

# 4th Quarter 2010 Highlights (cont.)

## Pressure Zone Start-up

In September, the West Pressure Zone was expanded to deliver water at a more consistent and higher service pressure within the region. This zone was historically confined to the North-West part of the city, roughly bounded by Rockton Avenue and Halsted Road. With the completion of rehabilitation work at U18, U21, and U44, as well as the installation of Zone Control Valves 8, 9, and 10, the zone was expanded to the southern end of the system roughly west of Pierpont Avenue to the north and Central Avenue to the south. Part of the effort to create the new pressure zone included water main reconfiguration and the installation of small-diameter bypass lines across the new zone boundary to maintain water quality in the area. In the late spring of 2011, the new East High Pressure Zone will be established roughly east of Mulford Road and north of State Street, increasing service pressure in that area.



Zone Control Valves and Inside Components

## Well Decommissioning

Six wells in the City of Rockford system are no longer needed due to the condition of the well itself, or the quality of the water supply at that well. These wells will now be abandoned and plugged, and the entire well house will be demolished and cleared. Work for the well abandonment has been awarded to Layne-Western, and work for the site demolition has been awarded to Northern Illinois Service Co. of Rockford. The work will include well sites U04, U11, U12, U16, U20, and U27. Work is expected to start at these six sites in February, 2011, and should take approximately 6 months to complete.

## Unit Well 10 Radium Removal Treatment Plant Addition

Construction of the radium removal plant addition at the U10 well site on Newburg Road began in September, 2010. Iron and manganese will also be removed in the new treatment plant. This work has been awarded to Scandrol Construction of Rockford. The project will consist of the addition of a radium removal filter, chemical feed facilities, and a backwash storage tank. This project is being funded by a combination loan and grant from the Illinois Environmental Protection Agency. Work is expected to be finished at this site in the fall of 2011.



Filter Vessel Delivery at Well 10



# Water System Improvement Project

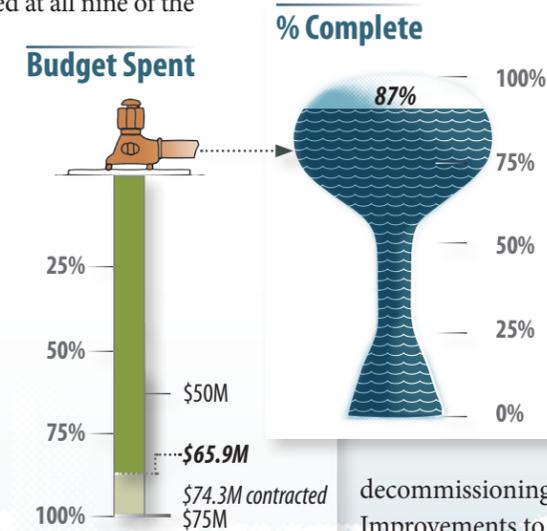
## Project Expenditures and Progress

During 2010 the City of Rockford achieved major interim milestones related to the implementation of its comprehensive Water System Improvement Program. Six of the ten planned water treatment facilities, including three radium removal facilities, are now complete and in operation. Construction is well under way at the four remaining treatment facility sites. Rehabilitation work has been completed at all nine of the base system non-treatment facilities included in the project, and these facilities are also fully operational.

Work completed in 2010 also included demolition of three deteriorated water reservoirs, construction of the last of more than 8 miles of new water main, and installation of ten new zone control valves. Following completion of the zone control valve project, the City implemented an expanded west pressure zone to increase service pressures to customers in the far western part of the community. A new East High Pressure Zone is schedule to be brought on line in the Spring of 2011. The East High Zone Project will increase normal service pressures to customers in the northeastern part of Rockford by more than 20 psi. Additional funding awards from the IEPA during the 2nd half of 2010 brought the state low interest loan support for this project to more than \$44.5 million, including more than \$5.1 million in principal forgiveness.

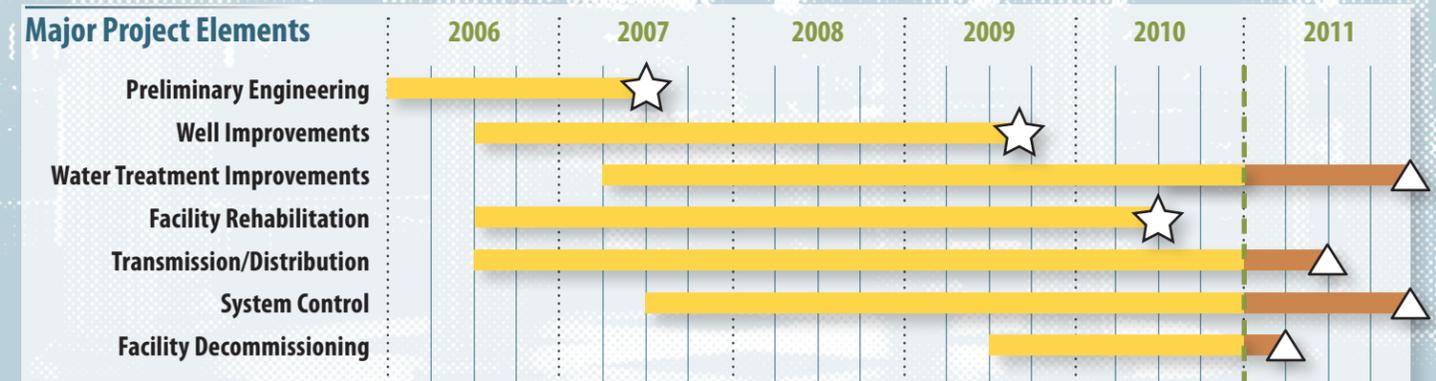
As of the end of 2010, the City had signed contracts for approximately \$74.3 million worth of studies, designs, and construction related to the water system improvement project. This total represents approximately 99.1% of the overall project budget of \$75 million. Actual expenditures recorded through December 2010 total \$65.9 million, or about 87.9% of the budget. Progress reports developed for the individual projects

indicate that work related to the overall improvement project is about 87% complete.



## Project Milestone Schedule

Rockford, together with its construction contractors and consultant team, continues to make strong progress toward completion of major elements of the water system improvement program. Efforts remain on track to complete the majority of the remaining water treatment, control, and facility decommissioning projects during 2011. Improvements to the water transmission and distribution network are complete with the exception of implementation of the East High Pressure Zone and final programming of the remaining zone control valves. As the remaining projects are completed, residents of Rockford will continue to see incremental improvements in the quality and pressure of the water they receive.



For more information on specific projects, please contact:  
Tim Holdeman • Rockford Water Division Superintendent (815) 987-5738 • Tim.Holdeman@rockfordil.gov

Prepared by: MWH

# 4th Quarter 2010 Project Status

## Individual Project Status

A detailed listing of the location, schedule and status of improvements planned for individual facilities, water mains, or the overall water system, is provided in these tables.

Color-coded cells in the last column of the table indicate overall project status using a green (Good), yellow (OK, but some issues), or red (Problems) format.

Project Status – June 2010			Rehabilitation				Progress				Status
Project	Ward	Planned Construction	Wells	Treatment	Facility Rehab	Abandon	Planning	Design	Construction	Complete	
<b>Facility Rehabilitation / Improvements</b>											
Treatment Equipment	--	2008-2011		X				✓	✓	✓	✓
S01 : 525 Stanley Street	13	2007-2008	X		X		✓	✓	✓	✓	✓
U03 : 1404 River Bluff Blvd.	12	2008-2009	X		X		✓	✓	✓	✓	✓
U04 : 801 Marchesano Dr.	5	2011				X	✓				✓
U05 : 2526 Pelham Rd.	3	2009-2011		X	X		✓	✓	✓		✓
U06 : 2604 19th Ave.	8	2008-2009	X		X		✓	✓	✓	✓	✓
U09 : 2708 Crosby St.	10	--					✓				✓
U10 : 4316 Newburg Rd.	14	2008-2011		X	X		✓	✓	✓		✓
U11 : 1218 7th Ave.	11	2011				X	✓				✓
U12 : 1022 Benton St.	3	2011				X	✓				✓
U13 : 4625 Skyline Dr.	10	2009-2011	X	X	X		✓	✓	✓		✓
U15 : 3030 Chestnut St.	13	2010				X	✓	✓	✓	✓	✓
U16 : 4550 Harrison St	14	2011				X	✓				✓
U17 : 3700 Brookview Rd.	3	--					✓				✓
U18 : 1409 S. Johnson Ave.	5	2008-2009			X		✓	✓	✓	✓	✓
U20 : 2434 N. Central Ave.	9	2011				X	✓				✓
U21 : 703 Daisyfield Rd.	13	2008-2009	X		X		✓	✓	✓	✓	✓
U22 : 5110 Auburn St.	13	2008-2009			X		✓	✓	✓	✓	✓
U23 : 1206 Elmwood Rd.	12	--					✓				✓
U24 : 6475 Cessna Dr.	6	2008-2009	X		X		✓	✓	✓	✓	✓
U25 : 5602 Spring Creek Rd.	4	2009					✓	✓	✓	✓	✓
U26 : 5500 E. State St.	10	2009					✓	✓	✓	✓	✓
U27 : 5834 Guilford Rd.	1	2011				X	✓				✓
U28 : 5400 Belt Line Rd.	6	--					✓				✓
U29 : 4750 Pepper Dr.	4	2008-2009	X	X	X		✓	✓	✓	✓	✓
U30 : 3725 Trainer Rd.	4	2008-2009	X	X	X		✓	✓	✓	✓	✓
U31 : 1780 Bell School Rd.	1	2008-2009	X	X	X		✓	✓	✓	✓	✓
U33 : 930 Arthur Ave.	1	--				X	✓				✓
U34 : 3945 Dawes Rd.	5	2009-2010	X		X		✓	✓	✓	✓	✓
U35 : 2944 Bildahl St.	6	2010					✓				✓
U36 : 4141 Samuelson Rd.	6	2009-2011		X	X		✓	✓	✓		✓
U37 : 2100 Huffman Blvd.	9	2008-2009			X		✓	✓	✓	✓	✓
U39 : 7423 Spring Brook Rd.	4	--					✓				✓
U40 : 738 Lyford Rd.	1	2008-2009		X	X		✓	✓	✓	✓	✓
U42 : 6733 Newburg Rd.	1	2008-2009	X	X	X		✓	✓	✓	✓	✓
U43 : 3447 Publishers Dr.	14	2008-2009		X	X		✓	✓	✓	✓	✓
U44 : 5250 Owen Center Rd.	9	2008-2009			X		✓	✓	✓	✓	✓
SCADA	--	2008-2010					✓	✓	✓	✓	✓



# 4th Quarter 2010 Highlights

## Group 3 Treatment Facilities Construction

The Group 3 Treatment Facilities began construction in October of 2009. The Group 3 water treatment facilities consist of iron and manganese removal at U5/5A and U13. U13 is currently moving into the start up phase of the project and U5 will be following close behind with start up scheduled for early spring. This project utilizes ARRA funding through the Illinois Environmental Protection Agency's State Revolving Loan Fund. Significant project cost savings are being realized through zero-interest loans and principal forgiveness being offered through this program.

## U36 Treatment Facility Construction

Construction began on the U36 treatment facility, located near Jefferson High School, on the city's far south side in September. The work at this site includes construction of a radium removal facility, replacement of chemical feed equipment, and a sewer extension to service the facility. This facility will also remove naturally occurring iron and manganese from the water.

Scandrol Construction of Rockford is the general contractor for this facility. They have completed the necessary work to receive the new filter vessel which is anticipated to be delivered in February. Work at the site over the next few months will be limited by winter conditions, but will pick up as the weather warms and spring approaches. The project is scheduled for completion before the end of 2011.

## Group 2 Treatment Facilities Construction

The Group 2 Treatment Facilities Construction project is entirely complete. The project included work at U29, U30, and U43. The contractor, Williams Brothers Construction, of Peoria, Illinois, completed the work at all three sites. The total value of construction for the three sites totaled \$8,961,328.



Well 5/5a: 2526 Pelham Rd.



Well 13: 4625 Skyline Dr.



Well 43: 3447 Publishers Dr.

Dedication ceremonies were held on June 3, August 25, and December 2, 2010 at the U29, U30 and U43 sites, respectively. These facilities are the first treatment plants in Rockford to utilize hydrated manganese oxides (HMO) to remove naturally occurring radium, in addition to the iron and manganese, from the ground water. The previous treatment plants were designed to remove iron and manganese from the water, with the capability to modify the process in the future should radium removal become necessary. Local residents had the opportunity to tour the facility and see the radium removal facilities during the dedications. Water quality testing data collected to date has shown that the treatment process is removing over 90 percent of the radium in the raw well water.



U43 Dedication Ceremony

Project	Ward	Planned Construction	Progress				Status				
			Planning	Design	Construction	Complete					
<b>Preliminary Engineering</b>			2005-2007	✓	✓	✓	✓	✓			
<b>Well Rehabilitation</b>			2006-2007	✓	✓	✓	✓	✓			
<b>Pilot Test Program</b>			2006-2007	✓	✓	✓	✓	✓			
<b>Zone Boundary Improvements</b>			2007-2011	✓	✓	✓		✓			
<b>Water Main Improvements</b>											
W-1 : Harrison Street East	8	2007	✓	✓	✓	✓	✓	✓			
W-2 : Airport Loop	6	2007-2008	✓	✓	✓	✓	✓	✓			
W-3 : Auburn Street	7/9	2008-2009	✓	✓	✓	✓	✓	✓			
W-4 : Aldeen	10	2008-2009	✓	✓	✓	✓	✓	✓			
W-5 : Alpine Meadows	4	2009-2010	✓	✓	✓	✓	✓	✓			
W-6 : American Road	14	2008-2009	✓	✓	✓	✓	✓	✓			
W-7 : Dawson Avenue	2/3	2008-2010	✓	✓	✓	✓	✓	✓			
W-8 : 20th Street	8/11	2008-2009	✓	✓				✓			
W-9 : Green Street	13	2008-2009	✓	✓	✓	✓	✓	✓			
W-10 : 22nd Street	8	2008-2009	✓	✓				✓			
W-11 : Ekberg Pine Manor Park	6/14	2008-2009	✓	✓	✓	✓	✓	✓			
W-12 : 35th Street	14	2008-2009	✓	✓	✓	✓	✓	✓			
EXW : Porter Road	9	2008-2009	✓	✓	✓	✓	✓	✓			