



Madison Water Utility

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MEMORANDUM

Date: June 10, 2016

To: Water Utility Board

From: Al Larson, PE, BCEE
Principal Engineer

Re: **2016 Water Master Plan Update**
Recommendation to Hire SEH Inc

Background

Madison Water Utility has used a Water Master Plan for long term planning since 1964. The Water Master Plan has guided and shaped the development of the water distribution system, it has recommended wells, reservoirs and pump stations, and it has established our Capital Improvement Program to allow us to meet our established Level of Service. The current full system plan was prepared in 2006 and partially updated in 2012. This project will include an update of the full system and will lay the groundwork for system planning to the year 2040.

The planned update will utilize the water demand data from our recently completed AMI system and pumping data from our SCADA system. These data sources will provide an excellent basis for the update and recalibration of our water system computer model. We will be able to make sound water demand projections and analyze the performance of our water system. We will also include recent water conservation data and goals into the water demand projections further refining our long term water needs. Having this information in the model will assist in refining our capital improvements list to maximize the effectiveness of our capital spending. The proposed update will also be coordinated with the development of our Asset Management Program to further fine tune our infrastructure management and capital budgeting efforts.

Request for Proposal (RFP) and Advertising

A detailed request for engineering services for the Master Plan Update was prepared for the project in cooperation with City Purchasing. The RFP was electronically advertised by City Purchasing on April 8th with proposals due on May 6th.

Proposals

A single proposal was received on May 6th and distributed to a review committee of five Water Utility employees with expertise and knowledge of the project. Joe Grande from Water Quality, Joe DeMorett from Water Supply, Pete Braselton from Engineering, Dan Rodefeld from Operations, and myself. Asset Manager, Seth McClure was also involved in the review and discussion of the proposal.

Calls were made to engineering firms that elected not to submit proposals to inquire why they did not submit. Generally speaking several firms indicated that they did not have the staffing available to meet our needs and therefore elected not to submit proposals. The general indication is that many Wisconsin utilities are in the process of updating their water master plans.

Review

The review team therefore was tasked with determining if SEH_Inc. was the right firm for the work. A thorough review of qualifications and the proposed scope of services was conducted. The proposals were evaluated based on two main categories:

1. Project Understanding to include:
 - a. Project objectives
 - b. Proposed methodology
 - c. Limitations
 - d. Modeling capabilities
 - e. Schedule
2. Qualifications
 - a. Project Team
 - b. Work Experience
 - c. Team Organization

Submitted Hours and Costs are as follows:

	Hours	Budget
SEH Inc	1,471	\$175,000

A meeting was held with SEH_Inc personnel on Wednesday June 1st to refine the proposed scope of services and budget. SEH_Inc reworked their scope of services and submitted it to MWU on June 6th for review. A 2-1/2 hour interview with the key players of the consultant team was held on Thursday June 9, 2016. Throughout the scoping meeting and the interview, the discussion centered on modeling system operations, updating the water demands based on AMI and SCADA data, and developing an easily updated Capital Improvement Program (CIP). The CIP must be reasonable and achievable based on MWU capacity to do and fund the work while providing flexibility to allow it to be adapted to ever changing current conditions.

Based on these meetings, SEH_Inc will refine and update their project scope and budget further to bring it into alignment with project objectives. The MWU review team is confident

that we can work with the SEH_Inc team to craft a workable and flexible Water Master Planning document that will serve the Utility well into the future.

Recommendation

Based on all of the information submitted and the interview of the proposed project team, SEH_Inc was judged by all reviewers to be qualified for this project. They have extensive experience with Water Master Plan and CIP development. SEH_Inc is also familiar with the Madison water system and MWU staff.

SEH_Inc demonstrated their understanding of our project objectives, the challenges that we will face in completing the project, and all of the tasks needed to gain approval and acceptance of the updated Water Master Plan by the regulating authorities and Utility staff.

The costs and projected hours submitted by SEH_Inc with their proposal further reinforced their depth of understanding of the project. They have the staff and expertise available to complete the project efficiently to the satisfaction of MWU.

Following a comprehensive evaluation of all materials submitted the committee unanimously recommends that SEH_Inc be retained for the 2016 Water Master Plan Update.