Request for Proposals: Reliability Centered Maintenance Implementation Plan and Support

Introduction
As part of an overall effort to further asset management practices at the Madison Metropolitan Sewerage District ("MMSD“ or the “District”) the District is requesting proposals from well-qualified and experienced consultants to assist with the continuing development of a comprehensive reliability-centered maintenance (RCM) program. The successful consultant will serve as a guide, teacher, and expert while also encouraging District staff to engage fully with RCM and to embed RCM principles into the District’s operations and maintenance routines. Likewise, the successful candidate will be able to articulate not just the “what” and the why” of RCM but also the “how.” The project, which is expected to take up to a year, has a budget of approximately $150,000. It should also be noted that, until further notice, all consulting activities will, by necessity, be remote.

The project has five essential elements:
1. Development of work planning for Operations and Maintenance staff
2. Preventative maintenance management and optimization procedures
3. A spare parts management routine
4. Implementation of a Level 2 condition assessment procedure
5. Integration of these elements into the District’s current CMMS (Oracle WAM 1.9) and general guidance on these elements for the District’s use in a separate project to select a new CMMS.

Work is expected to start by December 2020, but may begin earlier depending on resource availability.

Background
MMSD is a municipal corporation created to collect and treat wastewater from the Madison metropolitan area. The District provides service to over 40 municipal customers and serves a population of 340,000 people. All wastewater generated in the District’s 180 square mile service area is treated at the Nine Springs Wastewater Treatment Plant. The current design flow for the NSWTP is 50-million gallons per day. Asset Management has been an active pursuit of the District for the past seven years. MMSD has developed a Strategic Asset Management Framework, Asset Management Implementation Plan, and a tactical asset management plan for our Nine Springs Wastewater Treatment Plant. A core piece of implementing an asset management program at the District is the adoption of reliability-centered maintenance practices in our operations and maintenance department. Furthermore, the District’s CMMS
(oracle WAM 1.9) is being replaced. Before moving to a new system, however, MMSD has determined that RCM practices need to be established to fully leverage the functionality of a modern CMMS.

**Project Scope and Deliverables:**

I. **Development of operations and maintenance planners; development of scheduling routine**
   A. Build competency of planners on-site – work hands-on with our planners in each department to build more effective job plans, more accurate labor estimates, and better equipment Bills of Materials (BOMs)
   B. Build Weekly Scheduling Routine – Work with Maintenance, Operations, and Purchasing to develop a Weekly scheduling routine
   C. Develop meeting routines and agendas for schedule review and development.
   D. Develop KPIs for tracking scheduling and planning performance.
   E. Develop verification routines for spot checks.
   F. Assist in developing templates and action plans to hold district employees accountable.

II. **Preventative Maintenance Management and Optimization**
   A. Review of MMSD’s current PM structures across departments in our CMMS
   B. Develop a common routine for PM management across the District that includes:
      1. Routines for how PMs are created, managed, scheduled, and reviewed across departments.
      2. Best practices for managing lubrication tasks in CMMS.
      3. KPIs for tracking the health of the PM system.
   C. Develop verification routines for spot checks.
   D. Assist in developing templates and action plans to hold district employees accountable.

III. **Spare Parts Management Routines**
    A. Audit of current spare parts management routines
    B. Development of a spare parts management routine based on criticality/priority (ABC Classification) including:
       1. Routines for how spare parts are classified and managed.
       2. KPI’s for tracking the health of the Spare Parts system.
    C. Develop verification routines for spot checks.
    D. Assist in developing templates and action plans to hold district employees accountable.

IV. **Level 2 Condition Assessment**
    A. Incorporation of condition assessment routine in WAM
    B. Condition assessment protocol for asset register
    C. Assistance with scheduling condition assessments as part of preventative maintenance routines.

V. **Computerized Maintenance Management Systems guidance**
    A. Guidance on ways to embed items I-IV above in our current WAM 1.9.x system following system structure with minimal modifications
B. Support with historical data cleanup
C. Define critical ways different CMMS technologies in the marketplace can add value to defined routines
D. Begin the process of identifying critical District user requirements for the next CMMS system

(Note: Replacement of the WAM system is a separate project.)

**Proposal Submittal**
Written proposals are to be submitted by email before 5:00 p.m. on August 3rd, 2020. Proposals shall not exceed ten pages. Send proposals to:

Seth McClure, PE
Asset Investment Program Manager
sethm@madsewer.org
608.658.7568

The proposals shall include the following sections:

- **Qualifications and related experience** for your firm and any sub-consultants. For each team member assigned to this project include relevant experience for their specific responsibility.
- **Project understanding and approach**: demonstrate a complete understanding of the project and include a detailed description of your team’s approach to the work. Include a discussion of key issues that may be encountered during the process and how they will be addressed. Comment on what you believe will be particularly important to the success of the project.
- **Parts, Tasks, Hours, and Proposed Budget**: provide estimated hours and budget for each part and tasks included in your approach as well as an overall project budget. Include billable rates for each team member; indicate any expenses (e.g. travel, food, etc.) that are billed outside of salaries and account for any expected adjustments.
- **Schedule**: break down the project into tasks and show how and when the various tasks will be completed to meet major milestones -- include timelines and key meetings.
- **Covid-19 Remote Work**: describe your approach to achieving project requirements in the event on-site visits are disallowed or visits require social distancing or mask use, for all or part of the project.

**Evaluation of Proposals, Consultant Selection, and Contracting**
Proposals will be evaluated by a committee composed of District staff. Proposals will be scored based on 100 possible points, with the evaluation criteria weighted as follows:

- Qualifications and experience of the firm and assigned personnel (25%)
- Project understanding and approach (45%)
- Tasks, hours and proposed budget (20%)
- Schedule (10%)
Following the review of proposals, a minimum of two firms will be asked to interview. All interviews will be remote. Interviews will be scheduled for the week of August 17th, 2020. The Review Committee’s recommendation will be for the consultant deemed to be in the best interest of the project based on both the proposal and interview. The District reserves the right to contract for all or part of the project. The contract and associated scope of work will be a “not-to-exceed” contract. The expectation is that the selection process will be completed and the selected consultant informed by the week of August 31st, 2020. Work is expected to start by December 2020, but may begin earlier depending on resource availability. The District desires to have all tasks completed by December 1st, 2021.

**Additional Documentation**
The District’s Strategic Asset Management Plan and Plant Asset Management Plan are available in .pdf format on request.