

# **Engineering Report to the Water Board**

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## **Engineering Systems and Mapping**

- 1. GIS: Continued to enter 2007 water main projects into GIS. Increased use of GPS data collection and made plans for better use of this data to increase efficiency. GPS training and evaluation is scheduled for December 13.
- 2. Specialty Maps: Meter route maps continue to be provided to meter readers
- 3. Lead Services: Letters mailed to property owners for lead service replacements related to 2008 water main projects.
- 4. Strategic Planning: Participating on Standard Operating Procedures; Work Practices; and Workforce Flexibility Teams

## Water Main Design and Construction Projects

Projects out for bid: None Projects under design: Waubesa St replacement; Marquette St replacement, Waubesa Ct (PC)
Projects waiting for construction: Union Corners phase 2; Clyde Gallagher crossing / replacement; St. Paul / Dixon replacement
Projects under active construction: Spaight / Russell / Walton – Delayed to 2008; 1507 Burningwood Way CSM – PC; Hilldale CSM - PC
Construction Complete: Charter / Chandler / Orchard replacement; Felland Reservoir water main; Lien Road extension; Castle Place
replacement; 700 Block University Avenue PC; Cardinal Glen - Phase 3 PC; First Add to Ice Age Falls PC; Secret Places – Phase 4 PC;
Secret Places – Phase 5 PC; Farwell Street PC; restart of Corry St replacement; Grandview Commons Phase 14 PC; Linden Park Phase 5
PC; Heather Glen Replat Phase 2B PC; First Add to Hawks Creek Phase 1 PC; Cardinal Glen Phase 4 PC; W. Mifflin replacement; N
Randall replacement; Dixon / Fairview / Ryan / Buena Vista / Garrison replacement; Henry / Dayton replacement; Wisconsin Ave / Gilman
St intersection replacement; Adams / Harrison replacement; Eighth Add to Blackhawk – Phase 2 PC; Second Add to Hawks Creek PC; S.
Franklin replacement; Delaplaine / Brooks replacement; Sixth / Hoard / Upham replacement; Colby / Livingston replacement; Bedford /
Main St. replacement; Lexington replacement; Mayfair Ave replacement; E Washington replacement; Dane County Airport Ramp
Expansion PC; S Park St replacement; Kendall / Chamberlain replacement; E Washington replacement; E Mifflin replacement; Spring
Court replacement; Dane County Airport Ramp Expansion - PC

# **Other Projects**

1. Video surveillance: Replogix and Westphal Electric continue to install cameras at our remote facilities.

## **Unidirectional Flushing Operations and Sampling**

- 1. 2007: flushed 710 (83%) pipeline miles by 2979 flushing runs through 2365 hydrants using 116.5 million gallons of water.
- 2. Conventional flushing: Wells 9, 26, and part of 20; 92 miles of main using 444 hydrants and 8.3 million gallons of water.

# East Isthmus Well Siting Study and Public Participation Program

- 1. The citizens working group met on December 11, 2007 and reviewed potential well sites in District's 2, 6, and 12.
- 2. Montgomery prepared a public participation plan for review and consideration.
- 3. Montgomery and RMT are working on groundwater hydrology and making preparations for further detailed analysis.

#### Well 29 Iron and Manganese Filter

1. The filter equipment bid package is advertised. Proposals are due Tuesday January 3<sup>rd</sup> and will be opened January 10<sup>th</sup>.

# **Larkin Street Test Well**

- 1. Test well pumping continued since its start on 10/16/07.
- 2. Water quality and well drawdown information is being gathered and analyzed by RMT.

#### Whitney Way Well Site

1. Requested a well capture zone plot and contaminate source inventory for the required DNR Well Siting report.

#### Raymond Road Reservoir

1. No progress, waiting to hear back from the Alders on the public participation program to locate a site.

#### SCADA Upgrade

- Completed the workshop with EMA and the SCADA design team to finalize the pre-design report.
- 2. Started working with City IS to develop an RFP for the HMI (Human Machine Interface) software procurement.
- 3. Water Supply is developing a pilot study to evaluate using staff for the configuration of RSView software.

# **Other Topics**

- 1. The Well 29 deep well extended period pump test was successfully completed 11/28/07. RMT and Montgomery are analyzing the data and will be developing a report on the results for presentation to the Board.
- 2. UW grad research project: Completed the on-line turbidimeter study @ Crestwood Elementary to monitor turbidity before and after flushing. Ryan continues to analyze data on the effectiveness of flushing in the well 8 area.
- 3. Wellhead Protection: Earth Tech has finalized plans for Wells 6, 12, 18, and 24. Utility and City Engineering Staff are starting to prepare plans for wells 7, 11, 16, and 17.