

## **REQUEST FOR ENGINEERING SERVICES**

**MARCH 2014**

**AGENCY:** Department of Health Services

**DHS CONTACT:** Ed Neckar, 608-267-4594, edwin.neckar@wisconsin.gov

**LOCATION:** Mendota Mental Health Institute, City of Madison, Dane County

### **PROJECT REQUEST:**

Request release of \$55,000 Building Trust Funds – Planning for pre-design and preliminary design/design report for Central Plant Chiller Replacement. AE selection is for pre-design, preliminary design/design report, final design, bidding, and construction administration.

**PROJECT NUMBER:** 14A2V

### **PROJECT DESCRIPTION:**

This project will replace one or both of the existing nominal 350 ton chillers with a 500 to 800 ton absorption or centrifugal chiller. Provide a new cooling tower and associated condenser and chilled water pumps piping and temperature controls. The chiller will be located in the Heating Plant and will be part of the central chilled water system for the Mendota Mental Health Institute and the Central Wisconsin Center. Additional cooling tower capacity will be installed to accommodate increased chiller capacity. Increased electrical power will be brought to the chiller area to service the new chiller and tower. The pre-design will investigate options for replacement including determining which existing chiller(s) to demolish, new chiller and tower size, type and location. It will include estimated installation cost, energy costs and life cycle costs analysis for the various options.

### **JUSTIFICATION:**

This project is needed to maintain the environment in buildings on the MMHI and CWC campuses for the safety of patients, staff and visitors. Due to patient medications, precautions must be taken to maintain the temperature and humidity within set limits to protect these individuals.

The two older existing chillers were installed prior to 1993 and maintenance cost and down time are increasing. In 2011 one of the chillers was unavailable for 6 weeks during the summer cooling season while parts were secured and installed. Since the original installation, demand has continued to increase. The chiller and cooling tower in the Administration Building have had ongoing maintenance issues and a project to retire this equipment and connect the building to the center

plant system was included in the 2013-2015 budget and will be done with a separate future project. The current system does not have the capacity to carry the load when the Administration Building is added.

**BUDGET AND SCHEDULE:**

|                     |                    |
|---------------------|--------------------|
| Construction        |                    |
| Pre Design & Design |                    |
| DFD Mgt             |                    |
| Contingency         |                    |
| Equipment           |                    |
| Other Fees          |                    |
| <b>TOTAL</b>        | <b>\$1,414,900</b> |

|                        |          |
|------------------------|----------|
| A/E Selection          | Mar 2014 |
| SBC Approval           | Jan 2015 |
| Bid Opening            | May 2015 |
| Start Construction     | Jul 2015 |
| Substantial Completion | Apr 2016 |
| Final Completion       | Nov 2016 |
|                        |          |

**PREVIOUS ACTION:**

None