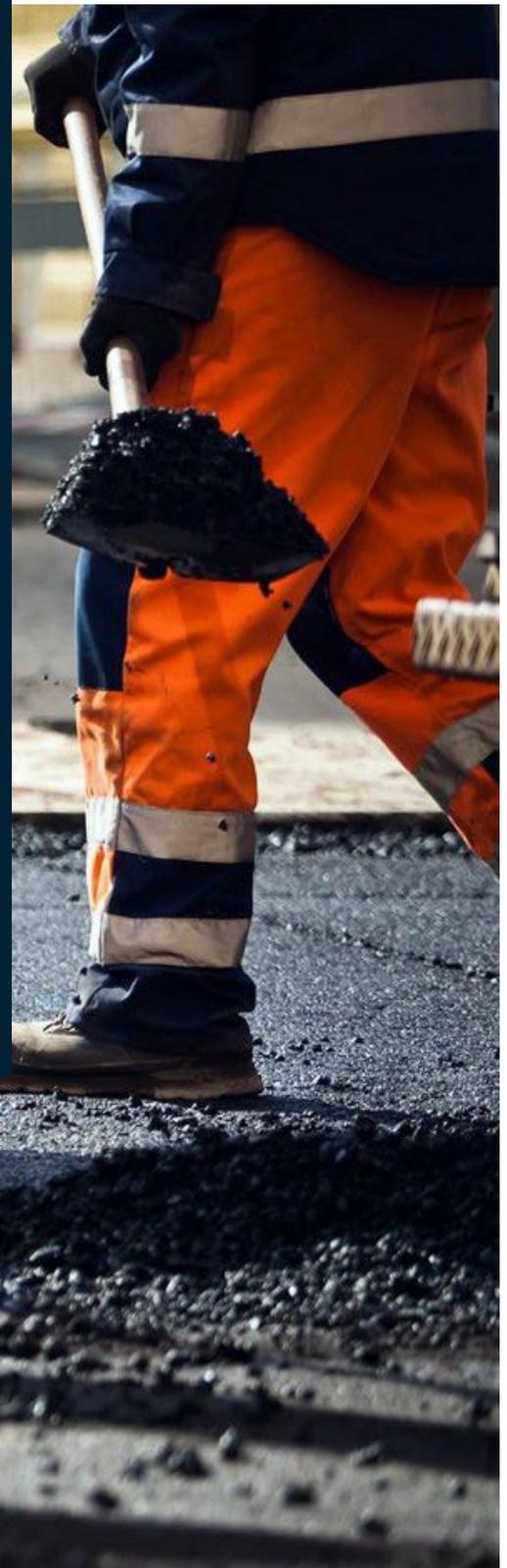


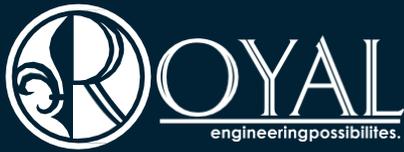
Routine Engineering Services for Streets Projects (SOQ 24-021)



PRESENTED TO
Jefferson Parish Government

SUBMITTED BY
Royal Engineers and Consultants

DATE
July 16, 2024



Jefferson Parish TEC Questionnaire: Royal Engineers and Consultants, LLC

A. Project Name and Advertisement Resolution Number:

SOQ 24-021 Routine Engineering Services for Streets Projects
Resolution Number 144319 Jefferson Parish Government

B. Firm Name & Address:

Royal Engineers and Consultants, LLC
1501 Religious Street
New Orleans, Louisiana 70130

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:



Michael L. Pugh, P.E., President (Fulfills Minimum Qualifications # 1, 2, 3)
1501 Religious St., New Orleans, LA 70130
O (504) 283-9400 | F (504) 283-9001 | mpugh@royalengineering.net
P.E. Civil 30911, LA Expires 03/31/2026

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

Michael L. Pugh, P.E., President (Fulfills Minimum Qualifications # 1, 2, 3)
1501 Religious St., New Orleans, LA 70130
O (504) 283-9400 | F (504) 283-9001 | mpugh@royalengineering.net
P.E. Civil 30911, LA Expires 3-31-2026

E. Please provide the number of employees whose primary function corresponds with each category:

<u>11</u> Administrative	<u>0</u> Estimators	<u>0</u> Specification Writers
<u>1</u> Architects (Licensed)	<u>0</u> Geologists	<u>2</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>0</u> Geotechnical Engineers	<u>0</u> Graduate Engineers
<u>9</u> Civil Engineers	<u>0</u> Interior Designers	<u>13</u> Project Managers
<u>11</u> Construction Inspectors	<u>0</u> Landscape Architects	<u>0</u> Clerical
<u>0</u> Ecologists	<u>0</u> Land Surveyor	<u>4</u> Grant/Funding Specialist
<u>0</u> Electrical Engineers	<u>0</u> Mechanical Engineers	<u>0</u> Sanitary Engineers
<u>6</u> Engineer Intern	<u>1</u> Environmental Engineers	<u>26</u> Sanitary Engineers
<u>0</u> Professional Land Surveyors		<u>84</u> TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES NO X

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1. N/A

2. N/A

H. Has this JOINT-VENTURE previously worked together? Please check:
 YES NO

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2. N/A		
3. N/A		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

None other than what is contained in Section E above.

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Michael Pugh, P.E., President

Project Assignment:

Principal

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

19

Education: Degree(s)/Year/Specialization:

BS / 1997 / Civil Engineering

Active registration: Year first registered/discipline:

P.E. 30911
Louisiana Expiration: 03/31/2026

Other experience and qualifications relevant to the proposed Project:

Mr. Pugh has over 29 years of experience in the design of roadway plans and the construction management of roadway, drainage, and sewer systems. He managed the St. Bernard Parish Roadway Restoration Program which has included the design, bidding, and construction management of 178 roadways with a construction value of nearly \$60 million. He has served as the Principal Engineer on a variety of sewer and drainage projects and is a Registered Professional Engineer in eight states, including Louisiana.

As Royal's Principal-In-Charge, Mr. Pugh is responsible for the company's overall project delivery and supervising all technical operations of the company including plan preparation, budgeting, cost control and monitoring, team supervision, engineering design, and construction management.

East Hardy Bridge Design and Replacement – New Orleans, Louisiana

Principal Engineer. The East Hardy Street Bridge was a two-lane bridge located on the Leaf River in Petal, MS that was identified for replacement through the Emergency Road and Bridge Repair Fund. Mr. Pugh participated in Design Reviews and served as Civil Engineering Subject Matter Expert for bridge design, layout, specifications, and probable cost.

FEMA Roadway Restoration Program – New Orleans, Louisiana

Principal Engineer on the Royal team hired to provide construction management and construction inspections for the Roadway Restoration Program in New Orleans. The Program's scope includes associated subsurface

drainage, sewerage, and water repairs. Construction services are being performed by multiple contractors under contract by DPW and overseen by Royal. Royal is providing construction inspections, data management, reporting, platform deployment, quality assurance, administration, pay applications, and closeout services. Staff includes on-site and back-office support personnel including qualified CMs and RIs.

MaxPave Roadway Program – New Orleans, Louisiana

Principal Engineer responsible for interagency coordination, project management, contract administration, construction management, assessment and resident inspection services for the CNO DPW and SWBNO combined utility rehabilitation initiative. The Program involves 50 to 75 service cuts weekly to conduct the needed point repairs to the sewer and water infrastructure. On-time, on-budget contract delivery; client service management; and civil engineering and utility impacts subject matter expert were Mr. Pugh's primary duties for this project.

Streetcar Expansion Program – New Orleans, Louisiana

Principal Engineer for the multi-phase program merging the rails of 3 major streetcar lines along the main Central Business District corridor in the City of New Orleans which impacts public and private underground utilities, communications, parks and roadways, local businesses and residents. As Principal, Mr. Pugh leads construction management services to include inspections, document administration, a portion of the engineering management, and change order management. This also involves field inspections to observe demolition, excavation, utility re-location, piling, concrete, asphalt, earthwork, and track-work to ensure compliance with drawings and specifications.

Roadway Restoration Program – St. Bernard Parish, Louisiana

Principal Engineer. Royal was hired to perform civil engineering, inspection, inventory, and construction management services. Specifically, Royal produced comprehensive cost estimates and CPM schedules to execute its design scope of work and to provide construction management services over multiple contractors. These projects include the restoration of all concrete and asphalt roadways, including associated infrastructure that suffered damage in St. Bernard Parish during Hurricane Katrina and the recovery process.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Beau Tate, P.E.

Project Assignment:

Senior Engineer

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

16

Education: Degree(s)/Year/Specialization:

BS / 1998 / Environmental Engineering, Minor- Civil Engineering

Active registration: Year first registered/discipline:

P.E. 30990
Louisiana Expiration: 03/31/2026

Other experience and qualifications relevant to the proposed Project:

Mr. Tate is Professional Engineer with 23 years of experience managing and delivering civil, coastal, and environmental projects for governmental and private organizations. His design and management experience includes projects and structures involving coastal restoration features, roads, bridges, wastewater treatment facilities, subdivisions, public buildings and associated infrastructure, public utilities, residential structures, and marine structures. He also has extensive experience performing site assessments, investigations, and remediation of contaminants such as asbestos, mold, and lead paint.

Mr. Tate has performed and coordinated engineering services for the LADOTD and the Office of Facility Planning and Control. He has designed road and bridge projects all across south Louisiana and has extensive experience among a variety of regulatory federal and state agencies.

Polly Lane Extension – Lafayette, Louisiana

Senior Engineer providing design services for the extension and connection of both existing dead-end streets of Polly Lane, inclusive of roadway reconstruction and widening to its existing section to Verot School Road. The approximate length of the new roadway is 1,080 linear feet and the length of improvements to the existing roadway is 930 linear feet.

Roadway Restoration Program – St. Bernard Parish, LA

Senior Engineer on team hired to produce comprehensive cost estimates and CPM schedules to execute its engineering design services as well as construction management services for multiple construction contracts. These projects include the restoration of all concrete and asphalt roadways, including associated infrastructure that suffered damage in St. Bernard Parish during Hurricane Katrina and the recovery process. Mr. Tate assisted in performing hydraulic calculations for these structures based on the same open-channel flow principles used by software suites such as the EPA SWMM model and HEC-RAS.

Bloski Avenue Extension – Belle Chasse, LA

Senior Engineer on the Royal team contracted by NAVFAC to construct a new asphalt roadway to serve personnel aboard the Naval facility. Bloski Avenue Extension brings the current existing roadway 1,300 feet across an area which was the former base golf course, to tie into Rinard Avenue.

City of Youngsville New Road Design – Youngsville, LA

Senior Engineer responsible for design, bidding, and construction management for a new road located in Youngsville. Design services include a drainage analysis of the area to quantify runoff and to incorporate subsurface drainage, as well as preliminary and final design submittals. Pre-construction and construction phase services include planning and coordination with the general contractor, technical review of all proposed construction material submittals, traffic engineering, and field verifications, and oversight.

Detente Street Rehabilitation – Youngsville, LA

Senior Engineer responsible for design, bidding, and construction management for the rehabilitation of Detente Road located in Youngsville. An alternative analysis was performed and the design of the selected mill and overlay of asphaltic pavement (including patching) option was completed. Pre-construction and construction phase services include planning and coordination with the general contractor, technical review of all proposed construction material submittals, traffic engineering, and field verifications, and oversight.

Rehabilitation of the World Trade Center – New Orleans, LA

Senior Engineer. Provided civil engineering services for the design and construction management of the Four Seasons New Orleans Hotel and Residences, formerly the World Trade Center of New Orleans. Oversaw of the development of the hydraulic/hydrologic drainage study and the preparation of all construction documents.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

Katherine Foreman, P.E.

Project Assignment:

Engineer, Design Team Lead

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

9

Education: Degree(s)/Year/Specialization:

BS / 2017 / Civil Engineering

Active registration: Year first registered/discipline:

P.E. 46031

Louisiana Expiration: 03/31/2026

Other experience and qualifications relevant to the proposed Project:

Ms. Foreman has nine years of experience in civil engineering design, including asphalt and concrete road design, sidewalks, potable water distribution systems, gravity sewer systems, flood control structures, commercial and residential site design, foundation design, and retaining walls. Her expertise includes familiarity with DOTD design manuals and specifications, ADA requirements, and AASHTO standards and the use of various software packages for H&H design and analysis such as HEC-HMS, HEC-RAS, DOTD HYDR programs, HY8, and Autodesk Storm and Sanitary Analysis. Ms. Foreman has significant experience preparing plans and specifications to LADOTD and local standards.

W. Metairie Avenue Over S. Suburban Canal Off System Bridge – Jefferson Parish, LA

Lead Engineer and Project Manager for DOTD Off-System Bridge (OSBR) replacement of an existing slab span bridge located in an urban area of Jefferson Parish. Ms. Foreman's responsibilities include managing all aspects of design and client relations, overseeing plan production in accordance with the Off-System Highway Bridge Program Guidelines, leading the hydraulic analysis and design for all viable alternatives for the bridge replacement per the DOTD Hydraulics Manual, and coordinating survey efforts. Services provided by Royal include topographic and boundary survey, preliminary plan production, right-of-way agreements and sketches, and environmental services, including solicitation of views, categorical exclusion clearance, wetland studies, and other information needed for the Environmental Clearance process.

Lafayette Parish Non-State Pvmt Markings, Lafayette Parish, LA

Assistant Project Manager for providing construction contract administration and construction engineering inspection services for the construction related to the nearly 14 miles of restriping of Cajundome Boulevard, East

Pinhook Road/Teurlings Avenue, Kaliste Saloom Road, Mudd Avenue, and Gendarme Road, in Lafayette Parish.

SLECA Road Repairs – Ashland Road and Detiveaux Road, Terrebonne Parish, LA

Lead Engineer. Ms. Foreman served as the Engineer of Record responsible for designing, and preparing plans and specifications, and the Hydrologic Modification Impact Analysis (HMIA) for this project, for which Royal provided engineering design, permitting, and construction administration and management services for two roadways providing access to SLECA's electrical distribution infrastructure in Houma, LA: Detiveaux Rd, a 1.5-mile long aggregate roadway providing access to the Bayou Dularge Main Feed, and Ashland Rd, a 2.3 mile long aggregate roadway providing access to the Ashland Substation.

CNO Street Repair - Leontine, Valmont, Camp, and Chestnut – New Orleans, Louisiana

Engineer Intern and Project Manager on the team providing Engineering Design and Construction Administration Services for the City of New Orleans for roadway enhancement and full reconstruction of streets and utilities in a portion of the Uptown neighborhood of New Orleans, Louisiana. Royal is providing mainline drainage design, water line replacement design, and sewer line replacement design for several streets in accordance with New Orleans DPW and SWBNO requirements. Responsibilities included performing drainage analyses to layout and size the proposed curb and gutter drainage system and coordinating preparation of AutoCAD drawings for Preliminary and Final Plans.

NOLA Capital Improvement Program, Milneburg Group B – New Orleans, Louisiana

Engineer Intern for the Recovery Roads 1 (RR1) 31 Milneburg Group B project which involved professional engineering design services for FEMA eligible street repairs within the Milneburg Group B neighborhood. Responsibilities included design activities such as street grading, stormwater drainage and calculations, sanitary, sidewalks and driveways, and potable water.

Bridge Rehabilitation & Replacement Program – St. Bernard Parish, Louisiana

Engineer Intern on the team providing engineering services to St. Bernard Parish Government for repairs, restorations, and replacement of Parish-owned roadway and canal crossings to Pre-Katrina conditions. Responsibilities included site layout, engineering, and coordinating preparation of construction documents for the replacement of the culvert canal crossing structures on 20 Arpent Canal at Mumphrey Rd. and Gallo Rd. in Chalmette, LA, and all associated infrastructure necessary to replace to current codes and standards, including HMGP measures.

Camellia - Settlers Trace Turn Lane – Lafayette, Mississippi

Engineer Intern and Project Manager on the team providing engineering services to the LCG for the design of a dedicated right-turn lane and second left-turn lane at the intersection of Camellia Boulevard and Settlers Trace Boulevard. Services include preparing plans and specifications for project construction, performing engineering design and analyses for the widening of the concrete roadway, evaluation of the existing drainage infrastructure, and identifying required modifications to the existing drainage system. Responsibilities included site layout, engineering calculations for evaluation of the storm drainage system, utility coordination, coordinating preparation of construction documents, as well as invoicing, deliverables, scheduling, resourcing, and client coordination.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

Ryan Hebert, P.E.

Project Assignment:

Engineer, Design Team

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

4

Education: Degree(s)/Year/Specialization:

BS | 2017 | Environmental Engineering

Active registration: Year first registered/discipline:

P.E. 0046577

Louisiana Expiration: 09/30/2024

Other experience and qualifications relevant to the proposed Project:

Mr. Hebert is a Professional Engineer with a degree in Environmental Engineering and has experience in construction operations for street, sewer, and water systems repair. Specific project experience includes catch basin cleaning, asphalt and pavement patching, ADA project elements, and water and sewer line repairs. Mr. Hebert provides inspection services and project and construction management support for Royal projects which includes assisting with project scheduling and coordination, quality control, and ensuring retention of administrative records.

FEMA Roadway Restoration Program – New Orleans, Louisiana

Assistant Project Manager responsible for construction administration and management services for pavement restoration efforts undertaken by the City of New Orleans Department of Public Works (DPW) as part of the CNO Capital Improvement Program. DPW currently has (2) construction contractors (GC's) under contract to perform routine maintenance under a requirements-based contract. These contractors are dispatched on a work order-based system to repair and restore pavement and associated infrastructure. These projects include pavement restoration, utility repair, and replacement (drainage only), sidewalks, ADA-Compliant Ramps, as well as replacement and repair to associated infrastructure.

MaxPave Roadway Program – New Orleans, Louisiana

Assistant Project Manager and Lead Inspector for the team providing part-time inspection for temporary roadway restorations of water and sewer cuts throughout the city. The program consisted of identifying over 1,000 service cuts and nearly 800 completed repairs in a matter of 6 months. Mr. Hebert is serving as lead inspector and assistant Project Manager and is responsible for maintaining quality assurance and control of all

field information captured by inspectors and is in charge of work order development.

Emergency Catch Basin Cleaning and Repair Program – New Orleans, Louisiana

Associate Inspector for the City's catch basin cleaning and repairs project. Royal provided over 50 inspectors with supporting construction administration personnel for the cleaning of more than 15,000 catch basins in 120 calendar days within the City of New Orleans. The program also included inspection and management for over 3,000 catch basin repairs. Mr. Hebert is responsible for quality assurance and control of all field information captured by resident inspectors, including daily review of quantifiable pay items and photos of the work to be quantified.

NAVFAC Pedestrian Facilities Assessment – Belle Chase, Louisiana

Engineer Intern responsible for the assessment & data analysis of Pedestrian Facilities the Naval Air Station Joint Reserve Base New Orleans. The assessment consists of capturing any deficiencies present within the base regarding the pedestrian facilities. Mr. Hebert also has the responsibility of ensuring all data captured is presented in the final project report.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

Cassidy Melancon, E.I.

Project Assignment:

Engineer Intern, Design Team

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

4

Education: Degree(s)/Year/Specialization:

BS /2020/Civil Engineering

Active registration: Year first registered/discipline:

E.I. 0034626

Louisiana Expiration: 03/31/2025

Other experience and qualifications relevant to the proposed Project:

Ms. Melancon is an Engineer Intern with a bachelor's degree in civil engineering and has four years of industry experience, including assisting with engineering and project management services. Her responsibilities in engineering range from various design tasks regarding drainage, roadway, and structural analyses to drafting and maintaining project files. Her project management assistance included reviewing inspector observations and quantities.

H.015009 W. Metairie Avenue Over S. Suburban Canal Off System Bridge – Jefferson Parish, LA

Ms. Melancon is an Engineering Intern responsible for site layout, roadway vertical curve design, guardrail layout, and supporting plan production for this DOTD Off- System Bridge (OSBR) replacement of an existing slab span bridge located in an urban area of Jefferson Parish. Services provided by Royal include topographic and boundary survey, preliminary plan production, right-of-way agreements and sketches, and environmental services, including solicitation of views, categorical exclusion clearance, wetland studies, and other information needed for the Environmental Clearance process.

SLECA Road Repairs – Ashland Road and Detiveaux Road, Terrebonne Parish, LA

For the Ashland Road section, Ms. Melancon was an Engineer Intern responsible for plan development, creating a topographic survey surface using point elevation data, and performing a Hydrologic Modification Impact Analysis (HMIA) to support the Coastal Use Permit process. Royal provided engineering design, permitting, and construction administration and management services for two roadways providing access to SLECA's electrical distribution infrastructure in Houma, LA: Detiveaux Rd, a 1.5-mile long aggregate roadway providing access to the Bayou Dularge Main Feed, and Ashland Rd, a 2.3 mile long aggregate roadway providing access to the Ashland Substation.

Odyssey House Parking Lot Design, New Orleans, LA

Engineer Intern responsible for development of design plans for an approximately 7854 square foot lot for the construction of an accessory parking lot including implementation of permeable pavement system to comply with City of New Orleans stormwater ordinances. Design tasks included preparing site grading plans, concrete joint layout, and performing pre- and post- development drainage calculations. Construction features include approximately 3552.8 SF of concrete paving, 2298.7 SF of permeable pavers, 2298.7 of 24" thick permeable paving base course, 239.9 LF of barrier curbing, 173.3 LF of perforated underdrain pipes, 105.7 LF of PVC drainage pipe, 2 drain inlets, and pavement striping to delineate parking spaces.

NAVFAC P526U P529U, VCC and Inspection Facility AE, Belle Chasse, LA

Engineer Intern responsible for civil design of site grading, roadway vertical alignment, and stormwater analysis and design in accordance with UFC, AASHTO, DOTD, and Military design standards. Contracted services include architectural, structural, and civil design services for a design-build project to construct a new entry control facility including a Visitor Control Center, Commercial Vehicle Inspection station, commercial roadway, and associated site infrastructure for the Naval Air Station Joint Reserve Base (NAS JRB) in Belle Chasse, LA. Additional project features include a duress alarm system, overhead canopy for commercial vehicle inspection, signage, LED lane control signal lights, elevated access control lane islands, permanent passive barriers, traffic control arms, traffic signalization, phasing to maintain existing operation levels, and all utilities and pavements.

SBPG East Bank Sediment Transport Corridor – Highway 15 Road Reconstruction, Plaquemines Parish, LA

Engineer Intern responsible for roadway horizontal alignment, structural design of box culverts and retaining walls, guardrail design, temporary traffic control plans, and preparing quantity takes and cost estimates for the design of roadway regrading and reconstruction to facilitate installation of a permanent pipeline casing adjacent to the Mississippi River Levee. The permanent pipeline casing is required as part of a proposed corridor through Plaquemines and St. Bernard Parishes that would deliver dredged sediment from point bars within the Mississippi River to marsh creation areas within the Breton Sound.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

DeWain Butler

Project Assignment:

CAD Drafter/Designer, Design Team

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

4

Education: Degree(s)/Year/Specialization:

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:

Mr. Butler has had formal training in AutoCAD, AutoCAD Map 3D, and Civil 3D.

SBPG East Bank Sediment Transport Corridor – Hwy 15 Road Reconstruction and Canal Crossings – Plaquemines and St. Bernard Parishes, LA

Drafter/Designer for roadway horizontal alignment, canal crossing structures and sheetpile bulkhead systems, and design of roadway regrading and reconstruction to facilitate installation of a permanent pipeline casing adjacent to the Mississippi River Levee.

Naval Air Station Joint Reserve Visitor Control Center and Commercial Inspection Facilities, Belle Chasse, LA

Drafter/Designer to create set of drawings/plans using all required UFC codes for a new visitor control center, including a building, commercial vehicle inspection office, duress alarm system, overhead canopy for commercial vehicle inspection, signage, and LED lane control signal lights, elevated access control lane islands, permanent passive barriers, traffic control arms, traffic signalization, and all utilities and pavements.

H.015009 W. Metairie Avenue Over S. Suburban Canal Off System Bridge – Jefferson Parish, LA

Drafter/Designer for the DOTD Off-System Bridge (OSBR) replacement of an existing slab span bridge located in an urban area of Jefferson Parish.

Parking Lot Design, Odyssey House Louisiana, Inc., New Orleans, LA

Drafter/Designer. Prepared drawings for the development of an approximately 7854 square foot lot to construct an accessory parking lot, including implementing a permeable pavement system to comply with City of New Orleans stormwater ordinance. Developed the title sheet, general notes, existing and proposed site plans, grading and drainage plans, and details required for construction.

Indian Creek Low Water Crossing and Road Repairs, Fort Johnson, LA

Drafter/Designer. Prepared drawings for approximately 3.6 miles of aggregate roadway including roadway horizontal alignment, vertical curves, drainage culverts, and erosion control and reconstruction.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

Alec Carter O'Brien, P.E.

Project Assignment:

Engineer, Construction Management Lead

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

6

Education: Degree(s)/Year/Specialization:

BS / 2013 / Civil Engineering

Active registration: Year first registered/discipline:

PE 43647

Louisiana Expiration: 3/31/2026

Other experience and qualifications relevant to the proposed Project:

Mr. O'Brien is an Engineer with over 17 years of heavy civil, roadway, drainage, and bridge construction experience. Mr. O'Brien has managed field operations, inspectors, project documentation, and closeout on numerous projects. He has completed road restoration and reconstruction projects for DOTD, FEMA, and other local agencies. He has extensively worked in asphalt paving, PCCP, catch basins, drainage, and sidewalk projects. Mr. O'Brien has significant experience preparing plans and specifications in accordance with DOTD and local standards.

Lafayette Parish Non-State Pvmnt Markings (CE&I) – Lafayette, LA

Engineer. for providing construction contract administration and construction engineering inspection services for the construction related to the nearly 14 miles of restriping of Cajundome Boulevard, East Pinhook Road/Teurilngs Avenue, Kaliste Saloom Road, Mudd Avenue, and Gendarme Road, in Lafayette Parish.

US 90Z Harvey Canal Tunnel Rehabilitation (CE&I) – Jefferson Parish, LA

Engineer. Provide construction engineering and inspection services for the complete rehabilitation of the Harvey Canal Tunnel and its approaches along US 90Z in Jefferson Parish. The rehabilitation includes new tile lining, drainage pumps, pavement, structural, electrical and ventilation systems.

RR004 Bayou St. John, Fairgrounds, and Seventh Ward Group B Roads – New Orleans, LA

Engineer responsible for providing construction administration, construction management, and resident inspection services for the City of New Orleans Department of Public Works on the \$23 million infrastructure project. Mr. O'Brien provided field management of the contractor and all construction activities, including conducting progress meetings, dealing with resident complaints, review and recommending for approval of

monthly pay estimates, field adjustments, and using knowledge and experience in civil construction to ensure the project remained on schedule. The project scope included over 27,000 SY of PCCP paving, 4.5 miles of waterline replacement, sewer, drainage, and incidental construction items.

St. Gabriel Roadway Repair: Phase 5 – St. Gabriel, LA

Engineer on the Royal team contracted by the City of St. Gabriel to provide Construction Management and Engineering Services for the restoration of four roadways and the full reconstruction of one roadway. This project's scope consisted of cold planing of existing asphalt, Lime and Soil cement treatments, asphalt binder and wearing overlay. Mr. O'Brien performed construction management responsibilities during the Construction phase, assisted in design alterations during construction, and produced as-built drawings for post-construction closeout.

Sales Tax Street and Road Rehabilitation Program – East Baton Rouge Parish, LA

Mr. O'Brien assisted the Project Engineer for this project which began in 1990. Mr. O'Brien provided oversight of inspectors, developed plans and quantities for upcoming projects, handled partial estimates and change orders and assisted the project engineer on project administration for the past 5 years. These projects include a variety of rehabilitation jobs; PPC paving patching, asphalt patching, asphaltic concrete overlay, crack sealing and full reconstruction including soil cement.

I-10 Widening, LA 347 to Atchafalaya Floodway Bridge Route – St. Martin Parish, LA

As an Engineer Intern for this 3.436-mile, \$52 million project to widen the westbound lanes of I-10, including total reconstruction of the existing lanes both east and westbound and widening of four structures in St. Martin, Parish, Mr. O'Brien was responsible for Critical Path Method (CPM) schedule review.

US-51 Business Roundabouts – Hammond, LA

Senior Field Engineer responsible for problem identification and resolution in the field. This included preparing, designing, submitting, and revising concrete and asphalt mix designs in accordance with the project plans and specifications. Mr. O'Brien updated the CPM schedule each month, prepared as-built plans during construction to reflect in-field changes, and performed traffic control design during construction. He submitted numerous traffic control plans during construction phase changes and ensured the TC plans were in accordance with the MUTCD. Various drainage structures had to be altered to accommodate in-field conflicts, for which Mr. O'Brien calculated the slope, made drainage structure drawing adjustments, and ensured all changed structures met the project specifications. In addition, he was responsible for OSHA-compliant safety measures being exercised in the field; surveying; and change order management and quality control on all project materials including asphalt density testing, base density testing, concrete cylinders, soil cement densities and striping reflectivity testing.

Bridge Rehabilitation & Replacement Program – St. Bernard Parish, LA

Construction Manager on the Royal team contracted by St. Bernard Parish Government (SBPG) to provide engineering services for repairs, restorations, and/or replacement of Parish-owned roadway and canal crossings to their Pre-Katrina condition while preserving the historical value and intent of each facility. Mr. O'Brien was responsible for assisting with contractor oversight, change order management, management of resident inspectors, monthly pay applications, responding to RFI's, and reviewing material testing results. Royal's engineering and construction management responsibilities during the construction phase consist of all planning and coordination with the contractor, starting with a pre-construction meeting with all project associated personnel, through project close-out and all activities in between.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

Robert Klare, P.E.

Project Assignment:

Engineer

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

2

Education: Degree(s)/Year/Specialization:

BS / 2013 / Civil Engineering

Active registration: Year first registered/discipline:

P.E. 42991

Louisiana Expiration: 3/31/2025

Other experience and qualifications relevant to the proposed Project:

Mr. Klare has extensive experience in sewer, drainage, road and sidewalk design for Jefferson Parish and Louisiana projects. Technical skills include AutoCAD, EPA SWMM, and LADOTD Hydraulic Design Software. He has a Bachelor of Science in Civil Engineering from LSU, and his related coursework included Intro to Surveying, Advanced Surveying, Hydrologic Design, Steel Design, Concrete Design, and Deep Foundations.

Drainage Improvements to Lime Street - Jefferson Parish, LA

Mr. Klare assisted in the design of the full reconstruction of Lime Street in Metairie, LA, from Veterans Highway to W Esplanade Ave. The \$6.5 million project replaced waterlines, upgraded drainage, and fully removed and replaced the 26' wide concrete roadway along the 0.8 mile stretch. Additionally, Mr. Klare developed traffic control plans for work along Veterans Blvd, W Esplanade Ave, and Kawanee Ave. Design challenges included addressing conflicts between the larger drainage lines, existing utilities, and oak trees.

Roadway Restoration for Bayou St. John, Fairgrounds, and Seventh Ward Group B Roads – New Orleans, LA

As part of a construction administration and resident inspection contract with the City of New Orleans Department of Public Works, Royal provided construction management services for the construction of \$23 million FEMA-funded roadway improvements, one of the largest in the City. The project area covers 110 city blocks and construction is estimated to include 29,000 square yards (SY) of asphalt, 18,000 SY of concrete. It will require the replacement of roadway pavement, water lines, sewer lines, and drainage. The work also includes modifications to improve consumer mobility related to the Americans with Disabilities Act (ADA).

Nashville Wharf A Substructure Repairs, Phase 2 - Port of New Orleans

Assistant Project Engineer responsible for assisting the project manager with construction management services including cost estimating, constructability reviews, document control, field representation, and supporting Port NOLA with project closeout for the repair of the substructure of the Nashville Wharf "A" facility located on the Mississippi River in New Orleans, LA. The existing wharf was constructed in 1960 and 1961 and is approximately 2,400 linear feet long and 214 feet wide and supported by approximately 5,371 steel piles.

LA45/LA303 Rosethorne Path – Lafitte, LA

Mr. Klare designed a two-mile-long concrete walk along Jean Lafitte Boulevard in Lafitte. The project connected previously isolated sections of residential areas with the town's commercial and recreational assets. The design accommodated a narrow right-of-way, existing drainage inlets, and other utilities while conforming to all ADA and LADOTD requirements. Construction finished in 2023.

H.013525 St. Bernard Parish 40 Arpent Trail – Chalmette, LA

Mr. Klare designed an asphalt bike trail on 40 Arpent Levee in Chalmette, LA. This 7.5-mile trail expands bicycle and pedestrian access in St. Bernard Parish and includes four bridges across the 40 Arpent Canal. The project is currently under construction.

St. John Eastbank Levee Trail – Multiple Parishes, LA

The levee trail extends from the St. John/St. Charles parish line to the St. Charles/St. James line. As a project engineer, Mr. Klare worked on approximately seven miles of this 14-mile asphalt trail. Construction was completed in phases from 2011-2020.

City of Lafitte Sidewalks - Lafitte, LA

Mr. Klare was the project engineer for two projects adding concrete sidewalks around downtown Lafitte. This urban project increased connectivity between critical economic corridors in the Town of Lafitte, providing safe passage for pedestrians and recreational value. Construction was completed in 2017.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Levi LeBourgeois, PMP

Project Assignment:

Project Controls

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

14

Education: Degree(s)/Year/Specialization:

MS / 2023 / Business Administration

BS / 2004 / Finance

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Mr. LeBourgeois is a certified Project Management Professional (PMP) with 17 years of experience in executing project management and monitoring activities in the civil and coastal engineering and construction industry for federal, state, municipal, and private clients. Mr. LeBourgeois's current main responsibilities include Primavera P6 detailed schedule management, progress monitoring and reporting, resource management, issues identification and resolution, budget compliance, contract administration, and client acceptance / project close out. In the recent past, Mr. LeBourgeois has provided schedule management services on projects with clients including USACE; city and parish governments, state agencies including CPRA, and the private sector.

Mr. LeBourgeois also has an extensive technical background regarding the utilization of common civil infrastructure design and documentation software and serves Royal as a subject matter expert in the following areas: GIS applications, production of AutoCAD drawings, and database development and management. His GIS/CADD expertise includes the use of various software packages such as ArcGIS Desktop, AutoCAD Civil 3D, AutoCAD Map, ERDAS, QGIS, and Global Mapper. His database software experience includes Microsoft Access, Oracle database systems and Trendstar. Mr. LeBourgeois has experience in drone flight planning software including DJI Terra as well as drone image processing software Pix4d Reach and Pix 4d Mapper.

Iberia Street Sidewalks - Youngsville, LA

Mr. LeBourgeois is currently serving as the Project Manager for the Iberia Street Sidewalk Project located in Youngsville, Louisiana. The Iberia Street Sidewalk project consists of the installation of approximately 3,200 linear feet of RCP drainage piping within the existing roadside ditches and the installation of approximately 4,200 linear feet of six foot wide concrete sidewalk with a pedestrian bridge crossing on the south side of Iberia Street from School Street to Sugar Mill Pond Subdivision in Youngsville, LA (Lafayette Parish). The proposed project will allow for greater inter-connectivity of pedestrian travel in the City of Youngsville, LA. Mr. LeBourgeois is responsible for the coordination of the design and guiding the project through the Louisiana Department of Transportation's Transportation Alternatives Program, making sure the project meets DOTD requirements.

Détente Road Rehabilitation - Youngsville, LA

Mr. LeBourgeois was responsible for design of the road rehabilitation. Through site visits and survey data, Mr. LeBourgeois produced design plans for the road rehabilitation using AutoCAD Civil 3D. Royal was contracted through the City of Youngsville to perform design, bidding and construction management services for the rehabilitation of Détente Road located in Youngsville, Louisiana. Mr. LeBourgeois was responsible for field inspection and the production of daily reports to insure construction was completed according to plans.

Polly Lane Extension - Lafayette, LA

Mr. LeBourgeois served as lead technician providing design services utilizing AutoCAD Civil 3D for the extension and connection of both existing dead-end streets of Polly Lane, inclusive of roadway reconstruction and widening to its existing section to Verot School Road. The approximate length of the new roadway is 1,080 linear feet and the length of improvements to existing roadway is 930 linear feet. The roadway extension/connection will consist of a 2-lane asphaltic concrete roadway with open ditched (with possible subsurface drainage in some areas), a concrete box culvert over Issac Verot Coulee Lateral 7, sidewalks, and street lighting.

Harvey Blvd Drainage Analysis - Belle Chasse, LA

GIS Analyst/Data Manager, Mr. LeBourgeois programmed Trimble GPS units for the purpose of gathering landmark locations in the field. ArcGIS Desktop 10 was used to create the basemap and geodatabase that was transferred onto the mobile units which use the ArcMobile software. The purpose of the project was to provide analysis of the existing drainage of Harvey Blvd.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Ryan Schellhaas

Project Assignment:

Project Manager, Construction Inspections

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

12

Education: Degree(s)/Year/Specialization:

N/A

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Mr. Ryan Schellhaas serves as lead construction and resident inspector on a variety of Royal projects. His experience includes quality control, management of resident inspectors, financial and invoice control, administration, and scheduling.

Bayou St. John, Fairgrounds, Seventh Ward Group B - New Orleans, LA

As part of a construction administration and resident inspection contract with the City of New Orleans Department of Public Works, Royal provided construction management services for the construction of \$23 million FEMA-funded roadway improvements, one of the largest in the City. The project area covers 110 city blocks and construction is estimated to include 29,000 square yards (SY) of asphalt, 18,000 SY of concrete. It will require the replacement of roadway pavement, water lines, sewer lines, and drainage. The work also includes modifications to improve consumer mobility related to the Americans with Disabilities Act (ADA).

Tasked with Construction Administration, Resident Inspection, and Overall Construction Management, Royal is providing field management of the contractor and all construction activities, including conducting progress meetings, resolving resident issues, reviewing and approval of monthly pay estimates, field adjustments and applying knowledge and experience in civil construction to ensure the project remains on schedule and budget. Responsibilities include monitoring construction activities to determine and document the progress of the project and compliance with the construction contract, the City's standards and policies, and with an emphasis on site safety, the timely review of submittals, shop drawings, samples, substitute materials, value engineering proposals, the timely rejection of all non-conforming work and materials, the application of work forces to particular portions of the work, the conformance of the work to the construction contractor's schedule, the timely execution of the work, and conducting required interviews of the Construction Contractor. As Lead Inspector responsible for directing resident inspection services for the City of New Orleans Department of

Public Works. He provides oversight of inspectors assigned to the project and ensures daily work reports and logs are accurate. He inspected and updated quantities for all approved materials used to complete construction. Mr. Schellhaas was also responsible for site management, which included documenting the progress of work, and ensuring the site is barricaded and taped off properly.

FEMA Roadway Restoration Program – New Orleans, Louisiana

(See project numbers 12, 13, and 14) Project Manager on the Royal team contracted by the City of New Orleans Department of Public Works (DPW) to provide Construction Management and Resident Inspection Services for the FEMA related roadway program which includes associated subsurface drainage, sewerage, and water repairs. Construction services are being performed by multiple contractors under contract by DPW and overseen by Royal. Royal is providing all construction management, data management, reporting, platform deployment, quality assurance, administration, pay applications, and closeout services. Staff includes on-site and back-office support personnel including qualified Construction Managers and Resident Inspectors. Mr. Schellhaas oversees daily fieldwork, QC, reviewing and preparation of contractor invoices, scheduling of work and field inspectors, and dealing with field issues. CM of RI, construction management.

Water Line Replacement Program – New Orleans, Louisiana

Assistant Project Manager on the Royal team contracted by the Sewerage and Water Board of New Orleans to provide construction management and inspection services for the service repairs to water and sewer assets throughout the City of New Orleans. Services provided included assessment of related repairs, inspection during construction, tracking of daily activities and quantities, overall construction administration, and project closeout. Mr. Schellhaas managed daily fieldwork, QC, reviewing and preparation of contractor invoices, scheduling of work and field inspectors, and dealing with field issues.

Emergency Catch Basin Cleaning & Repair Program – New Orleans, Louisiana

Lead Inspector for the catch basin cleaning and repairs job in which Royal provided over 50 inspectors with supporting construction administration personnel for the cleaning of more than 15,000 catch basins in 120 calendar days within the City of New Orleans. The program also included inspection and management for over 3,000 catch basin repairs.

MaxPave Roadway Program – New Orleans, Louisiana

Assistant Project Manager for the Department of Public Works in the delivery of the City of New Orleans's Interim Paving Program. Mr. Schellhaas' duties included overseeing daily fieldwork, QC, reviewing and preparation of contractor invoices, scheduling of work and field inspectors, and dealing with field issues.

Roadway Restoration Program – St. Bernard Parish, Louisiana

Project Associate responsible for managing any additional work on the job site that occurred once the contractor had started his approved work. He inspected and updated quantities for all approved materials used to complete construction. Mr. Schellhaas was also responsible for site management, which

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

Jeff Monfrey

Project Assignment:

Resident Inspector

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

1

Education: Degree(s)/Year/Specialization:

N/A

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Mr. Monfrey has over 30 years of experience in various road and bridge construction environments. He has provided resident and construction services for roadway and structural projects. Mr. Monfrey's certifications include LaDOTD Structural Concrete Inspector, Embankment and Base Course Inspector, PCC Paving Inspector, and Asphalt Paving, Inspector/Technician, Bridge Inspector's Training Course and ATSSA Work Zone (Traffic Control Supervisor, Technician, and Flagger).

US 90 Z: Harvey Canal Tunnel Rehabilitation (CE&I) – Jefferson Parish, LA

Mr. Monfrey is a resident inspector for the rehabilitation of Harvey Canal Tunnel and its approaches along US90Z in Jefferson Parish. Mr. Monfrey's responsibilities include daily observation of construction activities, including new tile lining, drainage pumps, pavement, and ventilation systems. Mr. Monfrey prepares daily reports, inspects the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications, and attends all progress meetings.

Lafayette Parish Non-State Pvmnt Markings - Lafayette, LA

Mr. Monfrey is the resident inspector for this project, which includes restriping various major roads and intersections within Lafayette Parish. As a resident inspector, Mr. Monfrey's responsibilities include daily observation, daily reporting, quantity tracking, and inspection of work progress to ensure the contractor follows the plans' and specifications' requirements.

Causeway Boulevard Overpass at Airline Drive- Jefferson Parish, LA

Mr. Monfrey served as resident inspector, including rehabilitating Ramps 6, 7, and overpass of Causeway Boulevard Overpass at Airline Drive. Mr. Monfrey's responsibilities included observing construction activities for structure jacking, span movement, reinforced concrete riser construction, girder strengthening, bridge deck joint sealing, epoxy-urethane overlay, and bridge drainage rehabilitation. Mr. Monfrey prepared daily reports,

inspected the progress of the work to ensure that the Contractor complied with the requirements of the plans and specifications, and attended all progress meetings. He also noted the items of work performed for the day and the comparison of quantities installed with the contractor in the project diary.

Westwood Drive: Westbank Expressway to Lapalco – Jefferson Parish, LA

Mr. Monfrey provided construction inspection for the construction of 0.648 miles of roadway which includes 20,516 SY of Portland Cement Concrete Pavement with barrier curb, mountable curb and gutter. This project included Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Mr. Monfrey's responsibilities included maintaining all construction field records; making daily entries in the project diary to indicate the contractor's personnel and equipment being utilized on the project, the work being accepted, and the acceptability of traffic control; and the charging of contract time.

Canal Boulevard: Allen Toussaint Boulevard– Amethyst – New Orleans, LA

Mr. Monfrey provided construction inspection to reconstruct an existing four (4) lane divided boulevard. This project included grading, drainage structures, milling asphalt pavement, pavement patching, Class II base course, scarifying and compacting roadbed, asphalt concrete pavement, Portland Cement Concrete Pavement, cofferdams, stormwater pumping station, pavement striping, sign and legends and symbols. Mr. Monfrey's responsibilities on this project included responding to RFIs, performing periodic site visits, considering and negotiating change orders, performing substantial completion inspections, and quickly responding to limit the effect of often encountered unforeseen site conditions. The entire construction contract administration and construction engineering and inspection for this project was managed through LADOTD Site Manager.

Lake Pontchartrain Causeway Bascule Control System Replacement - St. Tammany and Jefferson Parish, LA

Mr. Monfrey was the Mechanical Inspector for this project: This project consisted of designing a replacement control system to allow operator control of the bascule bridge system at the North Channel of the Lake Pontchartrain Causeway. Mr. Monfrey performed an inspection of the control system to make sure it retained all mechanical interlocks as well as operating procedural interlocks.

DOTD Bridge Inspections District 2 – Multiple Parishes, LA

Mr. Monfrey was the lead inspector who supervised a team of inspectors performing the inspection of bridge substructures (piers, columns, etc.), superstructure (girders, trusses, etc.) and decking (roadway surface, bridge rails, etc.) and repair and/or replace bridges for all fixed and moveable bridges (On & Off Systems) for the entire District 02 area in Louisiana.

Huey P. Long Bridge Widening, Jefferson Parish, LA

Mr. Monfrey was a Senior Bridge Inspector assigned to the Huey P. Long Bridge widening projects. He supervised the inspection of structural steel erection and bolting, structural concrete construction, embankment and base course construction, concrete paving, and asphaltic concrete paving.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gary Brouillette

Project Assignment:

Resident Inspector

Name of Firm with which associated:

Royal Engineers and Consultants, LLC

Years' experience with this Firm:

1

Education: Degree(s)/Year/Specialization:

N/A

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Gary Brouillette is a senior construction inspector in heavy civil construction with fifteen years of field experience. Provided quality assurance acceptance testing and oversight in the sampling/testing of project-related construction materials. His experience includes the inspection of various phases of substructure and superstructure new bridge construction, embankment/base course, PCC pavement, structural concrete, asphalt paving, asphalt plant inspection, bridge demolition, pump station structures, levee structures, drainage and sewer structures, subsurface utilities repairs and replacements, roadway restoration to include asphalt mill/overlays, asphaltic concrete and PCCP roadway patching, canal embankment restoration, slope paving, wooden timber and concrete/steel substructure and superstructure wharf repairs, structural steel repairs, and replacements, and inspection of pre-stressed/pre-casted concrete bridge members.

His experience also includes approximately eleven years of performing the daily tasks of a Senior Inspector/Resident Inspector and holding state and national certifications in his field. He has extensive and comprehensive knowledge of the DOTD Standard Specifications for roads and bridges. His project experience also includes using DOTD SiteManager and HeadLight for inspection documentation, and he has experience in the DOTD "2059" project closeout process.

Certifications: DOTD Embankment and Base Course Inspector, DOTD Structural Concrete Inspector, DOTD Asphalt Paving Inspector/Technician, DOTD PCC Paving Inspector, ATSSA Traffic Control Supervisor, ATSSA Traffic Control Technician, ATSSA Registered Flagger, 10 Hour Occupational Health and Safety Training Course

Crescent City Connection Decorative Lighting Project – Jefferson and Orleans Parish, LA

Mr. Brouillette is a Resident Inspector for this project to install a new decorative lighting system for the Crescent City Connection bridges. The system features LED lights on the trusses of the bridges and lights illuminating the piers.

Safe Routes to Schools Phase II - Independence, Louisiana

Construction Inspector. Provided field oversight and inspection of the construction of sidewalks, driveways, earthwork, drainage structures, and related work. This project had an estimated cost of \$700,000.

Safe Routes to Schools- Baton Rouge, Louisiana

Construction Inspector. Provided field oversight and inspection of all construction-related items per the contract, including the construction of sidewalks, driveways, grading, drainage, striping, handicapped ramps, and related work. This project had an estimated cost of \$1 million.

Loyola Interchange Owner Verification - Kenner, Louisiana

Construction Inspector. Provided Owner Verification (OV) inspection services for the construction phases for two flyover access ramps from I-10 to the New Orleans International Airport. Construction inspection of ground elements included concrete barrier rail footings, pier protection footings, barrier rail, median barrier rail, pier protection barrier rail, sign truss footings, noise barrier wall, and curb and gutter. Construction inspection of superstructure elements included steel tub girder spans, LU-48 concrete tub girder spans, LG-36 concrete girder spans, slab spans, approach slabs, light pole supports, bridge barrier rail, bridge median barrier rail, finger expansion and strip seal joints. Inspected all phases of bridge deck construction, from the steel reinforcement installation to concrete placement. This project had an estimated cost of \$125 million.

Bonnabel Canal Improvements - Metairie, Louisiana

Resident Project Representative. Provided field oversight of all construction-related activities, including installing a 3000 linear foot steel sheet pile wall, embankment and base course installation, slope paving, concrete curb wall, drainage pipe extensions, and 6' chain link fence. Reviewed monthly quantities for pay estimates with the contractor and Project Engineer. Scheduled Progress Meetings and field site meetings. Formulated Punchlist for Final Inspection and acceptance of the project. Estimated cost of \$4.2 million.

Airline Park Boulevard - Metairie, Louisiana

Resident Project Representative. Provided field oversight of all construction-related items such as PCC Pavement, removal of PCC Pavement, Class II Base Course installation, various size RCP/RCPA installation, new drainage pump station structure and generator pad, roadway structures to include manholes, catch basins, conflict boxes, and sewer service/water main relocations. Attended Pre-Construction Conference, weekly Progress Meetings, and field site meetings. This project had an estimated cost of \$6.2 million.

Pavement Rehabilitation - Gretna, Louisiana

Senior Inspector/Lead Inspector. Provided field oversight of PCC pavement Rehabilitation, asphalt patching, cold planing, asphalt paving, ADA handicapped ramp construction. This project required the complete restoration of Old Behrman Hwy. Coordinated phases of construction with the contractor. Attended Pre-Construction Conference, weekly Progress Meetings, and field site meetings. Formulated Punchlist for Final Inspection and Acceptance of project. Assisted in "2059" project closeout. This project had an estimated cost of \$5.7 million.

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>DOTD Off-System Bridge West Metairie Ave., Jefferson Parish, LA</p> <p>Owner: LADOTD Barbara Ostuno, PE (225)379-1047 Barbara.ostuno@la.gov</p> 	<p>Royal is providing engineering and related services required to develop plans to replace an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish, which is off the State Highway System.</p> <p>Royal is managing all aspects of design and client relations, overseeing plan production in accordance with the Off-System Highway Bridge Program Guidelines, leading the hydraulic analysis and design for all viable alternatives for the bridge replacement in accordance with the DOTD Hydraulics Manual, and coordinating survey efforts.</p> <p>Other services to be provided by Royal include, preliminary plan production, and environmental services including solicitation of views, categorical exclusion clearance, wetland studies, and other information needed for the Environmental Clearance process. Royal oversaw surveying services for the project, with survey deliverables provided in accordance with the OSBR Program Guidelines and the DOTD Location and Survey Manual.</p> <p>Royal has completed the Plan-In-Hand phase of the project and is currently working towards the next deliverable of 100% Preliminary Plans and Environmental Reports.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2025 (Estimated)	\$2,000,000	\$93,000

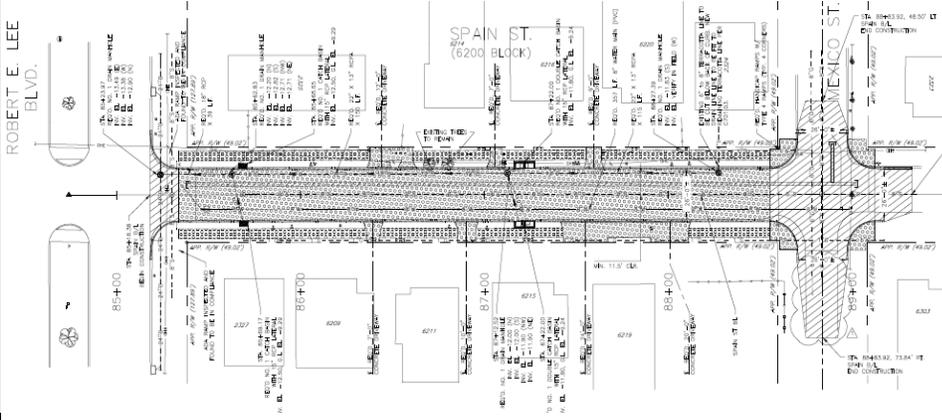
PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Polly Lane Extension Lafayette, Louisiana</p> <p>Owner: Lafayette City-Parish Consolidated Government Alison Lognion 337.291.8522</p> 	<p>Royal provided professional engineering design services for the extension and connection of both existing dead-end streets of Polly Lane to provide connectivity for vehicular and pedestrian traffic across Issac Verot Coulee.</p> <p>The scope of work also included roadway reconstruction and widening of the existing roadway south of Gathright Street to its existing section at Verot School Road and the installation of sidewalks on both sides of the road along the entire length of the project. The approximate length of the new roadway is 1,080 linear feet and the length of improvements to existing roadway is 930 linear feet. The roadway extension/ connection consists of a 2-lane asphaltic concrete roadway, concrete sidewalks, subsurface drainage, traffic circle, concrete box culvert in Issac Verot Coulee Lateral 7, articulating block matting for scour protection, ADA ramps, and street lighting. The project also involved installation of a new 8" water main and water and sewer service line adjustments and relocations.</p> <p>Royal's design phase services included topographical and boundary surveying, all preliminary and final plans, preparation of all necessary right-of-way maps/plats and other governmental staking and inspection authorized on an as-need basis by owner, opinions of probable construction cost, design calculations, utility coordination, site condition assessment and surveying, permitting, and preparation of technical specifications and bid documents. The road was designed in accordance with LCG guidelines and other industry and state standards such as the AASHTO Greenbook and the LADOTD Road Design Manual. The sidewalks were designed in accordance with all LCG standard plans and ADA requirements, and the hydraulic design was in accordance with the 2011 LADOTD Hydraulics Manual.</p> <p>Construction phase services included pre-construction coordination, contractor submittal review and tracking, shop drawing review and approval, RFI management, inspections, on-site progress meetings, construction monitoring, engineering during construction, preliminary and final walk-through, punch list, substantial completion coordination, completion of record drawings and contractor pay request coordination.</p> <p>Design and construction of the project were divided into several phases to expedite the construction of the road and provide access to a newly built apartment complex. Phase 1 of the project was completed in July 2019, and construction of Phase 2 was completed in November 2021.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
11/2021 (Actual)	\$1,500,000	\$350,000

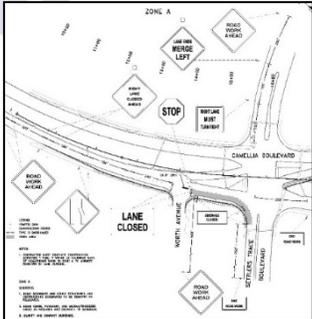
PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>Bloski Avenue Extension Belle Chasse, Louisiana</p> <p>Owner: United States Navy – Naval Facilities Engineering Command South East Henry Cambum 504.678.2882 henry.cambum1@navy.mil 400 Russell Dr New Orleans, LA 70143</p> 	<p>The United States Navy – Naval Facilities Engineering Command South East (NAVFAC), hired Royal to construct a new asphalt roadway to serve personnel at the Naval facility. The Bloski Avenue Extension design scope included bringing an existing roadway 1,300 feet across an area which was the former base golf course with a tie into Rinard Avenue.</p> <p>Royal began this project by estimating the total cost of construction, and then performing value engineering for the project. Royal's value engineering efforts reduced the total project price by approximately \$800,000 and reduced the project's duration by 50 days. Royal's end result was a superior roadway design, with improved solar LED street lighting that could be put into service quickly, with a greatly reduced price tag.</p> <p>South Louisiana soils present construction challenges unique to the region, and the Bloski Avenue Extension presented some of those challenges. Once construction operations were well under way, Royal determined that the area contained large amounts of unsuitable materials which could not be built upon. Royal quickly addressed the problem and designed a cost-effective solution, which was integrated into construction operations. Royal's efforts avoided substantial project delays, and ensures the roadway will provide dependable performance throughout its lifespan.</p> <p>Royal directed project oversight and supervision to ensure the highest quality product to NAVFAC. The project consisted of clearing and grubbing of the entire worksite, installation and maintenance of temporary vehicle access, environmental controls, and general site conditions. Royal conducted cut and fill operations, installed storm water drainage, offset conflicting utilities, and placed and compacted road base prior to placement of asphalt paving. Final site work included construction of 1300' of concrete sidewalk, installation of 15 solar LED streetlights, pavement striping, installation of traffic signage, and seeding, sodding and landscaping of entire project site.</p>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
06/2011 (Actual)	\$1,800,000	\$1,800,000

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>City of New Orleans Milneburg Group B New Orleans, LA</p> <p>Owner: City of New Orleans (CNO) Department of Public Works Prime Contact: Brett Liuzza, PE. 504-836-2155, bliuzza@dei-engr.com</p>	<p>Royal was hired by Design Engineering, Inc. to provide Preliminary and Final Design Plans for the following four New Orleans City blocks:</p> <ul style="list-style-type: none"> • 5600 Block of Arts Street; • 6200 Block of Spain Street; • 6300 Block of Marigny Street; and • 2200 Block of New York Street. <p>Royal produced the 30% and 60% Preliminary Plans, Accepted 60% Preliminary Plans, Preliminary Design Report, and prepared a preliminary Opinion of Probable Construction Cost.</p> <p>Design features include full removal and replacement of roadway pavement and road base, sidewalks and curb ramps, curb and gutter storm drainage system, and replacement of potable water and sanitary sewer utilities. Sidewalks and curb ramps were designed to meet ADA requirements and DPW standard plans.</p> <p>Royal performed hydraulic design calculations in accordance with DPW, Sewage and Water Board (S&WB) requirements, and the LADOTD Hydraulics Manual using the LADOTD HYDROWIN software.</p> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2021 (Actual)	\$227,000	\$227,000

PROJECT NO. 5

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Camellia - Settlers Trace Turning Lanes Lafayette, LA</p> <p>Owner: Lafayette Consolidated Government Jared Veazey, PE, MS 337-291-8590, javeazey@lafayettela.gov</p>	<p>Royal was hired by Lafayette Consolidated Government (LCG) to provide professional engineering design services for the addition of a dedicated right turn lane and a second left turn lane at the intersection of Camellia Boulevard and Settlers Trace Boulevard in Lafayette, Louisiana.</p> <p>Project features included approximately 1,200 SY of new concrete pavement and associated base course, 160 LF of new storm drainpipe, 400 SY of concrete sidewalks, 4 new or modified drainage structures, 3 new traffic signal heads, and modifications and improvements to the street lighting system.</p> <p>Royal's design phase services included all preliminary and final plans, specifications, performing boundary survey and preparation of all necessary right-of-way maps/plats, opinions of probable construction cost, design calculations, and utility coordination and relocation. Design for the roadway modification included performing engineering design and analyses for widening of the concrete roadway, evaluation of the existing drainage infrastructure, and identifying required modifications to the existing drainage system. Royal also provided plans for road striping, sidewalk relocation and ADA ramp reconstruction, street lighting, and recommendations for construction phasing.</p> <p>Construction phase services included pre-construction coordination, contractor submittal review and tracking, shop drawing review and approval, RFI management, on-site progress meetings, construction monitoring, engineering during construction, preliminary and final walk through, punch list, substantial completion coordination, completion of record drawings and contractor pay request and change order preparation. Royal also provided Resident Inspection.</p>	
		
	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
02/2022 (Actual)	\$54,000	\$54,000

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>FEMA Roadway Restoration Program New Orleans, Louisiana Owner: City of New Orleans Department of Public Works Josh Hartley, P.E. 504.658.800</p> 	<p>As part of a contract with the City of New Orleans Department of Public Works, Royal provided construction management services for a \$23 million in FEMA-funded roadway improvements Program, one of the largest in the City. The project area covers 110 city blocks, and construction is estimated to include 29,000 square yards (SY) of asphalt and 18,000 SY of concrete. It requires the replacement of roadway pavement, 4.6 miles of waterlines, sewer lines, and drainage. The work also includes modifications to improve consumer mobility related to the Americans with Disabilities Act (ADA).</p> <p>Tasked with Construction Administration, Resident Inspection, and overall Construction Management, Royal is providing field management of the contractor and all construction activities, including conducting progress meetings, resolving resident issues, reviewing and approval of monthly pay estimates, field adjustments and applying knowledge and experience in civil construction to ensure the project remains on schedule and budget.</p> <p>Responsibilities include monitoring construction activities to document the progress of the project and compliance with the construction contract, the City's standards and policies, and with an emphasis on site safety, the timely review of submittals, shop drawings, samples, substitute materials, value engineering proposals, the timely rejection of all non-conforming work and materials, and the conformance of the work to the project schedule. Royal resident inspectors document all construction activities and material quantities. They also monitor tests and maintain records for all quality testing, submit daily inspection reports, and observe the job site safety program.</p> <p>Deliverables include the following: Construction Inspection Reports, Monthly Pay Requests, Schedule Updates, Weather Reports, Plan Change Requests/Field Change Authorizations, Warranty Inspection Reports, Recommendations for Approval of Testing Laboratory Pay Requests, Non-Conforming Materials Notifications, Final "as built" Drawings, Monthly Progress Reports, and Invoices.</p>	
<p align="center">Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
	<p>Entire Project:</p>	<p>Work for which Firm was Responsible:</p>
<p>10/2021 (Actual)</p>	<p>\$9,500,000</p>	<p>\$500,000.00</p>

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Max Pave Roadway Program New Orleans, LA Owner: City of New Orleans, Department of Public Works</p> <p>Josh Hartley, PE 504-658-800, jwhartley@nola.gov</p>  	<p>Royal was hired to provide Interagency Coordination, Project Management, Contract Administration, Construction Management, and Assessment and Resident Inspection services for the citywide "MaxPave" Program, a collective effort between DPW and The Sewerage & Water Board of New Orleans (SWBNO) to address a significant backlog of open service cuts throughout the city as a result of ongoing utility repairs by the SWBNO.</p> <p>The SWBNO performs 50 to 75 new service cuts weekly to perform point repairs and other utility repairs to the City's aging sewer and water infrastructure. As a result of this high volume of service cuts, and due to budgetary constraints faced by SWBNO, a significant backlog of open, unpaved sites has developed throughout the entire city.</p> <p>To address this problem, DPW agreed to provide the SWBNO with \$6.5MM in funding to tackle the outstanding backlog. The objective of this project was to complete as many of these work orders that the funding allowed in a condensed 7-month period. DPW hired Royal to manage the entire project from start to finish.</p>	
<p>Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
	<p>Entire Project:</p>	<p>Work for which Firm was Responsible:</p>
<p>August 2019</p>	<p>\$791,000</p>	<p>\$791,000</p>

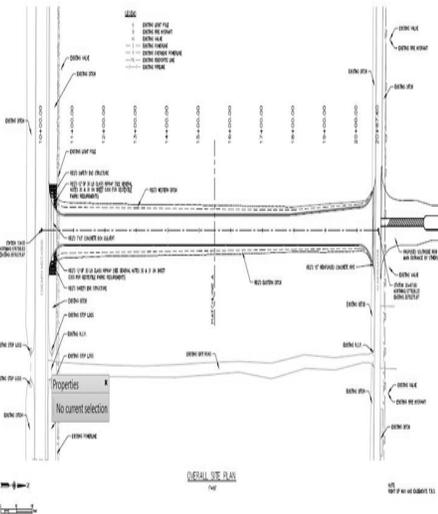
PROJECT NO. 8

<p>Project Name, Location and Owner's contact information:</p>	<p align="center">Nature of Firm's Responsibility:</p>	
<p>DPW Bond-Funded Projects New Orleans, Louisiana</p> <p>Owner: City of New Orleans Department of Public Works Josh Hartley, P.E. 504.658.8000 jwhartley@nola.gov 1300 Perdido St # 6W03 New Orleans, LA 70112</p> 	<p>Royal was hired to provide Construction Management and Resident Inspection Services for the bond-funded roadway program which includes associated subsurface drainage, sewerage, and water repairs. Construction services are being performed by multiple contractors under contract by DPW and overseen by Royal. Royal is providing all construction management, data management, reporting, platform deployment, quality assurance, administration, pay applications, and closeout services. Staff includes on-site and back office support personnel including qualified Construction Managers and Resident Inspectors.</p> <p>Construction Management and Administration Deliverables include Document Control Management statistics reports, Weekly Progress Dashboards, Construction Submittal Management progress reports, Daily, Weekly & Monthly Reports, Schedules, Monthly Pay Request Approvals, Invoice Management reports, Trend/Issues Management reports/ Corrective Action Reports, Field Quality Assurance Plans & Reports, As- Built Drawings, and Closeout Documents/Warranty/ Operations Manual.</p> <p>Resident Inspection services include: resident construction inspection and oversight. Observe construction at all times the contractor is working on critical work items, Ensure work does not adversely affect utilities, adjacent areas and/or property, etc., Inspect, measure and appropriately track (eligible) work completed for payment requests, Prepare daily field reports, and/or field books, Photograph and/ or document work progress, Pre & Post Inspection Detailed Reports & Photo's, Document and coordinate with DPW for unforeseen items encountered during construction, Prepare memorandums or documentation required for field changes, Verify contractor providing adequate traffic control and site safety procedures, and Prepare incident reports.</p>	
<p align="center">Completion Date (Actual or estimated):</p>	<p align="center">Estimated Cost:</p>	
	<p align="center">Entire Project:</p>	<p align="center">Work for which Firm was Responsible:</p>
<p>02/2022 (Actual)</p>	<p align="center">\$49,000,000</p>	<p align="center">\$1,700,000</p>

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>St. Bernard Con Span Bridge – Magistrate St. Chalmette, Louisiana</p> <p>Owner: St. Bernard Parish Government Donald Bourgeois, Jr. 504-278-4313 dbourgeois@sbsp.net</p> 	<p>The project consisted of engineering and construction administration services for the replacement of Magistrate Street at Corinne Canal Bridge (Magistrate Street Bridge) in St. Bernard Parish, as part of the Parish's investment in bringing their roadways, bridges, culverts or other canal crossing structures and all associated infrastructure to meet current codes and standards and providing Hazard Mitigation measures for structures prone to repeated damages caused by high velocity flood waters, sediment and debris delivered by storm surges during hurricanes.</p> <p>The Magistrate Street Bridge scope included a full replacement of the existing two – 96” corrugated metal pipe culverts with a 26'-0” wide clear span, precast concrete structure. Royal performed an analysis of existing conditions and identified significant damage to the pipe ends as well as pipe breakage. Due to the extent of the damage documented by the Royal Team, the project was deemed eligible for replacement by FEMA. Royal also conducted a cost analysis that ultimately justified a Hazard Mitigation solution (ConSpan Hazard Mitigation) to replace the existing crossing with a lower-cost, resilient system that exceeded the existing hydraulic capacity of the canal.</p> <p>Engineering Services included civil engineering, design, surveying, geotechnical, field layout, bidding, construction administration, resident inspection, technical/engineering project close-out, and construction management (CM) services. Royal produced the construction contract documents and bid package. Engineering deliverables included detailed design plans, comprehensive cost estimates, and a CPM schedule to execute its engineering design services and construction management services.</p> <p>Royal performed a complete hydraulic analysis of the existing canal and clear-span concrete arch. Elements of work included demolition and removal of the existing canal crossing, replacing the existing canal crossing with a precast concrete clear span con-span, driven timber piles, structural concrete grade beams, roadway replacement, ADA ramps, sidewalks, and incidental PCC pavement. Royal also designed vertical curves into the changes in the roadway profile to provide a seamless transition from the new to pre-existing roadway grade.</p>	
<p align="center">Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
	<p>Entire Project:</p>	<p>Work for which Firm was Responsible:</p>
<p>August 2022</p>	<p>\$151,000</p>	<p>\$151,000</p>

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Détente Road Rehabilitation, Iberia Street Sidewalk Design and New Road Design</p> <p>Owner: City of Youngsville Client Contact: Sally Angers 305 Iberia Street Youngsville, LA 70592 (337) 856-4181</p> 	<p>Royal provided Engineering Design, Bid Phase Services, and Construction Administration for the City of Youngsville in three separate Task Orders.</p> <p><i>T01: Détente Road Rehabilitation</i></p> <p>Services included design, bid and construction management for the rehabilitation of Détente Road in Youngsville. The design consisted of a mill & overlay of asphaltic pavement and asphaltic pavement patching.</p> <p><i>T02: Iberia Street Sidewalk Design</i></p> <p>Royal performed design, bidding and construction management services for the installation of a new sidewalk along Iberia Street located in Youngsville. Design services included designing one pedestrian bridge within the sidewalk's footprint to promote walking and bicycle traffic for the residents.</p> <p><i>T03: New Road Design</i></p> <p>Royal was hired to design and perform construction management of a new road from Chemin Metairie Parkway to Almonaster Road in Youngsville. Design scope included general excavation, soil cement, asphaltic pavement, pavement stripping, signage, and all other incidental work. Royal performed a hydraulic study and produced engineering drawings, specifications, and cost estimates. The new road has been designed to support traffic on the new Southside High School currently under construction. Design efforts included coordination with the Lafayette Parish School System and the City of Youngsville to ensure the new road would adequately serve both the new high school and the city.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2024 (Estimated)	\$2,200,000	\$233,000

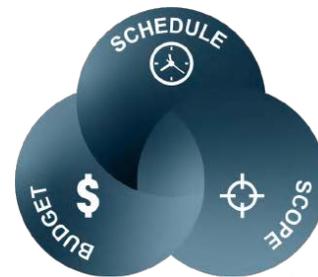
M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. N/A	N/A	N/A

N. Use this space to provide any additional information or description of resources supporting Firm’s qualifications for the proposed project.

Approach to Needed Services

At Royal, we believe the first step to a successful design project is to define the Scope, Schedule, Cost, and Deliverables. Our project team will meet with the Jefferson Parish personnel to gather their input and define these four items before starting any work. Our goal while performing design engineering, engineering staff augmentation, and construction management services is to ensure Jefferson Parish is in a position of proactive response during all phases of each project. Project meetings will be held throughout the design process and Royal will prepare written comments and recommendations to Jefferson Parish concerning constructability, cost, sequencing, and scheduling.



Design Engineering Services

The Project Engineer will meet with both the Construction Manager and with Jefferson Parish to review the scope of work and ensure a clear understanding of the project requirements, limitations, and expected outcomes. This meeting will mark the beginning of the Design Phase. Constructability insights will be incorporated into the plan based on this initial scoping review. The design team will review the scope and plan, and upon agreement on the design approach, the designers will prepare schematic, preliminary, and final design documents. To verify consistency with the agreed-upon scope and client expectations, designs will be reviewed by the project delivery team, as defined in the Red Team Review graphic introduced below. The construction team, represented by the principal construction manager and quality control manager will perform a constructability review as part of the preliminary design review, with comments documented in each discipline design file and addressed by documentation before advancing the design for Jefferson Parish to review.

Engineering design and technical support depth from the Royal Team includes civil, structural, geotechnical, electrical, mechanical, architectural, and fire protection. Our engineers routinely provide engineering services during all phases of the project life cycle including preliminary and final design phases.

Our ability to provide engineering support during the pre-construction and construction phase is what sets our team apart from the traditional A/E delivery model.

Construction Phase

Throughout the construction phase, Royal acts as a client/contractor liaison and coordinates all construction activities. Starting with mobilization, Royal schedules all contracted work and ensures it is completed according to the design specifications and within the project budget. We believe that open communication among all parties is integral to the success of the project. Therefore, we take advantage of regular meetings with the contractor and report progress to the client in real-time. We practice a robust system of quality control and ensure that all work is performed in compliance with the applicable codes and industry-standard operating procedures. Part of this process is overseeing all on-site testing and monitoring, as well as the submission of all relevant results/reports to governing agencies. Should any need for clarification arise, Royal processes the contractor's Request for Information and furnishes a technical interpretation of the design documents. Royal's expertise in adaptive management allows us to swiftly make adjustments in work, time, and scope in the event of unforeseen site conditions. We promptly process change orders and make recommendations to the contractor to minimize any additional costs incurred through project delay. Finally, Royal processes all contractor invoices and provides ample support in arbitrating any disputes or claims.

DEMONSTRATED PERFORMANCE HISTORY

Department of Public Works MaxPave Roadway Program City of New Orleans, Department of Public Works

A significant reason for the success and efficiency of the MaxPave Roadway Program is the use of our digital transformation platform, RoyalVUE. RoyalVUE is an asset management tool that provides our clients with real-time access to the status of every assigned work order within a program. With a personalized login, the end-user has the ability to get status updates from any computer or portable smart device at any time.

RoyalVUE allows our team to communicate real-time status updates in the field as the City's contractors make progress. Our construction managers and resident inspectors are equipped with technology that allows them to take before and after photos of work order development, log in-field observations as the project progresses, and accurately map each site in the field, which in turn updates all of our clients' maps of their assets. The platform also allows Royal to accurately create reports of completed work orders which the contractor invoices from. This has allowed Royal to eliminate a significant amount of delay from traditional invoice processing standards.

MORE INFO: See Section F: MaxPave Roadway Program

✓ COST CONTROL | ✓ RESPONSIVENESS | ✓ ABILITY TO MEET SCHEDULES & DEADLINES



RoyalVue

Our digital transformation platform, RoyalVUE, serves as a single system of engagement-connecting people and data in real-time and across multiple devices-and serves as a single system of record. Formerly known as "the Royal Platform", RoyalVUE offers clients transparency regarding the status and progress of ongoing work and allows clients to personally login to get "real-time" status updates on their projects.

Before and after pictures, notes on field observations, and written status can be viewed at any time from anywhere. Clients can access project information tailored to their request in the form of custom dashboards and

reports from both desktop and mobile devices with project information updated in real-time. RoyalVUE also allows us to build in and manage project exceptions, such as rain days or other legitimate delays, which serves as an accurate mediation tool in the event of a dispute. RoyalVUE eliminates a significant amount of the invoice process as accurate invoices are electronically created in the field as the project progresses and closes out.

RoyalVue Benefits

DEMONSTRATED PERFORMANCE HISTORY

RoyalVUE

Our Digital Transformation Platform

VISUALIZE

Track organizational program performance in real-time

- Dynamic dashboards, reports, and alerts improve transparency and provide a comprehensive view of performance.

UTILIZE

Optimize resources and streamline workflows

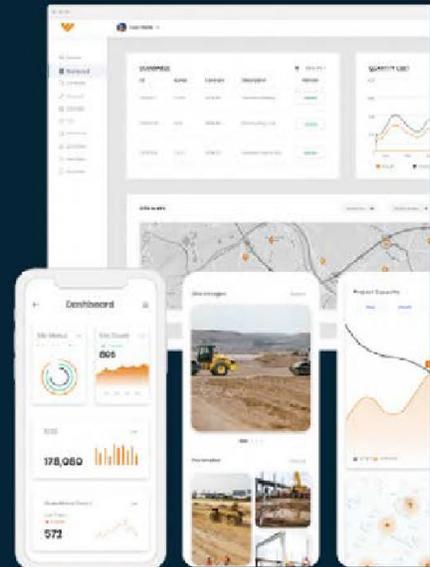
- Automation of manual processes paired with data-driven workflows provide greater control over contractor activities and result in lower cost of delivery.

ENGAGE

Foster real-time collaboration and problem solving

- Access information anywhere, anytime with a single interface for all users via mobile, tablet, or workstation.

MORE INFO: <https://www.royalengineering.net/services/digital-transformation/>



Capacity to Deliver

The normal workload for Royal is 30-50 concurrent, ongoing projects, each with project resource capacities easily being met. The program execution team presented herein is poised to begin work and is supported by a combined staff of approximately 50 people. As such, we offer our assurance that we can and will provide the professional services required by the SOQ immediately upon request. We have proven the capacity to scale and mobilize sufficient resources. As a small business delivering large-scale work, our resourcing strategy includes weekly measurement (and as needed, adjustment) of project commitments, available resources, and the resulting project task assignments. All project delivery plans target ahead-of-schedule milestones to accommodate resource adaptability needs.

Demonstrated Performance History

In addition to significant experience providing routine engineering services for street projects as evidenced in Sections K and L of the TEC Professional Services Questionnaire, our work also demonstrates a long and successful history of partnering with parishes and municipalities across Louisiana. In addition, our team has worked on several projects within Jefferson Parish. The below table provides a brief overview of projects performed within the Parish:

Firm	Project Name	Project Owner	Nature of Firm's Responsibility	Completion Date
	Labranche Wetland Assimilation Project	Meyer Engineers	Hydrodynamic modeling.	5/2013 (A)
	Cultural Resources Investigations of the Mid-Barataria Sediment Diversion Construction Impacts APE and Operations Impacts APE	CPRA	Terrestrial cultural resources investigations of the Mid- Barataria Sediment Diversion Construction Impacts and Operations Impacts Areas of Potential Effects (APE).	7/2020 (A)
	Barataria Basin Performance Assessment: Phase I Data Inventory	CPRA	Improve understanding of the effectiveness of restoration at the project and basin level to enhance the outcomes of restoration projects.	4/2019 (A)
	LA TIG Restoration Plan/ Environmental Assessment #7	CPRA	Development of restoration plan and environmental assessment to restore wetlands, coastal, and nearshore habitats and birds.	10/2016 (A)

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: 

Print Name: Michael Pugh, P.E.,

Title: President, Principal

Date: July 16, 2024



R. Kyle Ardoin
SECRETARY OF STATE

As Secretary of State of the State of Louisiana, I do hereby Certify that

ROYAL ENGINEERS AND CONSULTANTS, L.L.C.

A limited liability company domiciled in NEW ORLEANS, LOUISIANA,

Filed charter and qualified to do business in this State on September 12, 2005,

I further certify that the records of this Office indicate the company has paid all fees due the Secretary of State, and so far as the Office of the Secretary of State is concerned, is in good standing and is authorized to do business in this State.

I further certify that this certificate is not intended to reflect the financial condition of this company since this information is not available from the records of this Office.

In testimony whereof, I have hereunto set my hand and caused the Seal of my Office to be affixed at the City of Baton Rouge on,

May 13, 2020

Secretary of State

Web 36013193K



Certificate ID: 11207438#ARK73

To validate this certificate, visit the following web site, go to **Business Services, Search for Louisiana Business Filings, Validate a Certificate**, then follow the instructions displayed.
www.sos.la.gov

Louisiana Professional Engineering and Land Surveying Board

Hereby Certifies that

Royal Engineers and Consultants, L.L.C.

has complied with the regulations of this Board and is authorized to provide or to offer to provide Engineering services in the State of Louisiana contingent upon payment of the annual renewal fee.

Baton Rouge, Louisiana · 09/21/2005



Robert H. Owen
Chairman

Yann M. Hantelin
Secretary

License Number 3328

State of  Louisiana

State Licensing Board for Contractors

This is to Certify that: ROYAL ENGINEERS AND CONSULTANTS LLC
4298 Elysian Fields Ave Suite B
New Orleans, LA 70122

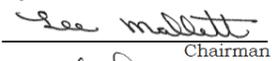
is duly licensed and entitled to practice the following classifications

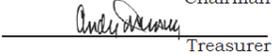
BUILDING CONSTRUCTION; HEAVY CONSTRUCTION; HIGHWAY, STREET AND BRIDGE CONSTRUCTION;
MUNICIPAL AND PUBLIC WORKS CONSTRUCTION



Witness our hand and seal of the Board dated,
Baton Rouge, LA 20th day of July 2022


Director


Chairman


Treasurer

Expiration Date: July 19, 2025

License No: 47048

This License Is Not Transferrable

State of  Louisiana

State Licensing Board for Contractors

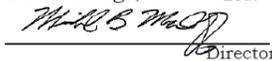
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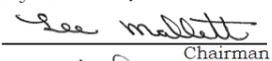
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MUNICIPAL AND PUBLIC WORKS CONSTRUCTION



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Baton Rouge, LA 20th day of July 2022


Director


Chairman


Treasurer

Expiration Date: July 19, 2025

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