



# DuPage Water Commission

600 E. Butterfield Road, Elmhurst, IL 60126-4642  
(630)834-0100 Fax: (630)834-0120

## AGENDA

**ENGINEERING & CONSTRUCTION COMMITTEE**  
**THURSDAY, AUGUST 15, 2013**  
**6:20 P.M.**

**600 EAST BUTTERFIELD ROAD**  
**ELMHURST, IL 60126**

## COMMITTEE MEMBERS

D. Loftus, Chair  
R. Furstenau  
F. Saverino  
M. Scheck  
J. Zay

- I. Roll Call
- II. Approval of Committee Meeting Minutes

**RECOMMENDED MOTION: To approve the Minutes of the July 18, 2013 Engineering & Construction Committee Meeting of the DuPage Water Commission.**

- III. Report of Status of Construction/Operations
- IV. R-22-13: A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-10/13 (**Rossi Contractors – estimated cost is \$107,300.00**)
- V. Authorization for the purchase and installation services for a PAX mixer (**Utility Service Company – estimated cost \$60,000.00**)
- VI. Discussion Items
  - A. Request for Emergency Connection Consideration – Broadview/Westchester Joint Water Agency
  - B. Request for Emergency Connection Consideration – Brookfield-North Riverside Water Commission
- VII. Old Business
- VIII. Other
- IX. Adjournment

Board\Agendas\Engineering\2013\Eng1308.docx

All visitors must present a valid drivers license or other government-issued photo identification, sign in at the reception area and wear a visitor badge while at the DuPage Pumping Station.

**MINUTES OF A MEETING OF THE  
ENGINEERING & CONSTRUCTION COMMITTEE  
OF THE DuPAGE WATER COMMISSION  
HELD ON THURSDAY, JULY 18, 2013  
600 EAST BUTTERFIELD ROAD  
ELMHURST, ILLINOIS**

The meeting was called to order at 6:25 P.M.

Committee members in attendance: R. Furstenau, F. Saverino, M. Scheck and J. Zay (ex officio)

Committee members absent: D. Loftus

Also in attendance: C. Bostick, E. Kazmierczak, T. McGhee, J. Spatz and M. Weed

Commissioner Saverino moved to approve the Minutes of the June 20, 2013 Engineering & Construction Committee Meeting of the DuPage Water Commission. Motion seconded by Commissioner Scheck and passed as follows:

Ayes: R. Furstenau, F. Saverino and M. Scheck

Nays: None

Absent: D. Loftus

General Manager Spatz informed the committee that staff has reached out to both the Riverside-Brookfield Water Commission and the Westchester-Broadview Water Commission to discuss potential connection to the DWC supply mains. General Manager Spatz advised that Westchester-Broadview Water Commission is taking the matter up at their July 25<sup>th</sup> meeting and that he expects a formal request to connect shortly thereafter. General Manager Spatz indicated that when all points of discussion by all applicants are known that the DuPage Water Commission should commence formal policy discussions regarding the connection requests.

General Manager Spatz informed the Committee that he is considering hiring back a former employee with over 19 years experience who had left the Commission's employment due to personal reasons and had moved out of state. This individual has since returned to the area and is seeking re-employment with the Commission. Commissioner Saverino stated that he was aware of the former employee's situation as the former employee was, and is, a Carol Stream resident and that he supports the rehiring. Commissioner Furstenau also stated that he supported the rehiring.

General Manager Spatz informed the Committee that the Lexington Pumping Station staff called into the Commission's operation staff requesting a curtailment of water pumping. General Manager Spatz stated that he personally called a Chicago Deputy Water Commissioner for an explanation.

Facilities Construction Supervisor Bostick provided an oral report highlighting the Status of Operations report;

Regarding the Document Management System (DMS), Facilities Construction Supervisor Bostick advised the Committee that completion of the migration to the new Storage Area Network (SAN) environment is expected in August. The DMS will also be moved from Interwoven into Microsoft SharePoint 2013 sometime later this year.

## Engineering Committee Minutes 07/18/2013

Regarding the York Township Water Facility, Facilities Construction Supervisor Bostick advised the Committee that joint facility design is ongoing, that Commission legal counsel is working with the County's Assistant State's Attorney on the outstanding easement issues whenever the County supplies Gorski & Good with the necessary information and that DuPage County has posted funds to cover the Commission's related expenses on this project. Commissioner Furstenau inquired as to the process of paying the Commission's legal counsel to which Facilities Construction Supervisor Bostick replied that a specific budget fund has been set up for this purpose and associated expenses are drawn directly from within.

Facilities Construction Supervisor Bostick advised that two interns have been hired to perform work on information management systems and cathodic protection testing database development. Commissioner Furstenau inquired as to what the interns were receiving as to salary and benefits and also where they hailed from. General Manager Spatz informed the Committee that they are receiving \$15 per hour and no benefits and one intern attends Northern Illinois University while the other attends Elmhurst College.

Regarding Contract TOB-7/12, Facilities Construction Supervisor Bostick informed the Committee that the Contractor, John Neri Construction Co Inc., continues working at all 27 project sites, and is on schedule to meet their September 3, 2013 contract completion date.

Commissioner Furstenau inquired as to the reasons only one bid was received for the furnishing and delivery of manhole frames and lids. Pipeline Supervisor Kazmierczak suggested that it may be due to the initial set-up cost incurrence by the firms which do not already have the custom molds already made, where Neenah Foundry has had the custom molds for several years already. Commissioner Scheck stated also that the Commission's requested quantities may also have been too small to work into existing production loads.

Commissioner Saverino moved to recommend approval of R-21-13: a resolution awarding a Contract to Furnish and Deliver Manhole Frames and Lids to Neenah Foundry in the amount of \$44,404.00. Seconded by Commissioner Furstenau and approved by a Roll Call Vote:

Ayes: R. Furstenau, F. Saverino and M. Scheck

Nays: None

Absent: D. Loftus

Chairman Pro-Tem Furstenau inquired with the Committee if any other business or items are to be discussed. Hearing none, Commissioner Scheck moved to adjourn the meeting at 6:50 P.M. Motion seconded by Commissioner Saverino and passed unanimously as follows:

Ayes: R. Furstenau, F. Saverino and M. Scheck

Nays: None

Absent: D. Loftus



# DuPage Water Commission

## MEMORANDUM

TO: John Spatz  
General Manager

FROM: Terry McGhee  
Manager of Water Operations

Ed Kazmierczak Pipeline Supervisor  
Chris Bostick Facilities Construction Supervisor  
John Schori Instrumentation Supervisor  
Frank Frelka GIS Coordinator  
Mike Weed Operations Supervisor

DATE: August 8, 2013

SUBJECT: Status of Operations

### Operations Overview

The Commission's sales for the month of July were a total of 2.832 billion gallons. This represents an average day demand of 91.4 million gallons per day (MGD), which is lower than the July 2012 average day demand of 113.8 MGD. The maximum day demand was 111.2 MGD on July 18, 2013, which is lower than the July 2012 maximum day demand of 135.1 MGD. The minimum day flow was 78.9 MGD.

The Commission's recorded total precipitation for the month of July was 2.22 inches compared to 3.66 inches for July 2012. The level of Lake Michigan for July 2013 is 577.72 (Feet IGLD 1985) compared to 577.55 (Feet IGLD 1985) for July of 2012.

### Water Conservation

The Commission's water conservation related project was selected by Chicago Metropolitan Agency for Planning (CMAP) Local Technical Assistance (LTA) Program. The program includes a customer survey, development of a training manual to summarize workshops and list regional resources for our Customer's conservation coordinators to utilize and outreach materials for elected officials. In addition, one leading-edge community will receive a small amount of additional training to help them implement some of the recommendations highlighted in the training. The Commission has chosen the Village of Westmont to receive this additional training and work on this will begin after the next workshop.

The third workshop, Indoor and Outdoor Water Use, was held on July 31, 2013. A memo about the workshop has been posted on [preservingeverydrop.org](http://preservingeverydrop.org) as well as the presentations, handouts and other information about the workshop. The last workshop is titled Water Rates and Revenues and will be held on August 29<sup>th</sup>.

## **Document Management**

The Document Management System was migrated to the SAN environment the first week of August.

Staff has determined that SharePoint 2013 is sufficient for the Commission's needs in place of the Commission's current Document Management System, Interwoven, and migration will start sometime later this year.

## **Facilities Construction Overview**

### **DuPage County Service Areas**

**York Township:** No Change: Joint facility design is ongoing. Commission legal counsel is working with the County's Assistant State's attorney on the outstanding easement issues whenever the County supplies Gorski & Good with the necessary information. DuPage County has posted funds to cover the Commission's related expenses on this project.

### **Standpipe Evaluations**

**New:** A Request for Board Action appears on the agenda for the purchase and installation of a PAX mixer for standpipe 4W. This is part of an overall optimization effort for the water storage system.

**No Change:** Staff is working on a proposal for a task order, with an engineering firm to be determined, to perform computerized flow modeling of standpipes 4E and 4W to study effective water mixing using "off the shelf" components. Staff will bring forth for consideration at a future date Rider No. 2 of the engineering agreement which would authorize the next phase of the work which is development of bid specifications for standpipe rehabilitation and coating work at standpipes 4E and 4W to be undertaken in FY2014/15.

Staff has met with the Lisle-Woodridge Fire District to discuss rescue service needs for these standpipes. Additional discussions with the Engineer (TIC) regarding the inclusion of anchorage points for rescue services and fall prevention systems will be held in the coming month.

## **Instrumentation / Remote Facilities Overview**

### **Contract QRE-6/12**

There are no active Work Authorization Orders at the present time.

### **Instrumentation and Remote Facilities Maintenance**

The annual meter station inspections are complete. Miscellaneous repairs or improvements continue being performed as needed.

## GIS

### Information Technology Infrastructure Upgrade Project

No Change: Staff is working on setting up online data backups with Mozy Pro. When complete the process will be fully automated and tape backups will be eliminated.

### Summer Intern Projects

The summer interns will be here through mid August.

One intern continues working on rebuilding the existing SharePoint 2003 Intranet site in the new SharePoint 2013 environment. Progress is satisfactory but a bit slower than expected due to the increased complexity of 2013 version.

The second intern continues the organization of Cathodic Protection test results into a searchable spreadsheet for linking to scanned copies of the actual reports. In addition, newly installed rectifiers and anode ground beds are being included within GIS into a newly created CP test station GIS layer.

### Infor EAM

Staff attended a demonstration of the Infor Enterprise Asset Management Mobile application. The application is a new product from Infor intended to make work order completion more efficient to accomplish in the field.

### Pipeline Maintenance and Construction Overview

#### Contract QR-10/13

There are no active Work Authorization Orders at the present time. R-22-13 appears on the agenda to authorize manhole adjustments, pavement removal and replacement at various locations.

#### Contract TOB-7/12 Corrosion Protection and Control for the Outer Belt Transmission Mains).

Five (5) of the nine (9) rectifier sites have utility power. ComEd delays in providing utility service to the remaining rectifier sites may push the project beyond its September 3, 2013 completion date.

**AUGUST 2013 COMMISSION AGENDA ITEMS:**

- R-22-13**      A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-10/13 at the August 15, 2013, DuPage Water Commission Meeting
- RFBA**         A Request For Board Action for the authorization of the purchase and installation services for a PAX mixer from Utility Service Company estimated not to exceed \$60,000.00

**Attachments:**


1. DuPage Laboratory Bench Sheets for July, 2013
2. Water Sales Analysis 01-July-09 to 31-July-2013
3. Chart showing Commission sales versus allocations
4. Chart showing Commission sales versus historical averages

DUPAGE WATER COMMISSION LABORATORY BENCH SHEET  
MONTHLY REPORT FOR JULY 2013

## LEXINGTON SUPPLY

## DUPAGE DISCHARGE

DAY	FREE CL <sub>2</sub> mg/l	TURBIDITY NTU	PO <sub>4</sub> mg/l	FREE CL <sub>2</sub> mg/l	TURBIDITY NTU	TEMP °F	pH	Fluoride	PO <sub>4</sub> mg/l	P.A.C. LBS/MG	ANALYST INT
1	1.01	0.10	0.56	1.03	0.11	65	7.5	1.1	0.56	0	FG
2	1.00	0.09	0.55	1.00	0.11	65	7.5	1.0	0.52	0	CT
3	1.00	0.09	0.54	1.00	0.10	66	7.5	1.1	0.52	0	CT
4	0.94	0.09	0.55	0.98	0.11	66	7.5	1.0	0.52	0	CT
5	1.00	0.09	0.54	1.00	0.10	66	7.6	1.1	0.53	0	CT
6	0.97	0.10	0.55	0.96	0.10	66	7.5	1.0	0.51	0	AM
7	0.97	0.09	0.56	0.97	0.10	66	7.6	1.0	0.50	0	CT
8	0.96	0.10	0.55	0.95	0.11	66	7.5	1.0	0.53	0	CT
9	0.98	0.09	0.58	0.95	0.10	66	7.5	1.1	0.54	0	FG
10	0.95	0.10	0.56	0.98	0.10	66	7.6	1.0	0.55	0	FG
11	0.94	0.09	0.55	0.96	0.09	66	7.5	1.0	0.53	0	FG
12	0.94	0.10	0.54	0.97	0.10	66	7.5	1.1	0.51	0	AM
13	0.93	0.10	0.53	0.97	0.09	67	7.5	1.1	0.50	0	KD
14	0.94	0.10	0.56	0.96	0.09	67	7.5	1.1	0.54	0	KD
15	0.92	0.09	0.54	0.95	0.09	67	7.5	1.0	0.55	0	KD
16	0.93	0.10	0.56	0.95	0.10	67	7.5	1.0	0.55	0	AM
17	0.94	0.10	0.53	0.95	0.10	66	7.5	1.0	0.50	0	AM
18	0.96	0.10	0.54	0.94	0.10	68	7.5	1.0	0.54	0	AM
19	0.94	0.10	0.53	0.97	0.10	68	7.5	1.0	0.51	0	KD
20	0.93	0.09	0.52	0.96	0.11	68	7.5	0.9	0.54	0	KD
21	0.92	0.09	0.56	0.95	0.10	69	7.5	0.9	0.51	0	AM
22	0.92	0.10	0.54	0.94	0.09	69	7.5	0.9	0.52	0	AM
23	0.96	0.09	0.55	0.98	0.11	69	7.5	1.1	0.51	0	CT
24	0.94	0.10	0.53	0.97	0.09	69	7.6	1.1	0.54	0	CT
25	0.96	0.09	0.54	0.98	0.10	70	7.5	1.1	0.54	0	CT
26	0.95	0.10	0.53	0.99	0.11	70	7.5	0.9	0.54	0	GA
27	0.96	0.11	0.54	0.98	0.10	70	7.5	0.9	0.54	0	FG
28	0.95	0.10	0.56	0.96	0.09	70	7.5	1.0	0.55	0	KD
29	0.94	0.10	0.53	0.96	0.10	70	7.5	0.9	0.55	0	KD
30	0.96	0.09	0.52	0.96	0.09	71	7.5	1.0	0.54	0	KD
31	0.95	0.10	0.54	0.94	0.10	71	7.5	0.9	0.51	0	FG
AVG	0.95	0.10	0.54	0.97	0.10	68	7.5	1.0	0.53	0	
MAX	1.01	0.11	0.58	1.03	0.11	71	7.4	1.1	0.56	0	
MIN	0.92	0.09	0.52	0.94	0.09	65	7.5	0.9	0.50	0	

  
Terrance McGhee  
Manager of Water Operations



DU PAGE WATER COMMISSION  
WATER SALES ANALYSIS

01-May-92 TO 31-Jul-13

PER DAY AVERAGE 80,885,348

MONTH	SALES TO CUSTOMERS (GALLONS)	PURCHASES FROM CHICAGO (GALLONS)	GALLONS BILLED %	BILLINGS TO CUSTOMERS	BILLINGS FROM CHICAGO	DOCUMENTED COMMISSION WATER USE (2)	DOCUMENTED COMMISSION WATER USE %	TOTAL ACCOUNTED FOR %	DWC OPER. & MAINT. RATE (3)	CHGO RATE
May-10	2,493,442,000	2,546,177,057	97.93%	\$4,587,933.28	\$5,105,085.00	1,951,633	0.08%	98.01%	\$1.84	\$2.005
Jun-10	2,379,251,000	2,435,768,080	97.68%	\$4,377,821.84	\$4,883,715.00	1,052,920	0.04%	97.72%	\$1.84	\$2.005
Jul-10	2,977,683,000	3,048,231,920	97.89%	\$5,478,936.72	\$6,111,705.00	1,342,710	0.04%	97.73%	\$1.84	\$2.005
Aug-10	2,867,253,000	2,924,004,988	98.06%	\$5,275,745.52	\$5,862,630.00	930,281	0.03%	98.09%	\$1.84	\$2.005
Sep-10	2,525,751,000	2,588,259,352	97.58%	\$4,647,381.84	\$5,189,460.00	1,085,300	0.00%	97.58%	\$1.84	\$2.005
Oct-10	2,394,743,000	2,449,952,618	97.75%	\$4,406,327.12	\$4,912,155.00	1,143,788	0.05%	97.79%	\$1.84	\$2.005
Nov-10	2,044,476,000	2,079,920,200	98.30%	\$3,761,835.84	\$4,170,240.00	955,414	0.05%	98.34%	\$1.84	\$2.005
Dec-10	2,173,930,000	2,196,014,963	98.99%	\$4,000,031.20	\$4,403,010.00	943,234	0.04%	99.04%	\$1.84	\$2.005
Jan-11	2,176,905,000	2,203,802,993	98.78%	\$4,005,505.20	\$4,418,625.00	6,094,505	0.28%	99.06%	\$1.84	\$2.005
Feb-11	1,960,872,000	1,992,314,214	98.42%	\$3,608,004.48	\$3,994,590.00	3,351,469	0.17%	98.59%	\$1.84	\$2.005
Mar-11	2,084,629,000	2,119,930,175	98.33%	\$3,835,717.36	\$4,250,460.00	875,189	0.00%	98.33%	\$1.84	\$2.005
Apr-11	2,032,022,000	2,050,900,249	99.08%	\$3,738,920.48	\$4,112,055.00	674,574	0.03%	99.11%	\$1.84	\$2.005
May-11	2,342,971,000	2,384,648,379	98.25%	\$4,779,660.84	\$4,781,220.00	603,990	0.03%	98.28%	\$2.04	\$2.005
Jun-11	2,467,779,000	2,526,763,092	97.67%	\$5,034,118.96	\$5,066,160.00	700,540	0.03%	97.69%	\$2.04	\$2.005
Jul-11	3,211,413,000	3,276,142,145	98.02%	\$6,551,276.72	\$6,568,665.00	1,090,800	0.03%	98.06%	\$2.04	\$2.005
Aug-11	2,733,016,000	2,779,503,741	98.33%	\$5,575,352.64	\$5,572,905.00	792,559	0.03%	98.36%	\$2.04	\$2.005
Sep-11	2,486,823,000	2,533,174,564	98.17%	\$5,073,028.92	\$5,079,015.00	1,078,701	0.04%	98.21%	\$2.04	\$2.005
Oct-11	2,206,656,398	2,249,745,636	98.08%	\$4,501,579.05	\$4,510,740.00	681,023	0.03%	98.11%	\$2.04	\$2.005
Nov-11	1,986,038,000	2,012,618,454	98.68%	\$4,051,517.52	\$4,035,300.00	850,000	0.04%	98.72%	\$2.04	\$2.005
Dec-11	2,046,708,000	2,072,416,459	98.76%	\$4,175,284.32	\$4,155,195.00	974,459	0.05%	98.81%	\$2.04	\$2.005
Jan-12	2,073,584,000	2,111,472,876	98.21%	\$5,660,884.32	\$5,293,462.50	978,662	0.05%	98.25%	\$2.73	\$2.507
Feb-12	1,926,054,000	1,974,613,582	97.54%	\$5,258,127.42	\$4,950,356.25	923,283	0.05%	97.59%	\$2.73	\$2.507
Mar-12	2,006,949,000	2,047,616,673	98.01%	\$5,478,970.77	\$5,133,375.00	1,394,581	0.07%	98.08%	\$2.73	\$2.507
Apr-12	2,020,132,000	2,067,114,579	97.73%	\$5,514,960.36	\$5,182,256.00	1,425,448	0.07%	97.80%	\$2.73	\$2.507
May-12	2,571,924,000	2,631,095,433	97.75%	\$7,021,352.52	\$6,596,156.25	845,168	0.03%	97.78%	\$2.73	\$2.507
Jun-12	3,400,363,000	3,498,823,295	97.19%	\$9,282,990.99	\$8,771,550.00	1,375,200	0.04%	97.23%	\$2.73	\$2.507
Jul-12	3,529,438,000	3,609,199,242	97.79%	\$9,635,365.74	\$9,048,262.50	1,048,718	0.03%	97.82%	\$2.73	\$2.507
Aug-12	2,941,022,000	3,012,931,292	97.61%	\$8,028,990.06	\$7,553,418.75	986,869	0.03%	97.65%	\$2.73	\$2.507
Sep-12	2,477,340,000	2,530,704,029	97.89%	\$6,763,138.20	\$6,344,475.00	1,328,048	0.05%	97.94%	\$2.73	\$2.507
Oct-12	2,204,646,000	2,250,972,278	97.94%	\$6,018,683.58	\$5,643,187.50	1,277,774	0.06%	98.00%	\$2.73	\$2.507
Nov-12	1,997,315,000	2,038,118,269	98.00%	\$5,452,669.95	\$5,109,562.50	1,099,388	0.05%	98.05%	\$2.73	\$2.507
Dec-12	2,051,481,000	2,091,309,334	98.10%	\$5,600,543.13	\$5,242,912.50	882,788	0.04%	98.14%	\$2.73	\$2.507
Jan-13	2,118,398,000	2,159,418,779	98.10%	\$7,033,081.36	\$6,223,444.92	836,113	0.04%	98.14%	\$3.32	\$2.882
Feb-13	1,903,034,000	1,950,611,450	97.56%	\$6,318,072.88	\$5,621,662.20	1,106,766	0.06%	97.62%	\$3.32	\$2.882
Mar-13	2,046,176,000	2,085,514,809	98.11%	\$6,793,304.32	\$6,010,453.68	1,128,463	0.05%	98.17%	\$3.32	\$2.882
Apr-13	1,987,777,000	2,035,998,626	97.63%	\$6,599,419.64	\$5,867,748.04	708,538	0.03%	97.67%	\$3.32	\$2.882
May-13	2,347,910,000	2,413,837,252	97.27%	\$7,795,061.20	\$6,956,678.96	809,119	0.03%	97.30%	\$3.32	\$2.882
Jun-13	2,321,503,000	2,390,040,458	97.13%	\$7,707,389.96	\$6,888,096.60	649,245	0.03%	97.16%	\$3.32	\$2.882
Jul-13	2,829,247,000	2,911,976,489	97.16%	\$9,393,100.04	\$8,392,316.24	1,059,086	0.04%	97.20%	\$3.32	\$2.882
TOTALS (1)	627,832,068,798	645,424,841,106	97.27%	\$924,414,774.76	\$876,684,976.92	612,386,996	0.09%	97.37%	\$1.47	\$1.358

(1) - SINCE MAY 1, 1992

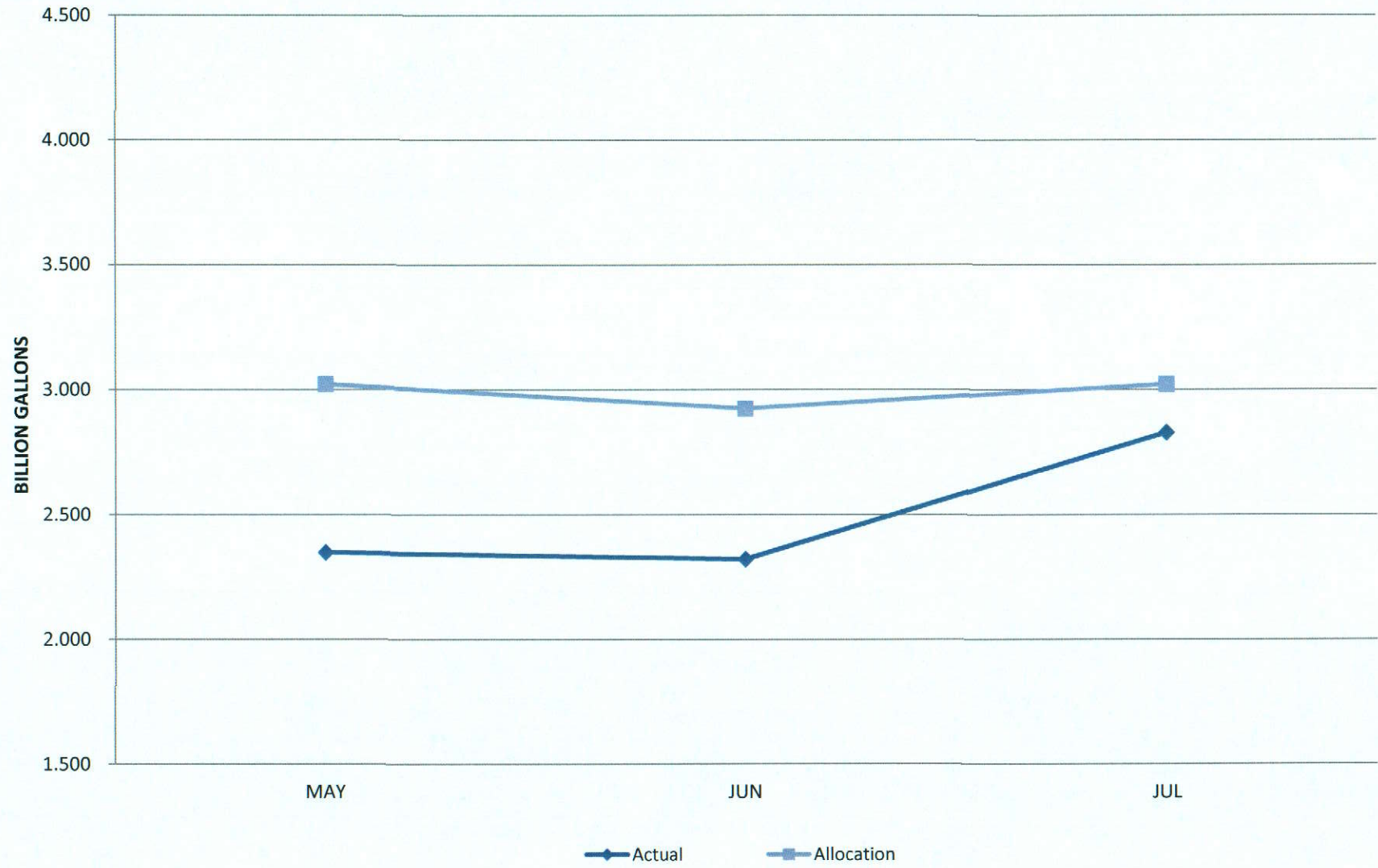
(2) - REPRESENTS DU PAGE PUMP STATION, METER TESTING AND CONSTRUCTION PROJECT USAGE

(3) - DOES NOT INCLUDE FIXED COST PAYMENTS

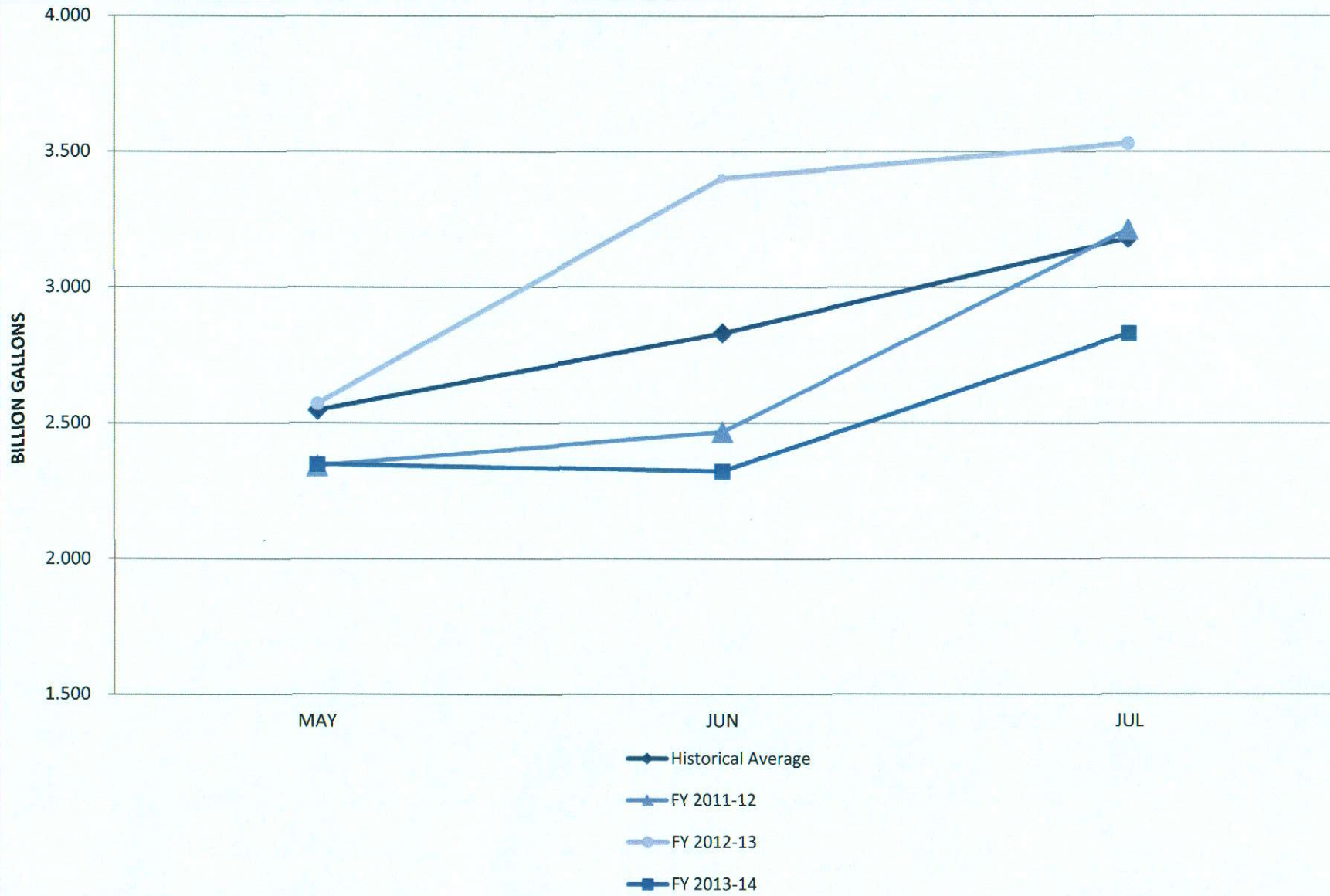
YTD

Jul-12	9,501,725,000	9,739,117,970	97.56%	\$ 25,939,709	\$ 24,415,969				\$2.73	\$2.507
Jul-13	7,498,660,000	7,715,854,199	97.19%	\$ 24,895,551	\$ 22,237,092				\$3.32	\$2.882
	(2,003,065,000)	(2,023,263,771)		(\$1,044,158)	(\$2,178,877)					
	-21.1%	-20.8%		-4.0%	-8.9%					
Month										
Jul-12	3,529,438,000	3,609,199,242	97.79%	9,635,366	9,048,263				\$2.73	\$2.507
Jul-13	2,829,247,000	2,911,976,489	97.16%	9,393,100	8,392,316				\$3.32	\$2.882
	(700,191,000)	(697,222,753)		\$ (242,266)	\$ (655,946)					
	-19.8%	-19.3%		-2.7%	-6.8%					
July > June	507,744,000	521,936,031		\$ 1,685,710	\$ 1,504,220					

## DU PAGE WATER COMMISSION SALES FY 2013-14 VS. ALLOCATION

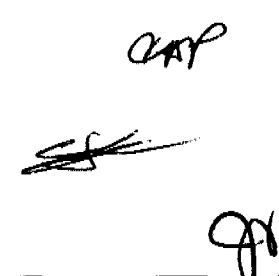


## DU PAGE WATER COMMISSION SALES FY 2013-14, 2012-13 & 2011-12 VS. HISTORICAL AVERAGE



DATE: August 8, 2013

## REQUEST FOR BOARD ACTION

<b>AGENDA SECTION</b>	Engineering & Construction Committee	<b>ORIGINATING DEPARTMENT</b>	Pipeline
<b>ITEM</b>	A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-10/13 at the August 15, 2013, DuPage Water Commission Meeting  Resolution No. R-22-13	<b>APPROVAL</b>	
Account Number: 01-60-6631			
<p>The Commission entered into certain agreements dated July 1, 2013 with John Neri Construction Co. Inc., and Rossi Contractors, Inc. for quick response construction work, as needed, through the issuance of Work Authorization Orders. Resolution No. R-22-13 would approve the following Work Authorization Orders under the Quick Response Contracts.</p> <p><b>Work Authorization Order No. 001 to Rossi Contractors Inc.:</b> Commission staff has identified 32 separate and discreet locations where the pavement surrounding certain valve vaults and other at grade structures has failed. As a result, pavement removal and replacement and re-setting, and/or replacement of the structures frames and lids are necessary. This work has been approved by the board and has been budgeted for in Fiscal Year 2013/2014 at a total cost of \$150,000.00.</p> <p>Approval of Resolution R-22-13 would authorize the contractor to adjust the frames and lids of 32 Commission structures at the locations listed on Exhibit 2 to the Work Authorization. The work will include, among other things: traffic control and protection set up, monitoring, and removal, and the removal and replacement of the existing pavement base and surface course(s). The cost for this work is not known but is estimated to be \$107,300.00.</p>			
<b>MOTION:</b> To adopt Resolution No. R-22-13.			

## DUPAGE WATER COMMISSION

## RESOLUTION NO. R-22-13

A RESOLUTION APPROVING AND RATIFYING  
CERTAIN WORK AUTHORIZATION ORDERS  
UNDER QUICK RESPONSE CONTRACT QR-10/13 AT THE  
AUGUST 15, 2013, DUPAGE WATER COMMISSION MEETING

WHEREAS, the DuPage Water Commission (the "Commission") entered into certain agreements dated July 1, 2013, with John Neri Construction Co. and Rossi Contractors, Inc. for quick response construction work related to the Commission's Waterworks System (said agreements being hereinafter collectively referred to as "Contract QR-10/13"); and

WHEREAS, Contract QR-10/13 is designed to allow the Commission to direct one or more or all of the quick response contractors to perform quick response construction work, including without limitation construction, alteration, and repair related to the Commission's Waterworks System, as needed through the issuance of Work Authorization Orders; and

WHEREAS, the need for quick response construction work could not have been reasonably foreseen at the time the contracts were signed;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the DuPage Water Commission as follows:

SECTION ONE: The foregoing recitals are by this reference incorporated herein and made a part hereof as findings of the Board of Commissioners of the DuPage Water Commission.

SECTION TWO: The Work Authorization Orders attached hereto and by this reference incorporated herein and made a part hereof as Exhibit 1 shall be and hereby are

Resolution No. R-22-13

approved and, if already issued, ratified because the Board of Commissioners of the DuPage Water Commission has determined, based upon the representations of staff, that the circumstances said to necessitate the Work Authorization Orders were not reasonably foreseeable at the time the contracts were signed, the Work Authorization Orders are germane to the original contracts as signed, and/or the Work Authorization Orders are in the best interest of the DuPage Water Commission and authorized by law.

SECTION THREE: This Resolution shall constitute the written determination required by Section 33E-9 of the Criminal Code of 1961 and shall be in full force and effect from and after its adoption.

AYES:

NAYS:

ABSENT:

ADOPTED this \_\_\_\_ day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Chairman

ATTEST:

\_\_\_\_\_  
Clerk

Board/Resolutions/R-22-13.docx

## Exhibit 1

**WORK AUTHORIZATION ORDER**

**SHEET 1 OF 2**

**CONTRACT QR-10/13: QUICK RESPONSE CONTRACT**

**WORK AUTHORIZATION ORDER NO.: QR-10.001**

**LOCATION:**

Various locations as described on Exhibit 2 to this work authorization.

**CONTRACTOR:**

Rossi Contractors Inc.

**DESCRIPTION OF WORK:**

All work shall be performed in compliance with the specifications and requirements of the permitting highway authority and may include, but not be limited to: furnish and maintain traffic controls; saw cut and remove the existing pavement to the lines and depths required for frame and lid adjustment and pavement replacement; remove structure frames and lids for reuse, or for delivery to the Commission; furnish and install new pre-cast concrete manhole adjusting rings, set frames and lids to match existing pavement elevations; replace pavement base and wearing course(s); replace pavement striping, complete final restoration and clean up; and any other incidental work as required or as directed by the Commission.

**REASON FOR WORK:**

To replace failed pavement and adjust, and/or replace with Commission supplied materials, the frame and lids of various structures so they match existing pavement elevations.

**MINIMUM RESPONSE TIME:**

N/A

**COMMISSION-SUPPLIED MATERIALS, EQUIPMENT AND SUPPLIES TO BE INCORPORATED INTO THE WORK:**

The Commission will supply replacement cast iron frames and lids of the type and size required if, in the opinion of the Commission, the existing frame and lid is damaged beyond use. Damaged frames and lids shall be returned to the Commission.



**THE WORK ORDERED PURSUANT TO THIS WORK AUTHORIZATION ORDER**

IS  IS NOT PRIORITY WORK

**SUPPLEMENTARY NOTIFICATION OF POTENTIALLY HAZARDOUS CONDITIONS:**  
N/A

**SUBMITTALS REQUESTED:** N/A

**SUPPLEMENTARY CONTRACT SPECIFICATIONS AND DRAWINGS:** N/A

**DUPAGE WATER COMMISSION**

By: \_\_\_\_\_  
Signature of Authorized  
Representative

DATE: \_\_\_\_\_

**CONTRACTOR RECEIPT ACKNOWLEDGED AND DESIGNATION OF SAFETY REPRESENTATIVE:**

By: \_\_\_\_\_ Safety Rep: \_\_\_\_\_  
Signature of Authorized Name and 24-Hr Phone No.  
Representative

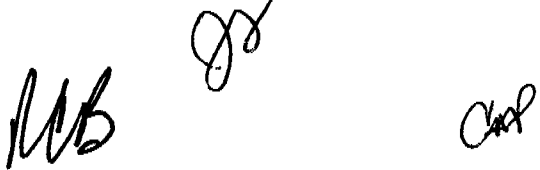
DATE: \_\_\_\_\_

## Exhibit 2

#	Plan set	Page	Sta. #	Location	Type	Traffic	Lid Dia.
1	FOB 2/89	7	92+84	Schick Rd. and Mall Entrance #1--- Bloomingtondale	BV	Y	29
2	FOB 2/89	3	38+80	Schick Rd. 200' East of Country Club Dr.---Bloomingtondale	BOV	Y	25
3	FOB 2/89	4	42+90	Schick Rd. 25' West of Country Club Dr.---Bloomingtondale	BOV	Y	25
4	FOB 2/89	4	43+62	Schick Rd. 80' West of Country Club Dr.---Bloomingtondale (Bottom ring badly corroded.)	BV	Y	29
5	FOB 2/89	4	50+92	Schick Rd. 100' E. of Los Lagos--- Bloomingtondale	AR	Y	29
6	FOB 2/89	12	10+45	Winston and Edgewater--- Bloomingtondale. Cracked frame	BOV	Y	25
7	TOB E-87	47	613+50	Bloomingtondale Rd. and Burdett--- Glendale Heights. Lid sits low	BV	Y	29
8	TN 1/88	49	643+32	West and St. Charles---Elmhurst. Lid sits low.	BOV	Y	25
9	TN 1/88	47	624+60	West and Utley---Elmhurst	BOV	Y	25
10	TN 1/88	46	604+84	West Ave S. of Second St---Elmhurst	BV	Y	29
11	TN 1/88	34	450+04	Church Rd. and Forest View Rd.- Bensenville	BOV	Y	25
12	TN 1/88	33	427+99	Church Rd. S of Crest---Bensenville	AR	Y	29
13	TN 1/88	31	410+36	Church Rd. N. of Washington--- Bensenville	AR	Y	29
14	TN 1/88	29	381+95	Church Rd. N. of Grove---Bensenville	AR	Y	29
15	FN 2/89	11	127+49	Lake St. and Central Ct.---Addison	BOV	Y	25
16	TE 1/88	4	43+94	Austin and Jackson---Oak Park (Stem paved over)	BOV	Y	Valve Box
17	TE 1/88	22	291+57	Prairie Path E. of 25 <sup>th</sup> St.---Bellwood	AR	Y	29
18	TE 3/94	13	142+27	Wedgewood and Norfolk--- Westchester	AR	Y	32
19	TE 3/94	14	150+60	Garner and Indian Joe Dr.--- Broadview (CP Test station acting as Lid---Crumbled)	AR	Y	32

#	Plan set	Page	Station #	Location	Type	Traffic	Lid Dia.
20	TE 3/94	37	425+06	Lombard Ave. and 13 <sup>th</sup> St.—Berwyn (Ring corroded)	AR	Y	32
21	FNW 2/89	6	34+90	Grace Ave. S. of Sunset—Lombard	AR	Y	29
22	FNW 2/89	5	27+25	Grace and Berkshire Ave.—Lombard	AR	Y	29
23	FNW 2/89	3A	88+35	Grace and Winthrop Ave(s)—Addison	BV	Y	29
24	FNW 2/89	3A	N/A	NE Corner of Grace and Winthrop Ave(s)—Addison (Cracked lid). East of ROV Lid	AR	Y	29
25	FNW 2/89	14	54+05	Addison and Interstate Rd.(s)— Addison	BOV	Y	25
26	TW-2	17	206+56	Morningside Ave. and Highlake Rd.— Winfield (Patch Failure)	BV	Y	38
27	TOB E-87	41	522+08	President St. 125' N. of Ranch— Wheaton	BOV	Y	25
28	TOB E-87	40	519+48	President St. 80' S. of Ranch— Wheaton	AR	Y	29
29	TOB E-87	33	416+25	President St. and Dawes Ave.— Wheaton	BOV	Y	25
30	TOB E-87	61	800+76	Bloomingtondale Rd. and Franklin St.— Bloomingtondale	AR	Y	29
31	TOB E-87	61	800+82	Bloomingtondale Rd. and Franklin St.— Bloomingtondale	BV	Y	29
32	TOB E-87	63	54+45	Bloomingtondale Rd. 100' N. of Lake St.— Bloomingtondale	AR	Y	29

**REQUEST FOR BOARD ACTION**

<b>AGENDA SECTION</b>	Engineering and Construction Committee	<b>ORIGINATING DEPARTMENT</b>	Facilities Construction/Safety Coordinator
<b>ITEM</b>	Authorization for the purchase and installation services for a PAX mixer from Utility Service Company estimated not to exceed \$60,000.00	<b>APPROVAL</b>	

Account Number: 01-60-7708.01

In order to optimize water quality throughout the Commission's water distribution and storage system, Staff is recommending the installation of a tank mixing system at Tank 4W. The installation of a tank mixing system will provide the means to enhance mixing of water entering the tank with older water in the tank and aid in maintaining uniform water quality throughout filling and draining cycles of tank operation.

As part of a long term optimization program, Staff is recommending removing one of the two 5 million-gallon standpipes from service and installing a PAX mixer. A PAX mixer is a vortex type device that mounts to the base of the standpipe and stirs the water within the standpipe. Staff has investigated alternative type tank mixing systems, of the same ilk, and feels the PAX mixer is best suited for this application.

Staff will then be able to measure the effectiveness of the proposed standpipe mixer against the other un-mixed standpipe, Tank 4E, and determine if this mixer is viable part of a long term solution. While Staff is collecting data on the operation of this mixing system, design specifications would be completed for the planned standpipe recoating and incorporate any additional tank mixing systems or components or monitoring devices needed to be installed during the spring or summer of 2014.

This request would authorize the purchase and installation of the PAX mixer from Utility Service Company as the exclusive supplier for PAX Water Technologies, Inc. in the Northern Illinois market.

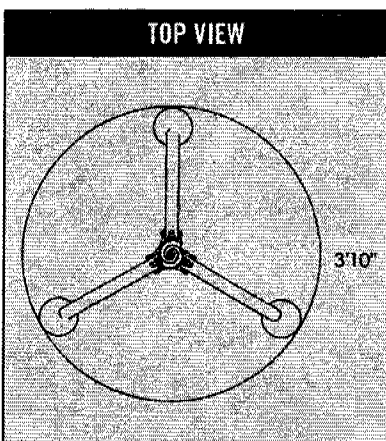
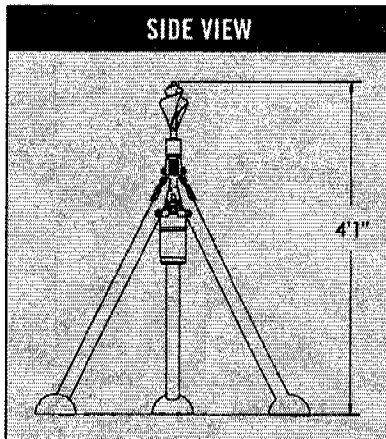
Even though \$1.8MM was budgeted in the FY 2013/2014 Annual Management Budget for a standpipe mixing system, Board approval is required due to the sole source supply for the estimated not to exceed expense of \$60,000.00.

For information purposes, Staff would, through the Electrical Quick Response Contract (QRE) and at a later request for Board action, be seeking authorization to bring electrical service and data transmission wiring from the Commission's power panel and Remote Telemetry Unit to the PAX mixer to provide power and monitoring of the mixing system.

**MOTION:** To authorize the purchase and installation services for a PAX mixer from Utility Service Company to not exceed \$60,000.00

### Product Specifications

The PAX Water Mixer is an active, submersible mixing system for cost effective management of drinking water quality in storage tanks and reservoirs. The mixer easily installs without service disruptions or tank modifications, and mixes on-demand to rapidly eliminate stratification, uniformly distribute disinfectants and prevent conditions favorable to nitrification. Efficient and effective mixing of large volumes is made possible by the patented impeller's characteristic axial jet which establishes a stable flow structure throughout the storage volume.



61

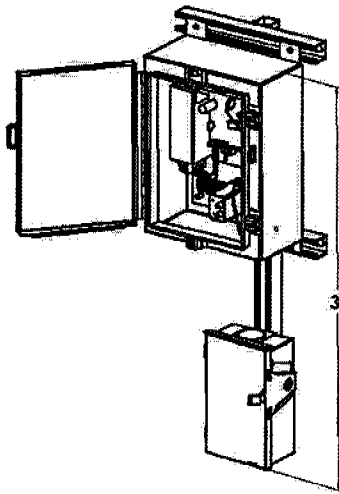
MIXER SPECIFICATIONS	
Power supply requirement	120 VAC, GFCI-protected, 15 Amp circuit
Customer supplied power switch	NEMA 3R, fused, safety disconnect switch
Motor Type	48VDC, Water-filled, water-lubricated, brushless motor
RPM	1200
Nominal power draw	280 Watts @ 1200 RPM
Impeller specifications	8.25" Tall x 4.5" Diameter, SS 316, balanced to 0.4 gram-inches
Footprint diameter	3' 10" (1.17m)
Height	4' 1" (1.24m)
Weight: Mixer Assembly	62 lbs (28.2 kg)
Weight: Control Center	24 lbs (10.9 kg)
Material: Control Center	Stainless Steel NEMA 3R Enclosure
Material: Stand	316 Stainless Steel
Material: Motor Housing	316 Stainless Steel
Material: Motor Seals	Chlorine/chloramine-resistant NBR rubber
Material: Feet	Chlorine/chloramine-resistant EPDM rubber
Wiring	UL-listed Submersible Pump Cable 14 AWG XLPE



# PAX

WATER TECHNOLOGIES™

## PAX Water Mixer Product Specification



**PAX Mixer Control Center Power Requirements (grid power):**  
120 VAC, GFCI-protected, 5mA trip, 15 Amp circuit located within 75 ft of load

**Safety Switch Requirements:**  
A NEMA 3R or better, Safety Disconnect Switch installed by customer and located within 10 ft of the mixer Control Center

**Standards, Environmental & Temperature Specifications:**

Control Center Temperature Ranges:

Operating temperature\*: -40°F to 115°F (-40°C to 46°C)

Storage temperature: -40°F to 155°F (-40°C to 70°C)

\*outside ambient temperature

Figure 3: PAX Control Center (upper box) and example of Safety Disconnect Switch (lower box)

Motor Specifications

Water-filled, water-lubricated, maintenance-free brushless DC motor, carbon/ceramic thrust bearing construction. No electronics inside motor housing.

Maintenance

Recommended maintenance is to replace motor proactively every 8-10 years depending on tank draining and scheduled tank service. Also recommend checking filter on control center once per year.

**SCADA addition – Product Specifications**

The PAX SCADA system can connect to existing systems through hard-wire connections, or a robust line of sight wireless connection if trenching and conduit runs are undesired.

SCADA Specifications	
Input to board (dry contact)	Mixer On/Off
Output 1 (dry contact)	Mixer operating at required RPM
Output 2 (dry contact)	Mixer requires attention
Nominal power draw:	~2 Watts

Control Center Temperature Ranges: \*outside ambient temperature

Operating temperature\*: -13°F to 158°F (-25°C to 70°C),

Storage temperature: -13°F to 160°F (-25°C to 71°C)

### ***Warranty***

For the period of time beginning with shipment to Buyer and ending on the time periods listed below, the Product is warranted to be substantially free from defects in material and workmanship and to conform to Seller's specifications applicable to the Product –

- Two (2) years on all supplied parts

Warranty does not cover damage due to: (i) lightning, flood or other acts of nature, or failure of or inappropriate application of peripheral devices including lightning or surge protectors; (ii) negligence of Buyer or any third party; (iii) vandalism or any other misuse or mistreatment of the product; or (iv) installation by non-licensed contractor. Lightning protection is recommended in areas historically prone to lightning AND is the responsibility of the Buyer for proper installation in accordance with local, state, and national code requirements.





## BROADVIEW WESTCHESTER JOINT WATER AGENCY

2222 South 10<sup>th</sup> Ave. Broadview, IL 60155 Office (708) 343-5599 Fax (708) 343-4960

Mr. John Spatz  
General Manager  
DuPage Water Commission  
600 East Butterfield Road  
Elmhurst, Illinois 60126

### **RE: Broadview-Westchester Joint Water Agency Request for Connection Consideration**

Dear John:

The Broadview-Westchester Joint Water Agency (the "Agency") is requesting consideration for an emergency water supply connection to the DuPage Water Commission ("the Commission"). It has been brought to our attention that a connection of this type may be permitted for an "emergency" situation, as determined by the Commission. It is understood that this connection would be installed and controlled by the Commission, with the cost of the connection and maintenance to be paid for by the Agency. The proposed location of the connection would be at the intersection of 10<sup>th</sup> Avenue and Fillmore Avenue in the Village of Maywood.

Attached are documents showing the point of connection and a chart of the Agency's current system resources and water requirements as they pertain to this emergency connection. The Agency currently receives water directly from the City of Chicago at the intersection of Austin Avenue and Garfield Avenue. This main pipeline has had few upgrades since it was installed over sixty (60) years ago. The primary concern of the Agency is the potential for a failure of this transmission main, which has two river crossings in it, which could place the Agency in a situation of not being able to serve its customer base. The Agency is seeking an emergency connection that would provide the capability of a back-up source during emergency work that may become necessary on their primary source. The Agency, at this time, does not have a redundant main or an alternative source of water. Each of the Villages has an emergency connection with neighboring communities that provide a limited amount of water in an emergency. However, Loyola University Medical Center, Hines VA and John J. Madden Hospital do not have any emergency connections. It should

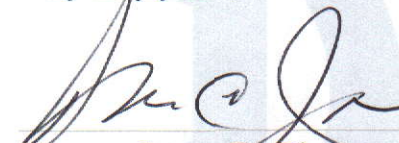
also be noted that the Agency and its customer base have reservoirs that provide approximately a two (2) day supply, which meets the City of Chicago requirements. This storage provides the Agency ample time to modify and repair minor issues with its transmission mains. The emergency connection is being requested for the major events that may occur, such as a failure in one of the river crossings. This type of emergency could not be repaired in the time frame our current storage allows.

The Agency understands that it will be necessary to fund an analysis of your supply system by your engineers for its ability to handle the increased load without adversely affecting your customer base. The results of the study will indicate whether your system could handle the additional loading without major changes to its operation. Please advise how much the study will cost and what needs to be done to commence the study.

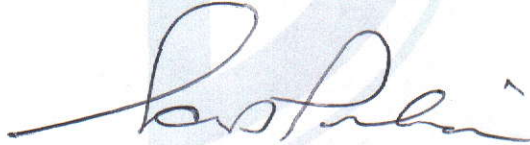
Thank you in advance for your consideration of this matter.

If you should have any questions, please do not hesitate to contact the Agency's corporation counsel, Michael Jurusik, at 312/984-6432. Thank you for your assistance with this matter.

Very truly yours,



Sherman Jones, Co-Director  
Broadview-Westchester Joint Water Agency



Sam Pulia, Co-Director  
Broadview-Westchester Joint Water Agency

Enclosures:

cc: Executive Board, Broadview-Westchester Joint Water Agency (w/ encls.)  
Paul Dowd, Superintendent (w/ encls.)  
Jim Goumas, Agency Engineer (w/ encls.)  
Michael T. Jurusik, Klein, Thorpe and Jenkins, Ltd. (w/ encls.)

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**EXHIBIT 1**  
**PROPOSED EMERGENCY WATER CONNECTION**  
**DPWC:BWJWA**

DRAWN BY: MK  
DATE: 7/22/13  
NOT TO SCALE

EDWIN HANCOCK ENGINEERING COMPANY

<b>BROADVIEW WESTCHESTER JOINT WATER AGENCY CURRENT CUSTOMER WATER USE</b>					
<b>CUSTOMER</b>	<b>2012 AVG DAY MGD</b>	<b>2012 PEAK MGD</b>	<b>2015 ALLOCATION MGD</b>	<b>2020 ALLOCATION MGD</b>	<b>2030 ALLOCATION MGD</b>
VILLAGE OF BROADVIEW	1.187	1.434	1.479	1.485	1.497
VILLAGE OF WESTCHESTER	1.56	2.081	2.135	2.169	2.231
LOYOLA UNIVERSITY MEDICAL CENTER	0.473	0.870	0.520	0.520	0.520
JOHN J. MADDEN HOSPITAL	0.025	0.039	0.040	0.040	0.040
HINES VA HOSPITAL *	0.288	0.406	0.288	0.288	0.288
<b>TOTAL USE/ALLOCATION</b>	<b>3.533</b>	<b>4.83</b>	<b>4.462</b>	<b>4.502</b>	<b>4.576</b>
<b>WATER STORAGE</b>					
BWJWA 10th AVE RESERVOIR				1.500	
BWJWA CUYLER AVE RESERVOIR				0.175	
BROADVIEW ELEVATED TANK				1.500	
WESTCHESTER CRESTWOOD RESERVOIR				2.250	
WESTCHESTER ELEVATED TANK				2.000	
HINES VA HOSPITAL RESERVOIR				0.700	
HINES VA ELEVATED TANK				1.000	
<b>TOTAL SYSTEM STORAGE AVAILABLE</b>				<b>9.125</b>	
<b>TOTAL SYSTEM STORAGE REQUIRED</b>				<b>8.924</b>	

\* HINES VA DOES NOT HAVE AN ALLOCATION USED 2012 USAGE

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**EXHIBIT 1**  
**PROPOSED EMERGENCY WATER CONNECTION**  
**DPWC:BWJWA**

DRAWN BY: MK  
DATE: 7/22/13  
NOT TO SCALE

EDWIN HANCOCK ENGINEERING COMPANY

<b>BROADVIEW WESTCHESTER JOINT WATER AGENCY CURRENT CUSTOMER WATER USE</b>					
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BROADVIEW ELEVATED TANK				1.500	
WESTCHESTER CRESTWOOD RESERVOIR				2.250	
WESTCHESTER ELEVATED TANK				2.000	
HINES VA HOSPITAL RESERVOIR				0.700	
HINES VA ELEVATED TANK				1.000	
<b>TOTAL SYSTEM STORAGE AVAILABLE</b>				<b>9.125</b>	
<b>TOTAL SYSTEM STORAGE REQUIRED</b>				<b>8.924</b>	

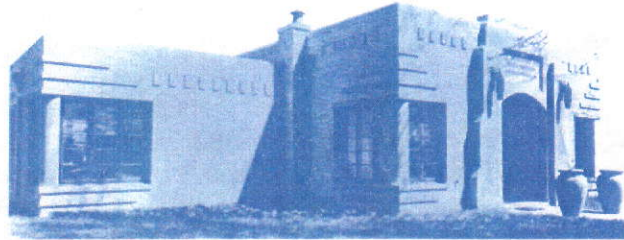
\* HINES VA DOES NOT HAVE AN ALLOCATION USED 2012 USAGE

## BROOKFIELD-NORTH RIVERSIDE WATER COMMISSION

8636 Brookfield Avenue  
Phone: (708) 485-4244

Brookfield, Illinois 60513  
FAX: (708) 485-9321

Jean M. DiMonte, Treasurer  
Janice J. Decosola, Clerk  
John T. O'Connell, Attorney  
Robert F. Novotny, Superintendent



COMMISSIONERS  
Edward J. Durec, Chairman  
David B. Witken, Commissioner  
Mark Lucas, Commissioner

March 28, 2013

Board of Commissioners  
DuPage County Water Commission  
600 E. Butterfield Road  
Elmhurst, IL. 60126-4642

Re: **Brookfield-North Riverside Water Commission  
Request for Connection Consideration**



Dear Commissioners:

The Brookfield/North Riverside Water Commission is requesting consideration for an emergency water supply connection to the DuPage Water Commission. It has been brought to our attention that a connection of this type may be permitted for an "Emergency" situation, as determined by the DuPage Water Commission. It is understood that this connection would be installed and controlled by the DuPage Water Commission with the cost of the connection to be paid for by the Brookfield North Riverside Water Commission.

Attached are documents showing the point of connection, estimated flow capacities and a chart of the Commission's current system resources and water requirements as they pertain to this emergency connection. The Commission currently receives water directly from the City of Chicago at the intersection of Ogden and Cicero Avenues. This pipeline has had few upgrades since it was installed in 1938. With increases in use and the advent of the polyphosphate rules by the EPA, this connection has lost a million gallons a day in capacity since 1987. This deduction in capacity has required the Commission to supplement their supply during the summer months. Thus, the Commission has over the past 20 years purchased a contractual supplemental water supply of approximately 350-400 million gallons per year from the Village of Forest Park. This water is pumped through a 20" ductile iron transmission main to the Water Commissions facilities in North Riverside. This connection, however, does not address a growing concern by the Water Commission that a failure of the Commission's primary water main, which has multiple river crossings on it, would place the Commission in a situation of not being able to serve their customer base. The Commission is seeking an emergency connection that would provide the capability of a backup source during emergency work that may become necessary on their primary source. This connection would utilize the current supplemental water supply transmission

**Brookfield-North Riverside Water Commission**  
**Request for Connection Consideration**  
Page 2 of 2

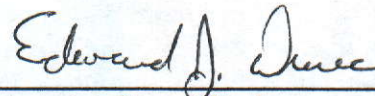
main, the 20" ductile iron pipeline from Forest Park, to deliver the emergency water to the Water Commission's North Riverside facility. Therefore the supplemental source cannot be deducted from the overall system demand. However, it should also be noted that the Commission and the customer base over the years have built reservoirs that provide approximately a three day supply, which is 50% greater than the City of Chicago requires. This has provided the Commission ample time to modify and repair minor issues within their transmission mains. The emergency connection is being requested for the major events that may occur, such as a failure in one of the river crossing. This type of emergency could not be repaired in the time frame of our current storage allows.

The Brookfield North Riverside Water Commission has funded an analysis of your supply system by your Engineers for its ability to handle the increased load without adversely affecting your customer base. The results of the study indicated your system could handle the additional loading without major changes to its operation.

Thank you in advance for your consideration of this matter.

Sincerely,

**BROOKFIELD NORTH RIVERSIDE  
WATER COMMISSION**



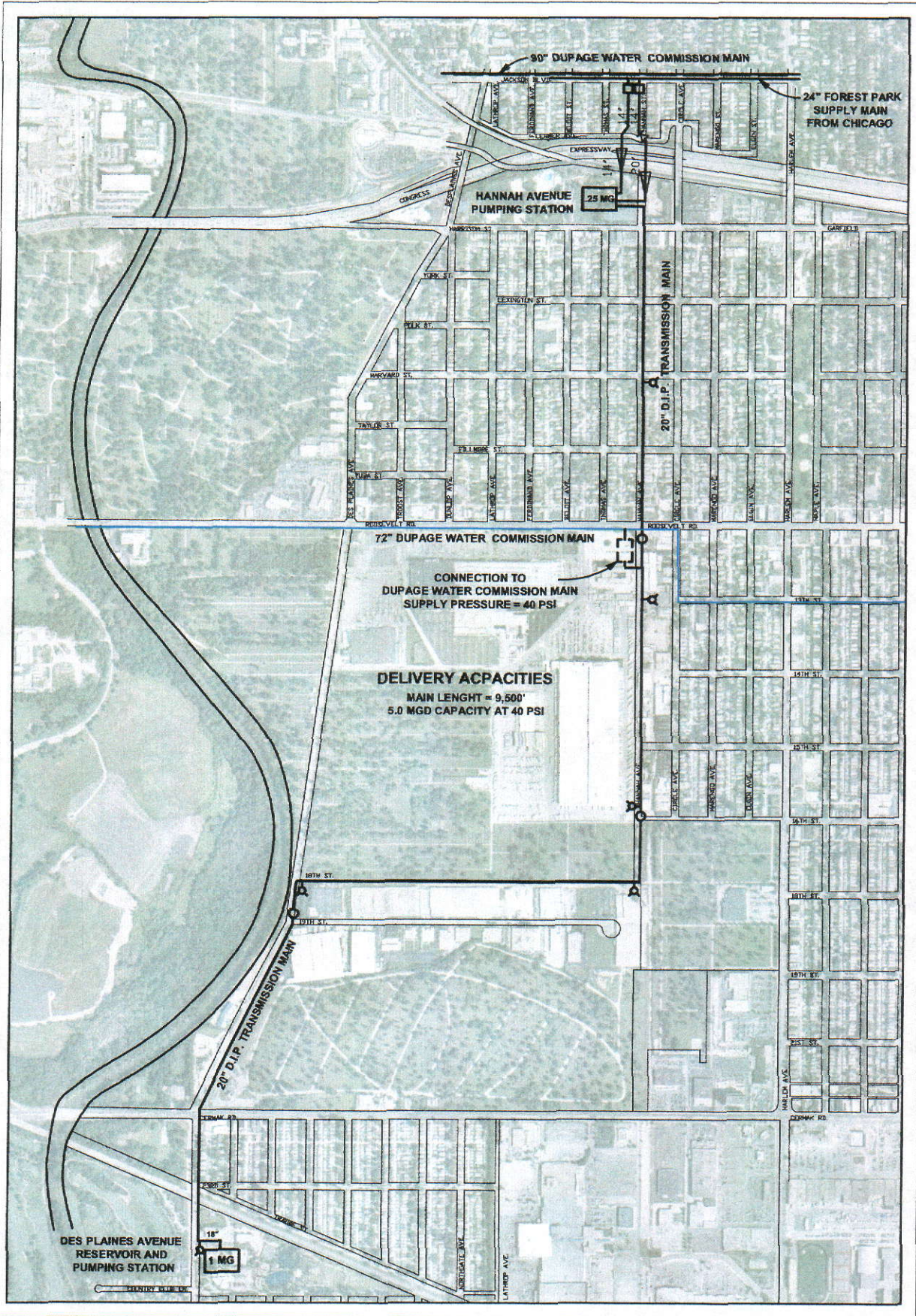
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Edward J. Durec, Chairman

Encl:

cc: Brookfield North Riverside  
Water Commission, Encl.  
David Witken, Commissioner, Encl.  
Mark Lucas, Commissioner, Encl.  
John O'Connell, Attorney, Encl.





**BROOKFIELD-NORTH RIVERSIDE WATER COMMISSION  
CURRENT CUSTOMER BASE**

<b>MUNICIPALITY</b>	<b>2030 ALLOCATION MGD</b>	<b>2015 ALLOCATION MGD</b>	<b>2012 USAGE MGD</b>	<b>2012 PEAK MGD</b>
VILLAGE OF BROOKFIELD/ZOO	2.241	2.201	1.994	2.840
VILLAGE OF NORTH RIVERSIDE	1.038	1.013	0.888	1.484
VILLAGE OF LYONS	1.055	1.031	1.136	1.257
VILLAGE OF LAGRANGE PARK	1.305	1.273	1.215	1.524
<b>TOTAL ALLOCATION / USE</b>	<b>5.639</b>	<b>5.518</b>	<b>5.234</b>	<b>7.105</b>
<b>CAPACITY OF 20" CHICAGO FEEDER</b>			<b>6.000</b>	
<b>AVERAGE WATER DRAW FROM SUPPLIMENTAL</b>			<b>1.030</b>	
<b>SUPPLIMENTAL WATER REQUIRED (PEAK)</b>			<b>1.105</b>	
<b>MAXIMUM WATER DRAW (EMERGENCY)</b>			<b>7.105</b>	
<b>CUSTOMER STORAGE</b>				
<b>NORTH RIVERSIDE - STANDPIPE</b>			<b>2.500</b>	
<b>LAGRANGE PARK RESERVOIR</b>			<b>2.500</b>	
<b>BROOKFIELD - ELEVATED</b>			<b>1.000</b>	
<b>BROOKFIELD ARDEN RESERVOIR</b>			<b>2.125</b>	
<b>LYONS - ELEVATED</b>			<b>0.250</b>	
<b>LYONS - RESERVOIR</b>			<b>1.000</b>	
<b>TOTAL CUSTOMER STORAGE</b>			<b>9.375</b>	
<b>BNRWC STORAGE</b>				
<b>BNRWC - DESPLAINES RESERVOIR</b>			<b>1.000</b>	
<b>BNRWC - McCORMICK RESERVOIR</b>			<b>1.500</b>	
<b>BNRWC - ARDEN RESERVOIR</b>			<b>2.125</b>	
<b>BNRWC - OGDEN AVE RESERVOIR</b>			<b>0.250</b>	
<b>BNRWC - BROOKFIELD RESERVOIR</b>			<b>1.500</b>	
<b>TOTAL BNRWC STORAGE</b>			<b>6.375</b>	
<b>TOTAL SYSTEM STORAGE AVAILABLE</b>			<b>15.750</b>	<b>REQ'D 11.036</b>