



# Water Bulletin



Civil • Water Supply • Municipal

February 2005

## 8 MGD Water Treatment Plant Awarded Blaine, MN

The City of Blaine Water Treatment Plant No. 2 was awarded to Municipal Builders, Inc. for \$4.2 million at the January 20, 2005 council meeting. The project received 11 bids at the January 6, 2005 bid opening. The plant will be constructed near Main Street and Oak Park Boulevard by Spring 2006.

The high-rate pressure filtration plant is designed to remove iron and manganese from eight million gallons per day (MGD), or 5,500 gpm, of raw water from three of Blaine's wells. The existing wellhouse for Wells No. 12 and 13 will be demolished and the new plant built over the wells. The filtration system utilizes the "Filtronics" process, which consists of a chlorine contactor, sulfur dioxide contactor, and filters containing "Electromedia". The process reduces iron and manganese to below EPA secondary standard levels of 0.3 mg/L for iron and 0.05 mg/L for manganese.

## Booster Station Design Northfield, MN

The northeast part of Northfield experiences low water pressure due to the relatively high elevation of the area and higher demands caused by the recent opening of a new hospital and additional development. A Water System Modeling Study by PCE recommended the creation of a new high pressure zone. A feasibility study for a new booster station for the City of Northfield Public Works is now in the final phase. PCE will design the 1,500 gpm capacity, multi-pump system to meet both low flows at night and adequate pressures in the hospital area during high demand or fire events.

## Presentation

Naeem Qureshi, P.E. will be giving a presentation on the Staples Water Treatment Plant to the Metro District School on Thursday, April 7, 2005.

## Water System Plan Owatonna, MN

PCE has been selected by the City of Owatonna, MN to update the City's water distribution system computer model. The computer model update will be completed in conjunction with the Water Supply System Description and Evaluation Update.

The City of Owatonna is growing steadily and the City is in the process of changing the pressure zone boundaries in order to maintain adequate pressure and flow throughout the distribution system.

Using the updated model and future demand projections, recommendations will be made and a 5-year and 10-year capital improvement plan (CIP) will be developed. The locations of new facilities will be shown on the maps and the CIP will explain when these new facilities should be constructed. The updated model and report will be presented to the Utility Commission and PCE will conduct a training session to show the Utility Staff how the computer model works.

## Water Distribution System Modeling Superior, WI

Superior Water, Light & Power (SWL&P) retained PCE to update the Water System Master Planning Study. The study will focus on new storage and the distribution system and will determine how to continue upgrading the water system to meet the water needs of the City in a cost effective manner.

PCE's work on this project will include updating the City's water system computer model, reviewing field test data, and calibrating the updated model. The calibrated model will be used to make recommendations on sizing and locations of new watermain and storage facilities. Recommendations will address current and future distribution and storage needs.



**Progressive Consulting Engineers, Inc.**  
6120 Earle Brown Drive, Suite 629, Brooklyn Center, Minnesota 55430  
Phone: (763) 560-9133  
Fax: (763) 560-0333  
www.pce.com e-mail: pce@pce.com  
Contact: Naeem Qureshi, P.E. • David Brown, P.E. • Lance Newman, P.E.