

MANCHESTER WATER DISTRICT
Resolution No. 2024-04

**A RESOLUTION OF
THE BOARD OF COMMISSIONERS OF MANCHESTER WATER DISTRICT
APPROVING A CONTRACT WITH PARAMETRIX FOR WELL 6 & 7 MOTOR
CONTROL CENTER (MCC) REPLACEMENT DESIGN SERVICES**

WHEREAS, District staff has determined the need for professional consulting services to design replacement motor control centers (MCCs) for Well's 6 & 7 due to aging electrical infrastructure that is reaching the end of its useful life; and

WHEREAS, on January 25, 2024, pursuant to District Resolution 2016-06 Establishing a Small Public Works Roster Process for Consulting Services, District staff pulled a consultant roster from the District's hosting agency, MRSC Rosters, for the Main Category: Engineering Services and Sub-Category: Electrical Engineering; and

WHEREAS, on January 25, 2024, staff selected three (3) consulting firms from the roster and downloaded their Statement of Qualifications (SOQ); and

WHEREAS, on January 26, 2024, staff evaluated and scored the three (3) consulting firms based on the information provided in their SOQ's for the proposed scope of work, and selected the most highly qualified firm, Parametrix; and

WHEREAS, District staff and Parametrix representatives have negotiated and agreed upon a defined scope of work (Exhibit A) and fee (Exhibit B) for the project in the amount of \$61,808.00; and


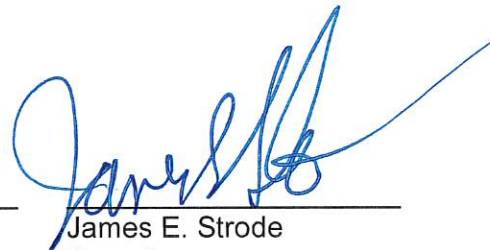

WHEREAS, the District General Manager is seeking Board authorization to execute a Professional Services Agreement with Parametrix for the Well 6 & 7 MCC Replacement Project in the amount of \$61,808.00.

NOW THEREFORE, BE IT RESOLVED by the District Board that the District General Manager is authorized to execute a Professional Services Agreement with Parametrix in the amount of \$61,808.00.

THIS RESOLUTION was duly considered and approved by the Manchester Water District Board of Commissioners in a regularly scheduled open public meeting on April 9, 2024.

1. **Ratification.** Any act consistent with the authority granted pursuant to this Resolution occurring prior to the effective date of this Resolution is hereby ratified and affirmed; and
2. **Severability.** The provisions of this Resolution are declared separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this resolution or the invalidity of the application thereof to any person or circumstances, shall not affect the validity of the remainder of the resolution, or the validity of its application to other persons or circumstances; and
3. **Effective Date.** This resolution shall become effective immediately upon adoption and signature as provided by law.

ADOPTED by the Manchester Water District Board of Commissioners on April 9, 2024.

		
_____ Steve Pedersen Board Chair	_____ James E. Strode Secretary	_____ Robert Ballard Commissioner

**Manchester Water District
Well Motor Control Center Replacement**

Introduction

The Manchester Water District (District), located in Port Orchard, Washington, has asked Parametrix to provide a scope of work and budget for replacing the well electrical distribution motor control centers (MCCs), and mitigating risk of pump failure during seasonal power quality events.

Bid support and construction services are not included in this scope, but may be amended to the contract upon completion of bid documents in Task 03.

Task 01 – Project Management

Objectives

The objective of this task is to provide overall project management of the consultant contract with the District.

This task includes general management functions that include the following:

- Project Planning – Document and communicate the scope of work, budget, and schedule as a road map for the project team. Coordinate project team and issues throughout the project.
- Budget and Schedule Tracking – Track the project budget using Parametrix in-house tools to verify that progress is keeping pace with spending.
- Monthly Progress Reports – Prepare a monthly invoice for services performed by Parametrix.
- Correspondence – Prepare written correspondence as needed to document project management issues and/or concerns.

Deliverables

Deliverables for this task include:

- Miscellaneous correspondence to document project management issues.
- Monthly progress reports enclosed with invoices.

Task 02 – Predesign

Objective/Goal

The goals of this task include:

- Review any existing plans or documents.
- Go on site to document relevant assets and their condition and to determine the as-built one-line (if there isn't a diagram kept up to date).

- Determine a motor control solution that can operate during poor quality events measured by the District.

Approach

Parametrix will perform a site visit to confirm the electrical equipment loads and ratings on the as-builts provided by the District, and document any equipment not on the as-builts. Dimensions will be taken of the existing MCC and electrical room.

Parametrix will review site findings and design recommendations with the District.

Deliverables

- None.

Assumptions

Assumptions for this task include:

- There are as-built documents and equipment cutsheets available to review.
- Condition assessment is limited to one site with one utility feed.
- The condition assessment of motors and pumps is not a part of this scope.
- Site evaluation will not require more than one site visit.
- There is a qualified electrician on staff at the District to assist in opening panels and operating controls.
- The reported poor quality events are a voltage sag on one phase, lasting up to four days during cold weather, issue sourced from Puget Sound Energy.
- Metering data of reported poor power quality events are provided and accurately measure the events.

Task 03 – Design

The design will maintain existing control strategies and District standards for well pump power distribution and controls. Drawing and technical specifications will be Parametrix standards.

Subtask 03.01 – 50% Design

Objective

Based on the information collected in Task 02, prepare 50% draft design for the project.

Activities

Activities for this task include:

- The Consultant will develop boilerplate CSI technical specifications, 50% draft design drawings, and preliminary Engineers Opinion of Probable Construction Cost (EOPCC) for the project. The 50% draft design will be sufficient to communicate the design concept for review by the District.

- The Consultant will perform internal quality control review of the 50% deliverable package prior to submittal to the District.
- 50% Design Review Meeting – The Consultant will attend the 50% design review meeting to resolve any design issues discovered during the documentation review and site visit, review the 50% draft design with the District, and document comments to be addressed as design moves forward.

Assumptions

Assumptions for this task include:

- Photographs taken during the site visit will be used as design background for existing equipment and electrical panels for demolition drawings; detailed drawings of the existing buildings, electrical panels, and equipment will not be developed as part of this project.
- The 50% submittal sheets will be stamped by a professional engineer licensed in the State of Washington but will not be signed or dated for construction.
- The 50% design review meeting will be conducted remotely via Microsoft Teams or similar.
- District to review 50% design and return comments to the Consultant within 14 business days.
- Any comments made on the 50% draft design will be addressed in the 90% Design task.
- Deliverable documents will be electronic files only.
- Design is confined to the well pump MCC; design does not include modifications to other distribution equipment, well pumps, controls or utility service.
- A solution to mitigate circuit breaker tripping during reported poor power quality events will be proposed, however there is no guarantee that the solution will fully reduce the risk of tripping, since Puget Sound Energy is the source of the issue.
- Division 0 and 1 specifications will be provided by the District.

Deliverables

- 50% draft Drawings (PDF format). Drawings include:
 - G01 – Cover Sheet
 - D01 – Demolition
 - E01 – Electrical Legend
 - E02 – One-Line Diagram
 - E03 – Site Plan
 - E04 - Schedules
- 50% draft CSI Specifications (PDF and Word format).
- 50% EOPCC (PDF and Excel format).

Subtask 03.02 – 90% Design

Objective

Complete 90% near-final plans, specifications, and cost opinion for the project.

Activities

Activities for this task include:

- The Consultant will develop 90% near-final specifications, design drawings, and EOPCC for the project. Comments received on the 50% design will be addressed in the 90% deliverables.
- The Consultant will perform internal quality control review of the 90% deliverable package prior to submittal to the District.
- 90% Design Review Meeting – The Consultant will attend the 90% design review meeting to review the design with the District and document comments to be addressed as design moves forward.

Assumptions

Assumptions for this task include:

- The 90% submittal sheets will be stamped by a professional engineer licensed in the State of Washington but will not be signed or dated for construction.
- The 90% design review meeting will be conducted remotely via Microsoft Teams or similar.
- District to review 90% design and return comments to the Consultant within 14 business days.
- Any comments made on the 90% design will be addressed in the Final Design task.
- Deliverable documents will be electronic files only.

Deliverables

- 90% Drawings (PDF format). Drawings include:
 - G01 – Cover Sheet
 - D01 – Demolition
 - E01 – Electrical Legend
 - E02 – One-Line Diagram
 - E03 – Site Plan
 - E04 – Schedules
 - E05 – MCC Elevation
 - E06 – Typical Soft Starter Elementary Diagram
- 90% CSI Specifications (PDF and Word format).
- 90% EOPCC (PDF and Excel format).

Subtask 03.03 – Final Design

Objective

Complete bid ready final plans, specifications and cost opinion for the project.

Activities

Activities for this task include:

- The Consultant will develop -final specifications, design drawings, and EOPCC for the project. Comments received on the 90% design will be addressed in the final documents.
- The Consultant will perform internal quality control review of the 90% deliverable package prior to submittal to the District.

Assumptions

Assumptions for this task include:

- There will be no additional comments from the District on the final documents; all District comments will be provided at the 90% review.
- The final bid documents will be stamped and signed by a professional engineer licensed in the State of Washington.
- Deliverable documents will be electronic files only.

Deliverables

- Comment response log addressing the 90% review comments (Excel format).
- Final plans (PDF and Revit format). Drawings include:
 - G01 – Cover Sheet
 - D01 – Demolition
 - E01 – Electrical Legend
 - E02 – One-Line Diagram
 - E03 – Site Plan
 - E04 – Schedules
 - E05 – MCC Elevation
 - E07 – Typical Soft Starter Elementary Diagram
- Final CSI Specifications (PDF and Word format).
- Final EOPCC (PDF and Excel format).

Client: Manchester Water District
Project: Well Motor Control Center Replacement
Project No: 999-2916-999

Other Direct Expenses	
Mileage	\$348.00
Other Direct Expenses Total:	\$348.00

Project Total **\$61,808.00**

