Inc. (CD&C)	CADD Operator	1	1
Civil Design & Construction, Inc. (CD&C)	Senior Technician	2	5
Bluewing Civil Consulting, LLC	Professional Engineer	2	4
Bluewing Civil Consulting, LLC	Engineer Technician	2	4

14. Organizational Chart:



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. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	David Huval Sr., PE, PLS	Huval & Associates, Inc.	P.E. # 0009931	LA	03/31/2023
2	Colby Guidry, PE	Huval & Associates, Inc.	P.E. # 0031338	LA	09/30/2022
2	Rudy McLellan, PE	Huval & Associates, Inc.	P.E. # 0019994	LA	03/31/2022
5	Justin Peltier, PE	Huval & Associates, Inc.	P.E. # 0034765	LA	09/30/2023
4	Ralph Burgess, PLS	Civil Design & Construction,	PLS #5040	LA	09/30/2022
		Inc.			
5	Chris Ballard, PLS	Civil Design & Construction,	PLS #5033	LA	09/30/2022
		Inc.			
6	Thomas M. Gattle III, PE	Huval & Associates, Inc.	P.E. # 0030779	LA	09/30/2023

(Add rows as needed)

16. Staff Experience:

Firm employed by	Firm employed by Huval & Associates, Inc.				
Name David S.	Huval, Sr., P.E., P.L.S.		Years of experience with this firm/employer	32	
Title President			Years of experience with other firm(s)/employer(s)	29	
Degree(s) / Years	/ Specialization	Post	Graduate Work /Structural, 08/66-05/69		
	-	Bach	nelor of Science, 05/61		
		Civil	l Engineering / Structural		
Active registration	number / state / expiration date	9931	/LA/03/31/2023 2015/LA/03/31/2023		
Year registered	1965/1965 Discipline	Civi	l Engineering and Land Surveying		
Contract role(s) / b	prief description of responsibilities	Seni	or Principal		
Experience dates	Experience and qualifications rele	vant t	to the proposed contract; <i>i.e.</i> , "designed drainage", "designe	d girders",	
(mm/yy–mm/yy)	"designed intersection", etc. Exper-	rience	dates should cover the time specified in the applicable MPR(s).	
David Huval, Sr. ha	s designed, Inspected, Rated and Const	ructed	Bridges across Louisiana and the Southeastern United States for the	e past 57	
years. His experien	ce includes Highway and Railroad Brid	ges, R	oadways, Cofferdams and Caissons, and he is familiar with Federal	and State	
Government Proced	ures and the geographic area. Mr. Huva	l leads	s construction bid estimates for his sister company C.E.C., Inc. He	has	
designed and manag	ed a number of large projects as a Cons	sultant	, General Manager for a Steel Erection Contractor, Bridge Design E	ingineer for	
Louisiana Departme	nt of Transportation and Development	(LAD	OID), and Highway Engineer for the Federal Highway Administrat	.10n	
(FHWA). Since 198	39, Mr. Huval has served as President o	I Huva	al & Associates, Inc., where he has worked as a Project Engineer, Pro-	roject	
Huvel Sr, Was the	solution for seven (7) senerate R	ily as a ridge D	a Design Engineer. Mr. Huvai is also a Professional Land Surveyor	DOTD over	
the past eighteen (1)	Wears Inspection Repair Rehabilita	tion or	Renlacement Services were performed for several hundred fixed a	nd movable	
bridge structures un	der these Retainer Contracts including	the I-1	O Calcasieu River Bridge the LA 70 Sunshine Bridge I-310 Missi	ssinni River	
Bridge, US 80 Louis	sville Street Bascule Bridge in Monroe.	Jacks	on Street Bridge over the Red River in Alexandria. LA 511 Red Riv	ver Bridge	
(Jimmie Davis Bride	ge), and dozens of bridge structures on	the fut	ure I-49 North corridor.	01 211080	
	GNOEC Safety Bay Improvement (CMAR	R (Independent Cost Estimator)		
	Assisted the Independent Cost Estima	tor (IC	E) for the for the \$55 million Safety Bay Improvement CMAR Pro	ject, the	
(2019 2020)	first highway CMAR project in Louis	iana. I	Under this contract, Mr. Huval assisted in the efforts of producing a	detailed	
(2018-2020)	independent cost estimate for the cont	ract ite	ems and review the CMAR Contractor's schedule and cost model th	roughout	
	each phase of design under the CMAF	R pre-c	construction phase. Additionally, constructability reviews and desig	,n	
comments were performed collaboratively with the CMAR design engineer, contractor, and Program Manager.					
	Retainer Contract for Bridge Preve	ntive I	Maintenance Program (BRPM) – Statewide, Contract No. 4400)1543 -	
(2011 – 2015)	Principal and Lead Bridge Design Eng	gineer	for Retainer Contract. Responsible for Task Order conceptual desig	gn,	
oversight, construction support services and QA/QC. Retainer Contract currently consists of 7 Task Orders.					

(2009 – 2015)	Retainer Contract for Bridge Preservation Services – Statewide, S.P. 700-99-0488- Principal and Lead Bridge Design Engineer for Retainer Contract. Responsible for Task Order conceptual design, oversight, construction support services and OA/OC Retainer Contract currently consists of 19 Task Order with supplements
(2008 – 2012)	Retainer Contract for Urgent Bridge Repair and Rehabilitation Services – Statewide, S.P. 700-99-0449 - Principal and Lead Bridge Design Engineer for Retainer Contract. Responsible for Task Order conceptual design, oversight, construction support and QA/QC.
(2007 – 2011)	Retainer Contract for Bridge Preservation Services – Statewide, S.P. 700-99-0431 - Principal and Lead Bridge Design Engineer for Retainer Contract. Responsible for Task Order conceptual design, oversight, construction support.
(2000-2009)	District 02, 03 and 07 Inspection and Rehabilitation, S.P. 700-99-0232 - Principal, Project Manager and Lead Design Engineer for Retainer Contract. Responsible for coordination, project setup, conceptual design, design details and calculations, traffic control, oversight, construction support and QA/QC.
(1994-1998)	District 02 Major Bridge Inspection (Jefferson and Orleans Parish), S.P. 700-30-0205 (1994 – 1997) - Inspected the bridges along other team members of Huval & Associates. Prepared final Inspection Report and wrote QA/QC Plan for the Project. Bridges include the US-11 Bridge on Lake Ponchartrain, I-10 Bridge on Lake Ponchartrain and LA-1 Bridge on Caminada Bay.
(2003 & 2015)	Mississippi River Bridge (Natchez) Provided the construction engineering for the repairs of the steel trusses on both the east and west bound trusses.
(1997 – 2005)	I-310 Mississippi River Bridge (Luling) - Design of Finger Joints replacing Modular Joints, Asphalt and Concrete Overlays and Design of Joint Replacements. Project also included Inspection of various items of the bridge.
(1991-Present)	St. Martin Parish Bridge Inspection (1991 – Present) - From 1991 to present, Mr. Huval has been involved in the Inspection and Rating of Bridges for the Parish of St. Martin. This work also included the design of Bridge Repair Projects, in particular the retrofit of Timber Piling on Precast Bridges. Bridges included one Pontoon Bridge, one Swing Span Bridge and numerous Timber and Precast Concrete Bridges.
(1979 – 1989)	Lafayette Steel Erector, Inc. During this period David S. Huval, Sr. provided construction engineering and project management on the erection of structural steel girder, truss spans, prestressed concrete girder spans, segmental post tension, concrete girder spans and moveable bridges, including swing spans, vertical lift bridges, and bascule spans.
(1965-1978)	 LADOTD - Bridge Design Engineer, 1965 - 1978 Bridge Design, (1965 - 1978) - Participated in the development of numerous bridge standards on Prestressed Concrete Girders, Piles, Stay-in-Place Forms, Bridge Decks, Joints, Structural Steel Bridges, Movable Bridges, and Timber Bridges. Participated in the planning, design and construction of bridge structures throughout the State of Louisiana. Bridge Maintenance, (1965 - 1970) - Coordinated with the Bridge Maintenance Engineer, C.J. Russell, on the development of Design and Details for bridge maintenance projects throughout the State of Louisiana.

Firm employed by Huval & Associates, Inc.					
Name Colby J.	Guidry, P.E.		Years of experience with this firm/employer	15	
Title Vice Pres	ident and Lead Engineer		Years of experience with other firm(s)/employer(s)	7	
Degree(s) / Years /	Specialization	08/9	5-05/00		
	-	Bach	nelor of Science, Civil Engineering		
Active registration	number / state / expiration date	3133	8/LA/09/30/2022		
Year registered	2004 Discipline	Civil	l Engineering		
Contract role(s) / b	orief description of responsibilities	HUV	VAL Project Manager		
Experience dates	Experience and qualifications rele	evant t	to the proposed contract; i.e., "designed drainage", "designed	ed girders",	
(mm/yy–mm/yy)	"designed intersection", etc. Exper-	rience	dates should cover the time specified in the applicable MPR((s).	
Mr. Guidry came t	o Huval & Associates with 7 years'	exper	rience with the Federal Highway Administration (FHWA). Hi	s FHWA	
experience include	d all aspects of transportation relate	d proj	ects, where he was actively involved with environmental revi	ew,	
design, constructio	on, and maintenance of bridges and i	roadw	ays throughout Louisiana. Since joining HUVAL, he has been	1 involved	
in bridge and struc	tural design, plan preparation, bridg	e insp	ections, and construction support services. Completed the two	o-week	
FHWA approved c	comprehensive bridge training cours	te for l	bridge inspectors, certified as a Bridge Inspection Team Lead	er,	
completed the NH	I LRFR for Superstructures Course,	the W	ork Zone Traffic Control Technician and Supervisor Courses	, ATSSA	
Flagger Training, t	the NHI Design & Operation of Wo	rk Zor	ne Traffic Control, Roadside Design Course, NHI Highway H	ydraulics	
Course, NHI Urbai	n Drainage Design Course, as well a	as mar	iy construction and environmental related courses. Very families	liar with	
the LADOID Brid	Ige Design Manuals, 2002 AASHTC	J Brid	lge Specs, and the current AASHIO LRFD Bridge Specs		
	development of a new swing span bridge	tre ov	able) - St. Martin Farisi - Project Manager for the design and pl	dae Design	
(1/19-Present)	elements include all aspects of the bridge including environmental clearance surveying structural design mechanical				
	design, electrical design, hydraulic design, roadway design, and all other design elements.				
	Retainer for Engineering Services for	or Bri	dge Preservation - Statewide, Contract No. 4400011225 - Superv	visor	
(4/18 – Present)	Engineer of Retainer Contract. Respon	nsible	for project management, coordination, project setup, QA/QC, and b	oridge rehab	
	design for the \$4M retainer.				
	Retainer Contract for Bridge Repai	r and	Rehabilitation Services - Statewide, Contract No. 4400002537-	Supervising	
(09/12 - 12/17)	Engineer of Retainer Contract. Respo	onsible	for coordination, inspections, project setup, QA/QC, bridge rehab	design for	
	Retainer for Engineering Services f	or Bri	dge Preventive Maintenance (RRPM) - Statewide Contract No		
(05/11 – 08/15)	440001543-Lead Engineer of Retainer	r Conti	ract. Led the Inspection and Design for 8 different Task Orders cov	vering	
	Preventive Maintenance Repairs for o	ver 10	0 Bridges statewide in short timeframes.		
(0.8/0.0 - 0.6/1.5)	Retainer Contract for Bridge Repai	r and	Rehabilitation Services - Statewide, S.P. 700-99-0488 - Lead Er	igineer of	
(00/09-00/15)	Retainer Contract. Responsible for co	ordina	tion, inspection team leader, project setup, bridge design, and QA/	QC of Task	

Page 9 of 86 Prime consultant name: Huval & Associates, Inc.

	Orders totaling approximately \$8.75M over a 5-year period. Contract utilized multiple Subconsultants on all aspects of bridge design and inspection
	1-49 Bridges (Various Segments) Under Retainer No. 4400000670 – Lead Engineer for LRER load ratings for 18
(03/09 - 11/12)	bridges design and final plans of over 10 bridge structures and 1 box culvert structure. Bridge types included steel girder
(00/0) 11/12)	prestressed concrete, and slab spans. Managed several sub-consultants producing numerous bridge plans.
	Tappan Zee Bridge, NY Thruway Authority – Project Manager/design engineer for design of precast tower and anchor
(01/13-11/15)	pier slabs, pile templates, work platforms, and other systems. Also assisted in the design of temporary fender systems
	designed to protect the construction area from ice, wave, and ship impacts.
(10//14 12/14)	Bayou Mercier Bridge Rehabilitation, St. Martin Parish – Project Engineer for the construction project which
(10//14 - 12/14)	consisted of repairing piles, cap replacements, wingwall construction, and other miscellaneous works.
	St. Martin Parish Phase II Bridge Repairs, St. Martin Parish – Project Engineer for the complete reconstruction of
(10/14-03/15)	three concrete bridges. Construction consisted of new piles, concrete panel removal, new caps, new bulkheads, new
	wingwalls, new roadway approach work, new guardrail.
	St. Martin Parish Phase III Bridge Repairs, St. Martin Parish – Project Engineer for the complete reconstruction of
(10/14-05/15)	three concrete bridges. Construction consisted of new piles, concrete panel removal, new caps, new bulkheads, new
	wingwalls, new roadway approach work, new guardrail.
(12/15 02/10)	Rusty Rd. Bridge Replacement, St. Martin Parish – Assistant Project Engineer for the bridge replacement project on
(12/15-03/16)	Rusty Rd. in St. Martin Parish. New bridge consisting of new concrete girders, new concrete caps, new concrete piles, new
(12/17	Ningwans, new backwans, new approach stabs, new approach roadway, new asphalt, etc.
(12/17 - 0)	which consists of 30 pile splices, new stringers, cap repairs, new backwalls, approach work
ongoing)	which consists of 50 phe sphees, new stringers, cap repairs, new backwans, approach work.
(11/17 07/10)	Surrey St. Bridge Repairs, Larayette Parisn – Assistant Project Engineer for the repair of the Surrey St. Bridge in
(11/1/-0//10)	Larayette. Project consisted of bearing repair and replacement, concrete riser construction, deck overlay, joint repairs,
	Beau Bassin Bridge Lafavette Parish – Assistant Project Engineer for the replacement of a bridge with a new concrete
(10/10-07/11)	slab span bridge. New concrete piles concrete caps concrete barrier wingwalls approach slab approach roadway
	guardrdail, and other miscellaneous items.
(01/07 –	Various Construction Services Projects – Act as Project Engineer for numerous projects for various contractors on
Present)	private jobs, parish jobs, and other municipal projects.
	US 90 Albertsons Parkway Design Build – Quality control/Quality Assurance for the design team for this design build
(04/14-09/20)	project for the bridge plans at Albersons Parkway and for the bridge Plans at the BNSF Railroad crossing. Involved
. ,	through construction.

Firm employed by Huval & Associates, Inc.						
Name Rudolph (Rudy) Mclellan, P.E.	Years of experies	nce with this firm/employer	3			
Title Senior Design Engineer	Years of experies	nce with other firm(s)/employer(s)	41			
Degree(s) / Years / Specialization	, Civil Engineering	g with Honors, University of Florida, 1976)			
	ter of Engineering	in Structures, University of Florida, 1977				
	Graduate Studies	in Structures, Louisiana State University,	1997			
Active registration number / state / expiration date	04/LA/03/31/2022	31148/FL/02/28/2023				
Year registered 1981 and 1982 Discipline (l Engineering					
Contract role(s) / brief description of responsibilities	lge Design					
Experience dates Experience and qualifications relevant	to the proposed co	ontract; <i>i.e.</i> , "designed drainage", "design	ned girders",			
(mm/yy-mm/yy) "designed intersection", etc. Experie	dates should cove	er the time specified in the applicable MPR	ζ(s).			
Mr. McLellan has over 40 years of experience in every facet	ridge and structural	design in over 14 states including Louisiana, T	lexas,			
Mississippi, Alabama & Florida. He is experienced in compl	ridge design, moval	ble bridges and rating and has been responsible	e for studies,			
preliminary and final design, preparation of plans and specifi	ons, cost estimate for	r highway and railroad fixed and movable brid	lge projects,			
flood control structure and special or complex structures, incl	ng field inspections a	and investigative studies. Mr. McLellan is pro	gressively			
responsible, experienced and has expertise in creating innova	and cost-effective si	imple to complex bridges and structures. Mr.	McLellan			
has been the chief structural engineer for the design of four m	ble bridge projects,	including the Award Winning Double Leaf Fix	xed Trunnion			
Bascule Bridge in Louisa, Louisiana.						
Mol allan performed proliminary bridge	ion colculations for	the main newigational span over the ICWW Cl	- Mr.			
(09/18-Present) the RFP design phase for the proposed h	the REP design phase for the proposed high-level fixed bridge. Mr. McLellan currently is the Lead Bridge Engineer for					
the project. He is performing final design	the project. He is performing final design calculations for the ICWW Main Piers and will provide OA/OC for all bridge					
designs. The bridge construction will in	le Phase constructio	n to maintain existing traffic through the corrig	dor.			
I-220/I-20 Interchange IMP & BAFB	ess Design-Build P	roject, Louisiana, S.P. H.003370 - Mr. McLe	llan is			
serving as Design Quality Manager on t	Design-Build project	which will provide direct access to Barksdale	Air Force			
(05/19-Present) Base from the I-220/I-20 Interchange. N	Base from the I-220/I-20 Interchange. Mr. McLellan has performed the Quality Assurance for the project including the					
Independent Check structural calculation	Independent Check structural calculations of the I-220 / I20 Overpass bridges and Bridges over the KCS Railroad on the					
project.						
S.P. 239-01-0077 LA Highway 319 Int	oastal Waterway B	ridge Louisa, St. Mary Parish,				
Louisiana - Mr. McLellan performed pr	ninary and final strue	ctural design calculations for all				
(04/96-7/99) superstructure and substructure member	the constructed 276	foot double leaf fixed trunnion	and the second			
bascule movable bridge. The Louisa E	ge is the state's longe	est steel girder double leaf bascule	and man			
bridge, is one of the longest span of its t	constructed in the n	ation and is the recipient of the	The second			
National Steel Bridge Alliance's 2007 P	Bridge Award Wini	ner in the movable span category.	20 EL S			

	S.P. 840-43-0001 US 71 & US 165 Fort Buhlow Bridge & Approaches Over The Red River, Rapides Parish,				
	Louisiana. Structural Engineer - Mr. McLellan performed final structural design calculations for all superstructure and				
(04/09-01/14)	substructure members of the constructed twin fixed high level three span continuous steel plate girders having spans 300' -				
	400' - 300' and some of the prestressed concrete bulb tee girder approach structures supported by river piers with pile and				
	drilled shaft footings constructed in cofferdams. The Main River Piers are subject to marine vessel (Barge) collision.				
	Old Mississippi River Railroad Bridge and Tunnel (Old U.S. 80), Vicksburg, Mississippi				
	and Delta, Louisiana - Mr. McLellan performed bridge safety and repair inspection, bridge				
	load rating and structure maintenance and repair plans repairs for the existing combination				
(01/87-Present)	highway and railway through truss, the approach deck girder bridge and the concrete tunnel				
	structure. He performed the bridge repair designs, plans, constructability reviews and cost				
	estimates for structural steel removal and replacement, girder strengthening, truss span vertical				
	jacking, pier concrete removal and replacement.				
(04/83-07/86)	BH-015-1(81) & (87) Mississippi River Bridge Parallel Crossing between Natchez, MS and Vidalia, LA and the				
	Railroad Bridge Overpass in Natchez, MS. Project Engineer in charge of structural design for the twin, five span,				
	multiple cantilever through truss bridge with spans to 875' over the Mississippi River. The project included concrete and				
	steel highway structures & a steel railroad bridge. Mr. McLellan performed the final structural design & rating calc's for				
	all superstructure & substructure members of the constructed railroad bridge with steel girder spans over the highways.				
	Project No. BRDP-9205-00(003) Mississippi River Bridge US 82 Greenville, Mississippi – Mr. McLellan performed				
	the design, quality review of plans, constructability, cost estimates and final calculations for the post-tensioned concrete				
(09/95-7/01)	segmental alternate and steel composite alternate of the 1,378 foot cable stayed main navigational span. He performed the				
	final calculations for most of the constructed steel composite main span, river piers supported on dredge caisson type				
	foundations and the anchor spans supported on piers with drilled shaft footings.				
	1-49 / LA 3132 and 1-49 / 1-20 Interchanges, Shreveport, Louisiana, S.P. 455-08-23 & 455-				
	08-20 - Mr. McLellan was the Lead Bridge Engineer, performed the design, quality review of				
	plans, constructability, cost estimates & final structural calculations for most of the constructed				
((03/85 - 01/94))	members consisting of curved continuous steel trapezoidal box girders with spans to 250', steel				
	box framed in cap beams, the post-tensioned concrete delta shaped central (tree) pier and				
	architecturally flared piers of both the constructed four-level bridge interchanges. He				
	members of the DPC concerts transported by sinder (LL Cinders) entropy the structures				
	L 4 Turkey Lake Read Interchange Broward County Floride, Mr. Mol. ellen performed				
	the final structural design calculations for all superstructure and substructure members for the				
(0.4./00 0.0./00)	AISC Award Winning oursed continuous steel box girder bridge supported by crebitecturally				
(04/89 - 08/90)	flared concrete piers having mustang rone indentations. Steel frame-in can beams were used in				
	the I-4 median to allow for future widening of I-4				
	the random to mow for future wideling of random set in the set of				

Firm employed by Huval & Associates, Inc.						
Name Justin Pe	NameJustin Peltier, P.E.Years of experience with this firm/employer9					
Title Civil Eng	gineer			Years of experience with other firm(s)/employer(s)	8	
Degree(s) / Years	/ Specialization		08/0	1-05/05		
	-		Bach	elor of Science Civil Engineering		
Active registration	n number / state / exp	iration date	3476	5/LA/09/30/2023		
Year registered	2009	Discipline	Civil	Engineering		
Contract role(s) / l	orief description of re	esponsibilities	Brid	ge Design Lead		
Experience dates	Experience and qua	alifications rele	evant t	to the proposed contract; i.e., "designed drainage", "designe	d girders",	
(mm/yy–mm/yy)	"designed intersecti	ion", etc. Expe	rience	dates should cover the time specified in the applicable MPR(s).	
Mr. Peltier joined H	uval & Associates in 2	013 with 8 years	s of exp	perience in civil engineering. Previously employed with LADOTD,	, he was	
involved with the de	esign, live load rating, j	plan developmer	nt, and	construction support of more than 20 bridge replacement projects.	ſhese	
consisted of various	superstructure and sub	ostructure types i	ncludi	ng but not limited to: AASHTO p.p.c. girders, quadbeams, cast-in-p	lace slab	
spans, precast slab s	pans, steel girders, con	crete box culver	ts, p.p.	c. pile bents, steel H-pile and pipe pile bents, timber pile bents and	column	
bardware details and	d specifications includ	ing but not limit	. NIC. P	used rail barrier rail and crash cushion attenuators. He served as t	be Engineer	
of Record for the L	ADOTD concrete barri	er rail and the de	etour bi	idge special details Mr. Peltier's training includes the NHI LRFR t	for	
Highway Bridge Su	perstructure Course, th	e NHI AASHTO) LRFI) for Highway Bridge Superstructure Course, the NHI AASHTO L	RFD for	
Highway Bridge Su	bstructure Course, the	Roadside Design	n Cours	e, ATSSA Traffic Control Technician and Supervisor Course.		
	I-10 and I-12 Colleg	e Flyover Ramj) Desig	n Build Project RFP Phase 30% Design – S.P. H.013897 – Serve	ed as the	
	lead bridge engineer	for the preparation	on of b	ridge plans, construction cost estimates and proposal documents for	the RFP	
	phase of the project.	phase of the project. The bridges included a new curved steel plate girder bridge over I-12 WB, a new p.p.c. girder bridge				
(08/19-06/20	over Ward Creek and rehabilitation and widening of an existing steel plate girder bridge over I-12 EB. Assisted in					
	development of alternative technical concepts, suggested sequence of construction, and other plan details. Assisted in t					
	coordination and orga	coordination and organization of all project data with the various members of the design team from numerous consultin				
	Linns.	Duild Draigat D	ED DL	as 200/ Design S. R. H. 011670 Against in the propagation of at	aal tub	
	girder design and det	ails concrete bo	rıın v girde	r design and plans, as well as plans and proposal documents for the	RFP phase	
(01/19-05/19)	of the project Assist	ed in developme	nt of a	ternative technical concepts suggested sequence of construction a	nd	
	miscellaneous bridge	and other details	s. Assi	sted in the coordination and organization of all project data with the	e various	
	members of the desig	n team from nur	nerous	consulting firms.		

	US 90 (I-49South), Albertson's Parkway to Ambassador Caffery, Design-Build Project, Lafayette Parish, S.P. No.
	H.010620. Served as the lead bridge engineer for the new US 90 bridge over Albertson Parkway and provided Q.C. for the
	US 90 BNSF RR overpass bridge within the same footprint as the existing bridge while maintaining 4-lanes of US 90
(06/14-04/19)	traffic during construction. This presented unique design challenges and required a complex, three-phase, traffic control
	and construction sequencing plan to move traffic safely through the tight work zone. The bridges consisted of multi-
	continuous p.p.c. girders spans supported by concrete column bents and pile footings. The developed design concept saved
	millions of dollars and allowed the James Team to be 15% below the construction estimate of the nearest competitor.
	I-10: Highland Road to LA 73, Design Build Project, East Baton Rouge & Ascension Parish, S.P. No. H.009250.
	Served as the lead bridge engineer for the widening of the I-10 E.B. and W.B. slab span bridges over Manchac Bayou and
	provided Q.C. for the replacement of the I-10 E.B. and W.B. bridges over Highland Road with a new steel plate girder
(7/17-Present)	bridge with p.p.c girder approach spans. The existing I-10 mainline bridge at the Highland Road interchange needed to be
	reconstructed under the project to provide longer spans in addition to more lanes. An innovative sequence of construction
	scheme and bridge design enabled construction of this bridge while maintaining 74,000 ADT traffic. Huval's cost-effective
	designs enabled its design-build team to be the only competitor to fit within the Owner's budget of \$72 million.
	I-220/I-20 Interchange IMP & Barksdale Access Design-Build Project, Bossier Parish, LA DOTD S.P. No.
	H.003370. Currently the bridge design manager and lead bridge design and load rating engineer for the I-220 bridges over
	I-20 and Barksdale Access Road bridges over the KCS Railroad and also responsible for implementing the QC/QA plan
	for the bridge design and plan development process. The I-220 structures over I-20 consist of twin bridges utilizing LG-54
(03/19-Present)	p.p.c. girder spans supported by concrete column bents and drilled shafts. The Barksdale Access Road structures consist of
	twin bridges utilizing LG-54 p.p.c. girder approach spans supported by concrete pile bents and a main span over the KCS
	Railroad consisting of 170'-0", LG-78 p.p.c. girders supported by concrete column bents and drilled shafts. Some unique
	challenges that the project has presented is designing applicable I-220 bridge column bents for vehicular collision and
	completely spanning the KCS own right-of-way utilizing concrete p.p.c. girders.
	Bayou Lafourche Bridge on U.S. 80, Ouachita & Richland Parish, S.P. No. H.000174. Served as the lead
	bridge engineer for the replacement of the existing bridge over Bayou Lafourche with a new p.p.c. girder bridge.
	This project was selected as research project to be part of FHWA's Everyday Counts Initiative to promote
(07/13 – 07/14)	accelerated bridge construction (ABC) techniques. In lieu of using a cast-in-place concrete deck, full depth
	precast concrete deck panels were selected as the detail to promote ABC. As part of the Initiative, a proprietary
	post tensioning system, AccelBridge, was chosen as the method used to apply the required compression to the
	transverse deck panel joints before they were made composite with the p.p.c. girders.
	LA 443: Tangipahoa River Bridge Replacement, S.P. H.012728 - Lead engineer in the LRFD design, LRFR
(10/16-12/17)	load rating, and plan preparation of a LG-25 and LG-36 p.p.c. girder bridge. This was an emergency
	replacement, due to the flood of 2016, and 100% final plans were completed in 8 weeks.

Firm employed by	Huval & Associates, In	c.					
Name Thomas	M Gattle III, P.E.		Years of experience with this firm/employer	20			
Title Director	of Engineering		Years of experience with other firm(s)/employer(s)	4			
Degree(s) / Years	/ Specialization	08/9	1-12/97				
	•	Bach	elor of Science Civil Engineering, Structural				
Active registration	n number / state / expiration date	3077	79/LA/09/30/2023				
Year registered	2003 Discipline	Civi	l Engineering				
Contract role(s) / l	brief description of responsibilities	Roa	dway Design Lead				
Experience dates	Experience and qualifications rele	evant t	to the proposed contract; i.e., "designed drainage", "designed	ed girders",			
(mm/yy–mm/yy)	"designed intersection", etc. Exper-	rience	dates should cover the time specified in the applicable MPR((s).			
Mr. Gattle has over	20 years' experience in the design and	manag	ement of roadway and bridge projects. Mr. Gattle has been instrum	nental in the			
design, production a	and overall management of projects for	the LA	ADOTD. These projects include performing Lead Design and Projects	ect			
Management of nur	nerous Bridge Rehabilitation Retainer C	Contrac	cts, LADOTD Bridge Inspection projects, and LADOTD Roadway	Design			
Project. In addition	, Mr. Gattle was the Lead Designer for the Drive to initial HUVAL Mr. Cottle	numer	ous road and bridge design projects for the Lafayette Consolidated	Divon			
Bridge Environmen	tal Assessment He has experience and	in roa	dway design drainage design feasibility studies bridge design an	d bridge			
inspection.	an Assessment. The has experience and	iii ioa	dway design, dramage design, reasionity studies, or dge design, an	d bridge			
I	Comite River Diversion Bridges at	LA 67.	, LA 19 and LA 19 Railroad Bridge CMAR Project, East Baton	I Rouge			
	Parish – 4400017421 – Project Manager and Design Lead for providing geometric layout, construction sequencing and						
	cost estimation for the first CMAR project conducted by the DOTD. The project consisted of constructing 360' roadway						
(10/19-06/21)	bridges for LA 67, LA 19 and the adjacent railroad track to LA 19 over the proposed layout of the Comite Diversion						
	Canal. This \$39 million project required continued coordination with the DOTD, CMAR Contractor, ICE, USACE,						
	Geaux-Geaux Railroad and EBR Parish and was completed on-time and in advance of the on-going diversion canal						
	I-10 Lovola Design-Build Project R	FP Ph	ase 30% Design - S.P. H 011670 - Assisted the Design Manager i	in the			
	coordination and organization of all p	roiect	data with the various members of the design team from numerous c	consulting			
(11/18-05/19)	firms. Assisted in development of alte	rnative technical concepts, suggested sequence of construction, and miscellaneous					
	bridge and other details.						
	I-220/I-20 Interchange IMP & Barl	ksdale	Access Design-Build Project, Bossier Parish, S.P. No. H.00337	0. Currently			
	the Design Manager and Lead Design	n for th	ne Design-Build project. The Design-Build project consisted of m	odifying the			
	existing I-220/I-20 Interchange to acco	ommoo	date direct access to the Barksdale Airforce Base. Project includes r	new roadway			
(03/19-Present)	design for new directional ramps an	d I-22	0 extension, bridges over I-20 and KCS Railroad, temporary tra	iffic control,			
	sequence of construction and drainage	e desig	n. Mr. Gattle produced the geometric layout of the project and lea	d the design			
	project scheduled to be completed on	u-Dull time	in project. The design phase of the project is 98% complete with	i the overall			
	project seneduica to be completed on	unite.					

	GNOEC Safety Bay Improvement CMAR (Independent Cost Estimator)
(2/19.12/19)	Assisted the Independent Cost Estimator (ICE) for the for the \$55 million Safety Bay Improvement CMAR Project. Under
	this contract, Mr. Gattle assisted in the efforts of producing a detailed independent cost estimate for the contract items and
(3/10-12/10)	review the CMAR Contractor's schedule and cost model throughout each phase of design under the CMAR pre-
	construction phase. Additionally, constructability reviews and design comments were performed collaboratively with the
	CMAR design engineer, contractor, and Program Manager.
	I-10 Widening LA 415 to Essen Lane on I-10 and I-12, WBR and EBR Parishes, S.P. No. H.004100. Currently the
	Design Lead for the anticipated \$1.2 billion project to widen I-10 from the LA 415 interchange to the I-10/I-12
	Interchange. This project consists of all aspects of infrastructure including complex bridge design and roadway design.
	Prior to the award for engineering services for the project, Mr. Gattle led the Constructability Analysis during the NEPA
(1/18-Present)	phase of the project. This included development of construction sequencing while maintaining traffic thru the corridor
	along with providing construction cost estimates and project timeframes. Mr. Gattle presently leads the bridge and
	roadway engineering efforts for the current phase of the project that includes the replacement of road and bridges from the
	I-10/I-110 interchange past the I-10/Acadian Thruway. This includes coordination with the DOTD, CMAR Contractor and
	ICE to develop the best construction value for the complex project thru Baton Rouge.
	Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, Contract No. 4400002537- Project
(09/12 – 12/17)	Manager of Retainer Contract. Responsible for coordination, project setup, QA/QC, meetings and contracts for the \$6M
	retainer contract.
(06/14-04/19)	I-49 South-US 90 Albertson Pkwy to Ambassador Design Build - S.P. H.010620 - HUVAL Project Manager. Lead
	Designer on roadway geometric layout and assisted with bridge design and construction services for this Design Build.
(06/16 Prosont)	I-49 South-Verot School Road Interchange, S.P. H.011235 - HUVAL Project Manager and Prime Consultant Team
(00/10-1 resent)	Leader of roadway geometric design including traffic analysis while assisting with bridge design and construction services.
	West Bank Expressway MacArthur Drive Interchange, S.P. H.002550.5 & H.009933.5 - As Project Manager and Lead
(04/11 - 05/16)	Engineer, Mr. Gattle was responsible for Geometric/Span Layout Modifications and Structure Design. Mr. Gattle
	coordinated the survey efforts and the responsibilities of multiple Sub-consultants for the \$34M reconstruction project to
	provide additional ramps from the US 90B elevated roadway to the adjacent parallel frontage roads under tight timeframes.
	Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, S.P. 700-99-0488 - Project Manager of
(08/09 - 06/15)	Retainer Contract. Responsible for coordination, supervising inspection team, project setup and QA/QC of Task Orders
(00/0) = 00/13)	totaling approximately \$8.75M over a 5-year period. Contract utilized multiple Subconsultants on all aspects of bridge
	design and inspection.
(06/07 - 11/11)	Retainer Contract for Bridge Preservation (On-System) – Statewide, S.P. 700-99-0431 - Project Manager of Retainer
	Contract. Responsible for coordination, project setup, design and QA/QC of Task Orders.

Firm emp	ployed by	Huval & Asso	ciates, Inc	•				
Name	Robert S	Schmidt, P.E., PTOE			Years of experience with this firm/employer	3		
Title	Engineer	ring Manager			Years of experience with other firm(s)/employer(s)	34		
Degree(s)) / Years /	Specialization		B.S.	, Civil Engineering – LSU, 1982			
Active re	gistration	number / state / expira	ation date	2283	37/LA/09/30/2023			
Year regi	istered	1987	Discipline	Civi	l Engineering			
Contract	role(s) / br	rief description of resp	onsibilities	Trat	fic Lead			
Experience	ce dates	Experience and qu	alifications rel	evant	to the proposed contract; i.e., "designed drainage", "desig	gned girders",		
(mm/yy–	mm/yy)	"designed intersecti	on", etc. Expe	rience	e dates should cover the time specified in the applicable MPR((s).		
Mr. Schm	idt is a Seni	ior Manager at Huval ar	nd Associates. P	rior to	this he was Practice Leader for international engineering firms in t	he Louisiana		
and the Gu	ulf Coast A	rea. He has 37 years of	broad transporta	ation e	xperience in New Orleans, Baton Rouge and across the nation, with	a focus on the		
most chall	lenging proj	jects in the industry. M	r. Schmidt has le	ed all a	spects of transportation including program management/administra	tion, planning,		
traffic eng	gineering, do	esign, construction, and	operations. He	has led	a numerous alternative delivery projects such as Design-Build and (Construction		
Manager a	at KISK (CM	IAR). He has devoted r	is career to prov	laing	credible, quality, innovative solutions to Louisiana's transportation	system and		
outer syste		I-10 Lovola Design_	Ruild Project R	FP Ph	ase 30% Design - S.P. H 011670 - Design Manager for the prepar	ration of steel		
		tub girder design and	details, concrete	box 9	irder design and plans as well as plans and proposal documents for	r the RFP		
		phase of the project.	phase of the project. Created dozens of computer models in order to analyze and size the steel tub girders, taking into account					
(11/18	8-5/19)	system redundancy. Assisted in development of alternative technical concepts, suggested sequence of construction, and						
,	,	miscellaneous bridge and other details. Assisted in the coordination and organization of all project data with the various						
		members of the desig	n team from nur	nerous	consulting firms.			
		Louisiana DOTD, N	ew Belle Chass	e Brid	ge P3 Project - S.P. H.004791 – Mr. Schmidt is the Design Manag	ger for the new		
(1/18-Pre	esent)	\$150 million Belle Chasse bridge and urban roadway approaches, including a new access management interchange between						
(LA 23 and Engineers Road. In this role he is responsible for all design work performed on the project including road, bridge,						
		Louisiana DOTD C	amita Diversion	Other of	Highway and Pailroad Bridges CMAP. Caddo Parish Louisi	ana SDU		
		001352 5 and H 002	2735 - Mr Sch	n Calla midt i	s serving as the CMAR liaison for the CMAR Preconstruction Phas	e of this \$50		
(1/20-Pre	esent)	million project to bui	million project to build new highway bridges on LA 19 and LA 67 over the new Comite River Diversion Canal. The project					
(1/20 11)		also includes design of	also includes design of a new railroad bridge over the new canal parallel to LA 19. Detour roadways, railroad shooflys, utility					
		coordination are also a part of the project.						
		Louisiana DOTD, I-	10 Widening L	A 415	to Essen Lane on I-10 and I-12, WBR and EBR Parishes, Louis	iana		
		(Management and A	dvisory Servic	es) - S.	P. H.004100.2 Mr. Schmidt was Huval Project Manager and Pr	rincipal in		
(1/18-6/1	.9)	responsible charge of	program manag	ement	and strategic advice to the DOTD on its \$1.1 billion project to wid	en I-10 in the		
		heavily congested sec	heavily congested section through Baton Rouge. This very complex project will replace existing bridges in the urban area					
		within an extremely c	constrained right	of way	y while maintaining the existing 3 lanes of traffic flow on I-10 through	ugn the		

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	construction zone. Roles include alternative concepts development, construction sequencing, maintenance of traffic plans,
	contractor style cost estimates, developing individual project breakout segments, overall program scheduling, risk matrix and
	assessment, utility conflicts matrix, funding and cash flow assessments, and a formal Project Management Plan in accordance
	with FHWA guidelines for projects over \$500 million for use by DOTD to guide project and program implementation.
	Schmidt led the team including numerous strategic meetings and workshops with DOTD staff and FHWA. The Program
	Management project will end Mid 2019 and construction is expected to begin in 2020.
	Louisiana DOID, 1-10 Design-Build, EBR to Ascension Parishes, Louisiana – S.P. H.009250 – Mr. Schmidt was Huval
	project manager and principal in responsible charge of engineering/design of the various bridges included as part of this \$72
	million design-build project. The project includes steel plate girder and PPC girder bridges. Bob managed Huval's design of
(3/17-1/18)	these bridges in interaction with the Owner (DOTD) and Contractor. The existing I-10 mainline bridge at the Highland Road
(0/1/ 1/10)	interchange needs to be reconstructed under the project to provide longer spans in addition to more lanes. An innovative
	sequence of construction scheme and bridge design enables construction of this bridge while maintaining 90,000 ADT traffic.
	Huval's cost-effective designs and construction sequencing enabled its design-build team to be the only competitor to fit
	within the Owner's budget of \$72 million. Construction began January 2018.
	GNOEC Safety Bay Improvement CMAR (Program and Project Management Services). Since January 2018 Mr.
	Schmidt has served as Program Manager on behalf of the GNOEC, working with the General Manager plus Financial and
	Operations staff, for the \$55 million Safety Bay project on the 25-mile Causeway Bridge over Lake Pontchartrain. In January
	2019 the \$40 million Safety Rail project was added under Mr. Schmidt's management. The Safety Bay project, providing 12
	bays 16' wide by 1008' long, is the first Construction Manager At Risk (CMAR) highway project in Louisiana. In his role,
	Mr. Schmidt led the Project Team, including Owner, Designer, Contractor, and ICE through all steps of scoping,
(1/18-6/20)	procurement, pre-construction design, scheduling, specifications, and construction. This included development of a
	Guaranteed Maximum Price, an accelerated project schedule (design 6 months and construction15 months), and a unique
	maintenance of traffic plan to maintain safety such that the existing bridges could be widened under traffic without reducing
	the number of lanes or narrowing and shifting the lanes. A Segmented CMAR approach was utilized so that advance
	construction packages including an Advance Pile Program and Advance Pile Order were implemented as well as the final
	CMAR package and GMP. Construction began December 2018. Mr. Schmidt is currently serving in a Principal role for Huval
	as Owner's Representative for the construction phase of both projects.
	Louisiana DOTD, I-49 Connector Urban Freeway Program, Lafayette, Louisiana. Mr. Schmidt was project manager
	and project principal for the NEPA planning and engineering design program, covering 27 years, for this 6-mile, \$900
	million, urban freeway section in Lafayette, Louisiana. This extremely complex and challenging project includes design of 3
	1/2 miles of six and eight lane elevated freeway, a directional interchange, numerous braided ramps, railroad bridges, traffic
(2/90-3/17)	signals, parallel frontage roads, and other features. Services also included traffic engineering, NEPA planning (EIS and
	ROD), context sensitive design, public involvement, litigation support, and a special GIS web-based public information
	exchange regarding project design and right of way details. Mr. Schmidt led design and a PSE package of the widening from
	four- to six-lanes of two miles of the Evangeline Thruway, beginning at the existing southern terminus of I-49 at the I-10
	interchange, as a first step in the project and ultimately to serve as the first segment of the southern extension of I-49.

Firm employe	ed by H	uval & As	sociates, Inc.	•			
Name Ro	bert P. Du	ıgas, Jr., PE			Years of experience with this firm/employer	1	
Title Ser	nior Bridge	e Engineer			Years of experience with other firm(s)/employer(s)	39	
Degree(s) / Ye	ears / Spec	ialization		B.S.	, Civil Engineering , 1981		
Active registra	ation numl	oer / state / exp	viration date	2194	4/LA/03/31/2022		
Year registere	ed	1985	Discipline	Civi	l Engineering		
Contract role((s) / brief d	escription of re	esponsibilities	QA/	QC		
Experience da	ates Ex	perience and q	ualifications relev	vant to	o the proposed contract; i.e., "designed drainage", "designed g	girders", "designed	
(mm/yy–mm/y	'yy) int	ersection", etc	. Experience date	es shou	ald cover the time specified in the applicable MPR(s).		
Mr. Dugas has	been a proj	ect manager and	l design engineer fo	or 40 y	ears on government transportation projects. His experience includes	s the structural	
design of bridge	es and high	ways and includ	les preparation of s	pecific	cations, geometrics, drainage computations and plans. He is very far	niliar with the	
various policies	s, procedure	es, and design ci	riteria which dictate	e the pa	arameters of every project. The wide range of experience Mr. Duga	s has been exposed	
to will serve as	a valuable	asset on this pro	oject. Mr. Dugas ha	s succe	essfully completed technical design and preparation of plans for sev	eral highway and	
bridge projects.	Co	mita Rivar Div	arsian Bridge at I	A 10	Fast Batan Bauga Parish Derformed the check of the steel gird	ler design and	
	det	ails for the new	5-snan through-gir	der rai	Iroad bridge over the new Comite River Diversion Canal for compl	iance with both the	
(02/21-Presen	nt) $\operatorname{An}^{\operatorname{act}}$	American Railroad Engineering and Maintenance-of-Way Association manual and project design requirements. Also performed a					
	det	detailed check of the steel span quantities.					
	Ka	nsas Lane – Ga	arrett Road Conn	ector –	- Ouachita Parish – Performed the design check for 1) the reinforc	e concrete column	
$(10/20_0/21)$	ber	bent designs and RCPier software run, 2) the 3-span continuous steel girder unit and the corresponding MDX software runs and 3)					
(10/20-02/21)	bea	bearing pad design for the steel girders. Also performed the as-designed load rating for the steel girder unit using AASHTOWare					
	Bri	dge Rating soft	ware.			. 1, 1	
	Be	lle Chasse Brid	ge & Tunnel Repl	aceme	ent – Plaquemines Parish – Performed the following tasks while a a DCDian and ED MultiDian 2) sheels the design and details for the	issigned to the	
(04/20-12/20)		project: 1) verification of pile reactions using KCPIer and FB-MultiPier, 2) check the design and details for the feinforced concrete column bents and 3) performed the design and detail check of the 3-span continuous steel girder unit over the Gulf Intracoastal					
	Wa	Waterway.					
	LA	1 Relocated Pl	nase 2A & 2E - La	Fourc	he Parish - Served as the Project Manager and Engineer of Record	for the design of the	
((11))	wie	widening of the existing bridge and the construction of a new bridge totaling 6,500, in length. The variably widened portion of the					
(0/10-3/18)	bri	bridge consists of prestressed concrete Type III girder spans. The new bridge portions will be supported on the new Louisiana (LG)					
	gir	ders.					
	Fo	rt Buhlow Brid	lge Over Red Rive	r - Ra	apides Parish: Served as Project Manager and Engineer of Record	for the design of the	
	\$8.	5 million Fort B	uhlow Bridge over	the Re	ed River in Alexandria. The 0.6 mile bridge was designed with AAS	SHTO 72" Type BT	
(08/05-05/10)	gir	der spans and a	1000' 3-span steel	unit ov	ver the channel. Responsibilities included designing concrete decks	in accordance with	
	AA	STIULKFD,	etrics – all in accord	r uesig	gits, checking column bent designs, checking pile bent designs, and with A A SHTO I RED	performing or	
	Che	cking an geome	curves - arr rin accord	Janue			

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(7/02-08/05)	Louisiana TIMED Managers – Mr. Dugas served as the Design Oversight Manager on the joint venture Louisiana TIMED Managers which managed the TIMED program for the Louisiana Department of Transportation and Development. His responsibilities included (1) management of five Design Segment Managers, (2) creation of baseline schedules and budgets, (3) coordination of design with right-of-way acquisition, environmental and utility relocation groups, (4) coordination with project controls, (5) coordination of construction support activities, (6) preparation of advertisement and contract documents for consultant services and (7) coordination and preparation of advertisement and contract documents for construction services.
	I-10/I-12 Widening, Acadian Thruway to Airline Highway – East Baton Rouge Parish - Design included prestressed girders,
(02/94-09/95)	steel girders and column bents. Mr. Dugas was responsible for the design of all column bents with integral 5 foot diameter drilled
	shafts.
(02/92-12/92)	US 71/165 Missouri Pacific Railroad Overpass – Rapides Parish - Design included prestressed girders, column bents and curved
(0=/)= 1=/)=)	steel girders.
	Route I-49 (Section AU-14), Elliott to Hamilton – Rapides Parish - Design included prestressed girders, pile bents, column bents,
(05/87-03/88)	curved steel girders. Mr Dugas was the principal designer of a 250' two span curved steel girder unit with an integral steel box beam
	column cap.
(01/88-12/89)	Route I-49 (Section AU-15), Hamilton to Ramp F-2 – Rapides Parish - Design included prestressed girders, pile bents and column
(*****)	bents. Mr. Dugas was the principal designer of a 192' flaring steel span unit.
	Ramp A3 of the Alexandria Urban, Section 3 – Rapides Parish – Mr. Dugas designed a three-span steel span unit for this project.
(04/86-01/87)	This unit had span lengths of 140', 180', and 140', and it was designed using the ETBridges program. On this same project, Mr.
,	Dugas also designed a five-span unit on Ramp A4. This unit had span lengths of 93', 119', 132', 119', and 93'. The ETBridges
	program was also used when designing this unit. Transit Mainling Damp of the Creater New Orleans Mississinni Diver Bridge No. 2. West and Fast Annuaches - Orleans
	Transit Mainline Ramp of the Greater New Orleans Mississippi River Bridge No. 2, west and East Approaches – Orleans Device Mr. Duese is menopolitie for the design of two sugged steel sinder units on the Target Meinline Deven West Approaches – Orleans
	Farish - Mr. Dugas is responsible for the design of two curved steel girder units on the Transit Mainline Ramp west Approach. The
(11/81-06/85)	first unit was a single span 115 long; the second was a two-span continuous unit with span lengths of 203 and 163. Both of these units were initially designed using the USS Steel V L and Mathed. Mr. Duese is also regressible for the design and rise memory in the second was a two-span continuous unit with span lengths of 203 and 163.
	of a three group continuous curried ginder unit on Down ID C of the East Approach. This unit had group longths of 82? 100? and 140?
	of a three-span continuous curved girder unit on Kamp IP-C of the East Approach. This unit had span lengths of 83°, 109° and 140°. Both the west and east approach project spans were designed using the DESCUS program.
	both the west and east approach project spans were designed using the DESCOS program.

Name Reid Romero, P.E. Years of experience with this firm/employer 13 Title Civil Engineer Years of experience with this firm/s/employer(s) 0 Degree(s) / Years / Specialization 08/04/05/08 Bachelor of Science Civil Engineering 0 Active registration number / state / expiration date 37772/LA/09/30/2023 Verregistration number / state / expiration date 37772/LA/09/30/2023 Contract role(s) / brief description of responsibilities Bridge Design Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", (mm/yy-mm/yy) "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s). Mr. Romero came to HUVAL after graduating from the University of Louisana at Lafayette in 2008. Since joining Huval & Associates, Inc., Mr. Romero completed several NHI training courses including Fundamentals of LRFR and Applications of LRFR for bridge superstructures course, and a Drilled Shaft LRFD design methods and construction procedures course. Mr. Romero is familiar with the LADOTD Bridge Design Manual, 2002 AASHTO Bridge Specifications, as well as the current AASHTO LRFD Bridge Specifications. (03/19-Present) I-220/1-20 Interchange Imp & BAFB Access Design Build Project - S.P. No. H.003370 - Responsible for QA of the bridge plans and load rating for the LA 1267 bridges over 1-20 and the LA 1267 bridges over the KCS Railroad. The LA 1267 structures over 1-20 column bents and mind span over the KCS Railroad consisting of 170-0", LG-78 p.p.c.	Firm employed by	Huval & Associates, In	с.					
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(03/19-Present)approach spans supported by concrete pile bents and a main span over the KCS Railroad consisting of 170'-0", LG-78 p.p.c. girders supported by concrete column bents and drilled shafts. Some unique challenges that the project has presented is designing applicable LA 1267 bridges over I-20 column bents for vehicular collision and completely spanning the KCS own right-of-way utilizing concrete p.p.c. girders.(01/19-05/19)I-10 Loyola Design-Build Project RFP Phase 30% Design - S.P. H.011670- Lead bridge engineer throughout the RFP design phase for this complex urban interchange. Assisted in the preparation of steel tub girder design and details, concrete box girder design and plans, as well as plans and proposal documents for the RFP phase of the project. Created dozens of computer models in order to analyze and size the steel tub girders, taking into account system redundancy. Assisted in development of alternative technical concepts, suggested sequence of construction, and miscellaneous bridge and other details. Assisted in the coordination and organization of all project data with the various members of the design for the \$4M retainer.(4/18 - Present)Retainer for Engineering Services for Bridge Preservation - Statewide, Contract No. 4400011225 - Lead Engineer of Retainer Contract. Responsible for coordination, project setup, QA/QC, and bridge rehab design for the \$4M retainer.(06/14-05/19)US 90 (I-49South), Albertson's Parkway to Ambassador Caffery, Design-Build Project, Lafayette Parish, S.P. No. H.010620. Performed QA/QC of the LRFD bridge design calculations, LRFR load rating, and plan preparation of a BT-72 girder bridge. The new US 90 bridge over Albertson Parkway and the US 90 BNSF RR overpass bridge were built within		and drilled shafts. The LA 1267 structures over KCS Railroad consist of twin bridges utilizing LG-54 p.p.c. girder						
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		girder bridge. The new US 90 bridge of	over A	lbertson Parkway and the US 90 BNSF RR overpass bridge were by	uilt within			

	the same footprint as the existing bridge while maintaining 4-lanes of US 90 traffic during construction. This presented
	unique design challenges and required a complex, three-phase, traffic control and construction sequencing plan to move
	traffic safely through the tight work zone. The bridges consisted of multi-continuous p.p.c. girders spans supported by
	concrete column bents and pile footings. The developed design concept saved millions of dollars and allowed the James
	Team to be 15% below the construction estimate of the nearest competitor.
	I-10: Highland Road to LA 73, Design Build Project, East Baton Rouge & Ascension Parish, S.P. No. H.009250. Led
	the design, plan preparation, and load rating for the repair of the prestressed girder bridge on LA 928. Performed QA/QC
	of the LRFD design calculations and load rating for the steel girder bridge at Highland road and the slab span widening at
(7/17-Present)	Bayou Manchac. The existing I-10 mainline bridge at the Highland Road interchange needed to be reconstructed under the
	project to provide longer spans in addition to more lanes. An innovative sequence of construction scheme and bridge
	design enabled construction of this bridge while maintaining 74,000 ADT traffic. Huval's cost-effective designs enabled its
	design-build team to be the only competitor to fit within the Owner's budget of \$72 million.
	LA 443: Tangipahoa River Bridge Replacement, S.P. H.012728 – Performed QA/QC of the LRFR load rating and plan
	preparation of a LG-25 and LG-36 p.p.c. girder bridge. This was an emergency replacement and 100% final bridge and
	roadway plans were completed in 8 weeks. In addition to the emergency timeline, the project had to be designed and
(10/16-12/17)	constructed within the existing right-of-way and could not interfere with another bridge structure located approximately
	250ft east of the existing bridge to be replaced. LADOTD also required that the low chord elevation of the new bridge be
	set to maximize the design storm flood year while also meeting all other project constraints. The design of the bridge also
	had to meet the LADOTD minimum design guidelines for design speed and ADT
	Surrey St. Bridge Repairs, Lafayette Parish – Lead Engineer for the repair of the Surrey St. Bridge in Lafayette. Project
(11/17-07/18)	consisted of bearing repair and replacement, concrete riser construction, deck overlay, joint repairs, painting of steel
	girders with full enclosure, and miscellaneous work.
	I-49 Segment I Ratings, S.P. 701-65-9999 – Performed as-designed LRFR calculations on two prestressed girder bridges.
(03/11-06/13)	Utilized VIRTIS to model varying girder spans. Created rating reports for each span configuration. Developed bridge
	load rating summary sheets. Provided construction services on an as-needed basis.
	I-49 North Segment J (MLK Blvd. to LA 1), S.P. H.003496.5- Performed LRFD design calculations and led plan
	preparation on two prestressed girder and steel girder bridges. Performed approach slab design, girder design check using
(01/12-11/13)	LEAP Conspan, cap and column design check using LEAP RC Pier, steel girder design check using MDX, deck and overhang
	reinforcing design check, strip seal joint opening calculations, quantity calculations and QA/QC, and elevation calculations
	Mr. Romero also provided load rating of the completed structure.
	I-49 North (LA 1 – LA 173), S.P. 701-65-1230 & S.P. 701-65-1349– Assisted in plan preparation and performed LRFD
	design calculations on a Type BT Prestressed Girder Bridge and a Type IV Prestressed Girder Bridge. Performed fixed and
(03/09-11/10)	expansion bearing pad design, deck and overhang reinforcing design, quantity calculations and QA/QC, strip seal joint
	opening calculations, girder design check using LEAP Conspan, cap and column design check using LEAP RC Pier, and
	elevation checks.
(01/12– 11/13) (03/09-11/10)	preparation on two prestressed girder and steel girder bridges. Performed approach slab design, girder design check using LEAP Conspan, cap and column design check using LEAP RC Pier, steel girder design check using MDX, deck and overhang reinforcing design check, strip seal joint opening calculations, quantity calculations and QA/QC, and elevation calculations Mr. Romero also provided load rating of the completed structure. I-49 North (LA 1 – LA 173), S.P. 701-65-1230 & S.P. 701-65-1349 – Assisted in plan preparation and performed LRFD design calculations on a Type BT Prestressed Girder Bridge and a Type IV Prestressed Girder Bridge. Performed fixed and expansion bearing pad design, deck and overhang reinforcing design, quantity calculations and QA/QC, strip seal joint opening calculations, girder design check using LEAP Conspan, cap and column design check using LEAP RC Pier, and elevation checks.

Firm employed by	Huval & Ass	ociates, In	c.				
Name Glenn M	cCall, P.E.			Years of experience with this firm/employer	2		
Title Civil Eng	ineer			Years of experience with other firm(s)/employer(s)	22		
Degree(s) / Years /	Specialization		Bach	elor of Science Civil Engineering / Structural, 05/97			
	-		Bach	elor of Science Agricultural Engineering, 05/96			
Active registration	number / state / expir	ration date	2963	9/LA/09/30/2023			
Year registered	2001	Discipline	Civil	Engineering			
Contract role(s) / b	rief description of res	ponsibilities	Roa	dway Design			
Experience dates	Experience and qual	lifications rele	evant t	to the proposed contract; i.e., "designed drainage", "designe	d girders",		
(mm/yy–mm/yy)	"designed intersection	on", etc. Expe	rience	dates should cover the time specified in the applicable MPR(s).		
Mr. McCall came to	Huval & Associates wi	th over 22 year	s of ex	perience in transportation related projects. Mr. McCall's experience	e has		
ranged from project	inception and identifica	tion of funding	, to the	NEPA process, following with production of construction docume	nts and		
through construction	with construction engine ality control (OA/OC)	neering and ins	pection	n (CE&I). Most of his experience has been related to detailed enging and CE&I. Mr. McCall is well versed in readyou design traffic	leering,		
nlans concrete steel	anty control (QA/QC) ,	vell as drainage	and m	ws, and CEQ. M. McCan is well versed in loadway design, trainc	ned		
roadways and bridge	es for State DOTs. local	municipalities.	and se	everal private clients related to the oil and gas industry. Mr. McCal	l's training		
includes ATSSA Tra	affic Control Technician	n as well as Tra	ffic Co	ntrol Supervisor.			
	Belle Chasse Bridge &	& Tunnel Repl	aceme	nt Project, S.P. H.004791 – Mr. McCall is serving as a senior desi	gn engineer		
	on this P3 project which	ch will construc	t a nev	v toll bridge over the Gulf Intercoastal Waterway (GIWW). Mr. Me	cCall has		
	assisted with the completion of alternate technical concept No. 1 which will improves the efficiency of all intersections						
(06/19-Present)	within the construction limits. In addition, Mr. McCall has worked as a senior engineer reviewing geometric design and						
(00/12/1100010)	layout, coordination of right of way and utility work and quality checks on hydraulic analysis and subsurface drainage. In						
	addition to the design duties, Mr. McCall has also assisted with the project management activities including the						
	management of sub-consultants, invoicing and progress reports, as well as design quality checks and adherence to the						
	requirements of the Fo	rm DR Process		Design Duild Dusiest DED Dhase 200/ Design S. D. H. 012907 A	a o Sonion		
	Findinger on the Team	Dr. Flyover R	amp D	vesign-Dunu Project RFP Phase 30% Design - S.P. H.01389/- A	s a Semor		
	involvement centered	in pursuit of the	is rioje	understanding of the DED documents. As the project progressed	arry On, ms		
(11/19- 06/20)	nrimarily served as a te	around the review	r in the	design and layout of the roadway as well as the drainage analysis	Mr		
	McCall also participate	ed in the evaluation	tion of	For proposed team alternatives for the project in addition to quality co	ntrol review		
	of the technical propos	al		proposed team alternatives for the project in addition to quarty co.	intor review		
	US 90(I-49 South) All	bertson's Park	way to	Ambassador Caffery Design-Build S.P. H.010620 – Under the	Design-		
(05/13-05/19)	Build Contractor, Mr.	McCall served	as the]	Principal in Charge of the Design Team for this project. In this role	e, Mr.		
```'	McCall provided coord	dination betwee	n the C	Contractor and all members of the design team through coordination	n with the		

	Project Manager. Mr. McCall also provide lead technical experience to the design team during initial construction
	document production and through completion of construction of the project.
(06/16-Present)	<b>1-49 South</b> (a) Verot School Road, S.P. H.011235.5 – Mr. McCall served as senior engineer for the road and drainage design portion of this project encompassing the Verot School Rd. improvements as well as the parallel service road. In addition to the roadway aspects, Mr. McCall also provided the customized drainage design for the scuppers on the bridge structures. Mr. McCall has created a SWMM model of the existing and proposed conditions which will be used to meet the requirements of the railroad owner adjacent to the project. This model is a hydrodynamic model with evaluates water surface elevations at time step intervals for the 100-year storm event while also dynamically modeling the water surface elevation of the outfall channel.
	I-220/I-20 Interchange IMP & BAFB Access Design-Build Project, S.P. H.003370 – Mr. McCall is serving as a senior
	design engineer on this design build project which will provide direct access to Barksdale Air Force Base. Most recently,
	Mr. McCall has assisted with the sequence of construction and geometric layout for the proposed improvements to the I-
(NG/19_Present)	220 to I-20 SB/WB ramp. This modification to the original intent seeks to provide phased construction of this ramp while
(00/1)-11(scht)	maintaining full access to I-20. Mr. McCall is also assisting with project management duties and financial controls for
	Huval and its sub-consultants. In addition, Mr. McCall has completed the design of the box culvert location, coordinated
	with the electrical sub-consultant on the lighting inventory report and layout as well as assist the Project Manager with
	various aspects of the project management duties required for this project.
	Heavy Haul Road Project (HHR), Lake Charles Chemical Complex Project – Principal in charge and Senior
	Technical Lead for the 2017 LADOTD Excellence Award winning project. This project improved LA HWY 379 in Lake
	Charles, LA in support of the \$11B petrochemical project for Sasol North America. For this project, the existing road
	improvements were required to meet LADOID standards while accommodating over 300 heavy haul moves across the
	annost three times of roadway. The final design incorporated additional pavement and pavement markings to both
(09/13-02/19)	3 000 tons. Since I A 370 is a significant arterial to the community the design also accommodated the neak traffic
	demands of the community as well as the 6 000 plus workers accessing the site daily. Once the geometric improvements
	were approved by the State. Mr. McCall lead the Construction Administration. At the conclusion of the project. Mr.
	McCall and his team submitted the LADOTD required 3059 construction packet for approval. The project team was
	presented with the Excellence award as a result of the private-public partnership which improved the existing roadway in
	accordance with all state standards and completed the project ahead of schedule and under budget.
	I-10 (LA 415 to Essen on I-10 and I-12), S.P. H.004100 – Mr. McCall served as a senior design engineer responsible for
(06/19-9/19)	the creation of the Project Implementation Plan (PIP). The PIP is a compilation of the various project aspects related to the
	widening project and the associated constructability reviews completed by Huval and Associates.

Firm employed by Huval & Associates, Inc.							
Name Nicholas	s Helminger, P.E.		Years of experience with this firm/employer	3			
Title Civil En	gineer		Years of experience with other firm(s)/employer(s)	5			
Degree(s) / Years	/ Specialization	08/2	009-05/2013: Bachelor of Science Civil Engineering				
	-	08/2	013-12/2014: Master of Science in Civil Engineering				
Active registratio	n number / state / expiration date	4193	37/LA/03-31-2022				
Year registered	2017 Discipline	Civi	l Engineering				
Contract role(s) /	brief description of responsibilities	Roa	dway and Traffic Design				
Experience dates	Experience and qualifications rele	evant 1	to the proposed contract; i.e., "designed drainage", "designe	d girders",			
(mm/yy–mm/yy)	"designed intersection", etc. Expe	rience	e dates should cover the time specified in the applicable MPR(	s).			
Mr. Helminger jo	ined Huval and Associates in 2018	with 5	5 years' experience with Professional Engineering & Surveyin	ng Co, Inc.			
(PENSCO). His	experience with PENSCO included	mult	iple aspects of engineering including roadway design, draina	ige design,			
bridge design, pla	in and specification preparation, con-	structi	ion layout, and construction administration. Since joining HU	JVAL, Mr.			
Helminger has be	en involved in roadway design, bri	idge d	lesign, project coordination and plan preparation for several	LADOTD			
projects. Mr. Hel	minger's training includes the ATSS	A Tra	affic Control Technician and Traffic Control Supervisor.				
	I-10: LA 415 to Essen Lane on I-10	and I-	12 - S.P. H.004100 – Mr. Helminger is serving as a road design eng	gineer on			
this CMAR project which includes the reconstruction and widening of I-10 from the Mississippi River Bridge				b the I-10/I-			
(04/21-Present)	12 split. Design duties include horizontal and vertical geometrics for 1-10 mainline and entrance/exit ramps and sequence						
	or construction and temporary traffic control along 1-10 mainline. At part of the UMAK process, Mr. Helminger is						
	LA 94: Vermilion River Bridge Replacement - S.P. H 014560 – Mr. Helminger is serving as the road design engineer						
(07/21-Present)	for the replacement of the LA 94 Brid	ge ove	er the Vermilion River in Lafavette/St. Martin Parish. Mr. Helming	er designed			
(*****************	the horizontal and vertical geometry of LA 94 and the diversion roadway and prepared all roadway plan sheets.						
	Comite River Diversion Bridges at 1	LA 67	, LA 19, and LA 19 Railroad Bridge - S.P. H.001352 and H.0022	2 <b>73</b> – Mr.			
	Helminger served as the road design e	engine	er and assistant project manager on this CMAR project which include	les the			
	construction of new bridges over the (	Comite	e River Diversion Channel (CRDC). This project had two sites: LA	67 and LA			
	19. LA 67 is a two-way two-lane road	dway v	while LA 19 is a 4-lane divided roadway. On site diversion roadway	ys were			
	used on both sites. Mr. Helminger designed the horizontal and vertical geometry for both roadways and diversion						
(06/20-05/21)	roadways, typical sections, sequence of	of cons	struction, drainage, guardrail, pavement markings, signing, and cros	s sections.			
	He also created typical sections, plan	profile	es, and cross sections of the CRDC that will be excavated under this	project.			
	The LA 19 site included a railroad cro	ossing	over the CRDC. Mr. Helminger designed the vertical and horizonta	alignment			
	Helminger also computed quantities	and t	the shoony randoad used to maintain rail traffic during construction.	IVIT.			
	quantity and cost reconciliation meeti	ngs as	ped cost estimates, and participated in all design workshops, plan re	views, and			
	quantity and cost reconcination meeting	ngs as	part of the Children process.				

	I-10 and I-12 College Dr. Flyover Ramp Design-Build Project RFP Phase 30% Design - S.P. H.013897 – Prepared
	plans and proposal documents for the RFP phase of the project. Developed the overall project layout for the proposal
	phase. Analyzed numerous geometric layouts and cross sections along the I-10/I-12 corridor to develop a flyover concept
(11/10 06/20)	which fit within the existing right-of-way while complying with project requirements. Designed roadway horizontal and
(11/19-00/20)	vertical profiles, typical sections, sequence of construction, guardrail, concrete barriers, MSE walls, sound barrier layout,
	overall bridge layouts, drainage, and computed roadway quantities. Performed the role of Assistant Design Manager by
	conducting weekly meetings and coordinating/working closely with the entire design team and contractor to develop the
	plans, quantities, and proposal documents.
	Belle Chasse Bridge & Tunnel Replacement Project - S.P. H.004791 – Mr. Helminger is performing the roadway plan
(01/20/00/21)	review on the Belle Chasse project. The project review consists of overall geometric layout (horizontal and vertical),
(01/20-08/21)	overall design compatibility between various disciplines of engineering, and plan set review per the project QA/QC
	process. Additionally, Mr. Helminger will review the temporary traffic control plans and signing/pavement marking plans.
	I-10 Loyola Design-Build Project RFP Phase 30% Design - S.P. H.011670 – Assisted in the preparation of plans and
(01/10 05/10)	proposal documents for the RFP phase of the project. Assisted in development of alternative technical concepts, created
(01/19-05/19)	roadway typical sections, assisted in roadway geometric design, suggested sequence of construction, and roadway
	quantities. Assisted in the coordination and organization of all project data with the design team.
	I-220/I-20 Interchange Imp. & BAFB Access Design-Build Project - S.P. H.003370 - Assisted in the preparation of
(10/19 Drosont)	plans and proposal documents for the RFP phase of the project. Created typical sections, design/layout of guardrail, pier
(10/10-1105011)	protection and roadway barrier, calculated roadway quantities, performed preliminary bridge design calculations and
	assisted with coordination of the design team. Providing road design support and bridge QC for the design phase.
	I-49 South-Verot School Road Interchange - S.P. H.011235 – Prepared and reviewed roadway plans for LADOTD
	submittal. Designed vertical profiles and performed QC checks on horizontal geometry. Assisted subconsultants in the
(10/18 Propert)	design of subsurface drainage systems and developed a plan for alternative outfall locations. Performed bridge design
(10/10-1105011)	calculations including prestress girder design checks to determine span lengths, preliminary pile loads for column bents
	and pile bents, and vertical clearance calculations. Computed preliminary quantities and developed preliminary
	construction costs estimates. Assist in coordination of subconsultants primarily for plan consistency between several firms.
	I-49 South: Ambassador Caffery & U.S. 90 Interchange - S.P. H.002868 – Prepared roadway plan profiles, typical
	sections, barrier details, pavement marking details, embankment widening and guardrail details, suggested sequence of
(05/13 07/18)	construction, MSE wall layout and details, quantity tables, and all bridge plans for the 2 mile stretch of urban freeway in
(03/13-0//10)	Lafayette Parish. Assisted in drainage design and vertical alignment of roadways. Performed all bridge design
	calculations including deck design, girder design, column bent and pile bent design, footings, columns, pile loads.
	Calculated all riser and bent elevations. Assisted in the coordination and organization of subconsultants.
	Various Roadway Projects - Roadway geometric design, vertical design, drainage design, quantities, plan and
(05/13 07/18)	specification preparation, and construction administration for multiple roadway projects for the City of Broussard and St.
(03/13-0//10)	Martin Parish, LA. Performed QC checks on roadway plans and quantities for various projects for Lafayette Consolidated
	Government.

Firm employed by Huval & Associat	es, Inc.						
Name Michelle Helminger, P.E.		Years of experience with this firm/employer	7				
Title Civil Engineer		Years of experience with other firm(s)/employer(s)	0				
Degree(s) / Years / Specialization	08/2	010-05/2014					
	Bach	nelor of Science Civil Engineering					
Active registration number / state / expiration c	late 4312	23/LA/03-31-2023					
Year registered 2018 Discip	line Civi	l Engineering					
Contract role(s) / brief description of responsib	ilities Roa	dway and Traffic Design					
Experience dates Experience and qualification	ons relevant	to the proposed contract; i.e., "designed drainage", "designe	d girders",				
(mm/yy–mm/yy) "designed intersection", etc	. Experience	dates should cover the time specified in the applicable MPR(	s).				
Mrs. Helminger joined Huval and Associates f	ollowing her	graduation from the University of Louisiana - Lafayette in 20	)14. In her				
time with HUVAL, Mrs. Helminger has been in	volved in roa	adway geometric design, traffic control & MOT design, structu	ıral design,				
plan preparation, and construction support service	vices. Mrs. H	Helminger has also performed a variety of services for LADC	TD bridge				
rehabilitation projects, including S.P. 700-99-	0559 Retaine	er Contract for Bridge Preventive Maintenance Program (BI	RPM), S.P.				
4400002537 Retainer Contract for Engineering	; Services for	Bridge Preservation, and several other Retainer Contracts. In	addition to				
typical LADOTD bid-build projects, Mrs. Helr	ninger has be	en involved in many of LADOTD's alternative delivery proje	cts.				
on this P3 project which will	construct a nex	w toll bridge over the Gulf Intercoastal Waterway (GIWW) Mrs. H	engineer				
provided design on this project	t from the init	ial bid phase to present. Mrs. Helminger served as the primary road	way				
engineer and the primary point	engineer and the primary point of contact for subconsultants including coordination of lighting drainage traffic signals						
(06/19-Present) and MSE walls. Mrs. Helming	and MSE walls. Mrs. Helminger developed the overall geometric layout which dictated the available MOT options						
required to maintain two-lane	required to maintain two-lanes of traffic in each direction for the duration of construction. Detailed traffic control plans						
were developed by Mrs. Helm	linger to suppo	ort the construction phasing. Coordination efforts also include utility	7				
relocations & ROW acquisitio	relocations & ROW acquisition services.						
I-49 South-Verot School Ro	ad Interchang	ge - S.P. H.011235 - Assisted in roadway geometric design includin	g traffic				
control analysis and plan prep	control analysis and plan preparation while also assisting with bridge design and construction phasing. Project						
(06/16-Present) management tasks included co	management tasks included coordination with subconsultants, LADUID meetings to present design options, and						
study phase of the project. Pre	liminary Plan	s and will continue to provide design support through the Final Plan	s phase of				
this project.	initial y 1 faits	s and will continue to provide design support through the r had r ha	is phase of				
(01/15 07/10) I-49 South-US 90 A	lbertson P	kwy to Ambassador Design Build - S.P. H.	010620 –				
(01/15-0//18) Prepared MSE wall layout, sit	e grading, sho	p drawing reviews and construction services pertaining to demolitic	on.				

	LA 443: Tangipahoa River Bridge Replacement, S.P. H.012728 – Mrs. Helminger supported the roadway &
(10/16 12/17)	drainage design efforts for this bridge replacement project. Design tasks included roadway plans, channel grading
	plans, and detour layout. This was an emergency replacement, due to the flood of 2016, and 100% final plans were
	completed in 8 weeks.
	Replacement of Lemon Road Bridge over Redwood Creek, Baton Rouge Parish - Performed geometric design to
(11/15 05/16)	accommodate new bridge structure based upon minimum low chord requirements. Created typical roadway sections,
(11/13-03/10)	performed guardrail design, and created cross sections. Created channel grading layout and created cross sections for the
	channel. Assisted in roadway plan preparation.
	US 90 Pearl River Bridges Environmental Assessment - S.P. H.000284.2 – Performed tasks pertaining to bridge design
(02/15_12/16)	in order to perform Stage 1 Environmental related services for the two moveable bridges included in the project. Analyzed
(02/13 - 12/10)	multiple vertical alignments for various bridge types as well as performed preliminary cost estimates. Created various
	meeting exhibits for public meetings. Special consideration was required due to the historical nature of the structures.
	District 05 Bridge Repairs – Bearing Rehab., Deck Joint and Concrete Spall Repairs, & Cleaning & Painting Steel,
	S.P. H.011766.5 Mrs. Helminger assisted with rehabilitation plans produced. These consisted of bridge deck joint repairs,
(04/16-11/17)	concrete spall repairs, bridge deck overlays, bearing rehabilitation, cleaning & painting steel girders, and all associated
	traffic control plans yielding a construction cost of \$11M. The bearing rehabilitation consisted of replacing over 700
	existing steel fixed/expansion bearing assemblies with a retrofitted bevel sole plate and reinforced elastomeric bearing pad.

Firm employed by	Civil Design & Consult	t <mark>ant,</mark>	Inc. (CD&C)			
Name Ralph B	urgess, PLS		Years of relevant experience with this employer	11		
Title Principal Land Surveyor			Years of relevant experience with other employer(s)	12		
Degree(s) / Years	/ Specialization	BS I	ndustrial Design & Supervision 2004 / Southeastern LA Univ	ersity		
Active registration	n number / state / expiration date	5040	0 / Louisiana / September 30, 2022			
Year registered	2010 (Louisiana) Discipline	Lan	d Surveyor			
Contract role(s) / 1	brief description of responsibilities	Mr.	Burgess will be the Survey Manager and will work to oversee	the project		
		prog	gress stays on schedule, aide in both crew coordination	and office		
		prod	luction, and provide final QC on the firms' deliverable to	the Prime		
		Cons	sultant. Mr. Burgess also has extensive background in	providing		
		topo	graphic surveys for LADOTD including the use of 3D	Terrestrial		
		Scan	nning. Mr. Burgess meets MPR #4 & # 5.			
Experience dates	Experience and qualifications rele	evant	to the proposed contract; i.e., "designed drainage", "designe	ed girders",		
(mm/yy–mm/yy)	"designed intersection", etc. Expe	rience	e dates should cover the time specified in the applicable MPR(	s).		
07/20 - 04/21	<u>H.013955, H.013956, H.013957, H.0</u>	) <u>13958</u>	8, H.013959, & H.013989 Rural Bridge Initiative: Mr. Burgess s	erved as the		
	firm's surveying Manager on these pro	ojects.	He coordinated field effort and office data processing for all sites to	o ensure that		
	the project followed the procedures and standards of LADOTD Location and Survey. CD&C as a sub-consultant on this					
01/18 01/20	Project is responsible for topographic surveying for 6 bridge sites across South Louisiana.					
01/18-01/20	Manager for this project CD&C as a	sub-co	<b>1-10 and 1-12, west and East Baton Rouge, LA</b> . WI. Durgess is a possible for topographic surveying the	e portion of		
	I-10 in West Baton Rouge Parish beg	ginning	at the start of the project limits to a point just before the approach	n of the I-10		
	Bridge and the limits of the project alo	ngLA	415 including work on Tributaries of the Intercoastal Canal. This we	ork included		
	using 3D Scanning for the bridge at	I-10 t	pridge @ LA 415 as well as scanning every 500' for control veri	fication and		
	incorporation of the Mobile Lidar for	the I-1	10 pavement.			
07/17 - 12/18	H.010960.5-2, LA 30 Roundabout a	t Tang	ger I-10, Ascension Parish, LA: Mr. Burgess served as Survey Mar	nager for the		
	project. Duties included meeting with	LADC	TD & Cardno, Inc for utility locations, coordination of crews and 3	D terrestrial		
	scanning crew along with office personnel, coordination. Special duties were merging of two state projects with project					
01/16 - 08/16	H 005733 5 US 100 Superstreat St	an pro Tamm	Jeeus lugelliel. Jany Parish I A: Mr. Burgess served as Survey Manager for the pro-	viect Duties		
01/10 - 00/10	included complete topographic survey	z and d	rainage map for this project including all utility coordination. The s	urvey began		
	at the intersection of US 190 and Ho	olidav	Square Frontage Road. From this point, the survey proceeded in	a northerly		
	direction along US 190 for approxima	itely 2.	9 miles to a point that is 700 feet South of Intersection of US 190 ar	d E. Boston		
	St. in Covington, LA. This project al	so incl	uded work in the Abita River and utilized 3D Terrestrial Scanning	for the main		
	route.		-			

10/15 - 12/18	H.003184.5 I-10 Texas State Line – East of Coone Gully, Calcasieu Parish, LA: Mr. Burgess served as Survey Manager
	for the project. Duties included meeting with LADOTD, coordination of traditional crews and 3D terrestrial scanning crew,
	coordination of utility companies on the project, review and verification of drainage crossing I10, merging of existing
	topographic survey of bridges from LADOTD and final review of all survey data for submittals
08/16 - 12/17	H.011235 I-49 South at Verot School Road, Lafayette, LA: Mr. Burgess served as the Survey Manager for the project.
	Duties included meeting with LADOTD, and all consultants on the team, coordination of both traditional crews and 3D
	terrestrial scanning crew, coordination of survey crews with Cardno, Inc, utility locations on the project, met and review
	right of entry with landowners for project, review of drainage map, merging of existing topographic survey of the I-49
	Connector project from LADOTD with current survey of project, review of apparent right of way mapping for prime
	consultant, and final review of all survey data.
07/14 - 10/15	H.011088.5 I-110 North Street to Plank Road, EBR Parish, LA: Mr. Burgess served as Survey Manager for the project.
	Duties included meeting with LADOTD, coordination of traditional crews and 3D terrestrial scanning crew, review and
	verification of drainage map, merging and final review of all survey data for submittals. Other special duties were
	coordinating with LADOTD District 61 for a rolling lane closure for location of drainage located in the interior of the project
	along the existing crash wall. Also, coordination with LADOTD Records and EBR City Parish regarding the research of all
	drainage structures that enter and leave the project area.
04/17 - 07/17	H.010006.5-3 LA 58 Petit Caillou Bridge Rehabilitation (Sarah Bridge), Terrebonne Parish, LA: Mr. Burgess served
	as Survey Manager on this project which included a complete topographic survey, utility coordination, channel cross-sections
	and the scanning of the existing vertical lift bridge for the design of its repairs/replacement. Project included data collection
	of the topography via traditional means and methods along with 3D terrestrial scanning and hydrographic surveying.
03/14 - 06/14	H.008369 Cleo Road Roundabout, St. Tammany Parish, LA: Mr. Burgess served as the project manager for the project.
	CD&C was responsible for the topographic survey that began approximately 2400 ft. NW of intersection of 1-59 and US
	Hwy 1090 and ended approximately 1000 ft. NW of intersection of I-59 and US Hwy 1090. The survey also included 500
	ft. of Cleo Road and 175 ft. of Avenue D.
05/13 - 07/13	H.009288 LA 1 Railroad Bridge at DOW, West Baton Rouge, LA: Survey Manager for this project located in West Baton
	Rouge Parish. The intent is to create a grade separation at the intersection of LA 1 and the R/R spur for DOW. CD&C is
	performing all of the topographic survey for this project including utility coordination and R/R coordination and permits so
	that CD&C can survey the spur and parallel line.
02/14 - 03/17	H.010620 1-49 Design Build: Mr. Burgess managed and supervised all field work, utility coordination, and review of
	existing survey data for final topographic survey submittal. CD&C also produced ROW maps for the project. Mr. Burgess's
	duties for this portion also included title reports, review of property surveys and final submittal of final existing right of way
	plans.

Firm employed by Civil Design & Construction, Inc. (CD&C)						
Name Chris Balla	rd, PLS		Years of relevant experience with this employer	6		
Title Survey Project Manager			Years of relevant experience with other employer(s)	19		
Degree(s) / Years / S	pecialization	Back	helor of Science – Southeastern University/2004/Biological Sc	ience		
Active registration nu	umber / state / expiration date	5033	3 / Louisiana / September 30, 2022			
Year registered 20	010 (Louisiana) Discipline	Prof	fessional Surveyor			
Contract role(s) / brie	of description of responsibilities	Mr.	Ballard will be the Survey Project Manager and will work to di	rect crews,		
		over	see processing of field data, and aide with coordination with	other team		
		mem	nbers to ensure that the project is completed in accordance w	ith project		
		sche	dule background in providing topographic and ROW for 1	LADOTD.		
		Mee	ts MPR #4 & #5			
Experience Exper	rience and qualifications releva	int to	the proposed contract; i.e., "designed drainage", "designed	d girders",		
dates "desig	gned intersection", etc. Experier	nce dat	tes should cover the time specified in the applicable MPR(s).			
(mm/yy–						
01/18 - 01/20 <b>H 00</b> 4	4100 I-10: I.A 415 to Essen Lane	on I-1	0 and I-12 West and Fast Baton Rouge LA: Mr. Ballard is the	Surveying		
Proied	t Manager for this project. CD&C a	as a sul	b-consultant on this project is responsible for topographic surveying	the portion		
of I-1	0 in West Baton Rouge Parish beg	inning	at the start of the project limits to a point just before the approach	of the I-10		
Bridg	Bridge and the limits of the project along LA 415 including work on Tributaries of the Intercoastal Canal. This work included					
using	using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and					
incorp	incorporation of the Mobile Lidar for the I-10 pavement.					
04/17 - 07/17 <b><u>H.010</u></b>	H.010006.5-3 LA 58 Petit Caillou Bridge Rehabilitation (Sarah Bridge), Terrebonne Parish, LA: Mr. Ballard served as the					
tirms	Survey Project Manager on this pro	ject wł	hich included a complete topographic survey, utility coordination, ch	annel cross		
sectio	tion of the topography via tradition	g veru	ns and methods along with 3D terrestrial scanning and hydrographic	cluded data		
02/19 - 09/19 Bridg	Bridge Replacements in Fast Faliciana Parish Rural Fast Faliciana Parish I A. Mr. Ballard is serving Survey Project					
Mana	ger for this project for East Felician	na Pari	ish Police Jury. It includes the replacement of 2 bridges which we	re damaged		
from	from flooding and the repairs to many rural roadways throughout the parish. These projects are being funded thru FEMA and					
all do	all documentation has to be in accordance with FEMA's policies and procedures.					
01/17 - 12/17 East 1	<u>Baton Rouge Parish Bridges, East</u>	Baton	<b>1 Rouge Parish, LA:</b> In 2017, CD&C has performed topographic su	rveys for at		
least 4	least 4 Bridge Replacement Projects throughout East Baton Rouge Parish. Mr. Ballard served as Survey Project Manager on					
each o	each of these projects which included cross-sectioning and tracing the channel at each location. These included bridges over					
Daws	on Creek, Claycut Bayou, Copper N 778 5 I A 443, Tangi Diyon Drida	AIII Ba	you, and Cypress Bayou.	ot Managar		
$\frac{10/10 - 11/10}{\text{for th}}$	is Project Among the duties perform	med fo	r the project were review of the crew work conditions review & pr	ocessing of		
101 th	is reject. ranong the duties perform		a the project were review of the crew work conditions, review & pr	ooossing of		

Page 31 of 86 Prime consultant name: Huval & Associates, Inc.

	the survey data, verification and review of final submittal. CD&C completed a topographic survey which included all utilities
	with depths, all drainage, all building information including finish floor elevations, and all super/substructure of the bridge over
	the Tangipahoa River. Additional information regarding the river was located by traditional means upstream and downstream
	for the engineer's design of the new bridge. To utilize data collection of the failed bridge, 3D Terrestrial Scanning was
	incorporated in conjunction with traditional means to complete the topographic survey. Due to the nature of the project being
	an Emergency Bridge replacement all staff worked on this project non-stop until field work was completed in less than 3 weeks.
09/17 - 12/17	H.012650.5-1 District62 Bridges, Livingston and Tangipahoa Parishes, LA: Mr. Ballard served as a Survey Project Manager
	for this project which included 5 bridge sites in District 62. In addition to all of the existing data for the bridge and roadway at
	each site, each channel was cross-sectioned both upstream and downstream of the bridge. These included bridges over the US
	190 Bridge over Gray's creek, 2 bridges on LA 442 both crossing East Hog Branch, LA 1063 over the Natalbany River, and US
	51 over Ponchatoula Creek. Several of these bridges including the US190 one was surveyed utilizing <b>3D Terrestrial Scanning</b> .
10/15 - 12/18	H.003184.5 I-10 Texas State Line - East of Coone Gully, Calcasieu Parish, LA: Mr. Ballard served as the Survey Project
	Manager on this project which is a 6-lane widening of I-10. Duties performed on this project included the review of the survey
	information from crew, verification of project delivery schedule, processing of data and final review of submittal of project. 3D
	Terrestrial Scanning was used in conjunction with traditional means and methods for the completion of this project.
01/16 - 08/16	H.005733.5 US 190 Superstreet, St. Tammany Parish, LA: Mr. Ballard served as the Survey Project Manager on this project.
	CD&C provided a complete topo survey & drainage map along with utility coordination for the project. Project duties included
	processing of data, review of field notes and weeklies, & performing final punch list. This project also included work in the
	Abita River utilized <b>3D Terrestrial Scanning</b> for the main route.
10/15 - 01/16	H.011773 Hanks Dr/Landis Drive Pedestrian Improvements, East Baton Rouge Parish, LA: Mr. Ballard served as the
	Survey Project Manager on this project that included a topographic survey and establishment of the ROW for Hanks Dr. for
	installation of new sidewalk.
06/11 - 09/13	260-01-0028, H.002372 LA 42 Widening and Improvements, Ascension Parish, LA: Mr. Ballard worked as a PLS on this
	project which included boundary and topography, establishing the existing ROW and acquisition of additional ROW.
07/17 - 12/18	H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA: Mr. Ballard served as the Survey Project Manager
	on this project that includes a complete topo survey, utility coordination and drainage, along with finish floor elevations of all
	buildings that fall within the survey limits. Project included data collection of the topography via traditional means and methods
	along with <b>3D terrestrial scanning</b> .
08/16 - 12/17	H.011235 I-49 South at Verot School Road, Lafayette, LA: Mr. Ballard served as the Survey Project Manager on this I-49
	South project for LADOTD. This project is to continue the improvements to the US 90 corridor to upgrade the roadway to
	interstate standards for I-49 South. This project includes traditional topography, 3D Scanning, and ROW mapping as part of the
	full scope. Special task was to coordinate with the Railroad company and perform railroad permitting for access to the rails.

Firm employed by	Bluewing C	ivil Cons	ultir	ng, LLC			
Name Simon (A	Alex) A. Guillory, CFN	M, PE		Years of relevant experience with this employer	7		
Title Principal	pal			Years of relevant experience with other employer(s)	7		
Degree(s) / Years	/ Specialization		ME, 2	2010 - Civil Engineering, Water Resource Engineering   BS, 2008 - Civil	Engineering		
Active registration	n number / state / expi	ration date	LAI	PE 37874 – Expires 3/31/2022			
Year registered	2008	Discipline	Civi	l Engineering			
Contract role(s) /	brief description of res	sponsibilities	Hyd	raulics Engineer			
Experience dates	Experience and qua	lifications rele	evant t	to the proposed contract; i.e., "designed drainage", "designed	d girders",		
(mm/yy–mm/yy)	"designed intersection	on", etc. Expe	rience	e dates should cover the time specified in the applicable MPR(s	5).		
03/20-Current	Lower Vermilion Riv	ver Watershed	Plan	Vermilion Parish, LA. Project Manager, Engineer-of-Record. NR	CS		
	Watershed Plan/EA to	evaluate a tide/	surge	and freshwater protection system. Scope of the project includes an	assessment		
	of environmental resol	urces and anticip	pated p	project impacts. Project administration in accordance with NEPA	-4		
	Project lead responsib	le for all aspects	r of the	5.0 to develop a 2D hoodplain model of the appx 15,000 acre proje	older		
	engagement and coord	lination: NEPA	confor	mance etc. Also acting as Engineer-of-record for H&H analysis ar	nd		
	modeling.		•••••••				
11/18-Current	Calcasieu Parish Cor	nsolidated Grav	vitv D	rainage District 1 – Urban Flood Study   Sulphur, LA. Project Mo	anager.		
	Engineer-of-Record. S	Study of the May	olewoo	od Subdivision in Sulphur, LA for localized flooding issue and analy	zing		
	alternatives to provide	flood relief for	local 1	residents. The Maplewood area has seen an increase in residential a	nd		
	commercial developm	ent and natural	drainag	ge outfalls have decreased in capacity due to floodplain encroachme	ents. BWC		
	are utilizing 1D and 21	D models to ana	lyze th	ne recent development impacts on the existing drainage networks an	d design		
	drainage improvement	ts. This study ic	lentifie	ed drainage improvements along Prater Rd and BWC are currently a	ssembling		
	bid package for this in	nprovement. Pro	oject le	ad responsible for all aspects of the project including H&H analysis	, field		
				er coordination and engagement, and solution development.	т.		
04/19-Current	Calcasieu Parish Cor Project Manager, Eng	isolidated Grav	VITY DI	rainage District I – David Bayou Watershed Flood Study   Sulph	ur, LA.		
	and analyzing alternat	ives to provide t	flood r	elief for local residents. As surrounding development has increased	a central		
	and historic neighborh	nood of Sulphur.	LA is	experiencing increased flood risk and impacts. BWC are utilizing	1D/2D		
	integrated stormwater	models, field-co	ollecte	d survey data, and historic high water marks to analyze the existing	area and		
	develop CIPs to mitigate flood risk. Project lead responsible for all aspects of the project including H&H analysis, field						
investigations, report preparation, stakeholder coordination and engagement, and solution development.							
11/19-02/20	Jeff Davis Parish Co	nsolidated Dra	inage I	District 1 –Bayou Serpent H&H Study   Northwestern Jeff Davi	s Parish,		
	LA. Project Manager,	, Engineer-of-Re	ecord	Develop hydrologic and hydraulic models to analyze the Manual Ro	1. Bridge		
	crossing of Bayou Ser	pent in northwe	stern J	ett Davis Parish. BWC are developing hydrologic and hydraulic me	odels to		

	analyze this crossing to develop recommendations for improving hydraulic efficiency. Potential improvements include bridge replacement and floodplain culverts. Led development of H&H analysis and drainage solution.
08/20-Current	<b>Jeff Davis Parish Consolidated Drainage District 9 – East Lacassine Bayou H&amp;H   Welsh, LA</b> <i>Project Manager, Engineer of Record.</i> Riverine H&H study to assess conditions of bayou, analyze stream geometry and bridge crossings, and develop recommendations to lower floodplain profile. Led development of H&H analysis and drainage solution.
01/19-Current	<b>Calcasieu Parish Consolidated Gravity Drainage District 1 –David Bayou Watershed Flood Study</b>   <b>Sulphur, LA</b> . <i>Project Manager, Engineer-of-Record.</i> Study of the David Bayou Watershed in Sulphur, LA for localized flooding issue and analyzing alternatives to provide flood relief for local residents. As surrounding development has increased, a central and historic neighborhood of Sulphur, LA is experiencing increased flood risk and impacts. BWC are utilizing 1D/2D integrated stormwater models, field-collected survey data, and historic high water marks to analyze the existing area and develop CIPs to mitigate flood risk. Project lead responsible for all aspects of the project including H&H analysis, field investigations, report preparation, stakeholder coordination and engagement, and solution development.
11/20-Current	<b>LWI Modeling Contract Region 5</b>   <b>Southwest LA</b> . <i>Project Manager, Engineer-of-Record</i> . Collection of existing watershed datasets, models, and studies; and proposition of modeling design approach, schedule and costs. Identify and execute data gap analysis for regional or local models (models, data, surveys, historical floods, high water marks, environmental concerns) in the Mermentau and Vermilion HUC's of Region 5; assisting with data documentation; identifying stakeholders; and working with HDR on scoping of subsequent data acquisition and community stakeholder engagement. Hydraulic Model development for Bayou Lacassine and tributaries, or others designated by HDR.
01/19-Current	Calcasieu Parish Police Jury –Sara St. Bridge Replacement (Recall #070043)   Sulphur, LA <i>Project Manager,</i> <i>Engineer-of-Record.</i> . Project includes engineering, plan preparation and utility coordination for the reconstruction of Sara St. Bridge. Assisted with the utility coordination. Identified potential conflicts with existing utilities, and began coordination with third party utilities and landowners for relocation of utilities to the existing bridge or proposed roadway conflict.
04/19-12/19	<b>DOTD</b> –I-49 South Design-Build   Lafayette, LA. <i>Drainage Engineer-of-Record</i> . Drainage engineer-of-record for the I- 49 South Design-Build Team. The scope of the project converted approximately 1.5 miles of existing US 90 in Broussard, LA into Interstate roadway according to all applicable AASHTO regulations. Fenstermaker serves as the chief design sub- consultant to prime contractor James Construction Group. This is the initial phase of the I-49 South Project from Lafayette to New Orleans. My duties involved preparation of signed and sealed drainage plan and profile sheets and Drainage Report for the project.
09/21-Current	Jeff Davis Parish Police Jury – St. Mary St. Bridge Replacement (Recall # 072706)   Elton, LA <i>Project Manager,</i> <i>Engineer of Record.</i> Project included development of an engineered bid package for replacement of existing precast, slab span bridge supported by timber substructure, with skewed timber replacement bridge. Scour Analysis was performed as well and included watershed runoff analysis and bridge scour analysis using HEC-RAS version 5.0.7.

Firm employed by Bluewing Civil Consulting, LLC						
Name Chase Be	rard, PE			Years of relevant experience with this employer	4	
Title Profession	nal Engineer			Years of relevant experience with other employer(s)	4	
Degree(s) / Years	/ Specialization		BS, 2	014 – Civil Engineering		
Active registration	number / state / expi	iration date	LAI	PE 43038 – Expires 3/31/2023		
Year registered	2014	Discipline	Civi	l Engineering		
Contract role(s) / b	prief description of re	sponsibilities	Hyd	raulics Engineer		
Experience dates	Experience and qua	alifications rele	evant 1	to the proposed contract; i.e., "designed drainage", "designe	d girders",	
(mm/yy–mm/yy)	"designed intersecti	on", etc. Expe	rience	dates should cover the time specified in the applicable MPR(	5).	
11/18-Current Calcasieu Parish Consolidated Gravity Drainage District 1 –Urban Flood Study   Sulphur, LA. <i>Project Engineer</i> . Study of the Maplewood Subdivision in Sulphur, LA for localized flooding issue and analyzing alternatives to provide flood relief for local residents. The Maplewood area has seen an increase in residential and commercial development and natural drainage outfalls have decreased in capacity due to floodplain encroachments. BWC are utilizing 1D and 2D models to analyze the recent development impacts on the existing drainage networks and design drainage improvements. This study identified drainage improvements along Prater Rd and BWC are currently assembling bid package for this improvement. Project lead responsible for all aspects of the project including H&H analysis, field investigations, report preparation, stakeholder coordination and engagement, and solution development.					<i>ngineer</i> . brovide oment and d 2D vements. br this s, report	
04/19-12/19	<b>DOTD –I-49 South I</b> intersection of HWY from North of Lafaye that could be construct switches and detours to were still compliant w	<b>Design-Build</b>   <b>I</b> 90 to interstate s tte all the way to ted while maint to determine the with LADOTD re	Lafaye standar o New aining grades oadway	<b>tte, LA</b> . <i>Project Engineer</i> . The scope of the project was to bring this ds as part of the state's long term goal to convert HWY 90 corridor of Orleans. My work consisted of breaking the project up into multiple traffic throughout the entire project. I used Inroads to model all traffic s of all temporary pavements and to make sure the detours/traffic swy design criteria and AASHTO design guidelines.	s particular into I-49 e phases fic vitches	
01/19-Current	<b>Calcasieu Parish Pol</b> includes engineering, utility coordination. Ic and landowners for re	lice Jury –Sara plan preparation dentified potenti location of utilit	St. Br n and u al cont ties to	<b>idge Replacement (Recall #070043)</b>   <b>Sulphur, LA</b> <i>Project Engine</i> titility coordination for the reconstruction of Sara St. Bridge. Assisted flicts with existing utilities, and began coordination with third party the existing bridge or proposed roadway conflict.	<i>eer</i> . Project d with the utilities	

Firm employed by	Bluewing C	<b>ivil Cons</b>	ultir	ng, LLC			
Name Drewe Burns, PE				Years of relevant experience with this employer	0.5		
Title Professio	nal Engineer			Years of relevant experience with other employer(s)	4.5		
Degree(s) / Years	/ Specialization		BS, 2	017 – Civil Engineering			
Active registration	n number / state / exp	iration date	LAI	PE 46135 – Expires 3/31/2022			
Year registered	2017	Discipline	Civi	1 Engineering			
Contract role(s) / l	brief description of re	sponsibilities	Hyd	raulics Engineer			
Experience dates	Experience and qua	alifications rele	evant 1	to the proposed contract; <i>i.e.</i> , "designed drainage", "designed	d girders",		
(mm/yy–mm/yy)	"designed intersecti	on", etc. Expe	rience	e dates should cover the time specified in the applicable MPR(s	s).		
04/21-Current	<b>Orleans Run/Pentar</b>	geli Subdivisio	n Drai	nage Improvement   Moss Bluff, LA. Project Engineer. BWC acted	ed as lead		
	civil engineer for a st	udy of approxim	ately 6	500 aces of developed/planned property in Moss Bluff, LA. The exis	ting homes		
	in Pentangeli Subdivi	sion are the mos	t critic	ally at risk structures in this area, due to poorly planned and improp	erly		
	implemented develop	ment methods. I	3WC ii	nvestigated, analyzed and reported on mitigation measures to reduce	e the flood		
	risk. Local flood dept	h benchmarks at	id othe	er forms of field data were collected and analyzed. BWC developed	three		
04/21 Cumont	Lonnings Airport De	ong with an acco	mpany	Ang Hydraune Report.	il onginger		
04/21-Current	for a drainage improv	rement of an exis	aprove sting C	"ity of lennings, LA. <i>Project Engineer</i> . B we is acting as read civ	acquisition		
	of drainage and main	tenance easemen	t along	said drainage outfall coulee. BWC has developed engineered const	truction		
	plans and is currently	obtaining requir	ed per	mits for coulee improvements.			
04/21-Current	April 2021-Septemb	er 2021   LCMI	I Cou	rtyard Drainage Improvements   Lake Charles, LA. Project Engi	ineer.		
	BWC developed hydr	ologic and hydra	aulic n	nodels to analyze rainfall and remediation efforts impacting the Main	n Campus		
	and the Women's Car	mpus on Gauthie	r Rd.	Hospital administration expressed a need to relieve four interior cou	ırtyards		
	from flooding after he	eavy rainfall eve	nts. M	Iodels include rainfall analysis, wet well catch basin sizing, and pur	np sizing.		
11/20-Current	LWI Modeling Cont	tract Region 5	South	west LA. Engineer Technician. Collection of existing watershed da	tasets,		
	models, and studies;	and proposition of	of mod	leling design approach, schedule and costs. Identify and execute data	a gap		
	analysis for regional	or local models (	model	s, data, surveys, historical floods, high water marks, environmental of	concerns)		
	in the Mermentau and	vermilion HUC		Region 5; assisting with data documentation; identifying stakeholder	rs; and		
	working with HDK on scoping of subsequent data acquisition and community stakeholder engagement. Hydraulic Model						
12/19-10/20	Milton Mitchell. Jr.	-Milton Mitche	ell Res	ervoir   Vernon Parish, LA Engineer Technician, Owner proposes	to		
12/19 10/20	construct a 130 acre r	private reservoir	in Ver	non Lake Watershed. A HEC-RAS 1D/2D model was developed to	analyze		
	the 100-year and "sur	ny day" dam br	each to	o ensure minimal impacts downstream. Assisting with H&H analysis	and		
	model creation.						
01/20-10-20	PERC Engineering – Ross Ranch Compressor Station Flood Mitigation   Eddy County, NM Engineer Technician.						
---------------	--------------------------------------------------------------------------------------------------------------------------------						
	Project includes engineering and design of flood mitigation structure to reduce flood risk of an O&G compressor station.						
	Multiple datasets utilized to ensure a comprehensive assessment of this remote location. Assisting with H&H analysis,						
	dataset manipulation, model creation and construction plan production.						
01/19-Current	Calcasieu Parish Police Jury –Sara St. Bridge Replacement (Recall #070043)   Sulphur, LA Engineer Technician.						
	Project includes engineering, plan preparation and utility coordination for the reconstruction of Sara St. Bridge. Assisted						
	with the utility coordination. Identified potential conflicts with existing utilities, and began coordination with third party						
	utilities and landowners for relocation of utilities to the existing bridge or proposed roadway conflict.						

# 17. Firm Experience:

Firm name	Huval & As	sociates	, Inc.	I	Past Performance Evaluation Discipline(s)* Bridg						
Project name	<b>Comite River Div</b>	version Brid	ge at LA 19 ai	nd LA	19 Railro	ad Bridge	Firm responsib	ility (	prime or su	ıb?)	Prime
Project number	4400017421		Owner's nar	ne	LADOT	D					
Project location	East Baton Ro			Owner's Pro	ject Manager	Chri	stina Brign	ac, P	E		
Owner's address	ss, phone, email	1201 Capit	ol Access Rd.,	Baton	Rouge, LA	A 70804-9245, (	(225) 379-1395, c	hristir	na.brignac@	la.gov	7
Services comm	enced by this firm	n (mm/yy)	10/19	Total	consultar	nt contract cos	t (\$1,000's)			\$1,6	500
Services compl	Cost	of consult	ant services p	rovided by this f	firm (	\$1,000's)	\$1,3	00			

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL designed all aspects of this CMAR project. Presently the project is in the Construction Phase.

The Louisiana Highway 19 Bridges Project is in East Baton Rouge Parish, Louisiana at the point where the channel of the future Comite River Diversion Canal (CRDC) will intersect existing LA 19. The site is located just north of Baton Rouge and south of Baker. The project includes both highway and railroad bridges across the Comite River Diversion Channel.

The new channel will pass under the existing at-grade Geaux Geaux Railroad running north-south through the area. The new single-track railroad bridge will be approximately 350' long over the completed channel. Coordination with the railroad is critical in order to maintain rail service during construction. A shoofly track will be designed for maintenance of rail traffic while the new channel and new railroad bridge are constructed.

The highway bridges project scope of work includes preparing plans, specifications and design documentation for a portion of the CRDC, twin parallel bridges approximately 350 feet long, with a finished cross-sectional clear width of 40 feet on LA Hwy 19, and a single bridge approximately 350 feet long, with a finished cross-sectional clear width of 40 feet on Hwy 67. LA Hwy 19 and Hwy 67 traffic are being maintained via a parallel temporary diversion roadway.

#### Key Project Members:

David S. Huval, Sr., Principal Thomas Gattle, Project Manager / Lead Engineer Rudy McLellan, Bridge Design Engineer Justin Peltier, Bridge Design Engineer Colby Guidry, Design Engineer, QA/QC Nicholas Helminger, Road Design Engineer

Huval & Associates, Inc. performed **100%** of the work for this project in Louisiana.



Page 38 of 86 Firm Name: Huval & Associates, Inc.

Firm name	Huval & As	sociates, l	[nc.		Past Performance Evaluation Discipline(s)* Brid			Bridge		
Project name	KCS Railroad O	verpass Near	Ada				Firm responsib	oility (	(prime or sub?)	Prime
Project number	bject number H.003823.5 Owner's r					TD.				
Project location Bienville Parish, Louisiana						Owner's Pro	ject Manager	Xuy	ong Wang, P.E.	
Owner's address	ss, phone, email	1201 Capito	l Access	Rd., Ba	ton Rouge	, LA 70804, (2	225) 379-134, X	uyong	g.Wang@la.gov	7
Services commenced by this firm (mm/yy) 01/10					consultant	contract cost (	\$1,000's)		\$45	54
Services completed by this firm (mm/yy) 01/12 Co				Cost c	of consultar	nt services pro	vided by this fir	m (\$1	,000's) \$45	54

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

Huval and Associates, Inc. (HUVAL) prepared the final plans and a construction cost estimate of the KCS Railroad Overpass Near Ada for the LADOTD in accordance with the AASHTO LRFD Bridge Design Specifications, the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual, and the KCS Guidelines for the Design and Construction of Railroad Overpasses and Underpasses.

HUVAL redesigned the roadway vertical alignment and bridge to meet the vertical clearance of 23.5 ft. for the main span above the railroad tracks per KCS's railroad requirements. Meeting this requirement involved project coordination with the Roadway Section, KCS Railroad, and Roadway Consultant, as well as roadway analysis and design, and revising the final plan sheets of general plan and elevation.

The bridge structure had to be designed with a 26 degree skew over the railroad tracks. Due to the complexity of skewed and curved steel girder bridge, LADOTD requested HUVAL to investigate various temporary lateral bracing and permanent diaphragms. This item involved bridge modeling and analysis and revising final plan sheets of steel framing plan, plate girder elevations, girder design tables and girder deflection tables.

Additionally, HUVAL provided construction engineering services for this project under Task Order No. H.000126. The construction engineering services included shop drawing review, erection/stability reviews, RFIs, and other miscellaneous construction support.

HUVAL performed 100% of the work for this project in the State of Louisiana.

#### Key Project Members:

David S. Huval, Sr., Principal Thomas Gattle, Project Manager, Bridge Design Colby Guidry, Lead Bridge Design Pat Wilson, Bridge Design Reid Romero, Bridge Design



Firm name	Huval & As	sociates	, Inc.		Past Perfo	rmance Evalu	ation Discipline	(s)*	Bridge	
Project name	I-10 (LA 415 to 1	Essen Lane	on I-10 and	l I-12)			Firm responsib	oility (	(prime or sub?)	Prime
Project number	ct number H.004100 Owner's na					D				
Project location Baton Rouge, Louisiana						Owner's Pro	ject Manager	Nick	c Olivier, P.E.	
Owner's address	ss, phone, email	1201 Capi	itol Access ]	Rd., Ba	ton Rouge	, LA 70804, (2	225) 379-1133, 1	nick.o	livier@la.gov	
Services commenced by this firm (mm/yy) 01/18 Te					consultant	contract cost (	\$1,000's)		\$3	45
Services completed by this firm (mm/yy) 06/19 C					of consulta	int services pr	ovided by this fi	irm (\$	(1,000's) \$3	45

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL recently completed its contract with LADOTD to provide Constructability Reviews and other Advisory Services for the estimated \$1.1 billion I-10 Widening Project in Baton Rouge. HUVAL was responsible for helping to leading the Engineers, LADOTD, FHWA, and the other Stakeholders concurrent with the Stage 1 (NEPA) process to arrive at the chosen design for the project which cause the least impact to maintenance of traffic within the extremely constricted right-of-way footprint, while also minimizing project construction costs. It also included an extensive evaluation of the design as it relates to the constructability, phasing, schedule, and construction budget requirements.

As part of its constructability evaluation, HUVAL reviewed the NEPA Consultant's existing bridge ratings and analysis. This review led to modifications to the ratings and consideration of utilizing the existing structures in certain areas of the project. In order to develop a constructability evaluation, HUVAL analyzed and modified the NEPA Consultant's final layout to establish construction phases that would allow 3-lanes of I-10 in each direction to be maintained during construction. Complex construction issues were analyzed by determining potential construction methods and equipment. This in-depth analysis dictated the final geometry of the corridor and extents of right-of-way and taking that would be needed to complete the project. Using the established geometry and construction phasing, HUVAL separated the corridor into separate sections that could be constructed with independent utilities and contracts. Included in the project, HUVAL prepared a draft Project Management Plan and Project Implementation Plan as well as provided integral support to the formal Cost Estimate Review (CER) process.

#### Key Project Members:

David S. Huval, Sr., Principal Bob Schmidt, Project Manager Thomas Gattle, Lead Design Engineer (Road) Colby Guidry, Lead Design Engineer (Bridge) Reid Romero, Design Engineer Justin Peltier, Design Engineer



Firm name	Huval & As	sociates, l	nc.		Past Perfo	rmance Evalua	ation Discipline	(s)*	Bridge	
Project name	LA 443: Tangipa	ahoa River Br	idge Repl	lacemen	nt		Firm responsib	oility (	(prime or sub?)	Prime
Project number	t number H.012728.5 Owner's				LADO	ΓD				
Project location Tangipahoa Parish						Owner's Pro	ect Manager	Pau	l Vaught III, P.	Е.
Owner's address	ss, phone, email	1201 Capito	l Access	Road, B	aton Roug	ge, LA 70804,	225-379-1816, ]	paul.v	vaughtiii@la.go	V
Services commenced by this firm (mm/yy) 09/1				Total c	consultant	contract cost (	\$1,000's)		\$30	00
Services completed by this firm (mm/yy) 09/17 C				Cost o	f consulta	nt services pro	vided by this fir	m (\$1	,000's) \$30	00

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

Huval & Associates, Inc. (HUVAL) provided final bridge and roadway design plans, design and rating calculations and a construction cost estimate for the emergency replacement of the existing bridge over the Tangipahoa River in Tangipahoa Parish. During the August flood of 2016, the existing bridge substructure suffered extensive scour damage which required an immediate closure of the structure. Due to the long detour and high ADT, LADOTD required an emergency replacement of the existing bridge.

LADOTD gave a timeline of only eight weeks to perform a complete topographic survey and submit 100% final bridge and roadway design plans. In addition to the emergency timeline, the project had to be designed and constructed within the existing right-of-way and could not interfere with another bridge structure located approximately 250ft east of the existing bridge to be replaced. LADOTD also required that the low chord elevation of the new bridge be set to maximize the design storm flood year while also meeting all other project constraints. The design of the bridge also had to meet the LADOTD minimum design guidelines for design speed and ADT.

To meet these project constraints, HUVAL investigated multiple superstructure types and vertical aligments in order to minimize a rise in finished grade while providing a low chord elevation which maximized the design storm flood year. Through analysis, a combination of LG-25 p.p.c. girder approach spans and LG-36 p.p.c. girder main spans were used to deliver a project which met or exceeded all of LADOTD's project requirements. HUVAL met all of LADOTD's required submittals on or ahead of schedule.

HUVAL also provided LADOTD with construction support for the project.

#### **Kev Project Members:**

David S. Huval, Sr., Principal Thomas Gattle, Project Manager, Roadway Design Engineer Justin Peltier, Bridge Design Engineer Reid Romero, Bridge Design Engineer Colby Guidry, Bridge Design Q.C.



HUVAL performed 100% of the work for this project in Louisiana.

Firm name	Huval & As	sociates	, Inc.	]	Past Perfo	rmance Evalu	ation Discipline	(s)*	Bridge	
Project name	I-220/I-20 Interc	hange Imp	& BAFB A	ccess De	esign-Buil	d Project	Firm responsib	oility (	(prime or sub?)	Prime
Project number	oject number   H.003370 Owner's n					D				
Project location Shreveport, Louisiana						Owner's Pro	ject Manager	Core	ey Landry, P.E.	
Owner's address	ss, phone, email	1201 Capi	itol Access	Rd. Bato	on Rouge,	LA 70804-92	45; (225)-379-1	065;	peggy.paine@la	a.gov
Services commenced by this firm (mm/yy) 08/18					onsultant	contract cost (	\$1,000's)		\$4,	411
Services completed by this firm (mm/yy) Ongoing C					f consultar	nt services pro	vided by this fir	m (\$1	,000's) \$2.	166

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL, as Lead Designer, teamed with James Construction Group for the I-220/I-20 Interchange Imp & BAFB Access Design-Build Project and was selected by LADOTD February 2019.

The I-220/I-20 Interchange Imp & BAFB Access Design-Build Project consists of extending I-220 as a 4-lane freeway (Barksdale Access Road) south over I-20 to proposed ramp gores for ramps W-S and S-E at Musselshell Bayou then continuing south as a 4-lane rural arterial, crossing over the KCS RR, ending on BAFB property. Included is a modification of the existing I-220/I-20 interchange to also provide direct access from I-20 to Barksdale Access Road. Cost of the project is \$72 million. Saving \$10 million for the LADOTD, a HUVAL-developed Alternative Technical Concept (ATC) was accepted by LADOTD and incorporated into the project. This ATC changed the IMR concept for the I-220/Barksdale Road northbound exit to I-20 westbound entrance (Ramp NB-WB) from an elevated semi-direct flyover ramp (Ramp S-W in the IMR) to an at-grade loop ramp. This ATC partial cloverleaf design extends the collector-distributor road for the I-20 westbound exit to the I-220 southbound entrance (Ramp WB-SB) included in the IMR concept in order to connect NB to WB traffic to the I-220 southbound to I-20 westbound entrance ramp (Ramp SB-WB).

HUVAL's responsibilities for the I-220 interchange project include Lead Designer, project management, roadway geometrics, bridge design, sequence of construction, and traffic control plans.

HUVAL also is providing construction engineering support for James Construction Group during the construction phase of the project.

HUVAL performed 100% of the work for this project in Louisiana.

#### **Key Project Members:**

Thomas Gattle, Design Manager Justin Peltier, Lead Bridge Design Rudy McLellan, Design Quality Manager Bob Schmidt, Traffic Reid Romero, Bridge Design Colby Guidry, Design and Construction Liaison Nicholas Helminger, Traffic & Road Design



Firm name	Huval & As	sociates,	Inc.		Past Performance Evaluation Discipline(s)*			Bridge			
Project name	I-10: Highland R	d. to LA 73	Design Bu	uild			Firm responsib	oility (	prime or su	b?)	Sub
Project number   H.009250 Owner's na					LADOT	D					
Project location Baton Rouge, LA						Owner's Pro	ject Manager	Pegg	gy Jo Paine,	P.E	
Owner's address	ss, phone, email	1201 Capit	ol Access	Rd., Ba	aton Rouge	, LA 70804, (	225) 379-1065,	peggy	v.paine@la.	gov	
Services commenced by this firm (mm/yy) 01/18 T					consultant	contract cost (	\$1,000's)			\$3,1	00
Services completed by this firm (mm/yy) 08/20 Co					of consultar	nt services pro	vided by this fir	rm (\$1	,000's)	\$1,0	60

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL led the design of all bridges for this project, consisting of 1 new twin bridge on mainline I-10, 1 widened twin span bridge on mainline I-10, and rehabilitation of an existing bridge over mainline I-10 in Baton Rouge. HUVAL prepared final bridge plans for the I-10: Highland Rd. to LA 73 Design Build for the LADOTD in accordance with the AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual.

The I-10 mainline bridge over Highland Rd. consisted of a full replacement of 2 existing twin structures utilizing a 3-span structure which included 2 prestressed girder spans and 1 steel plate girder span of 190'. The superstructure is supported by column bents and pile bents that combine the EB and WB into one bridge structure. In order to maintain high volume traffic on I-10 while reconstructing the bridge, the new bridge had to be constructed in 3 separate phase.

The I-10 bridge over Bayou Manchac consisted of widening of 2 existing slab span structures supported by pile bents. The widening of these structures occurred toward the centerline of the project so traffic could be maintained during construction.

LA 928 consisted of a bridge rehabilitation/girder replacement/span jacking of the existing 4 span prestressed girder structure. The rehabilitation consisted of repairing spalls, cracks, and cleaning. The girder replacement was necessary since a girder had been struck by an over height vehicle. The bridge also required the jacking of spans to facilitate the necessary vertical clearance of the new widened roadway section.

Huval performed 100% of the work for this project in the State of Louisiana.

#### Key Project Members:

David S. Huval, Sr., Principal Robert Schmidt, Project Manager Colby Guidry, Project Manager/Lead Engineer Justin Peltier, Design Engineer Reid Romero, Design Engineer



In order to maintain high volume traffic on I-10 while reconstructing the bridge, the new bridge had to be constructed in 3 separate phases.

Page 43 of 86 Firm Name: Huval & Associates, Inc.

Firm name	Huval & As	sociates,	Inc.		Past Performance Evaluation Discipline(s)*Bridge				Bridge		
Project name	Kansas Lane – Gar	rrett Road Co	onnector				Firm responsi	bility (	(prime or su	ıb?)	Sub
Project number	Project number   H.007300   Owner's nar					D					
Project location Monroe, Louisiana						Owner's P	roject Manager	Cath	nerine Mast	in, P.I	E.
Owner's addre	ss, phone, email	1201 Cap	itol Access Ro	oad, I	Baton Roug	ge, LA 7080	4, (225) 379-1652	2, Catł	nerine.mast	in@la	ı.gov
Services comm	nenced by this firm	Tot	al consultar	nt contract c	ost (\$1,000's)			\$300	00		
Services completed by this firm (mm/vy) On-Going					t of consult	ant services	provided by this	firm (	(\$1,000's)	\$650	)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL leads the design of all bridges for this project, consisting of 1 new bridge over I-20, 1 new bridge over LA 594 and the KCS Railroad and preservation of the existing Garrett Road bridge over I-20. HUVAL is preparing final bridge plans for the LADOTD in accordance with the AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual.

The new Garrett Road Bridge over I-20 consists 4, LG-36 girder spans providing a total bridge length of 380'-0". The superstructure is supported by concrete column bents and pile footings. The Kansas Lane– Garrett Road Connector bridge consists of a 555'-0", 3-span continuous steel plate

girder superstructure with LG-36 girder approach spans. The total bridge length is 1,235'-0". The superstructure is supported by concrete column bents and pile footings. The bridge will span over LA 594 and completely span over the KCS Railroad right-of-way. Preservation of the existing Garrett Road bridge consists of an epoxy deck overlay, repairing spalls and cracks, installing new guard rail and a class 3 concrete finish. Once the estimated \$50 million project is complete, it will provide an upgraded interchange at I-20 and Garrett Road and the direct connection of Garrett Road to Kansas Lane.

Huval & Associates, Inc. performed **100%** of the work for this project in the State of Louisiana.

### Key Project Members:

David S. Huval, Sr., Principal Thomas Gattle, Road Design Engineer Justin Peltier, Lead Bridge Design Engineer Reid Romero, Bridge Design QC/QA



Firm name	Hu	ival & Asso	ociates, I	nc.		Past Performance Evaluation Discipline(s)*				Bridge	
Project name	Bell	e Chasse Bridge	& Tunnel R	eplacement F	ublic-P	rivate Partn	ership Project	Firm responsi	ibility	(prime or	Prime
								sub?)			
Project number		H.004791		Owner's n	ame	LADO	ΓD				
Project location	1	Belle Chasse,	Louisiana				Owner's Proj	ect Manager	Nich	nolas Olivier, P	.Е.
Owner's addre	ss, pł	none, email	1201 Capi	itol Access ]	Rd. Bat	on Rouge,	LA 70804-924	45; (225)-379-1	133;		
			nicholas.o	livier@la.g	ov						
Services commenced by this firm (mm/yy) 08/18 To						consultant	contract cost (S	\$1,000's)		\$8,	538
Services completed by this firm (mm/yy) Ongoing Co					Cost o	f consultar	nt services prov	vided by this fir	m (\$1	,000's) \$6,	494

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL is the Lead Designer on the Traylor/Massman DBJV and Plenary Infrastructure team for the new Belle Chasse Bridge Public-Private Partnership Project, including urban arterial approach roadways and toll system.

HUVAL led the winning design by crafting an alternative technical concept (ATC) including numerous access management, Complete Streets, super street, and traffic signal design features. Green Infrastructure design of the multiacre infield area of the new bridge significantly reduces runoff from the project. This winning ATC significantly reduced the amount of new rightof-way and displacements needed to construct the project and simultaneously improves traffic operations in the constricted corridor.

The Belle Chasse Project consists of replacing an existing vertical lift bridge/tunnel pair on Belle Chasse Highway (LA 23) with one four-lane fixed span bridge over the Gulf Intracoastal Waterway (GIWW). This project will improve connectivity from Lapalco Boulevard (LA 248) to Woodland Highway (LA 406). The project includes a toll on the new bridge to help fund construction cost as well as operations and maintenance for the duration of the toll.

The Rio Grande Railroad is directly adjacent to the project corridor and also crosses the GIWW. It requires numerous atgrade roadway crossings, signalized intersections, and navigation protection and lighting. HUVAL has coordinated these elements of the project with the Railroad to enable the project to meet contracted schedule requirements.

Huval & Associates, Inc. performed 100% of the work for this project in Louisiana.

#### Key Project Members:

David S. Huval, Sr., Principal Bob Schmidt, Design Manager Thomas Gattle, Roadway Design Michelle Helminger, Roadway Design Rudy McLellan, Lead Bridge Design Matthew Hebert, Bridge Design Colby Guidry, Design QC



Firm name	Huval & As	sociates,	Inc.		Past Perfo	rmance Evalua	ation Discipline	(s)*	Bridge	
Project name	I-49 @ Verot Sc	hool Road					Firm responsib	oility (p	orime or sub	o?) Prime
Project number   H.011235.5 Owner's name   LADOTD										
Project location Broussard, Louisiana Owner's Project Manager Cory Landry, P.E							Ξ.			
Owner's address	ss, phone, email	1201 Capit	ol Access	Rd., Ba	ton Rouge	, LA 70804, (2	225) 379-1065, 0	cory.la	ndry <u>@la.go</u>	V
Services commenced by this firm (mm/yy) 6/16 Total consultant contract cost (\$1,000's) \$3							\$3,064			
Services compl	eted by this firm	(mm/yy)	Cost o	of consultar	nt services pro	vided by this fir	m (\$1,	000's)	\$713	

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

HUVAL leads a group of firms providing preliminary engineering and related services to construct 2.4 miles of mainline freeway and an interchange at the intersection of I-49 South/US 90 and Verot School Road. The project consists of an above grade bridge structure on Verot School Road that traverses over the I-49 South/US 90 mainline roadway and the parallel railroad. The project also includes one-way frontage roads on both sides of the mainline roadway, a two-way collector service road east of the mainline roadway, and a new alignment of Verot School Road from the interchange to an existing bridge structure approximately 600' west of its intersection with LA 182 (Pinhook Road). A roundabout will be utilized as the intersection between the reconstructed and realigned Verot School Road and South College Drive.

Huval was given a Notice to Proceed in July of 2016 which began Phase 1 of the design project. Phase 1 consisted of a topographic survey, SUE services, traffic engineering analysis, conceptual roadway design and bridge design, preliminary geotechnical study and public meeting and outreach. The goal of Phase 1 was to analyze and update the Record of Decision (ROD) Conceptual Layout and assess the limits of the updated concept compared to that of the ROD Concept. Phase 2, the Preliminary Plan portion of the project, began in May of 2018 and will complete in March 2022.

During the Preliminary Plans portion, as the prime consulting firm, Huval is responsible for overall project management, lead bridge design, roadway design and drainage design.

HUVAL is performing 100% of this work in the State of Louisiana.



#### Key Project Members:

David Huval, Sr., Principal, Structural Design Thomas Gattle, Project Manager Nick Helminger, Design Engineer Michelle Helminger, MOT, Design Justin Peltier, Design Engineer



Firm name	Huval & Ass	sociate	s, Inc.		Past Performance Evaluation Discipline(s)*Bridge				Bridge	
Project name	I-49 South-US 90	Albertso	on Pkwy to A	mbassa	ador Design	n Build	Firm respor	sibility (	prime or sub	?) Sub
Project number	me	LADO	TD							
Project location	Broussard, Lou	uisiana				Owner's	Project Manager	Pegg	gy Jo Paine, l	P.E.
Owner's address,	phone, email	1201 Ca	pitol Access	Rd., Ba	ton Rouge	, LA 7080	4, (225) 379-106	5, peggy	.paine@la.go	OV
Services commer	nced by this firm (m	nm/yy)	01/15	Total	Total consultant contract cost (\$1,000's)				1	N/A
Services complet	Cost o	of consultar	nt services	provided by this	firm (\$1	,000's) S	\$1,006			

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

Huval & Associates, Inc. (HUVAL) prepared final bridge plans and live load rating reports for the project in accordance with the AASHTO LRFD Bridge Design Specifications, Bridge Design & Evaluation Manual, American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual, and the BNSF Guidelines for Railroad Grade Separation Projects. The project required a new US 90 overpass structure at Albertson Parkway and also required that the existing US 90 BNSF Railway overpass structure to be replaced. This work had to be performed while maintaining two lanes of vehicular traffic in each direction. HUVAL was also responsible for the design of the frontage road bridges over the BNSF Railway.

The US 90 BNSF Railway overpass was designed with a 34.1 degree skew and required three construction phases in order to maintain vehicular traffic. The approaches are 120 ft. BT-72 p.p.c. girders spans and the main span is a 136 ft. BT-72 p.p.c. girder span. The superstructure is supported by concrete column bents and pile footings. The overall bridge width is 125'-6". The frontage road bridges also consists of BT-72 p.p.c. girder spans supported by column bents and pile footings.

The US 90 Over Alberton Parkway overpass consists of a BT-72 p.p.c. girder bridge with 120 ft. approach spans and a 136 ft. main span. The superstructure is supported by concrete column bents and pile footings. The overall bridge width is 125'-6".

Additionally, HUVAL provided construction engineering services for the Contractor.

HUVAL is performing 100% of this work in the State of Louisiana.

#### Key Project Members:

David S. Huval, Sr., Principal
Thomas M. Gattle, Project Manager/Lead Engineer
Colby Guidry, Design Engineer
Matt Hebert, Design Engineer
Justin Peltier, Design Engineer



Firm name	Civil Design &	Construc	tion, In	c.	Past Perfor	mance Evaluat	ion Discipline(s)*		Surveying	
Project name	Rural Bridge Initiativ	ve					Firm responsibili	ity (pri	ime or sub?)	Sub
Project number	H.013955, H. 0139	56, etc.	Owner's	name	LADOT	D				
Project location	Various Parishes,	LA				Owner's Proje	ect Manager	(Sub	to BKI)	
Owner's address	, phone, email N	lot Known								
Services commen	nced by this firm (mm.	/yy)	07/20	Total	consultant co	ontract cost (\$1	,000's)		N	'A
Services completed by this firm (mm/yy) 04/				Cost c	of consultant	services provid	led by this firm (\$	51,000	's) \$3	38

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

**Project Description:** The intent of this project was all necessary engineering and related services required for developing plans for the replacement of 35 bridges on the State Highway System and/or local roadways, LA. CD&C provided survey for 6 of these sites. Those include H.013955, H.013956, H.013957, H.013958, H.013959, & H.013989. CD&C used Mobile LiDAR and traditional means and methods to survey the sites in accordance with LADOTD Location and Survey Manual.

#### CD&C's Role:

CD&C performed a topography within the existing right of way on each of the 6 sites our firm was tasked. CD&C also located all utilities within the designated areas of the bridge site and cross-sectioned each channel up and downstream of the bridge. Utilities were marked by LA One Call. **3D Terrestrial Scanning** was used in conjunction with traditional surveying means and methods to collect data for the project.

<u>Members Involved</u>: Karla E. Weston, P.E., Ralph Burgess, PLS, Chris Ballard, PLS, John Ewing, Phil Dupree, Jacob Stoehr, Jason Stoehr, Scott Benton, Madison Mills, LSI & Trenton Norris Performed in LA: 100%

Firm name	C	Civil Design & Construction, Inc.			ic.	Past Performance Evaluation Discipline(s)*   S			Surveyin	g	
Project name	LA	A 58: Petit Caille	ou Bridge Reha	abilitation	/ Sarah	Bridge		Firm responsibili	ity (pr	ime or sub?)	Sub
Project number	I	H.010006.5-3		Owner's	name	LADOT	D				
Project location		Terrebonne Par	rish, LA				Owner's Proj	ect Manager	Thon	nas Gattle (Huv	val & Assoc)
Owner's address	, ph	ione, email	922 W. Point	Des Mou	ton Rd.,	Lafayette, 1	LA 705007 / 33	87-234-3798 / <u>tgat</u>	tle@tg	gattle@huvala	assoc.com
Services comme	nce	d by this firm (n	nm/yy)	04/17	Total c	consultant co	ontract cost (\$1	,000's)			N/A
Services comple	eted by this firm (mm/yy) 07/17 Cost			Cost of	f consultant	services provid	ded by this firm (\$	1,000	's)	\$31	

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

**Project Description:** The purpose of this project is to provide a structural, architectural, mechanical, and electrical rehabilitation of the movable bridge and approaches that shall allow it to remain in service for an additional 50 years with routine maintenance along with various other repairs and updates to the site. CD&C was tasked with performing the topographic survey and DTM for this movable bridge structure and site.

**<u>CD&C's Role:</u>** CD&C performed a topography survey along LA 58 from Little Caillou Road to Bayside Drive within the existing right of way. Also, CD&C located all utilities within the designated areas of the bridge site and cross-sectioned this large bayou up and downstream of the bridge. Utilities were marked by LA One Call. **3D Terrestrial Scanning** was used in conjunction with single beam hydrographic surveying in addition to

traditional means and methods to collect data for the project. To obtain all critical information for design the bridge had to be scanned at both raised and lowered positions.

<u>Members Involved:</u> CD&C employees involved in the project included Ralph Burgess, PLS, Survey Manager; Christopher Ballard, PLS Survey Project Manager; Trent Norris, 3D Scanning Technician; John Ewing, Survey Technician

Performed in LA: 100%



Firm name	С	Civil Design & Construction, Inc.			Past Performance Evaluation Discipline(s)*Survey			Surveyin	ng			
Project name	I-1	10: LA 415 to Es	ssen Lane on I-	10 and I-1	12			Firm responsibili	ity (pri	ime or sub?)	S	Sub
Project number	I	H.004100		Owner's	name	LADOT	D					
Project location		West and East	Baton Rouge, I	LA			Owner's Proj	ect Manager	Nich	olas Olivier		
Owner's address	, ph	ione, email	1201 Capital	Access Ro	d, Bator	n Rouge, LA	70802 / 225-3	79-1232 / Nichola	s.olivi	er@la.gov		
Services commen	nce	d by this firm (n	nm/yy)	01/18	Total	consultant co	ontract cost (\$1	,000's)			N/A	
Services complet	Services completed by this firm (mm/yy) on-going Cost of			Cost c	of consultant	services provid	ded by this firm (\$	51,000	's)	\$296		

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

**Project Description:** This project is located in West Baton Rouge and East Baton Rouge Parishes in the cities of Port Allen and Baton Rouge, LA. A complete Topographic survey including all utilities (ASCE 38-02, QL "B") with depths and all drainage is required, along with Finish floor elevations of all buildings that fall within the survey limits. The survey begins 1,500 feet West of the western most entrance/exit ramps of the LA 415 and I-10 Interchange. From the I-10, I-12 split the survey shall proceed in southerly and easterly directions along the existing main alignment of I-10 for approximately 1.5 miles & I-12 for approximately 1.5 miles to end the route limits. CD&C's Role:

CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.



Members Involved: Karla E. Weston, P.E.; Ralph Burgess, PLS, Christopher Ballard, PLS; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief; Trent Norris, 3D scanning technician; John Ewing, Survey Tech;

Performed in LA: 100%

Firm name	С	Civil Design & Construction, Inc.			Past Perfor	Past Performance Evaluation Discipline(s)* Surv			Surveyin	g	
Project name	I-	I-10:TX State Line East of Coone Gully					Firm responsibili	ity (pr	ime or sub?)	Sub	
Project number	]	H.003184.5		Owner's	name	LADOT	D				
Project location		Calcasieu Paris	sh				Owner's Proj	ect Manager	Stan	ley Ard, PLS	
Owner's address	, pł	none, email	1201 Capital	Access Ro	d., Bato	n Rouge, LA	70802/225-37	9-1232/Stanley.ar	d@la.	gov	
Services commen	nce	d by this firm (n	nm/yy)	10/15	Total	consultant co	ontract cost (\$1	,000's)		-	N/A
Services complet	ices completed by this firm (mm/yy) 12/18 Cost			Cost c	of consultant	services provid	ded by this firm (\$	51,000	's)	\$443	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

**Project Description:** This was a 6-lane widening project on I-10 in Calcasieu Parish. The project limits extended from the foot of the Sabine River Bridge (approximately 0.5 miles east of the state line) to a point approximately 2000 feet east of the beginning of the existing 6-lane section (located East of Coone Gully). The survey width of the project was from apparent right of way to apparent right of way and 500 feet past the gore along each of the on and exit ramps.

• In 2018, CD&C was supplemented to extend the original limits of this survey approximately 1500' and to pick up several other areas of additional topographic updates.

**CD&C's Role:** CD&C performed a complete topographic survey in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation Procedures for this project. A topographic survey was already completed at all bridge sites located within the limits. The survey included all utilities with depths and information, all drainage structures, and all survey DTM and improvement features that fell inside the survey limits. Due to traffic concerns **3D Terrestrial Scanning was utilized for the location of roadways and traditional means and methods were used to complete the topographic survey on this project.** The final submittal of the survey was a combination of the supplied data from LADOTD for the bridges with the current survey that was completed for this project.

<u>Members Involved</u>: CD&C employees involved in the project included Karla E. Weston, P.E.; Ralph Burgess, PLS, Survey Manager; Christopher Ballard, PLS Survey Project Manager; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief; Trent Norris, 3D Scanning Technician; John Ewing, Survey Technician, Scott Benton, 3D Scanning Technician. Performed in LA: 100%





Firm name	C	Civil Design & Construction, Inc.			IC.	Past Performance Evaluation Discipline(s)*			Surveyin	g	
Project name	V	erot School Road	1					Firm responsibili	ity (pr	ime or sub?)	Sub
Project number	]	H.011235		Owner's	name	LADOT	D				
Project location		Lafayette, LA					Owner's Proj	ect Manager	Thon	nas Gattle (Huv	al & Assoc.
Owner's address	, ph	ione, email	922 W. Point	Des Mou	ton Rd.,	Lafayette, ]	LA 70507/337-	234-3798/tgattle@	yhuva	lassoc.com	
Services commen	nce	d by this firm (n	nm/yy)	08/16	Total o	consultant c	ontract cost (\$1	,000's)		-	N/A
Services complet	ted	by this firm (n	nm/yy)	01/18	Cost o	f consultant	services provid	ded by this firm (\$	1,000	's)	\$435

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

**Project Description:** This project is located in Lafayette Parish between Lafayette Regional Airport and Broussard, LA. The project is for the proposed widening of US 90/I-49 South and realignment of Verot School Road. A topographic survey was performed along the entire proposed route as well as an existing drainage map. This included a complete topographic survey of all utilities with depths, drainage and finished floor elevations of all buildings that fell within the designated survey limits. Also, CD&C was required to coordinate with the topographic survey of the adjacent I-49 Connector project and include required portions of the I-49 Connector project with the survey of this project.

<u>CD&C's Role:</u> CD&C performed a complete topographic survey of the project site by using **3D Terrestrial Scanning in conjunction with traditional means to complete the survey. Control was set for the scanning throughout the project limits.** Coordination with Cardno, Inc. (Team member) was necessary for the location of all utilities in the project area. CD&C also coordinated with all the property owners for access to the properties and also meet with safety advisors for the industrial business that were impacted. The survey included coordination with the ongoing I-49 Connector project and merging of that survey to the CD&C survey in order to make a complete project for the area. CD&C also researched and

compiled an existing right of way linework for the prime consultant to use for exhibits for the project. In order to complete the survey CD&C also had to coordinate with BNSF railroad for access to BNSF's rail.

<u>Members Involved:</u> Karla Weston, PE; Ralph Burgess, PLS Survey Manager; Christopher Ballard, PLS Survey PM; John Ewing, Survey Tech; Trent Norris, 3D Scan Tech; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief;



Performed in LA: 100%

Firm name	<b>Bluewing Civ</b>	il Consul	ting, LLC		Past Perfo	rmance Evalu	ation Discipline	(s)*	Road		
Project name	LWI Modeling C	LWI Modeling Contract Region 5					Firm responsibi	ility (j	prime or sul	) S	ub
Project number	4400017091		Owner's nat	ne	LADOT	TD					
Project location	n Southwest, L	A Region 5				Owner's Pro	ject Manager	Chri	stopher Kno	otts	
Owner's address	ss, phone, email	PO Box 9	4245 Baton R	ouge	, LA 70804	4/225-379-12	34/christopher.k	notts(	@la.gov		
Services comm	enced by this firm	n (mm/yy)	11/20	Tota	l consultar	nt contract cos	st (\$1,000's)			\$57,00	00
Services compl	eted by this firm	(mm/yy)	On-Going	Cost	t of consult	tant services p	provided by this f	firm (	\$1,000's)	\$170	

H&H subconsultant to HDR Engineering, Inc. for LWI Region 5 which consists of the Teche-Vermilion and Mermentau River Basins. Tasks 1 involved data gap analysis and collection of available models and other watershed datasets (data, surveys, historical floods, high water marks, environmental concerns). Task 2 will include development of H&H models for Lacassine Bayou. Other roles will include stakeholder engage and community outreach throughout the watersheds.



### Key Project Members:

Alex Guillory, CFM, PE, Principal Drewe Burns, PE Aaron Enlund, H&H Engineer Technician Ty Westerman, H&H Engineer Technician

Lacassine Bayou Model – 1D/2D RAS Model of Bellard Rd. Bridge location

Firm name	<b>Bluewing Civil Consulting, LLC</b>				Past Perfo	rmance Evalu	ation Discipline	(s)*	Road		
Project name	St. Mary St. Bridge Replacement (Recall #072)			706)		Firm responsibi	ility (	prime or sub	?)	Prime	
Project number	· 222003		Owner's	name	Jeff Day	vis Parish Pol	ice Jury				
Project location	n Elton, LA					Owner's Pro	ject Manager	Ran	dy Ringuet		
Owner's address	ss, phone, email	321 E Plaqu	emine St.	Jenning	gs, LA 705	546/ 337-824-	4792/randy@jdp	opj.ne	t		
Services comm	enced by this firm	n (mm/yy)	11/20	Total	consultan	t contract cost	t (\$1,000's)			\$10	
Services compl	eted by this firm	(mm/yy)	Current	Cost	of consulta	ant services pi	ovided by this fi	irm (\$	1,000's)	\$10	

Project include engineering, bid package production, and utility coordination for the reconstruction of St. Mary St. Bridge. Analysis also included scour analysis as required by LA DOTD.





Key Project Members:

Alex Guillory, CFM, PE, Principal Drewe Burns, PE Aaron Enlund, H&H Engineer Technician Ty Westerman, H&H Engineer Technician

Firm name	<b>Bluewing Civil Consulting, LLC</b>			]	Past Performance Evaluation Discipline(s)*         Road					
Project name	Gravity Drainage 5 – Maplewood Estates Floc				l Study		Firm responsibi	ility (j	prime or sub?	) Prime
Project number	219016		Owner's nar	ne	Gravity Dra	ainage 5				
Project location	n Sulphur, LA				Ov	wner's Pro	ject Manager	Bran	ndon Mounce	
Owner's address	ss, phone, email	1331 Swis	sco Rd. Sulph	ır, LA	70665, 337-0	625-3851,	gravitydrainage:	5@su	ddenlinkmail	com
Services comm	enced by this firm	n (mm/yy)	02/19	Total	l consultant co	ontract cos	t (\$1,000's)		\$	72
Services compl	eted by this firm	(mm/yy)	On-Going	Cost	of consultant	services p	rovided by this f	firm (	\$1,000's) \$	41

Bluewing Civil Consulting provided Gravity Drainage District 5 of Ward 4 a study of the Maplewood Estates Subdivision in Sulphur, LA. This portion of the City of Sulphur has experienced massive recent growth, and unpermitted developments blocked a critical natural drainage outfall. BWC utilized 1D/2D models and custom conservation of energy analyses to determine the loss of hydraulic efficiency, and design a new drainage outfall to replace a portion of the lost hydraulic capacity. Stormwater improvements connect to existing drainage infrastructure, and results show a flood- level reduction of 1.3' for the upstream homeowners. BWC are currently assembling a public bid package for these drainage improvements.



1D/2D model results

#### **Key Project Members:**

Alex Guillory, CFM, PE, Principal

Firm name	<b>Bluewing Civ</b>	Bluewing Civil Consulting, LLC				Past Performance Evaluation Discipline(s)* Road				
Project name	Gravity Drainage 5 - David Bayou Flood Stud				У		Firm responsib	ility (j	prime or sub:	?) Prime
Project number	219022		Owner's nat	ne	Gravity	Drainage Dis	strict 5 of Ward 4	1		
Project location	n Sulphur, LA					Owner's Pro	oject Manager	Bran	ndon Mounce	•
Owner's address	ss, phone, email	1331 Swis	sco Rd. Sulph	ur, LA	A 70665, 3	37-625-3851	, gravitydrainage	5@su	ddenlinkmai	.com
Services comm	enced by this firm	n (mm/yy)	02/19	Tota	l consulta	nt contract co	st (\$1,000's)		9	520.25
Services compl	leted by this firm	(mm/yy)	On-Going	Cost	of consul	tant services	provided by this	firm (	\$1,000's) \$	512

BWC utilized a coupled 1D/2D coupled urban flood model to estimate flood impacts to a historic neighborhood of Sulphur, LA which is heavily impacted by decades of surrounding urban expansion. Utilizing field survey data; local stakeholder surveys and reports of historic flood events; and aerial LiDAR data, BWC calibrated a local existing conditions H&H model and utilized this calibrated model to design flood mitigation measures for the locally impacted residents. Improvements include regional detention and subsurface drainage

#### **Key Project Members:**

Alex Guillory, CFM, PE, Principal



Local LiDAR elevation data and plotted HWMs

Firm name	<b>Bluewing Civ</b>	Bluewing Civil Consulting, LLC				rmance Evalua	tion Discipline	(s)* Road		
Project name	Lake Charles Me	Lake Charles Memorial Hospital Behavioral				ill Mitigation	Firm responsi	bility (prime or		Prime
							sub?)			
Project number	217006		Owner's nar	ne	Pomaric	o Design Stud	io Architect			
Project location	Lake Charles,	, LA				Owner's Proj	ect Manager	Michael Poma	rico	
Owner's address	ss, phone, email	19 Front St	. Newburgh, N	Y 1255	50, 845-56	1-0448, mike@	healthcaredesign	.com		
Services comm	enced by this firm	n (mm/yy)	03/17	Total	consultar	nt contract cost	(\$1,000's)		\$16	5
Services compl	pleted by this firm (mm/yy) 06/18 Co			Cost	of consult	ant services pr	rovided by this	firm (\$1,000's)	\$16	5

Bluewing Civil Consulting provided Pomarico Design Studio an engineered mitigation plan for a 15.5 acre Lake Charles Memorial Hospital expansion. A hydraulic norise analysis using HEC-RAS was prepared to model the removal of necessary floodplain fill, while also accounting for exempted items such as building pads and driveways. The resulting engineered detention pond served to reduce the post-development stormwater runoff for the 10-year event below pre- development conditions; and provided compensating floodplain storage volume to mitigate losses from development fill required for construction separate from drives and building foundations.

# Local pre vs post floodplain extents of LCMH Archer Behavioral Institute

# Key Project Members:

Alex Guillory, CFM, PE, Principal

# 18. Approach and Methodology:

# 0. Introduction

The US 190 UPRR Overpass project near Opelousas will replace two existing bridges over Union Pacific Railroad and two additional bridges over Little Bayou Teche. The project will include preliminary plans & final plans with the designer being responsible for Bridge Design, Roadway & Drainage Design and Survey. Huval & Associates (HUVAL), as the prime consultant, has assembled a team to meet the terms of the project scope most successfully.

HUVAL specializes in complex bridge design, project management, and construction for LA DOTD's most challenging projects. The US 190 Overpass project requires a strong structural project manager to guide the design portion of the project. Working hand-in-hand with the selected subconsultants, HUVAL is in a position to provide all services required by the scope of the project for the life of the project.

HUVAL has a unique understanding of the general project site through multiple projects executed in the Opelousas area. This experience includes new bridge and road design and existing bridge rehabilitation. Local knowledge results in a better understanding of the desires of the local LA DOTD District engineers, knowledge of general geotechnical site conditions, and local traffic concerns. Of particular note is HUVAL's rehabilitation work on bridges throughout District 03. A personal understanding of the type of existing structures and local constraints allows HUVAL to provide a context sensitive solution with replacing existing bridges.

In addition to our unique project understanding, the core strengths of our team members for this project are below:

#### HUVAL **Overall Project Manager and Bridge Design** Lead.

HUVAL specializes in complex bridge design, project management and roadway design for LA DOTD's most challenging projects.



Civil Design & Construction (CD&C) is a woman owned land surveying firm. CD&C and their highly skill staff are experts at providing guality LA DOTD survey.

# Bluewing

# Hydraulics Lead

Bluewing Civil Consulting is a Louisiana based design firm which specializes in hydraulic modelling for complex watersheds and scour analysis for bridges.

# 1. Project Understanding

The US 190 Overpass project aims to replace four existing structures along US 190 near Opelousas. The first pair of structures are located directly east of the US 190 interchange with I-49 and span UPRR. The second pair of structures to be replaced are located approximately 3 miles east of the US 190/I-49 interchange and span Little Bayou Teche. US 190 is an east-west route which connects a significant portion of southern Louisiana parallel to I-10. It is frequently utilized as a detour route when traffic incidents occur on I-10 between Lafayette & Baton Rouge. The existing facility is a two-lane, two-way rural arterial in the project vicinity. Though the roadway is classified as rural, there are multiple driveways and roadway crossovers along this corridor.

### US 190 Over UPRR

The existing eastbound and westbound structures are 400' long bridges (28' clear width) which cross UPRR railroad (one track). The existing UPRR railroad is skewed approximately 45 degrees with respect to the bridge alignment. The existing eastbound structure consists of concrete codex bridge approach spans with a steel I-beam girder span over the railroad. The existing westbound structure consists of steel I-beam spans for the entire bridge length. In addition to spanning the UP Railroad, the bridge pair also spans Prudhomme Street east of the railroad tracks. This existing road serves as a service road connection to adjacent properties and only has 12'-6" vertical clearance per posted signs. The existing bridge piers violate UPRR requirements for horizontal clearance.

The existing roadway has a posted speed of 55mph in the vicinity of the bridges. The roadway consists of 2-12' lanes in each direction with 2' inside shoulders and 8'-10' outside shoulders. There are entrance/exit ramps located within 1000' of the west end of the existing bridge and service road connections located within 600' of the east end of the existing bridge.

# US 190 Over Little Bayou Teche

The existing eastbound and westbound structures are 120' long bridges (28' clear width) which cross Little Bayou Teche. The existing eastbound structure consists of concrete codex bridge spans while the westbound structure consists of steel I-beam spans.

The existing roadway has a posted speed of 65mph in the vicinity of the bridge. The roadway consists of 2-12' lanes in each direction with 2' inside shoulders and 8'-10' outside shoulders. There are roadway crossovers located immediately at each bridge end and multiple driveways along the approach roadway for both directions of travel.

This project presents multiple challenges:

- Maintenance of two lanes of traffic in each direction during construction
- Coordination with the UPRR on clearance requirements
- Limited existing apparent right-of-way at Little Bayou Teche
- Maintaining existing local access (services roads, driveway connections, roadway crossovers)

# 2. Project Schedule

The proposed project schedule includes Topographic Survey, Geotechnical Investigation, Environmental Investigation, ROW Services, Preliminary Plans, & Final Plans extending over a 1000-day contract time (approximately 33 months). A portion of these services (geotechnical, environmental, & ROW) are to be provided by LA DOTD but must be factored into the overall schedule.



HUVAL has had significant success in advancing design of projects through DOTD's

process in an accelerated manner based on our recent experiences on emergency bridge replacement projects and alternative delivery projects. We are committed to accelerate design on this project too, so it can get to construction sooner. We have prepared the potential schedule above which indicates completion of the project in approximately 22 months.

# 3. Scope of Services

The US 190 Overpass project has a total contract time of 1000 days. It is assumed that concurrent with the Preliminary Plans phase, a Categorical Exclusion will be obtained by DOTD prior to moving forward with Final Plans. The HUVAL team is significantly experienced in NEPA and prepared to assist DOTD if needed for the CE or if an EA may be needed based on the preferred design concept.

#### 3.1. Topographic Survey

Civil Design & Construction (CD&C) will provide the topographic survey services related to the US 190 Overpass project in accordance with DOTD Location and Survey Requirements. There is an existing survey of the US 190 over UPRR bridge replacement site, so it is anticipated that survey will only be required for the US 190 over Little Bayou Teche bridge replacement site.

Survey will include roadway surface, channel alignment & cross sections, adjacent property driveways and roadway tie-ins, and surface utilities. After GPS control points have been established, 3D terrestrial scanning will be utilized in the topographic survey of the bridge and hard surface area to minimize disruption to motorists and to increase the safety of the survey crews. Utilities will be initially identified via Louisiana One-Call. After the number and general location of subsurface utilities are known, a recommendation for specific areas in which to utilize SUE services will be made. Little Bayou Teche will be surveyed using hydrographic surveying equipment.

### 3.2. Preliminary Plans

HUVAL will lead the preliminary plans pursuit. Preliminary plans consist of complete roadway & drainage plans (including typical sections, plan/profiles, geometric layout, geometric details, & cross sections). The preliminary plans phase will define the roadway & drainage design parameters through the completion of a roadway design report and a drainage design report.

# 3.2.1. Roadway Design

HUVAL will lead the road design portion of the US 190 Overpass project. The design parameters will be established through the roadway design report preparation process. If any design exceptions or waivers are required, documentation will be provided during the preliminary plans phase. Per the 2016 Minimum Design Guidelines, the existing roadway may require minor adjustments to meet the current standards (should width, curve radius, etc.). The roadway design methodology will rely heavily on the Maintenance of Traffic (MOT) scheme which is determined in conjunction with the preliminary bridge plans development. US 190 east of the I-49 interchange appears to be classified as a rural arterial. There may be small differences in design criteria between the two bridge sites due to differences in design speed. Each individual bridge replacement site will receive an individual roadway design report.

Challenges and project constraints to be considered include the ability to efficiently maintain traffic during construction, minimizing right-of-way, and minimizing utility impacts. Additional challenges include minimizing disruption to adjacent businesses and residences during construction, and how to minimize disruptions to the I-49/US 190 interchange as well as the cross-street connections present at each bridge site.

#### 3.2.2. Hydraulic Design

HUVAL will lead and perform roadway design drainage for both locations of the project. BLUEWING will lead the hydraulic design for Little Bayou Teche to determine high water elevations and bridge scour. Hydraulic design is required for the following portions of the project:

#### US 190 Over UPRR

• General roadway drainage design for open ditch drainage (including cross drains).

#### US 190 Over Little Bayou Teche

- General roadway drainage design for open ditch drainage (including cross drains).
- Hydraulic modelling to determine 100yr water surface elevation in the channel for use in bridge design.
- Hydraulic modelling for scour analysis.

A hydraulic report will be generated as part of the preliminary plans phase portion of the project to document all drainage design assumptions and modelling. Results of the hydraulic modelling of the Little Bayou Teche will set the required minimum low chord

elevation for the bridges. BLUEWING will utilize HEC RAS and other hydrologic modelling programs to determine scour depths and high-water elevations for use in bridge and roadway design.

#### 3.2.3. Maintenance of Traffic

HUVAL will lead the maintenance of traffic (MOT) design during the Preliminary Plans phase of the project. MOT is particularly sensitive for this project because US 190 is frequently utilized as an alternative route for I-10 when traffic issues occur on the I-10 corridor between Lafayette & Baton Rouge. It should also be noted that with significant construction proposed for I-10 through Baton Rouge, US 190 may become slightly more traveled within the next 2-6 years.

There are multiple design solutions that affect the ability to maintain existing traffic pattern in different manners. Potential design solutions include:

- 1. Constructing two separate bridge structures in the existing bridge locations.
- 2. Constructing one bridge structure centered between the existing bridges.
- 3. Constructing one overbuilt bridge structure centered between the existing bridges.

These solutions apply to both bridge replacement sites (UPRR & Little Bayou Teche). The third option results in the most feasible solution to maintain two-lanes of traffic in each direction, though it does result in an overbuilt bridge (approx. 19' inside shoulder). This concept of phased construction of one overbuilt bridge structure is demonstrated below for the US 190 over UPRR bridge site. US 190 over Little Bayou Teche is similar.





A Transportation Management Plan (TMP) will be required for this project. HUVAL will follow EDSM VI.1.1.8 that outlines what is required for a TMP. Based on the TMP flowchart, a Level 2 TMP will be required. Along with specifying the correct TTC Details, HUVAL will coordinate the bridge / road design to facilitate the least disruptions to the traveling public.

#### 3.2.4. Preliminary Bridge Design

HUVAL will lead the preliminary bridge design. Preliminary bridge plans will consist of structure type size and location.

### US 190 Over UPRR

Replacement of these bridges will likely require raising the grade of the proposed bridge to meet UPRR railroad requirements. New bridge will require longer main spans

to provide additional horizontal clearance to the rail. A longer main span will result in an increase in structure depth which will require raising the existing grade. There are existing ramps/frontage roads within 900' of the west side of the bridge. There are existing roadway intersections within 600' of the east side of the bridge. Both of which could be affected.

If the overall bridge length must increase, there is a horizontal curve which starts approximately 130' from the end of the existing bridge. This horizontal curve may result in a curved bridge structure which adds to project complexity.

#### US 190 Over Little Bayou Teche

Maintaining existing low chord EL will be critical as raising the grade at this location could be problematic. There are existing roadway crossovers within 150' of the end of the bridge on both the east and west side of the bridge. Additional challenges include the unique end treatments required at the bridge ends to protect the bridge barrier and still provide access at the roadway crossovers.

# 3.3. Final Plans

# 3.3.1. Roadway, Hydraulic & MOT Design

Roadway, hydraulic, & MOT design will be substantially completed in the Final Plans phase of the project. HUVAL will internally coordinate with the final bridge design and make roadway design adjustments as necessary. HUVAL is proficient in utilizing the preliminary plans phase of a project to sufficiently vet potential future design issues and no major changes to roadway, hydraulic & MOT design are typically needed during the final plans phase of work.

Additional details will be developed to finalize roadway plans such as graphical grades, joint layouts (if concrete pavement is utilized), final channel grading (Little Bayou Teche) and final geometric details.

### 3.3.2. Bridge Design

Final bridge design begins once preliminary bridge plans have been approved and the final structure details such as rebar, bearing pads, joint types and layout, are developed. Bridge and roadway design will work in conjunction to ensure that the approach roadway and proposed bridge section are compatible. LRFR ratings for each substructure and superstructure elements will be prepared for each bridge structure. A final calculation package will be submitted.

# 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.

	Past			Remaining
Firm(s)	Performance	State project	Droiget nome	Unpaid
	Evaluation	number	rioject name	Balance**
	Discipline(s) *			
Huval	Bridge	S.P. H. 011235	I-49 South @ Verot School Road Lafayette Parish – Design Phase Supp. #1&2	\$91,846.00
Huval	Bridge	S.P. H.004774.5	Kanas Lane-Garrett Road Connector – Supp #1	\$33.015.00
Huval	Bridge	S.P. H.009497.6	LA 106: Bayou Bouef - Construction Services	\$18,549.00
Huval	Bridge	S.P. H.011808.5	LA 10: Company Canal – Construction Services	\$27,715.00
Huval	Bridge	S.P. H.010000.5-2	US 171 Over Calcasieu River – Construction Services	\$49,490.00
Huval	Bridge	S.P. H.011485.6	LA 336-1 Bayou Teche Bridge @ Breaux Bridge Construction Services	\$93,997.00
Huval	Bridge	S.P. H. 012650.6	Bridge Repair District 62 - Construction Services	\$25,337.00
Huval	Bridge	S.P. H.012451.6	Dist. 04 Bridge Repairs - Construction Services	\$20,456.00
Huval	Bridge	S.P. H.010006.5	LA 58 Petit Caillou Bridge Rehabilitation	\$1,481.00
Huval	Bridge	S.P. H.002868.5	Ambassador/BNSF Frontage Road Bridges	\$9,795.00
Huval	Bridge	S.P. H.003370	I-220/I-20 Interchange IMP & BAFB Access	\$116,000.00
Huval	Bridge	S.P. H.008226	Cheniere Spillway & Bridge Replacement	\$20,000.00
Huval	Bridge	S.P. H.004791	LA 23: Belle Chasse Bridge and Tunnel (HBI)	\$1,590,789.00
Univol	Dridge	S.P. H.001352.5	Comite Diversion Bridge at LA 67 – Construction Services	\$104 625 00
nuvai	Bluge	S.P. H.002273.5	Comite Diversion Bridge at LA 19 & LA 19 Railroad – Const. Services	\$104,023.00
Huval	Bridge	S.P. H.004100	I-10 CMAR – Segment 1 Design	\$5,177,660.00
Huval	Bridge	S.P. H.014560.5	LA 94: Vermillion River Bridge Replacement	\$139,126.00
Huval	Bridge	S.P. H.014747	Southern University Ravine Project	\$314,910.00

Page 62 of 86 Firm Name: Huval & Associates, Inc.

CD&C	Surveying	4400017597	Rural Bridge Replacement Initiative (Districts 03, 07, 61, & 62)	\$21,000
CD&C	Surveying	4400013850	IDIQ for Design of Safety Projects (Downtown Greenway LA Connector	\$27,000
			-BR)	
CD&C	Surveying	4400011199	IDIQ contract for ADA Design Projects (Sidewalk Improvements to	\$18,000
			comply with ADA requirements – St. Tammany Parish)	
CD&C	Surveying	4400011225	IDIQ for Bridge Preservation (Southern University Ravine)	\$58,000
Bluewing Civil Consulting, LLC	Road	4400017091	Louisiana Watershed Initiative (LWI) Modeling Contract	\$168,020

(Add rows as needed)

DO NOT SUM

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

** Round to the nearest dollar. <u>**Do not**</u> round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

20. Certifications/Licenses: If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

() CONTRACTOR (CONTRACTOR (CONTRACTOR )	
The American Traffic Safety	The American Traffic Safety
Services Association	Services Association
Hereby recognizes that	Hereby recognizes that
Michelle Helminger	Michelle Helminger
has attended Traffic Control Technician-LA State Specific	Traffic Control Supervisor-LA State Specific
Training Course	Training Course
5/21/2019 to 5/21/2019	5/22/2019 to 5/23/2019 Date Training & Products Dept. Director
Date Baton Roune LA	Baton Rouge, LA
Location President, CEO	
The American Traffic Safety	The American Traffic Safety
Services Association	Services Association
Hereby recognizes that	Hereby recognizes that
Nicholas Helminger	Nicholas Helminger
has attended Traffic Control Technician-LA State Specific	Traffic Control Supervisor-LA State Specific
Training Course	Training Course
5/21/2019 to 5/21/2019 ATSSA	5/22/2019 to 5/23/2019 ATSSA Training & Products Dept. Director
Baton Rouge, LA	Baton Rouge, LA
Location President, CEO	Location President, CEO









Page 65 of 86 Firm Name: Huval & Associates, Inc.

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

If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank.



# US 190: UPRR Overpass Near Opelousas BRIDGE QUALITY MANAGEMENT PLAN

Prepared for:

Contract No. 440023434 State Project No. H.000445

> Route US 90 St. Landry Parish

> > Prepared by:

HUVAL & ASSOCIATES, INC.

Page 66 of 86 Firm Name: Huval & Associates, Inc.

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APPENDIX

1

#### 1. INTRODUCTION

The HUVAL Design Team has a goal of providing timely, efficient, and high-quality bridge engineering services to its clients. Safety is a top priority for the Team and its staff of qualified professionals. Successful completion of a project requires top-quality planning, teamwork, management, and a thorough review of all plans and documents.

In order to best serve the LADOTD, we have developed this Quality Control / Quality Assurance (QC/QA) plan. Since the LADOTD is our primary client, we have incorporated the QC/QA requirements of the LADOTD into this plan in order to produce quality sets of plans. According to the LADOTD's Construction Plans Quality Control / Quality Assurance Manual, a quality set of plans should have the following characteristics (The 5 C's): complete, consistent, clear, correct, and constructible. Our goal is to meet and exceed the requirements presented under the LADOTD Bridge Design Section Policy on Quality Control and Quality Assurance and the Guidance on QC/QA in Bridge Design in Response to NTSB Recommendation (H-08-17) in order to achieve the desired result of a quality set of plans.

The following QC/QA plan is proposed as a general document/guideline and may be modified based upon the specified scope of an individual project/task order and input from the LADOTD. The QC/QA Plan has been made to assure the LADOTD that the Huval Design Team understands the complexities associated with each project and are prepared to produce an accurate and complete submittal. The process assures that quality a set of Construction Plans will be submitted for Bid, thus, minimizing Plan Revisions and Plan Changes.

#### 1.1 Definition of Terms and Positions

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

<u>Quality Assurance (QA)</u>: Procedures of reviewing the work to ensure the quality controls are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications; those actions, procedures, and methods employed at the management and senior technical levels to observe and ensure that prudent quality procedures are in place and are being carried out and that the desired result of a quality product is achieved.

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

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

**Detailer:** Individual responsible for preparing drawings. This individual/s is responsible for development of the drawing through the use of required CAD technology.

<u>Reviewer:</u> Engineer responsible for ensuring that the QC process has been followed as outlined. The Reviewer is responsible for ensuring that submittals are complete and in accordance with LADOTD Bridge Design practices, policies and procedures

Engineer of Record: Qualified Engineer responsible for stamping the Final set of Plans and assuring that QC/QA certification is signed by all responsible parties.

<u>Team Leader</u>: Project Manager or Task Assignee responsible for overseeing the project and staff on the project. Responsible for conducting audits and ensuring quality control plans are adhered to for each discipline.

<u>Constructability Review</u>: A design review performed by the Contractor or appropriate construction services personnel to assess the feasibility of the proposed design from a construction perspective.

Design Criteria: Document agreed to by the LADOTD and Consultant prior to design that establishes the design guidelines and procedures to be used for the design of the project. The Design Criteria shall include a Checklist that lists all the criteria, factors, software and general guidelines to be used for each discipline required for this project. The Checklist is based upon the LADOTD Bridge Design Section Policy on Quality Control and Quality Assurance Appendix A: Design Criteria Checklist.

#### 2. BRIDGE DESIGN TEAM AND CONSULTANT RESPONSIBILITIES

As the Prime Consultant, HUVAL has selected experienced staff and Sub-consultant firms with qualified personnel to assist in the design of the required bridge structures for the project. Huval shall have the role of the project manager, Lead Bridge Designer and will also be responsible for the scope development of individual task orders. Huval shall also be responsible for QC/QA of the bridge/structural plans and design calculations.

#### 2.1 File Management

Refer to Quality System Procedure (QSP) No. 9 of the QA/QC Plan for document and file management control requirements.

#### 2.2 CADD

All drawings shall be performed in Microstation V8i and be CADD Conformed to LADOTD standards. HUVAL will be responsible for assuring that these requirements are met by all Consultants.

#### 2.3 LADOTD Roles

Quality control is the sole responsibility of the Design Team. The Team shall be responsible for completing quality control in accordance with this document and the QM prior to all submissions. LADOTD's role shall be limited to providing comments on the substance provided and not completely reviewing the plans for errors and omissions.

#### 3. DESIGN CRITERIA AND SOFTWARE

The following sections discuss the Design Team's procedures for Design Criteria and Software determination.

#### 3.1 Design Criteria

Design criteria will be created based on the requirements of the Bridge Design and Evaluation Manual. If applicable the design criteria shall include but not be limited to;

- Governing Design and Construction Specifications and Other References
- Design Assumptions and Design Exceptions
- General Information
- Hydraulic Design Criteria
- Design Factors
- Design Loads
- Limit States
- Bridge Barrier
- Guardrail
- Approach Slab
- Deck and Deck Drainage
- Bearings
- Joints
- Superstructure
- Substructure
- Piles
- Geotechnical Design
- Electrical/ Lighting Design
- As-Designed Rating Criteria
- Software

The design criteria will be submitted to LADOTD for review and approval prior to the start of design. The design criteria will be updated as necessary but resubmitted to LADOTD for review and approval.

Design memorandums will be issued to the Team for all major decisions that affect the design.

#### 3.2 Software

The Design Team shall adhere to LADOTD policies regarding software by using only design software which is pre-approved by the LADOTD. Design and drafting software to be used on the Project shall be listed in the design criteria. In the event software has not been pre-approved by the LADOTD, the Design Team shall adhere to the following stipulations in order to seek LADOTD approval of the software to be used.

A synopsis of the software shall be submitted to the Bridge Design Engineer Administrator for approval prior to use. The synopsis shall include the name of the software and the developer, a general description of the functions, a certification from the software developer stating that it is maintained in accordance with the latest AASHTO LRFD Bridge Design Specifications, and an account of the requester's experience and the experience of other organizations or agencies that use the software. Data/results from in-house software will not be accepted as part of the deliverable.

#### 4. DESIGN QUALITY MANAGEMENT PLAN

#### 4.1 Quality Management Overview

A specific Quality Control/Quality Assurance process has been established for the design of all bridges for the projects. This shall include design and detail reviews among the designated design team responsible for the design.

Detailed procedures for QC and QA are described in the following sections.

#### 4.2 Quality Control Process (QC)

#### **Design Calculations and Plans**

Quality control starts with the Designer. The Designer is responsible for producing and reviewing all calculations and details prior to being checked. It is the responsibility of the Designer to develop and check the details and plans produced by the Detailers.

The design checker is the engineer responsible for performing a full technical review of the design calculations, drawings, special provisions including Non-Standard items, and cost estimate. The design checker must be licensed by the State of Louisiana a professional engineer or certified as an engineer intern; however, if the designer is an engineer intern, the design checker must be a professional engineer. The detail checker is the individual responsible for performing a full review of the CAD drawings. The detail checker can be a designer or a detailer. The design checker and detail checker shall not be the ones who perform the original design and detailing.

During the design check process, the design checker must verify the accuracy of the designer's calculations, pay items, quantities, special provisions including Non-Standard items, and cost estimate. The design checker may perform a redline check of the designer's calculations or produce an independent set of calculations and compare the results; the supervisor or team leader shall determine which method to use

depending on the complexity of the project. Regardless of the checking method employed, the designer's calculations are the calculations of record and must be updated to correct any errors or omissions discovered by the design checker. The calculations of the design checker should also become a part of the calculation of record when independent checking calculations are produced. The design checker should also ensure that the drawings adequately and accurately present the design information.

During the detail check process, the detail checker must ensure the drawings are in accordance with the design information and CAD standards. All dimensions and quantity calculations must be verified.

The checker may begin the checking process at the completion of the entire design/detail process or may check components of the designer/detailer's work as it is completed. Likewise, the checker may provide feedback at the completion of the entire checking process or as each component of check is completed. Any discrepancies that arise should be resolved between the designer/detailer and the checker, and the calculations and plan details should be corrected accordingly. If the designer/detailer and the checker are unable to resolve their discrepancies, the issue should be brought to the attention of the supervisor or team leader.

The Design Checker shall review the calculations, document for correctness and completeness, and verify that the design is properly reflected in the plans and details.

- Items needing correction are marked in red.
- Correct items are highlighted in yellow.
- Correct full paragraphs (or pages) marked with a yellow diagonal or check mark
- For software calculations, the design checker may prepare an independent model or conform the correctness of the input/out using the designers software file.

When the checker is complete, all calculations and details should be highlighted and sent back to the designer. Any discrepancies are to be resolved prior to completion of the calculation package and noted.

Upon completion of the submittal by the Designer and Design Checker, the Reviewer shall review the calculation documents along with the details used to develop the calculations. The Reviewer is responsible for checking the plans for completeness and accuracy prior to a submittal. The Reviewer shall document their review.

- Agreement shown with a blue check mark
- Disagreement are discussed are shown in red.
- The review is sent back to the Designer. Any disagreements are to be resolved prior to completion of the submittal.

All reviews and comments shall be recorded and documented by the EOR.

#### 4.3 Quality Assurance Process (QA)

QA is defined as the procedures of reviewing the work to ensure the quality control procedures
are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications. Prior to submitting the plans to the Quality Manager (QM), the Reviewer is responsible for ensuring that the QC process is complete and that the design calculations, drawings, special revisions, and cost estimates are in accordance with LADOTD Bridge Design practices, policies and procedures.

The Reviewer shall verify the constructability of the plans and that critical structural areas are accurate and designed properly. The Reviewer provides the designer with any concerns or deficiencies observed in the design and plans. These issues are resolved prior to formal submittal to the DQM.

Upon completion of the QA process, the plans are submitted to the QM in accordance with the overarching Comite project CMAR QA/QC Plan.

#### **5. CERTIFICATIONS**

#### 5.1 Certifications and Forms

The Design Team shall create pertinent QC/QA forms for this project and shall require that the QC/QA process is followed, and the forms are signed by the responsible parties. Huval shall document and file these forms for each deliverable where required.

#### 5.2 Sealing of Plans

The Engineer of Record (EOR) is the Louisiana-licensed professional engineer who is assigned by the Design Unit Leader to seal the calculation, plans, and special provisions.

# APPENDIX

- Design Criteria Checklist
- Final Calculation Book Checklist
- QA Information Package Checklist
- QC/QA Certification
- Consultant Submittal QC/QA Certification
- Quality Audit Checklist
- Sample Check Print Stamps

# Design Criteria Checklist

Design criteria for each project shall include, but not be 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 Expectations

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
- Hydraulic design information (design water elevations, scour depth and scour elevation, etc.)
- Other relevant information
- ____ Design Factors

The ductility factor  $\eta_D$ , redundancy factor  $\eta_R$ , and operational importance factor  $\eta_I$  shall be listed in this section.

_ Design Loads

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

#### Limit States

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

# Bridge Barrier

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

# ____ Guardrail

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

# _ Approach Slab

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

# ____ Deck and Deck Drainage

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

#### ____ Bearing

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

# _____ Joint

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

# _____ Superstructure

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

# _____ Substructure

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

# Piles and Drilled Shafts

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

# ____ Geotechnical Design

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

# Mechanical Design

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

# ____ Electrical Design

____

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

# As-Designed Bridge Rating Criteria

All as-designed bridge rating criteria shall be included in this section.

#### **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
- <u>Construction Cost Estimate</u>
- 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 including the following information:

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

# **QA Information Package Checklist**

Project No.: TBD Project Description: TBD

 Calculation Book
 Plans
 Special Provisions
 Cost Estimate
 Other Documents

# **QC/QA** Certification

Project No.: TBD

Project Description: TBD

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						
EOR						

Page 80 of 86 Firm Name: Huval & Associates, Inc.

# Consultant Submittal QC/QA Certification

Project No.: TBD Project Description: TBD

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

Page 81 of 86 Firm Name: Huval & Associates, Inc.

# QUALITY AUDIT CHECKLIST

AUDITED AREA:			DATE(S) OF A	UDIT:	
AUDITOR:			AUDIT:		
AUDIT ITEM	REFERENCE	RENCE METHOD OF C VERIFICATION		CONFORMS	
				YES	NO
1. Have computer programs utilized been validated?	QMP Group D	Review validation records.			
2. Are calculation check prints available?	QMP Group B	Review originals and check prints			
3. Were calculations checked prior to drawing checking?	QA Folder, QMP Log	Review check p	rints.		
4. Are drawing check prints available?	QMP Group E	Review record prints.	set and check		
5. Are check prints of specifications available?	QMP Group A	Review record prints.	set and check		
6. Is checking of input to computer programs being accomplished?	QMP Group B	Review origina prints	als and check		
7. Are check prints of studies or report-type documents available?	QMP Group A	Review check p	rints.		

Q. Answers dama from a line and hard winter hains fallows 10	OA E-14-2	Descharge the standards	r	
8. Are procedures for marking up check prints being followed?	QA Folder	Review check prints.		
Checker - Vallow/Ped				
Checker - Tenow/Red				
Backchecker - Green				
Updater - Blue				
Verifier - Yellow				
10. Are check prints properly signed and dated?	QA Folder	Review check prints.		
11. Are plan reviews completed?	OMP Log	Review package to verify that	-	
	Quin Dog	comment sheets are available		
		comment sheets are available.		
12. Are the review comments incorporated into the final documents	QA Folder	Review for verification that		
or disposed of as otherwise noted?	~	Design Reviews comments have		
		been incorporated.		
		Review for verification that		
		comments from prior Design		
		Reviews have been		
		incorporated.		
		,		
13. Are check prints of graphic elements available?	QMP Group C	Review check prints.		
		100		
14. Are all checklists validated?	QMP Group D	Review check prints.		

#### SAMPLE CHECK PRINT STAMPS

#### **CHECKING PRINT**



#### AUXILIARY

CHECKING PRINT NO.

Checked by_____ Date_____

Back Checked by_____ Date_____

Corrected by_____ Date_____

Tracing Signed by_____ Date_____

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# 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
Civil Design & Construction, Inc.	Physical: 3251 Southern Pacific Road Port Allen, LA 70767 Mailing: PO Box 857, Port Allen, LA 70767	Karla E. Weston, PE, President <u>kweston@cdcbr.com</u>	225-765-1802
Bluewing Civil Consulting, LLC	604 Saint John St. Lafayette, LA 70501	Alex Guillory – alex@bluewingcivil.com	337-419-0911

(Add rows as needed)

# 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.

N/A