

## TEC Professional Services Questionnaire

**A. Project Name and Advertisement Resolution Number:**

Professional Electrical Engineering Services for Miscellaneous Street Lighting Projects and other Electrical Related Work throughout Jefferson Parish - SOQ # 24-026  
Resolution No. 144425

**B. Firm Name & Address:**



**Modjeski and Masters, Inc.**  
1100 Poydras St., Suite 900  
New Orleans, LA 70163

**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:**

**Cullen J. Ledet, PE**  
1100 Poydras St., Suite 900  
New Orleans, LA 70163  
504-524-4344  
cjledet@modjeski.com

**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.**

**Jonathan E. Gerhart, PE**  
100 Sterling Parkway, Suite 302  
Mechanicsburg, PA 17050  
717-790-9565  
jegerhart@modjeski.com

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

<u>31</u> Administrative	<u>    </u> Estimators	<u>    </u> Specification Writers
<u>    </u> Architects (Licensed)	<u>    </u> Geologists	<u>57</u> Structural Engineers
<u>    </u> Chemical Engineers	<u>    </u> Geotechnical Engineers	<u>    </u> Graduate Engineers
<u>10</u> Civil Engineers	<u>    </u> Interior Designers	<u>48</u> Project Managers
<u>7</u> Construction Inspectors	<u>    </u> Landscape Architects	<u>    </u> Clerical
<u>    </u> Ecologists	<u>    </u> Land Surveyor	<u>    </u> Grant/Funding Specialist
<u>10</u> Electrical Engineers	<u>10</u> Mechanical Engineers	<u>    </u> Sanitary Engineers
<u>15</u> Engineer Intern	<u>    </u> Environmental Engineers	<u>23</u> NBIS Bridge Inspectors
<u>    </u> Professional Land Surveyors	<u>13</u> CADD Technicians	<u>224</u> <b>TOTAL</b>

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

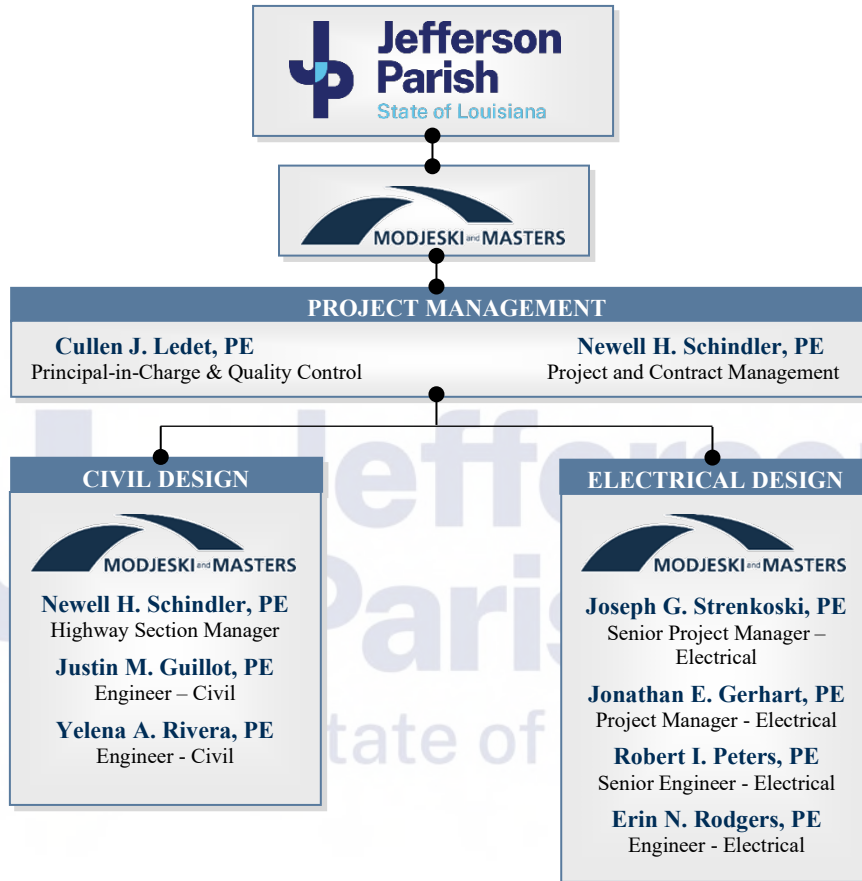
**If marked "No" skip to Section I. If marked "yes" complete Sections G-H.**

## TEC Professional Services Questionnaire

<b>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.</b>		
1. N/A		
2.		
<b>H. Has this JOINT-VENTURE previously worked together? Please check:</b> YES                      NO		
<b>I. List all subcontractors anticipated for this Project. Please note that <u>all subcontractors must submit a fully completed copy of this questionnaire</u>, 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.</b>		
<b>Name &amp; Address:</b>	<b>Specialty:</b>	<b>Worked with Firm Before (Yes or No):</b>
1. None		
2.		
3.		
<b>J. Please specify the total number of support personnel that may assist in the completion of this Project:</b> As shown in the Organizational Chart in Section K, Eight (8) M&M personnel (4 Electrical Engineers & 4 Civil Engineers) have been designated for this project. In addition, M&M will make available any of its qualified and knowledgeable staff to complete all Task Orders on time.		

## TEC Professional Services Questionnaire

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.



## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>	
<b>Name &amp; Title:</b>  <b>Cullen J. Ledet, PE</b> Senior Project Manager New Orleans Regional Director	
<b>Project Assignment:</b>  Quality Control	
<b>Name of Firm with which associated:</b>  <div style="text-align: center;">  </div>	
<b>Years' experience with this Firm:</b>  With this Firm: 22 Total: 22	
<b>Education: Degree(s)/Year/Specialization:</b>  B.S., Civil Engineering, Tulane University (2000)	
<b>Active registration: Year first registered/discipline:</b>  2007/Professional Engineer (Civil) - LA	
<b>Other experience and qualifications relevant to the proposed Project:</b>  <p>Mr. Ledet is a Senior Project Manager and currently serves as Regional Director for M&amp;M's New Orleans Office and has over 21 years of experience in the design of fixed and movable highway and railroad bridges. He also has provided quality assurance for all disciplines represented in the plans and specifications for several LADOTD Roadway Lighting Projects. He has consulted with personnel at LADOTD Headquarters (Electrical Design) and various District offices to ensure the proposed lighting design meets the local needs while adhering to LADOTD Illumination Standards. Mr. Ledet has coordinated with local governments including LCG/LUS and most of the Louisiana Electrical Utility Companies on numerous roadway lighting projects for LADOTD.</p> <p><b>Meets Minimum Personnel Qualification No. 1.</b></p> <p><b>US 90-Z CCC Decorative Lighting, New Orleans, LA   LADOTD (2023)</b>            M&amp;M was contracted by LADOTD for the design of the proposed Dynamic Decorative Lighting System to be installed on the two Crescent City Connection (CCC) Bridges over the Mississippi River in New Orleans, LA. (CCC #1 &amp; CCC #2). The proposed decorative lighting system will include remotely operated dynamic LED necklace lighting on the top chords, uplighting on selected truss members and downlighting on the main piers and would be on both the upriver and downriver sides of the two superstructures. Project was on an expedited schedule. M&amp;M was responsible for preparing the final construction plans and specifications, Level 4 Transportation Management Plan (TMP) and coordinating USCG approval. Mr. Ledet provided contract management and provided quality assurance for all engineering disciplines as part of this project.</p>	

## **TEC Professional Services Questionnaire**

### **I-10 Texas State Line to E. of Coone Gully, Calcasieu, LA | LADOTD (2/2017-7/2017)**

M&M performed a study of the existing roadway lighting system of Interstate 10 (I-10) in Calcasieu Parish at five locations for the LADOTD as part of S.P. H.003184 which calls for a portion of I-10 from the Texas state line through to the East of Coone Gully to be widened from four to six lanes of travel. The scope of the work and inquiry consisted of an illumination and roadway lighting construction feasibility study at the five specified locations. The as-designed roadway lighting systems were evaluated and compared to the proposed widened geometry to determine if the existing systems would remain in compliance with LADOTD Illumination standards. Where needed, modifications were recommended to satisfy required illumination and electrical criteria. Mr. Ledet provided contract management and provided quality assurance for all engineering disciplines as part of this project.

### **I-12 LA 447 (Walker) Lighting Interchange, Walker, LA | LADOTD (9/2016-9/2019)**

The project involved the design of roadway lighting at the I-12/LA 447 Interchange in Walker, LA. The design included providing lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates and is currently providing construction related services including shop drawing review and field inspections. Mr. Ledet provided contract management and quality assurance for all engineering disciplines as part of this project. He also provided construction related support by reviewing the structural components of the installed light poles including anchor bolts, base plates and drilled shafts.

### **I-10: E. Jct. I-49 to La 328 Lighting, Lafayette and St. Martin Parishes | LADOTD (9/2016-9/2019)**

The project involved the design of roadway lighting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates, and is currently providing construction related engineer services including shop drawing review and field inspections. Mr. Ledet provides contract management and quality assurance for all engineering disciplines as part of this project. He also provided construction related support by reviewing the structural components of the installed light poles including anchor bolts, base plates and drilled shafts.

### **I-10 @ Ambassador Caffery Parkway Interchange Lighting, Lafayette, LA | LADOTD (12/2013-5/2014)**

The project involved the design of roadway lighting for the Ambassador Caffery Parkway (LA 3184) Interchange along Route I-10 in Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Ledet provided quality assurance for all engineering disciplines and oversaw plan development for this project. He also provided construction related support by reviewing the structural components of the installed light poles including anchor bolts, base plates, and drilled shafts.

### **I-20 Garrett Road Interchange Lighting, Monroe, LA | LADOTD (6/2012-2/2017)**

The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Ledet provided quality assurance for all engineering disciplines and oversaw plan development for this project. He also provided construction related support by reviewing the structural components of the installed light poles including anchor bolts, base plates, and drilled shafts.



## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>	
<b>Name &amp; Title:</b>  <b>Joseph G. Strenkoski, PE</b> Senior Project Manager	
<b>Project Assignment:</b>  Engineer – Electrical Design/Street Lighting	
<b>Name of Firm with which associated:</b>  <div style="text-align: center;">  </div>	
<b>Years' experience with this Firm:</b>  With this Firm: 11 Total: 35	
<b>Education: Degree(s)/Year/Specialization:</b>  B.S., Electrical Engineering Technology, Penn State University (1988)	
<b>Active registration: Year first registered/discipline:</b>  1997/Professional Engineer (Electrical): AR, CA, CT, ID, LA, MA, MD, NC, NJ, NY, PA, TX, VA, WV	
<b>Other experience and qualifications relevant to the proposed Project:</b>  <p>Mr. Strenkoski has been employed by the Modjeski and Masters, Inc. since 2013 and currently serves as a Senior Project Manager in the Electrical Section. He has more than 34 years of experience in the electrical engineering consulting field including over a decade of project management work and almost two decades of electrical group management. Mr. Strenkoski has multi-discipline and multi-project management exposure including in-house coordination of civil, structural, and mechanical/electrical efforts, as well as relating with clients and consultants. His responsibilities include daily management of the Electrical Section personnel and procedures, technical QA/QC for electrical engineering designs, project management on multi-discipline designs, and marketing electrical engineering services. Mr. Strenkoski has also served as Project Manager for numerous LADOTD Roadway Lighting Design Projects.</p> <p><b>Meets Minimum Personnel Qualification Nos. 2 &amp; 3.</b></p>	

## **TEC Professional Services Questionnaire**

### **I-12: LA 1077 to US 190, Covington, LA | LADOTD (12/2019-Ongoing)**

As part of an overall interstate widening project, M&M provided an investigation for a future roadway lighting system along I-12 in St. Tammany Parish. M&M provided an illumination analysis per LADOTD standards for a complete lighting design at the I-12 at LA 1077, I-12 at LA 21, I-12 at Pinnacle Pkwy, and I-12 at US 190 interchanges. M&M provided plans and specifications for lighting and electrical equipment to accommodate installation of a future lighting system as well as plans and specifications for a new navigation lighting design on the widened Tchefuncte River Bridge. M&M is currently providing construction related engineering services for this project. Mr. Strenkoski serves as the Project Manager for this project.

### **I-10 Texas State Line to E. of Coone Gully, Calcasieu, LA | LADOTD (2/2017-7/2017)**

M&M performed a study of the existing roadway lighting system of Interstate 10 (I-10) in Calcasieu Parish at five locations for the LADOTD as part of S.P. H.003184 which calls for a portion of I-10 from the Texas state line through to the East of Coone Gully to be widened from four to six lanes of travel. The scope of the work and inquiry consisted of an illumination and roadway lighting construction feasibility study at the five specified locations. The as-designed roadway lighting systems were evaluated and compared to the proposed widened geometry to determine if the existing systems would remain in compliance with LADOTD Illumination standards. Where needed, modifications were recommended to satisfy required illumination and electrical criteria. Mr. Strenkoski served as Project Manager for this project.

### **I-12 LA 447 Lighting Interchange, Walker, LA | LADOTD (10/2016-9/2019)**

The project involved the design of roadway lighting at the I-12/LA 447 Interchange in Walker, LA. The design included providing lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates and is currently providing construction related services including shop drawing review and field inspections. Mr. Strenkoski served as Project Manager for this project.



### **I-10: E. Jct. I-49 to LA 328 Lighting Construction Related Services, St. Martin Parish, LA | LADOTD (10/2015-Ongoing)**

The project involved the design of roadway lighting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates and is currently providing construction related engineer services including shop drawing review and field inspections. Mr. Strenkoski serves as Project Manager for this project.

### **I-10: LA 347 to Atchafalaya Floodway Bridge Lighting Services, St. Martin Parish, LA | LADOTD (12/2015-Ongoing)**

The project involved the design of roadway lighting for Interstate 10 from LA347 to Atchafalaya Floodway Bridge in Lafayette, LA. The design included providing low-mast lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates and is currently providing construction related engineering services including shop drawing review and field inspections. Mr. Strenkoski serves as Project Manager for this project.

## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>	
<b>Name &amp; Title:</b>  <b>Jonathan E. Gerhart, PE</b> Project Manager - Electrical	
<b>Project Assignment:</b>  Engineer – Electrical Design/Street Lighting	
<b>Name of Firm with which associated:</b>  	
<b>Years' experience with this Firm:</b>  With this Firm: 14 Total: 26	
<b>Education: Degree(s)/Year/Specialization:</b>  B.S., Electrical Engineering Technology, Penn State University (1998)	
<b>Active registration: Year first registered/discipline:</b>  2016/Professional Engineer (Electrical): FL, IL, LA, MI, MS, PA, SC, WV	
<b>Other experience and qualifications relevant to the proposed Project:</b>  <p>Mr. Gerhart is a Project Manager in Modjeski and Masters' Electrical Engineering Section and has over 25 years of experience in the design of electrical distribution systems, control systems and safety systems, including roadway lighting systems. Having over 10 years of experience on LADOTD Roadway Lighting Projects, Mr. Gerhart is experienced with photometric analysis and roadway lighting design (both HPS and LED), including inspections, construction support, and troubleshooting. He has vast expertise in all matters related to lighting systems having served as Lead Design Engineer for numerous LADOTD roadway lighting projects and has developed evaluations, recommendations, cost estimations, value engineering and consultations with LADOTD electrical design staff. <b>Meets Minimum Personnel Qualification Nos. 2 &amp; 3.</b></p> <p><b>US 90-Z CCC Decorative Lighting, New Orleans, LA   LADOTD (2023)</b>            M&amp;M was contracted by LADOTD for the design of the proposed Dynamic Decorative Lighting System to be installed on the two Crescent City Connection (CCC) Bridges over the Mississippi River in New Orleans, LA. (CCC #1 &amp; CCC #2). The proposed decorative lighting system will include remotely operated dynamic LED necklace lighting on the top chords, uplighting on selected truss members and downlighting on the main piers and would be on both the upriver and downriver sides of the two superstructures. Project was on an expedited schedule. M&amp;M was responsible for preparing the final construction plans and specifications, Level 4 Transportation Management Plan (TMP) and coordinating USCG approval. Mr. Gerhart served as Project Manager and Lead Electrical Engineer for the Decorative Lighting Design.</p>	



## **TEC Professional Services Questionnaire**

### **I-12: LA 1077 to US 190, Covington, LA | LADOTD (12/2019-Ongoing)**

M&M provided an investigation for a future roadway lighting system along I-12 in St. Tammany Parish. M&M provided an illumination analysis per LADOTD standards for a complete lighting design at the I-12 at LA 1077, I-12 at LA 21, I-12 at Pinnacle Pkwy, and I-12 at US 190 interchanges. M&M provided plans and specifications for lighting and electrical equipment to accommodate installation of a future lighting system as well as plans and specifications for a new navigation lighting design on the widened Tchefuncte River Bridge. M&M is currently providing construction related engineering services for this project. Mr. Gerhart oversaw the photometric analysis, electrical calculations, and final plan development for the design portion of this project. He also performs field inspections during construction and works directly with LADOTD electrical engineers

### **I-10 Texas State Line to E. of Coone Gully, Calcasieu, LA | LADOTD (2/2017-7/2017)**

M&M performed a study of the existing roadway lighting system of Interstate 10 in Calcasieu Parish at five locations for the LADOTD as part of S.P. H.003184 which calls for a portion of I-10 from the Texas state line through to the East of Coone Gully to be widened from four to six lanes of travel. The scope of the work and inquiry consisted of an illumination and roadway lighting construction feasibility study at the five specified locations. The as-designed roadway lighting systems were evaluated and compared to the proposed widened geometry to determine if the existing systems would remain in compliance with LADOTD Illumination standards. Where needed, modifications were recommended to satisfy required illumination and electrical criteria. Mr. Gerhart oversaw the photometric analysis, electrical calculations, and final plan development for the design portion of this project. He also performed field inspections during construction.

### **I-12 LA 447 Lighting Interchange, Walker, LA | LADOTD (9/2016-6/2019)**

The project involved the design of roadway lighting at the I-12/LA 447 Interchange. The design included providing lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M performed photometric analysis, and provided plans & construction estimates and construction related engineering services including shop drawing review and field inspections. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers.

### **I-10: E. Jct. I-49 to LA 328 Lighting, Lafayette and St. Martin Parishes, LA | LADOTD (10/2015-Ongoing)**



The project involved the design of roadway lighting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates and is currently providing construction related engineer services including shop drawing review and field inspections. Mr. Gerhart oversaw the photometric analysis, electrical calculations, and final plan development for the design portion of this project.

### **I-10: LA 347 to Atchafalaya Floodway Bridge Lighting, St. Martin Parish, LA | LADOTD (12/2015-On-going)**

The project involved the design of roadway lighting for Interstate 10 from LA347 to Atchafalaya Floodway Bridge in Lafayette, LA. The design included providing low-mast lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates and is currently providing construction related engineering services including shop drawing review and field inspections. Mr. Gerhart oversaw the photometric analysis, electrical calculations, and final plan development for the design portion of this project.

## TEC Professional Services Questionnaire

### KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

<b>Name &amp; Title:</b>	
<b>Robert I. Peters, PE</b> Senior Engineer – Electrical	
<b>Project Assignment:</b>	
Engineer – Electrical Design/Street Lighting	
<b>Name of Firm with which associated:</b>	
	
<b>Years' experience with this Firm:</b>	
With this Firm: 15 Total: 34	
<b>Education: Degree(s)/Year/Specialization:</b>	
M.S., Engineering, Temple University, 1989 B.S., Electrical Engineering, Temple University, 1987 Associates of Arts, Engineering, HACC, 1984	
<b>Active registration: Year first registered/discipline:</b>	
2013/Professional Engineer (Electrical) – IL, LA, MD, MO, NC, PE, TX	
<b>Other experience and qualifications relevant to the proposed Project:</b>	
<p>Mr. Peters joined Modjeski and Masters, Inc. in 2009. He has over 28 years of industrial control system engineering experience with 10 years' experience being with movable bridges. Mr. Peters is assigned to the firm's Electrical / Mechanical Section. He has been involved in a variety of bridge projects.</p> <p><b>Lapalco Boulevard Bridge Repairs. Jefferson Parish, LA   Jefferson Parish (2012-2014)</b>          This is a 2,840-foot, double-leaf bascule bridge carrying four lanes of vehicular traffic over the Harvey Canal. The main bridge portion is comprised of welded steel plate girders, with the approaches including steel and concrete girder spans. This bridge has eleven concrete spans at 77', four concrete spans at 100', four 135' steel spans, two 182' steel spans, and two bascule leaves at 187' each. Mr. Peters assisted with developing plans and specifications for several electrical repair items. He also assisted developing plans and specifications for the addition of remote dynamic messaging signs, traffic gates, traffic signals, wireless network equipment, and CCTV cameras to be used for traffic flow management during extended bridge openings.</p>	

## **TEC Professional Services Questionnaire**

### **George Washington Bridge - Barriers, Sidewalks, Railings, Lighting & Security Cameras. | WSP USA (2015-2018)**

The George Washington Bridge is a suspension bridge that spans the Hudson River from Manhattan to Fort Lee in NJ carrying I-95 and U.S. Route 1/9. The bridge has an upper level with four lanes of traffic in each direction and a lower level with three lanes in each direction, for a total of 14 lanes. A sidewalk on each side of the bridge's upper-level carries pedestrian and bicycle traffic. M&M perform engineering design services related to the replacement of suspender ropes and the rehabilitation of the main cables and cable strands for this bridge. Mr. Peters assisted with the electrical design of the anchorage dehumidification.

### **Rob Roy Bridge MP 261.25 Electrical and Structural Rehabilitation. Pine Bluff, AR | Union Pacific Railroad (2012-2013)**

M&M provided the design for the electrical system rehabilitation of Bridge No. 261.25 over the Arkansas River in the Jonesboro Subdivision of Union Pacific Railroad. The focus of the rehabilitation work was the electrical and control systems of the span locks motors, main and auxiliary drive motors and new drives. Mr. Peters was the Senior Electrical Engineer for the project. He designed the new PLC control system for the bridge and assisted with the design of replacement VFD drives, main drive motors, raceway systems, bridge and navigation lighting, backup diesel generator, and tender house prefabricated building.

### **PTB 154 WO#15 Pump Station Rehabilitation. Franklin County, IL | Illinois Department of Transportation (2015)**

Provide phase II final design services for the emergency repairs to the I-57IL 149 Pump Station. An on-site mechanical and electrical inspection was initially performed to evaluate the condition of the existing equipment and to determine the required short-term repairs. Based on M&M's report of the inspection findings, plans and specifications for the required emergency repairs were developed. Mr. Peters performed the electrical portion of the pumping station inspection and assisted with developing the plans and specifications for recommended electrical repairs.

### **PTB 154, WO #18 Item 56 - I-57 over the Mississippi River Navigation Lighting Rehabilitation | Illinois Department of Transportation (2017)**

Mr. Peters assisted with developing the electrical plans and specifications for the replacement bridge navigation and aviation lighting.

### **Bascule Bridges Automation. Joliet IL | Illinois Department of Transportation (2011 - 2018)**



M&M was contracted to study and affect a design which allows the centralized control of six currently locally manned and controlled movable bridges located on the Des Plains River in Joliet, Illinois. An extensive fiber optic loop system and state of the art wireless radio back-up system will deliver control SCADA signals to each bridge for reliable operation and also function to deliver real time camera input back to the centralized location. Each bridge will be upgraded with new controls, various electrical system improvements, and an extensive coverage camera system. The centralized control area will be equipped with all necessary devices, technology and ergonomics to provide safe, reliable, and efficient control of the structures including a video wall for camera feedback observation. M&M is preparing the plans and special provisions to be included in the bid package and will provide support during the replacement. Mr. Peters is serving as the Senior Electrical Engineer and primary electrical designer on the project.

### **In-depth Bridge Inspections T.O. #6 – Statewide Louisiana | LADOTD (2017)**

M&M assisted AECOM in performing in-depth inspections of two LADOTD bridges, LA 182 Morgan City Bridge over the Atchafalaya River and LA 315 Dularge Bridge over Bayou Dularge. Mr. Peters was the lead Electrical Inspector.

## TEC Professional Services Questionnaire

### **KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**

<b>Name &amp; Title:</b>		
<b>Erin N. Rodgers, PE</b> Engineer - Electrical		
<b>Project Assignment:</b>		
Engineer – Electrical Design/Street Lighting		
<b>Name of Firm with which associated:</b>		
		
<b>Years' experience with this Firm:</b>		
With this Firm: 7 Total: 7		
<b>Education: Degree(s)/Year/Specialization:</b>		
B.S., Mechanical and Electrical Concentrations, Elizabeth University (2017)		
<b>Active registration: Year first registered/discipline:</b>		
2022/Professional Engineer (Electrical): PA		
<b>Other experience and qualifications relevant to the proposed Project:</b>		
<p>Ms. Rodgers joined Modjeski and Masters, Inc. as an engineer in training in 2017 following her graduation from Elizabethtown College with a Bachelor of Science in Engineering. Ms. Rodgers serves as an Electrical Engineer E3 for the Electrical section and has been involved in design and inspection of several movable bridges during her time with the firm. She also has significant experience with roadway lighting design, tunnel lighting design and utility coordination projects.</p> <p><b>I-20 Rehabilitation (Pine Road to I-220), Shreveport, LA   LADOTD (1/2018-Ongoing)</b></p> <p>M&amp;M was selected to develop roadway lighting plans to accommodate future interstate median lighting and to relocate any existing light poles in conflict with reconfigured on and off ramps. Ms. Rodgers is working under the direction of a senior engineer to design a preliminary roadway lighting system for the I-20 widening project. She is performing a photometric analysis using Visual lighting software to achieve optimal lighting illumination levels and uniformity while minimizing pole quantity and related costs. She will use the final approved photometric analysis report to generate final plans and specifications.</p>		



## **TEC Professional Services Questionnaire**

### **I-12: LA 1077 to US 190, Covington, LA | LADOTD (12/2019-On-going)**

As part of an overall interstate widening project, M&M provided an investigation for a future roadway lighting system along I-12 in St. Tammany Parish. M&M provided an illumination analysis per LADOTD standards for a complete lighting design at the I-12 at LA 1077, I-12 at LA 21, I-12 at Pinnacle Pkwy, and I-12 at US 190 interchanges. M&M provided plans and specifications for lighting and electrical equipment to accommodate installation of a future lighting system as well as plans and specifications for a new navigation lighting design on the widened Tchefuncte River Bridge. M&M is currently providing construction related engineering services for this project. Ms. Rodgers performed photometric analysis and assisted in final electrical plan development.

### **I-10: E. Jct. I-49 to LA 328 Lighting, Lafayette and St. Martin Parishes, LA | LADOTD (10/2017-On-going)**

M&M was selected to prepare final plans, specifications, photometric calculations, and a construction cost estimate for the I-10 at I-49 to LA 328 Interchange Lighting. M&M will be working closely with local government agencies and utility companies to provide an optimum, low-maintenance lighting system. Ms. Rodgers worked under the direction of a senior engineer to review submittals for the roadway lighting design for the I-10 widening project in Louisiana. Her responsibilities included verifying contractor submissions met design intent and coordinating all equipment to be used on the project with the contractor.

### **I-10: LA 347 to Atchafalaya Floodway Bridge Lighting, St. Martin Parish, LA | LADOTD (12/2017-On-going)**

M&M was selected to prepare final plans, specifications, photometric calculations, and a construction cost estimate for the I-10 @ LA 347 Interchange which consists of two roundabouts. M&M worked closely with local government agencies and utility companies to provide an optimum, low-maintenance lighting system. Ms. worked under the direction of a senior engineer to review submittals for the roadway lighting design for the I-12 widening project in Louisiana. Her responsibilities included verifying contractor submissions met design intent and coordinating all equipment to be used on the project with the contractor.

### **I-10: Texas State Line to East of Coone Gully Lighting Design, Calcasieu Parish | LADOTD (1/2018-5/2019)**

Ms. Rodgers worked under the direction of a senior engineer to design a roadway lighting system for I-10 widening project near Coone Gully, Louisiana. She completed a photometric analysis using Visual lighting software to achieve optimal lighting illumination levels and uniformity while minimizing pole quantity and related costs. Ms. Rodgers also worked to develop complete lighting plans for the project including plan layouts, pole schematics, and equipment detailing.

### **I-12 LA 447 (Walker) Lighting Interchange, Livingston Parish, LA | LADOTD (10/2017-4/2019)**

M&M was selected to prepare final plans, specifications, photometric calculations, and a construction cost estimate for the I-12 at LA 447 Interchange which includes two roundabouts. M&M worked closely with local government agencies and utility companies to provide an optimum, low-maintenance lighting system. Ms. Rodgers worked under the direction of a senior engineer to review submittals for the roadway lighting design for the I-12 widening project in Louisiana. Her responsibilities included verifying contractor submissions met design intent and coordinating all equipment to be used on the project with the contractor.

### **I-49 South at Verot School Road - Preliminary Lighting Plans, Lafayette Parish, LA | LADOTD (7/2018-7/2019)**

Ms. Rodgers worked under the direction of a senior engineer to design a preliminary roadway lighting system for the new interchange to be built at the intersection of I-49 and Verot School Rd near Lafayette, Louisiana. She completed a photometric analysis using Visual lighting software to achieve optimal lighting illumination levels and uniformity while minimizing pole quantity and related costs.



## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>	
<b>Name &amp; Title:</b>  <b>Newell H. Schindler, PE</b> Senior Engineer Highway Section Manager	
<b>Project Assignment:</b>  Project Manager	
<b>Name of Firm with which associated:</b>	
	
<b>Years' experience with this Firm:</b>	
With this Firm: 4 Total: 42	
<b>Education: Degree(s)/Year/Specialization:</b>	
B.S., Civil Engineering, Louisiana State University, 1982	
<b>Active registration: Year first registered/discipline:</b>	
1988/Professional Engineer (Civil & Environmental) – AL, LA, MS, TX	
<b>Other experience and qualifications relevant to the proposed Project:</b>	
<p>Mr. Schindler has 41 years of experience in the management and design of infrastructure projects, 13 years of experience in the Road Design Section of LA DOTD, and 28 years of experience as a Consulting Engineer which has included Project Management and design of a multitude of infrastructure improvement projects. He has extensive knowledge of current LA DOTD and the American Association of State Highway &amp; Transportation Officials' (AASHTO) policies and design procedures. In addition, Mr. Schindler supervised the design of a multitude of road and bridge improvement projects, including complex urban interstate, urban arterial, rural arterial, and minor bridge replacement projects. Experience with planning, schematic development, feasibility studies and environmental documents, for highway, flood protection, airport, and drainage projects. Perform hands-on design, for all projects managed. Mr. Schindler's clients include City of New Orleans Department of Public Works, New Orleans Aviation Board, New Orleans Regional Planning Commission, LADOTD, Jefferson Parish, Plaquemines Parish, St. Tammany Parish, St. Charles Parish, City of Kenner, Southeast Louisiana Flood Protection Authority East, USACE New Orleans District, Orleans Levee District, Lake Borgne Basin Levee District, among others.</p>	

## **TEC Professional Services Questionnaire**

### **US 90-Z CCC Decorative Lighting, New Orleans, LA | LADOTD (2023)**

M&M was contracted by LADOTD for the design of the proposed Dynamic Decorative Lighting System to be installed on the two Crescent City Connection (CCC) Bridges over the Mississippi River in New Orleans, LA. (CCC #1 & CCC #2). The proposed decorative lighting system will include remotely operated dynamic LED necklace lighting on the top chords, uplighting on selected truss members and downlighting on the main piers and would be on both the upriver and downriver sides of the two superstructures. Project was on an expedited schedule. M&M was responsible for preparing the final construction plans and specifications, Level 4 Transportation Management Plan (TMP) and coordinating USCG approval. Mr. Schindler served as the lead engineer overseeing the development of the TMP, temporary traffic control plans and coordination with the USCG for USCG approval for the installation of the decorative lighting over a navigable waterway.

### **Cline Ave Bridge. East Chicago, Indiana | United Bridge Partners (2020-2021)**

Mr. Schindler served as lead engineer for several post construction design tasks. Performed an independent technical review (ITR) of final roadway signing and striping plans prepared by others to determine conformance with AASHTO, IDOT, and IMUTCD design criteria and guidelines. 23 non-conformance Items were identified and documented in M&M's NCR Report. Also provided the Client with 17 additional recommendations to improve the operation and safety of the Cline Ave. Bridge facility. Subsequently, prepared final construction plans to address the NCR items and recommendations. Final plans included signing and striping layouts along with sign structure details. Also prepared final plans for the installation of Guide (Attraction) signs along Indiana SR 912 and I-90 in Indiana and Illinois. Plans were prepared in accordance with IMUTCD, MUTCD and Illinois and Indiana sign guidelines. Served as lead engineer developing conceptual geometric layouts for two (2) proposed new partial and fully directional interchanges. Five (5) conceptual interchange layouts were developed for the proposed Riley Rd./CAB Interchange and Three (3) conceptual interchange layouts were developed for the proposed Riley Rd./CAB Interchange and presented in a feasibility report. Roundabout layouts were developed for the ramp intersections. Developed in accordance with AASHTO and IDOT Interchange guidelines.

### **Central City Group A (FRC) (DPW P. No. 2017-RR021). New Orleans, LA | City of New Orleans - DPW (2016-2020)**

Mr. Schindler was Project Principal, Engineer of Record and Quality Control Officer. He performed technical engineering design quality control reviews for full reconstruction (FRC) of several streets (13 blocks) in the urbanized Central City Neighborhood. Project was a complex urban design due to the number of underground utilities. Mr. Schindler performed technical quality control reviews of the hydrologic and hydraulic analyses for the design of the sub-surface drainage system for a 10-year design storm in accordance with Louisiana (LA) DOTD Hydraulics Manual, along with technical quality control reviews of the design for the replacement of the existing water and sewer systems. He reviewed the designed profile grades to confirm conformance with AASHTO design criteria and LA DOTD sub-surface hydraulic criteria. He performed technical analysis and quality control reviews of the proposed geometric details and joint layouts. Mr. Schindler reviewed calculations for quantities for all construction items. He performed quality control reviews of the final construction plans and specifications, including typical sections, plan/profile sheets, geometric detail, joint layouts, and cross sections.

### **Menetre Park and Boat Launch Master Plan. Covington, LA | City of Covington (2018)**

Mr. Schindler served as Principal-in-Charge and Quality Control Officer for the production of a Master Plan which included a summary report and conceptual drawings of a 3-phased approach to implementing enhancements to the property included new boat and paddleboard/kayak launches, picnic areas, fishing piers, and elevated timber boardwalks throughout the wetland area along with a centralized gazebo. Mr. Schindler participated in the Public Meeting and performed Quality Control reviews of all project deliverables.

## TEC Professional Services Questionnaire

### KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

<b>Name &amp; Title:</b>	
<b>Justin M. Guillot, PE</b> Engineer - Highway	
<b>Project Assignment:</b>	
Engineer – Roadway & Drainage Design	
<b>Name of Firm with which associated:</b>	
	
<b>Years' experience with this Firm:</b>	
With this Firm: 4 Total: 8	
<b>Education: Degree(s)/Year/Specialization:</b>	
B.S., Civil and Environmental Engineering, University of New Orleans, 2017 B.S., Psychology, Louisiana State University, 2008	
<b>Active registration: Year first registered/discipline:</b>	
2021/Professional Engineer (Civil) – LA	
<b>Other experience and qualifications relevant to the proposed Project:</b>	
<p>Mr. Guillot has over 6 years of experience in the design of infrastructure projects. He has a broad knowledge of current Louisiana Department of Transportation and Development (LA DOTD) and the American Association of State Highway &amp; Transportation Officials' (AASHTO) policies and design procedures. He has also served in project management roles and performed construction administration. In addition, Mr. Guillot has completed coursework by the American Traffic Safety Services Association (ATSSA) and is certified as a Traffic Control Technician, Traffic Control Supervisor, and Flagger.</p> <p><b>US 90-Z CCC Decorative Lighting, New Orleans, LA   LADOTD (2023)</b></p> <p>M&amp;M was contracted by LADOTD for the design of the proposed Dynamic Decorative Lighting System to be installed on the two Crescent City Connection (CCC) Bridges over the Mississippi River in New Orleans, LA. (CCC #1 &amp; CCC #2). The proposed decorative lighting system will include remotely operated dynamic LED necklace lighting on the top chords, uplighting on selected truss members and downlighting on the main piers and would be on both the upriver and downriver sides of the two superstructures. Project was on an expedited schedule. M&amp;M was responsible for preparing the final construction plans and specifications, Level 4 Transportation Management Plan (TMP) and coordinating USCG approval. Mr. Guillot developed the temporary traffic control plans in accordance with MUTCD and LADOTD requirements. He assisted with the TMP development and the USCG approval process for the installation of decorative lighting on a navigable waterway.</p>	

## **TEC Professional Services Questionnaire**

### **Cline Avenue Bridge. East Chicago, IN | United Bridge Partners (2021 - 2022)**

This project involves various tasks related to the recent construction of a privately-owned 1.7-mile segmental box girder toll bridge. Mr. Guillot served in a general engineering support role in performing an Independent Technical Review of final Signage and Striping Plans produced by another consulting firm for conformance with Indiana Department of Transportation (InDOT) Design Guidelines as well as the Indiana Manual on Uniform Traffic Control Devices (IMUTCD). He was also tasked with proposing recommendations to improve the safety and operation of the bridge and roadway approaches, including revisions to the pavement marking layout and the addition of various warning and regulatory signs as well as roadway delineation. He produced final construction plans which included corrections to the items found not in compliance as well as the proposed recommendations. He calculated construction quantities and compiled an opinion of probable construction cost. He also reviewed construction material submittals from the contractor for conformance with the project specifications. In addition, the client wanted to add various "Attraction" signs and Advance Guide Signs along several routes in the area to attract more motorists to the toll bridge. Mr. Guillot's role included determining acceptable sign locations and designing the signs (overall size and color as well as letter font, size, and spacing) and their foundations in accordance with InDOT as well as the IMUTCD. He also produced preliminary plans for the fabrication and installation of the signs. Another task was the creation of conceptual layouts for new interchanges along the bridge. Mr. Guillot's role included determining the appropriate ramp design criteria (design speed, travel lane and shoulder widths, cross slope, maximum grades, curve radii, etc.) and designing multiple horizontal and vertical geometries for a total of 8 ramps at 2 different interchange locations in accordance with InDOT and AASHTO's "A Policy on Geometric Design of Highways and Streets". These ramps required complex layouts due to vertical clearance issues caused by the presence of overhead utilities and at-grade railroad tracks as well as limited right-of-way availability. He also produced conceptual layout drawings to illustrate each alternative.

### **Calcasieu River Bridge (Prien Lake) Rating (S.P. No. H.009859.5). Lake Charles, LA | LA DOTD (2021 - present)**

Mr. Guillot served in a general engineering support role, which included utilizing AASHTOWare BrR and other bridge rating software to perform the calculations necessary to rate the prestressed concrete girder sections of the bridge, concrete pile bent caps, and the pin & hanger connections within the steel girder sections. He also contributed to the compilation of the final Rating Report.



### **Central City Group A (FRC) (DPW P. No. 2017-RR021). New Orleans, LA | City of New Orleans - DPW (2017-2020)**

Mr. Guillot served as Design Lead during the preliminary and final design phases then transitioned to Project Manager and Construction Administrator upon the start of the construction phase. He performed geometric design in accordance with AASHTO design criteria and ensured compliance with the Americans with Disabilities Act (ADA) for full reconstruction (FRC) of 9 city blocks in the urbanized Central City Neighborhood. The project was a complex urban design due to the number of underground utilities and limited Right-of-Way. Mr. Guillot performed hydrologic and hydraulic analyses for the design of the sub-surface drainage system for a 10-year design storm in accordance with the LA DOTD Hydraulics Manual, along with design of the replacement of existing water and sanitary sewer systems. He oversaw development of the final construction plans and specifications, including typical sections, special details, plan/profile sheets, geometric details, joint layouts, and cross sections. Mr. Guillot calculated quantities for all construction bid items and compiled an Opinion of Probable Construction Cost (OPCC) which was ultimately within 1.1% of the winning contractor's bid. Upon the start of construction, Mr. Guillot was the primary point of contact for both the client and the contractor. He reviewed contractor material submittals and shop drawings for compliance with the plans and specifications. Lastly, he performed frequent site visits to ensure safe work practices were being followed and verify the contractor's implementation of proper temporary traffic control measures.



## TEC Professional Services Questionnaire

### KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

<b>Name &amp; Title:</b>	
<b>Yelena A. Rivera, PE</b> Engineer - Highway	
<b>Project Assignment:</b>	
Engineer – Roadway & Drainage Design	
<b>Name of Firm with which associated:</b>	
	
<b>Years' experience with this Firm:</b>	
With this Firm: 2 Total: 15	
<b>Education: Degree(s)/Year/Specialization:</b>	
B.S., Civil and Environmental Engineering, University of New Orleans, 2009	
<b>Active registration: Year first registered/discipline:</b>	
2016/Professional Engineer (Civil) – LA	
<b>Other experience and qualifications relevant to the proposed Project:</b>	
<p>Ms. Rivera has over 13 years of experience in the design of infrastructure projects. She has a broad knowledge of current Louisiana Department of Transportation and Development (LA DOTD) and the American Association of State Highway &amp; Transportation Officials' (AASHTO) policies and design procedures. She has worked on a variety of highway/roadway and bridge improvement projects through planning and design phases. She has also served in project management roles and performed construction administration. She has completed the following transportation related training courses:</p> <p><b>Central City Group A (FRC) (DPW P. No. 2017-RR021). New Orleans, LA   City of New Orleans - DPW (2017-2020)</b></p> <p>Ms. Rivera served as Project Manager overseeing the Surveying, Preliminary Design, Final Design and Bidding Phases of this project. Project consisted of full reconstruction (FRC) of several streets (13 blocks) in the urbanized Central City Neighborhood of New Orleans. Project was a complex urban design due to the number of underground utilities. Included geometric design in accordance with AASHTO design criteria and ensured compliance with the Americans with Disabilities Act (ADA). Included hydrologic and hydraulic analyses for the design of the sub-surface drainage system for a 10-year design storm in accordance with the LA DOTD Hydraulics Manual, along with design of the replacement of existing water and sanitary sewer systems.</p>	



## **TEC Professional Services Questionnaire**

### **Lower Ninth Ward Northeast Group C (FRC) (DPW P. No. 2019-RR105). New Orleans, LA | City of New Orleans DPW (2019-2020)**

Ms. Rivera served as Project Manager overseeing the Surveying, Preliminary Design, Final Design and Bidding Phases of this project. Project consisted of full reconstruction (FRC) of several streets (18 blocks) in the urbanized Lower Ninth Ward Neighborhood of New Orleans. Project was a complex urban design due to the number of underground utilities. Included geometric design in accordance with AASHTO design criteria and ensured compliance with the Americans with Disabilities Act (ADA). Included hydrologic and hydraulic analyses for the design of the sub-surface drainage system for a 10-year design storm in accordance with the LA DOTD Hydraulics Manual, along with design of the replacement of existing water and sanitary sewer systems.

### **Menetre Park and Boat Launch Master Plan. Covington, LA | City of Covington (2016-2018)**

The purpose of this project was to provide conceptual plans for improvements that would increase the safety of all visitors and expand the utilization of the Menetre Park and Boat Launch. Ms. Rivera performed a site visit and analysis on the property and derived potential alternative improvements which could be implemented in phases as funding becomes available. The 3 phases of improvements were then presented at a public stakeholder meeting to gauge public interest. Once all public comments were collected, a final Master Plan Report was prepared to detail the proposed improvements, summarize public comments, and provide a final recommendation to city officials.


### **Videotaping & Analysis of Culverts. New Orleans, LA | Flood Protection Authority East (2017-2019)**

This project consisted of two phases. Phase I entailed gathering data on all Orleans Levee District's Valves and Culverts which penetrate flood reduction systems including Levees and Floodwalls along the Mississippi River and Lake Pontchartrain. Phase II entailed the video/sonar inspections of all culverts and the preparation of an engineering report to document the condition of each along with recommendations for repairs in accordance with USACE "Flood Damage Reduction Segment/System Inspection Report". Ms. Rivera served as project manager and coordinated with the Engineering, Surveying and Underwater Acoustics Departments to complete both Phase I: Data Gathering and Verification and Phase II: Video/Sonar Inspection & Engineering Reports (91 total)

### **Orleans Levee District, Lakefront Levee Concrete Slope Paving. New Orleans, LA | Flood Protection Authority East (2014-2016)**


Ms. Rivera prepared construction documents for the construction of concrete slope paving on the protected side of the levee at three intersections along Hayne Boulevard. Ms. Rivera prepared permit documents, coordinated with the US Army Corps of Engineers for compliance, prepared construction plans and specifications, and aided in the bidding and award of the proposed work. Ms. Rivera also provided construction administration support for the project duration. Construction commenced in August 2015 and was completed ahead of schedule in December 2016.

## TEC Professional Services Questionnaire

<b>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.</b>		
<b>PROJECT NO. 1</b>		
<b>Project Name, Location and Owner's contact information:</b>  <b>I-12 @ LA 447 (Walker)</b> <b>Interchange Lighting</b> <i>Livingston Parish, LA</i>  <b>Louisiana Department of Transportation and Development</b> <i>Christopher LeBourgeois, PE</i> <i>(225) 379-1086</i> <i>Christopher.lebourgeois@la.gov</i>	<b>Nature of Firm's Responsibility:</b>  <p>As part of the Louisiana Department of Transportation and Development Bridge Preservation Retainer Contract, M&amp;M was selected to prepare final plans, specifications, photometric calculations and a construction cost estimate for the I-12 @ LA 447 Interchange which includes two roundabouts.</p> <p>The project involved the design of roadway lighting at the I-12/LA 447 Interchange in Walker, LA. The design included providing lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&amp;M performed a photometric analysis of the interchange conforming to LADOTD Illumination standards. M&amp;M provided final plans &amp; construction estimates as well as construction related services including shop drawing review and field inspections.</p> <p><b>Tasks Performed</b></p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>Field Inspections</li> <li>Construction Support</li> <li>Utility Coordination</li> </ul> <p><b>Key Personnel:</b> Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Erin N. Rodgers, PE</p> 	
<b>Completion Date (Actual or estimated):</b>  <div style="text-align: center;">2017 (Design) 2018 (Construction)</div>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>  <div style="text-align: center;">\$784K (Construction)</div>	<b>Work for which Firm was Responsible:</b>  <div style="text-align: center;">\$316K (Design)</div>

## TEC Professional Services Questionnaire

### PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>US-171/LA 8/28 Roundabout Lighting</b>  <i>Leesville, LA</i></p> <p><b>Louisiana Department of Transportation and Development</b>  <i>Michael Armentor, PE</i>  <i>(225) 379-1088</i>  <i>michael.armorntor@la.gov</i></p>	<p>The project involved the design of roadway lighting for a two-lane, four-legged modern roundabout that was reconstructed from a signalized T-intersection of US-171 with LA 8/28. M&amp;M performed a photometric analysis of the roundabout and the associated legs conforming to the LADOTD Illumination Standards. The design and development of the electrical lighting plans and specifications conformed to the LADOTD illumination Standards. The design incorporated the use of decorative light fixtures and poles and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&amp;M also provided construction related engineering services including shop drawing and O&amp;M manual review and field inspections.</p> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>Field Inspection</li> <li>Construction Support</li> <li>Utility Coordination</li> <li>Decorative Lighting</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Jonathan E. Gerhart, PE</p> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012 (Design) 2013 (Construction)		\$153K (Design)

## TEC Professional Services Questionnaire


### PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>Alternative Lighting Concepts for Mississippi River Crossings</b>  <i>New Orleans, LA</i></p> <p><b>New Orleans Regional Planning Commission</b>  <i>Jeffrey Roesel, AICP</i>  <i>(504) 483-8528</i>  <i>jroesel@norpc.org</i></p>	<p>The project involved the development of alternative lighting concepts to enhance traffic safety, reduce operating costs and improve transportation aesthetics on the US90 (Huey P. Long Bridge) and US90B (Crescent City Connection) Mississippi River Bridge crossings.</p> <p>Project Features</p> <ul style="list-style-type: none"> <li>Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.</li> <li>Study potential lighting systems required computer software for digital displays and control, and successful examples of similar LED applications, emphasizing energy efficiency, reduced maintenance and enhanced security lighting.</li> <li>Coordinate monthly with the RPC Project Management Committee to present study findings and recommendations.</li> </ul> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>LED Decorative Lighting</li> <li>Preliminary Feasibility Study</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE</p>	
<p><b>Completion Date (Actual or estimated):</b></p>	<p><b>Estimated Cost:</b></p>	
	<p><b>Entire Project:</b></p>	<p><b>Work for which Firm was Responsible:</b></p>
<p>2015 (Design)</p>	<p></p>	<p>\$26K (Design)</p>





## TEC Professional Services Questionnaire

<b>PROJECT NO. 4</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p><b>I-20 at Garrett Road Interchange Lighting</b>  <i>Monroe, LA</i></p> <p><b>Louisiana Department of Transportation and Development</b>  <i>Michael Armentor, PE</i>  <i>(225) 379-1088</i>  <i>michael.armentor@la.gov</i></p>	<p>The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&amp;M performed a photometric analysis of the interchange and provided final plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code. M&amp;M also provided construction related engineering services including shop drawing and O&amp;M manual review and field inspections.</p> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>Field Inspections</li> <li>Construction Support</li> <li>Utility Coordination</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE</p> <div style="text-align: center;">  </div>	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
2014 (Design) 2017 (Construction)	\$1.2M (Construction)	\$292K (Design Fees)



## TEC Professional Services Questionnaire

<b>PROJECT NO. 5</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<p><b>I-10 at Ambassador Caffery Parkway (LA 3184) Interchange Lighting Design</b> <i>Lafayette, LA</i></p> <p><b>Louisiana Department of Transportation and Development</b> <i>Christopher LeBourgeois, PE</i> <i>(225) 379-1086</i> <i>Christopher.lebourgeois@la.gov</i></p>	<p>The project involved the design of roadway lighting for the Ambassador Caffery Parkway (LA 3184) Interchange along Route I-10 in Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&amp;M also provided construction related engineering services including shop drawing and O&amp;M manual review and field inspections.</p> <p>Project Features</p> <ul style="list-style-type: none"> <li>Development of a photometric analysis of the interchange conforming to the LADOTD Illuminations Standards.</li> <li>Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.</li> </ul> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>Field Inspections</li> <li>Construction Support</li> <li>Utility Coordination</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Erin N. Rodgers, PE</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013 (Design) 2017 (Construction)	\$784K (construction)	\$316K (design fees)

## TEC Professional Services Questionnaire

### PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>I-10: E. Jct. I-49 to LA 328 Lighting Design</b> <i>Lafayette and St. Martin Parishes, LA</i></p> <p><b>Louisiana Department of Transportation and Development</b> <i>Michael Armentor, PE</i> <i>(225) 379-1088</i> <i>michael.armor@la.gov</i></p>	<p>The project involved the design of roadway lighting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&amp;M provided plans &amp; construction estimates and is currently providing construction related services including shop drawing review and field inspections.</p> <p>Project Features</p> <ul style="list-style-type: none"> <li>Development of a photometric analysis of the interchange conforming to the LADOTD Illuminations Standards.</li> <li>Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.</li> </ul> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>Field Inspections</li> <li>Construction Support</li> <li>Utility Coordination</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Erin N. Rodgers, PE</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015 (Design) Ongoing (Construction)		\$222K (Design)

## TEC Professional Services Questionnaire


### PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>I-10: LA 347 to Atchafalaya Floodway Bridge Lighting Design</b>  <i>St. Martin Parish, LA</i></p> <p><b>Louisiana Department of Transportation and Development</b>  <i>Michael Armentor, PE</i>  <i>(225) 379-1088</i>  <i>michael.armentor@la.gov</i></p>	<p>The project involved the design of roadway lighting for Interstate 10 from LA347 to Atchafalaya Floodway Bridge in Lafayette, LA. The design included providing low-mast lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&amp;M provided plans &amp; construction estimates and is currently providing construction related services including shop drawing review and field inspections.</p> <p>Project Features</p> <ul style="list-style-type: none"> <li>Development of a photometric analysis of the interchange conforming to the LADOTD Illuminations Standards.</li> <li>Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.</li> </ul> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>Field Inspections</li> <li>Construction Support</li> <li>Utility Coordination</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Erin N. Rodgers, PE</p> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015 (Design) Ongoing (Construction)		\$228K (Design)



## TEC Professional Services Questionnaire

### PROJECT NO. 8

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>US 90-Z CCC Decorative Lighting</b> <i>Orleans and Jefferson Parishes</i></p> <p><b>Louisiana Department of Transportation and Development</b> <i>Christina Brignac, PE</i> <i>(225) 379-1394</i> <i>christina.brignac@la.gov</i></p>	<p>This project involved the design of the proposed Dynamic Decorative Lighting System to be installed on the two Crescent City Connection (CCC) Bridges over the Mississippi River in New Orleans, LA. (CCC #1 &amp; CCC #2). The proposed decorative lighting system will include remotely operated dynamic LED necklace lighting on the top chords, uplighting on selected truss members and downlighting on the main piers and would be on both the upriver and downriver sides of the two superstructures.</p> <p>The CCC Decorative Lighting project is currently scheduled for a December 2023 construction letting by LADOTD. Construction is anticipated to be completed by December 2024. LADOTD's goal is to have the decorative lighting system fully operational by the 2025 Super Bowl scheduled for February 9, 2025, in New Orleans, LA.</p> <p>Project Features</p> <ul style="list-style-type: none"> <li>Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.</li> <li>Coordination with the U. S. Coast Guard (USCG) for approval to install the decorative lighting</li> <li>Develop Level 4 Transportation Management Plan (TMP)</li> </ul> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Design</li> <li>Photometric Analysis</li> <li>LED Decorative Lighting</li> <li>Final Construction Plans and Specifications</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Newell H. Schindler, PE, Justin M. Guillot, PE, Erin N. Rodgers, PE</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023 (Design) 2024 (Construction)		\$509K (Design)

## TEC Professional Services Questionnaire

### PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>LA 182 University Avenue Corridor Roadway Lighting Quality Control Review &amp; Pump Station Electrical Design</b>  <i>Lafayette, LA</i></p> <p><b>Lafayette Consolidated Government</b>  <i>Dustin Maynard, PE (CSRS-Prime)</i>  <i>(225) 769-0546</i></p>	<p>The University Avenue Corridor is an existing urban roadway and commercial corridor located west of Interstate 49, connecting rural communities north of Interstate 10 to the heart of the city of Lafayette. The Project Limits begin 100' south of the railroad overpass and extend just south of Interstate 10 at Alcide Dominique Drive. The project is approximately 1 mile in length and provides access to downtown, University of Louisiana at Lafayette, and Lafayette Regional Airport and north to Carencro eventually connecting with Interstate 49. The project will improve existing conditions and will feature roadway safety enhancements by creating specific and separate improvements to facilitate various modes of transportation including intersection redesigns to improve safety and congestion by removing traffic signals and installing roundabouts.</p> <p>The project was broken out into two phases. Phase 1 contains three (3) roadway segments and Phase 2 will consist of the intersections in between these segments.</p> <p>As a Sub-Consultant to the Prime M&amp;M is responsible for a quality control review of the roadway lighting plans, photometric reports, and electrical calculations for both Phases.</p> <p>M&amp;M has completed the Phase 1 services. The pump station upgrades were also included in Phase 1 and consisted of the following:</p> <ul style="list-style-type: none"> <li>• Replace existing 200KW Diesel Generator with <u>  </u> KW Natural Gas Generator (Size as Required to run both pumps simultaneously)</li> <li>• Add a new small Pump &amp; Motor MCC Starter &amp; Control Wiring to drain Wet Well (HP TBD)</li> <li>• Add Accel System with Telecommunications to be functional with existing system used by LCG</li> <li>• Add Indicating Lights (Pump Faulted – RED, Not Faulted – GREEN) on the exterior of the Pump Station Building for the two (2) existing Pumps</li> <li>• Replace existing Security Fencing – Disconnect/Reconnect the existing Grounding connections to the Fencing</li> <li>• Add Railroad Underpass High Water Caution Lights (Both Directions)</li> <li>• Add LED Light Fixtures for the Wet Well</li> <li>• Upgrade/Replace the existing Level Controls with Sonar/Ultrasonic Level Control</li> <li>• Other tasks as agreed upon to make a complete and functioning system</li> </ul> <p>Key Personnel: Cullen J. Ledet, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 (Design)	Unknown	\$98K (Design)



## TEC Professional Services Questionnaire

### PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p><b>Waverly Loop Utility Upgrades and Power Distribution and Meadow &amp; CP Grape Utility Certification</b>  <i>Newark &amp; South Kearny, NJ</i></p> <p><b>Conrail</b>  <i>Robert Baylor</i>  <i>(856) 231-2043</i></p>	<p>Modjeski and Masters was recently selected by Conrail to provide design and inspection services for electrical utility upgrades and power distribution design at several switch yard locations throughout New Jersey. The contract commenced in 2021 and is scheduled for completion in 2022.</p> <p>The contract encompasses two projects. The first project, Waverly Loop Utility Upgrades and Power Distribution, involves utility and electrical upgrades and certification inspection for five Conrail sites in Newark, NJ. The second project, CP Meadow &amp; CP Grape Utility Certification, involves an inspection and development of utility certification letters for two Conrail sites in South Kearny, NJ.</p> <p>This project showcases M&amp;M resume for building and facilities work and demonstrates our understanding and ability to perform in this service area. In addition, this project also exhibits M&amp;M's ability to design and coordinate medium voltage electrical services and power distribution—a specialty service not offered by many consultants.</p> <p>Tasks Performed</p> <ul style="list-style-type: none"> <li>Electrical Inspection</li> <li>Electrical Design</li> </ul> <p>Key Personnel: Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Erin N. Rodgers, PE</p>	
<p><b>Completion Date (Actual or estimated):</b></p>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
Ongoing (Design)	\$15M (est.)	\$175K (Design)



## TEC Professional Services Questionnaire

**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. Jefferson Parish	Modjeski and Masters, Inc.	No current litigation. Prior litigation settled amicably in 2022. <i>Parish of Jefferson v. Modjeski and Masters, Inc., No. 793-959, Division C.</i>
2.		
3.		
4.		

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

Modjeski and Masters, Inc. (M&M), a 100% employee-owned company, is a nationwide leader in the design, inspection, and rehabilitation of all bridge types, including long-span and movable structures. The original practice was established by Ralph Modjeski in 1893.

The Firm employs 224 dedicated personnel in sixteen (17) offices of which thirty-three (33) are full-time professional engineers registered in the state of Louisiana in civil, mechanical and electrical disciplines.

- 48 Project Manager
- 57 Structural Engineers
- 10 Electrical Engineers
- 10 Mechanical Engineers
- 13 CADD Technicians
- 23 Bridge Inspectors
- 7 Construction Inspectors
- 3 Civil Engineers
- 7 Transportation Engineers
- 15 Engineer Interns
- 31 Administrative



## **TEC Professional Services Questionnaire**

The Firm's size, available personnel, and personnel knowledge and experience are well suited to complete any electrical Task Order and exceed Jefferson Parish's expectations. This contract will be administered and managed in our New Orleans office. The New Orleans office covers all activities in Louisiana and employs 40 full-time engineers, technicians, and support staff. In addition to New Orleans personnel, M&M will make available any of its qualified and knowledgeable staff to complete this project on time.

M&M's Electrical Engineering Group is rich in technical excellence and professional integrity and has over 40 years of experience in roadway lighting design, including interstate highways, interchanges, roundabouts, urban and rural intersections, bridges, underpasses, and toll plazas. M&M's staff is familiar with the LADOTD and other local governmental agency's Illumination and Electrical Standards along with the AASHTO and IES lighting requirements and procedures for vehicular roadways, bikeways, sidewalks, and parking lots. Our electrical engineers perform the necessary photometric analysis using VISUAL lighting software by Acuity. Our software interfaces with CAD drawings of the roadway, resulting in accurate and easily recognizable results for inclusion in reports. We are accustomed to utilizing the latest developments in light sources such LED, as well as the traditional high intensity discharge sources such as high-pressure sodium and metal halide. We also provide the full electrical analysis, design and detailing required to complete a roadway lighting design bid package.

In Section L, we feature a series of M&M's roadway lighting projects. These include roadway lighting design services for interstate widenings and interchange projects, roundabout projects, local intersections, as well as a feasibility study developed specifically for the LADOTD and the New Orleans Regional Planning Commission (NORPC). The projects include the need for initial inspections, topographical surveying, documentation of existing utilities, photometric analyses, lighting design, cost estimates, and bid assistance and analysis. The Firm has also provided construction related engineering services which involved organizing pre-construction conferences, reviewing submittals and shop drawings, responding to RFI's, and performing intermediate and final field inspections for these lighting projects. These projects required close coordination with the client, local governments & electrical utility companies, active participation in consultation and field meetings to assure objectives are met, and flexibility to meet sensitive timelines.

M&M has significant roadway lighting experience, past and current, through numerous LADOTD projects, both directly with the LADOTD as well as through design-build. We also have roadway lighting experience with a number of other states and government agencies, such as the NORPC, Crescent City Connection, Virginia DOT, North Carolina DOT, Massachusetts DOT, Pennsylvania DOT, New York State DOT, New York City DOT, Triborough Bridge & Tunnel Authority (NYC), and the Delaware River Port Authority (Camden, NJ).

The ability to adapt to the diverse needs and alternate delivery system requirements of our clients is what drives the broad range of service options offered by the electrical engineering services at M&M. Our extensive experience in power distribution/utility coordination design, motor selection and control (relay and PLC), instrumentation design, communications design including fiber optic and wireless solutions, interior and exterior lighting design including modeling, and low voltage systems allow us to offer a "one stop" solution for your electrical engineering facility needs. We are committed to the continued advancement of the state of current practice by linking emerging needs with technological advances, using our history of practical success and good, deliberate, professional judgment.

## TEC Professional Services Questionnaire

### ENERGY EFFICIENCY AND CONSERVATION

- Interior and exterior lighting design including photometric modeling
- Roadway lighting including photometric modeling
- Variable Frequency Drive selection and specification
- High efficiency motor selection and replacement evaluations
- Life cycle cost analysis and value engineering.

### COMMUNICATIONS AND CONTROLS




- Fiber optic backbone and loop design for site and physical plant
- Ethernet backbone and networking physical plant distribution design
- Wireless communication and network design.
- PLC control design for municipal and industrial applications
- Instrumentation and loop feedback design

### POWER SYSTEMS

- Medium and Low Voltage distribution systems
- Utility service coordination
- Emergency and stand-by power generation system design
- Grounding, surge suppression, and lightning suppression system designs
- Power conditioning system design including power factor correction, harmonic distortion attenuation, and voltage correction.

### SUPPORTING SYSTEMS AND OTHER SERVICES

- Closed circuit television monitoring and recording system design
- Fire alarm system design
- Security and access control system design
- Public address and intercom system design
- Power system diagnostic analysis
- On-site testing and inspection
- Electrical code compliance evaluations
- Construction supervision and inspection
- Start-up and commissioning

Service	Application	
<b>Interior and Exterior Lighting Design</b>	<ul style="list-style-type: none"> <li>• Maintenance Facilities</li> <li>• Storage Facilities</li> <li>• Office Space</li> </ul>	
<b>Fiber Optic Backbone for Site and Buildings</b>	<ul style="list-style-type: none"> <li>• Campus Site Communications</li> <li>• Facility Building Infrastructure</li> </ul>	
<b>Power Systems Design</b>	<ul style="list-style-type: none"> <li>• Stand-By Generators</li> <li>• Maintenance Facility and Shop Distribution Upgrades, Tests, and Studies</li> <li>• Office Building Distribution</li> <li>• Utility Coordination</li> <li>• Site Power Distribution</li> <li>• Pumping Stations</li> </ul>	



## TEC Professional Services Questionnaire

### Special System Design

- Fire Alarm and Security for Facilities and Offices
- System and Controls for Pump Stations
- Facility Communication and Data Distribution



### Inspections, Testing, and Studies

- Facility Feasibility Studies
- Measurements for Troubleshooting
- Existing Condition Facilities Assessments




### References

Point of Contact	Client Name & Address	Telephone Number & Email Address
<i>Michael Armentor, PE</i>	<i>LADOTD 1201 Capitol Access Rd. Baton Rouge, LA 70802</i>	<i>(225) 379-1088 Michael.Armentor@la.gov</i>
<i>Christopher LeBourgeois, PE</i>	<i>LADOTD 1201 Capitol Access Rd. Baton Rouge, LA 70802</i>	<i>(225) 379-1086 Christopher.LeBourgeois@la.gov</i>
<i>Jeffrey Roesel, AICP</i>	<i>NORPC 10 Veterans Memorial Blvd. New Orleans, LA 70124</i>	<i>(504) 483-8528 j.roesel@norpc.org</i>

### Client Testimony

“...M&M was tasked by LADOTD under two separate contracts, respectfully, to provide essential lighting engineering and construction support services and successfully re-engineered a new fully functional lighting system final accepted by the LADOTD” – **Michael Armentor, PE, Illumination & Facilities Electrical Engineer, LADOTD on M&M's I-12 at LA-447 Interchange – Roundabout Lighting Project**

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

Signature:  Print Name: Cullen J. Ledet, PE

Title: Vice President Date: August 23, 2024