



Engineering Report to the Water Board

Item 5
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Engineering Systems and Mapping

1. GIS: Entering 2007 water main projects and main leaks into GIS
2. Specialty Maps: Provide Meter route maps to the meter readers as requested. Updating the meter route districts for meter staff; 2007 Flushing Results and Colored Water Complaints map; and developed Building Evacuation maps
3. Lead Services Annual Report
4. Flushing Annual Report and 2008 Flushing schedule
5. Design Teams: Participating on SOP; Work Practices; Workforce Flexibility; and the new Main Break Data Teams

Water Main Design and Construction Projects

Projects out for bid: Marquette St replacement **Projects under active design:** Sanitary Replacement with Resurfacing East
Private contract design additions: Waubesa Ct **Projects waiting for construction:** Union Corners phase 2; St. Paul /
Dixon main replacement; Waubesa St replacement **Projects under active construction:** Spaight / Russell / Walton main
replacement – Completion delayed until 2008; Clyde Gallagher main crossing / replacement

Projects completed (2007): Charter / Chandler / Orchard main replacement; Felland Reservoir water main; Lien Road main extension;
Castle Place main 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 main 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
main replacement; N Randall main replacement; Dixon / Fairview / Ryan / Buena Vista / Garrison main replacement; Henry / Dayton main
replacement; Wisconsin Ave / Gilman St intersection main replacement; Adams / Harrison main replacement; Eighth Add to Blackhawk –
Phase 2 PC; Second Add to Hawks Creek PC; S. Franklin main replacement; Delaplaine / Brooks main replacement; Sixth / Hoard /
Upham main replacement; Colby / Livingston main replacement; Bedford / Main St. main replacement; Lexington main replacement; Mayfair
Ave main replacement; Lakeview Ave main replacement; Dane County Airport Ramp Expansion PC; S Park St main replacement; Kendall /
Chamberlain main replacement; E Washington main replacement; E Mifflin main replacement; Spring Court main replacement; Dane County
Airport Ramp Expansion – PC; 1507 Burningwood Way CSM – PC; Hilldale CSM – PC

Other Projects

1. Video surveillance: The cameras are installed and Replugix and LongWatch are working on configuration.

Unidirectional Flushing Operations and Sampling

1. Planning for 2008 – Report on 2007 and recommendations will be presented at the January Board meeting.

East Isthmus Well Siting Study and Public Participation Program

1. The search area has been expanded to start to consider neighborhoods within Alder Districts 15 and 17. The working group will be working with identified neighborhoods to solicit participation and input into the site selection process.
2. Montgomery is working with Dave Davis of City Engineering to identify potential well sites based on land use.
3. Montgomery and RMT are making preparations for detailed hydrogeologic analysis once promising areas are identified.

Well 29 Iron and Manganese Filter

1. Bids for the filter equipment bid package were opened January 18th. ATEC was low bidder at \$301,000.

Larkin Street Test Well

1. Test well pumping is continuing as we assess the water quality data and draw down data.

Whitney Way Well Site

1. Waiting for a well capture zone plot and contaminate source inventory for the required DNR well siting report.
2. Anticipate drilling the well in late spring and pumping in May or June.

Raymond Road Reservoir

1. No progress, trying to coordinate with the Alders on the public participation program to locate a site.

Other Topics

1. The Well 29 deep well extended period pump test was successfully completed 11/28/07. RMT and Montgomery continue to analyze the data. They will be producing a report for presentation to the Board.
2. UW grad research project: Ryan continues to analyze data and develop water quality triggers for flushing. He is looking at the results of the effectiveness of flushing in the well 8 area during 2007. More work is planned for 2008.
3. Wellhead Protection: Met with Ken Bradbury to discuss the well capture zones for the next round of wellhead protection plans. Utility and City Engineering Staff are starting to prepare plans for wells 7, 11, 16, and 17. Working with the City Attorney's office to insert preliminary wellhead protection zones for all wells in the system.