

Request for Qualifications for Engineering Services

Central Louisiana Regional Port

Modular Electrical Substation Manufacturing and Warehouse Facility

The Central Louisiana Regional Port (CLRP) is seeking statements of qualifications from engineering firms to provide comprehensive engineering services for its new Modular Electrical Substation Manufacturing and Warehouse Facility. This state-of-the-art complex will support regional economic growth by enhancing modular substation production and logistics capabilities.

Part 1: Project Description

Project Overview: This project involves designing and constructing a manufacturing facility and an accompanying warehouse:

- **Manufacturing Facility**
 - Size: Approximately 81,000 square feet (270' x 300')
 - High Bay Area:
 - Two runs, each measuring 75' x 300', and an overall middle section of 150' wide
 - Minimum 38 feet bottom hook height clearance
 - Three overhead cranes per run
 - Wings:
 - Dimensions: 60' x 300' on each side of the main high bay area
 - 17.5 feet bottom hook clearance
 - Two additional overhead cranes per wing
 - Roll-Up Doors: Two 20' x 30' and Two 10' x 10' roll-up doors on both sides for access
 - Office and Amenities: Dedicated areas for offices, restrooms, and break rooms
- **Warehouse Facility**
 - Size: 30,000 square feet
 - Logistics: Support for storage, handling, and distribution of modular substation components

Engineering Services Requirements: Comprehensive Overview

The Modular Electrical Substation Manufacturing and Warehouse Facility necessitates comprehensive engineering services to design and construct a high-capacity, heavy industrial metal building. The facility will enhance modular substation production through specialized design, effective use of multiple overhead cranes, and strict adherence to safety and operational standards.

Architectural Design:

- **Space Optimization:** Plan a layout that maximizes efficient movement of personnel and materials while ensuring seamless workflows across modular substation assembly, storage, and logistics.
- **Operational Functionality:** Incorporate functional areas such as offices, break rooms, and restroom facilities to meet operational requirements.

Structural Engineering:

- **Load-Bearing Analysis:** Create a structural framework and foundation capable of supporting the weight and dynamic loads of multiple overhead cranes, considering maximum lifting capacities, load distributions, and sway forces.
- **High Bay Construction:** Design the high bay area to provide a minimum bottom hook height clearance of 38 feet, ensuring lateral stability, seismic resistance, and weatherproofing.
- **Crane Runway Support:** Develop sturdy runway beams and rails that can sustain crane loads with minimal deflection and vibration to ensure safe and effective crane operation.
- **Wing Structure:** Design the wing structures (60' x 300' each) to handle two additional overhead cranes with a 17.5-foot bottom hook clearance, ensuring proper bracing and load distribution.

Mechanical and Electrical Engineering:

- **Overhead Crane Systems:** Plan electrical systems for crane operation, including power distribution, motor control, and safety interlocks. Collaborate with structural engineers to ensure secure mounting and efficient crane movement.
- **Lighting and Power Distribution:** Design high-efficiency lighting for optimal visibility in manufacturing areas. Electrical distribution systems should support heavy machinery, office areas, and external lighting.

Fire Safety Compliance:

- Implement and verify comprehensive fire suppression and alarm systems to ensure compliance with industrial safety standards and code requirements.

Part 2: Scope of Services

The Central Louisiana Regional Port (CLRP) seeks comprehensive engineering services for its Modular Electrical Substation Manufacturing and Warehouse Facility. The selected firm will be responsible for the design and engineering of this heavy industrial metal building, providing specialized expertise to meet the following requirements:

Design Drawings and Specifications:

- Develop detailed architectural and engineering designs that meet structural, mechanical, and electrical requirements for the manufacturing facility and warehouse.
- Prepare specifications for all construction materials, equipment, and systems, ensuring compliance with relevant building codes and safety standards.

Surveys and Site Analysis:

- Conduct comprehensive topographical and boundary surveys of the proposed construction site.
- Analyze soil conditions, elevation, and other geotechnical data to design a foundation capable of supporting multiple overhead cranes.

Inspections and Quality Control:

- Perform regular on-site inspections during construction to verify adherence to design drawings and specifications.
- Implement quality control procedures to ensure the project meets all required safety and operational standards.

Permit Assistance and Regulatory Compliance:

- Provide guidance and documentation to assist with obtaining necessary construction and environmental permits.
- Ensure compliance with federal, state, and local regulations throughout the project.

Preferred Experience:

- Demonstrate prior experience in working with the Louisiana Department of Transportation and Development (La DOTD) Port Priority Program and the Red River Waterway Commission (RRWC).
- Experience collaborating with the U.S. Army Corps of Engineers (USACE) Vicksburg and New Orleans offices.
- Proven expertise in designing and constructing buildings exceeding 80,000 square feet with a minimum height of 45 feet.

Part 3: Firm Qualifications

Professional Licensing and Credentials:

- State licensure for architects, engineers, and any specialized professionals required for the project.
- Specific certifications relevant to modular electrical manufacturing facilities.

Experience and Expertise:

- Demonstrated experience in designing and managing projects of similar scale (buildings exceeding 80,000 square feet and 45 feet in height).
- Past work on modular electrical manufacturing facilities, particularly with overhead crane systems and high bay areas.
- Familiarity with projects involving state and federal funding, including working with La DOTD, RRWC, and the U.S. Army Corps of Engineers (USACE).

Staff Qualifications and Structure:

- Detailed resumes of key staff members with relevant experience in architecture, structural engineering, mechanical/electrical engineering, surveying, and project management.
- Organizational chart showing key personnel and their roles in the project.

Past Performance and References:

- List of relevant projects successfully completed within the last five years, including client references.
- Evidence of adherence to project timelines, budget constraints, and quality standards in previous projects.

Quality Control and Safety Standards:

- Description of quality control protocols used in past projects.
- Understanding and application of safety standards, especially in facilities with high bay construction and heavy machinery.

Insurance and Financial Stability:

- Professional liability insurance coverage details.
- Evidence of financial stability, such as a bank letter or financial statements.

Proximity to the Port:

- Explanation of proximity to CLRP, demonstrating how this will facilitate efficient project execution.

Part 4: Submittal of Responses to This RFQ

The selected firm must possess substantial expertise in engineering and design, specifically for large-scale industrial facilities. It should demonstrate prior experience in developing construction plans and specifications in line with regulations from the Louisiana Department of Transportation and Development (La DOTD), the Red River Waterway Commission (RRWC), and the U.S. Army Corps of Engineers (USACE) Vicksburg and New Orleans Districts. The firm should also have a proven track record of successfully delivering buildings exceeding 80,000 square feet with a minimum height of 45 feet. Expertise is required in designing facilities equipped with overhead cranes, supporting heavy industrial production needs, and ensuring compliance with safety and operational standards. A solid understanding of modular substation manufacturing and the integration of relevant architectural, structural, mechanical, and electrical elements is essential. Additionally, the firm should have experience handling projects funded by La DOTD and the RRWC, enabling it to navigate agency-specific requirements efficiently.

General Information:

- Name, address, telephone, email, and federal tax ID
- Contact person authorized to obligate the firm
- Introduction:
- Confirmation of Louisiana licensing requirements
- Statement regarding substandard work or unethical practices
- Other relevant information

Background and Experience:

- Legal name, business history, ownership structure, and changes
- List of CLRP projects completed
- Professional insurance coverage

Specialized Knowledge:

- Experience with similar projects and agency programs

Personnel/Professional Qualifications:

- Staff qualifications and resumes

Submit responses to:

Central Louisiana Regional Port

Attention: Mr. Ben Russo, Executive Director

600 River Port Road, Alexandria, LA 71303

Three copies are required by 4:00 p.m. on Friday, May 17, 2024.

Questions can be directed to Mr. Ben Russo at brusso@clrport.com by noon on May 16, 2024.

Part 5: Evaluation and Selection Criteria

Criteria for Evaluation:

Professional Qualifications for Required Services:

- Firms must have appropriately licensed architects, engineers, and other specialized professionals necessary to deliver the scope of services. Specific certifications or credentials relevant to this project will be prioritized.

Specialized Experience and Competence:

- Firms should demonstrate experience and technical skills in managing modular electrical manufacturing projects, including familiarity with overhead crane systems, heavy industrial structures, and associated safety standards.

Past Performance on CLRP Contracts:

- Submissions will be evaluated based on previous work with CLRP, considering factors such as adherence to project timelines, budget compliance, and quality of work.

Proximity to the Port and Knowledge of its Facilities:

- Firms should describe their proximity to the port, including their ability to conduct timely site visits. They should also outline their understanding of the port's infrastructure, logistical workflows, and operational requirements.

Evaluation Factors:

Firm Experience:

The firm's relevant experience will be assessed based on its history of managing projects similar in scope and complexity.

Maximum Points: 30

CLRP Projects Completed:

Previous successful projects with CLRP will be reviewed and evaluated for performance metrics.

Maximum Points: 35

Staff Experience:

The qualifications and experience of key staff members who will be involved in the project will be considered.

Maximum Points: 25

Proximity and Knowledge of Port:

Firms will be evaluated on their geographical proximity to the port and their understanding of CLRP's infrastructure and operations.

Maximum Points: 10