

DuPage Water Commission

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AGENDA ENGINEERING & CONSTRUCTION COMMITTEE THURSDAY, OCTOBER 20, 2016 6:00 P.M.

600 EAST BUTTERFIELD ROAD ELMHURST, IL 60126

- Roll Call
- II. Approval of Committee Meeting Minutes

COMMITTEE MEMBERS

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

RECOMMENDED MOTION: To approve the Minutes of the September 15, 2016 Engineering & Construction Committee Meeting of the DuPage Water Commission.

- III. Report of Status of Construction/Operations
- IV. Old Business
- V. Other
- VI. Adjournment

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MINUTES OF A MEETING OFTHE ENGINEERING & CONSTRUCTION COMMITTEE OF THE DUPAGE WATER COMMISSION HELD ON THURSDAY, SEPTEMBER 15, 2016 600 EAST BUTTERFIELD ROAD ELMHURST, ILLINOIS

The meeting was called to order at 6:00 P.M.

Committee members in attendance: R. Furstenau, D. Loftus, F. Saverino, M. Scheck, and J. Zay

Committee members absent: None

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

Commissioner Furstenau moved to approve the Minutes of the August 18, 2016 Engineering & Construction Committee Meeting of the DuPage Water Commission. Motion seconded by Commissioner Scheck.

All voted aye: Motion passed

Facilities Construction Supervisor Bostick provided an oral summary of the Status of Operations reports dated September 8, 2016:

Regarding R-28-16, Facilities Construction Supervisor Bostick reported that Staff is seeking authorization to advertise for bids on a Contract for 36-Month Maintenance, Parts and Repair Service for Large Electric Motors to enable a mechanism for Staff to have work performed on the Commission's larger electric motors and ancillary equipment. General Manager Spatz advised the Committee that an 800 horsepower High Lift Pump Motor is currently in a motor repair contractor's shop for assessment, and due to purchasing policy, Staff must seek bids to perform the actual motor repairs, which may end being performed at a different motor repair contractor's shop. General Manager Spatz explained that having motor repair service under contract would eliminate several steps in the purchasing process and would expedite a motor's return to service.

Regarding the Contract for the Rehabilitation of Coating Systems and Fall Protection Systems for Tank Sites No. 1 (Roselle) and No. 4 East (75th Street in Lisle Township) with Era-Valdivia Contractors, Inc. Facilities Construction Supervisor Bostick reported the work is complete at the Roselle site and the tank coating at 75th Street site is anticipated to be complete in early October. The Contract Completion Date is November 4th.

Facilities Construction Supervisor Bostick reminded the Committee that since Era-Valdivia Contractors, Inc. (EVC) has performed the work in a professional manner and provided quality workmanship, Staff requested EVC to submit a proposal to perform rehabilitation and other services on the third and final 7.5 million-gallon nominal capacity standpipe in Naperville, following the exact contract and contract technical specifications and a similar scope of work to the previous standpipe rehabilitation contracts. Staff is of the opinion that suspension of the Commission's purchasing procedures and awarding a contract to EVC for the rehabilitation of Standpipe No. 3 is advantageous for several reasons: Era-Valdivia has provided a proposal which is as much as \$100,000.00 lower

than the bid prices for the similarly sized standpipes; and, all standpipes including the 5.0 million-gallon nominal capacity tanks would have been rehabilitated by the same contractor and contractor staff with common workmanship and quality; and, a singular entity would be responsible for quality control and warranty response; increased efficiencies in project management by both the engineer and Commission Staff; and decreased expenditures relating to advertisement for bids and bid evaluation by both the Engineer and Commission Legal Counsel. Chairman Loftus inquired if any Commissioner had any questions regarding the recommendation to suspend the purchasing procedures. Hearing none, Chairman Loftus stated that the issue would be forwarded to the Board for their consideration.

Regarding the Masonry Rehabilitation and Window Replacements at the DuPage Pumping Station, Facilities Construction Supervisor Bostick advised the Committee that Mertes Contracting Corp. has commenced work on the masonry rehabilitation but the window work is still 10-12 weeks away.

Regarding Quick Response Electric Contract QRE-7/15, Facilities Construction Supervisor Bostick advised the Committee of several action items on the agenda:

R-27-16, Work Authorization Order No. 08 to McWilliams Electric Co. Inc., for the work performed to relocate the electrical service to ROV 2A in Bensenville. The electric service required relocation to facilitate the construction of a bicycle path along Church Road. This work will be billed on a time and material basis estimated at \$3,350.00.

R-29-16, Work Authorization Order No. 09 to Windy City Co. Inc., for the conversion of the replacement valve into a Remotely Operated Valve (ROV 14B) in Lombard. The work generally includes: the coring holes in vault wall; installation of conduits and boxes; installation of power, control, and SCADA wiring; installation of fixtures; and the installation of instrumentation. This work will be billed on a time and material basis estimated at \$21,800.00.

R-30-16, Work Authorization Order No. 10 to McWilliams Electric Co. Inc., to test the integrity of the fiber optic cable between the Pump Station and the Sodium Hypochlorite building and provide a report. Various communication errors are being experienced and testing of the fiber optic cable is part of the troubleshooting process. This work will be billed on a time and material basis estimated at \$600.00.

R-31-16, Work Authorization Order No. 11 to Windy City Co. Inc., to modify the 4" rigid conduit path between the AT&T hand hole and the DuPage Pump Station. After installation of the 4" conduit, ground water infiltrated the Pump Station via the 4" conduit entering at the at-grade hand hole. The modification includes bringing the 4" conduit above grade into a pedestal enclosure which should alleviate the ground water infiltration.

Regarding Pipeline Maintenance and Construction, Pipeline Supervisor Kazmierczak advised the Committee that Vacuum Excavation and Thermite Brazing work will commence on September 26th and the large diameter valve replacement projects remain on schedule.

Chairman Loftus inquired with the Committee if there were any questions regarding the action items. Hearing none, Commissioner Scheck moved to recommend approval of

Engineering Committee Minutes 09/15/2016

items 2 through 7 of the Engineering and Construction Committee portion of the Commission Agenda. Seconded by Commissioner Saverino.

All voted aye: Motion passed

Chairman Loftus inquired the Committee if there were any other business or items to be discussed. Hearing none, Commissioner Furstenau moved to adjourn the meeting at 6:16 P.M. Motion seconded by Commissioner Scheck.

All voted aye: Motion passed

SP2013/MINUTES/ENGINEERING/2016/ENG160915.doc



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:

October 12, 2016

SUBJECT:

Status of Operations

Operations Overview

The Commission's sales for the month of September were a total of 2.4 billion gallons. This represents an average day demand of 79.0 million gallons per day (MGD), which is higher than the September 2015 average day demand of 78.0 MGD. The maximum day demand was 90.7 MGD recorded on September 20, 2016, which is higher than the September 2015 maximum day demand of 90.0 MGD. The minimum day flow was 69.9 MGD.

The Commission's recorded total precipitation for the month of September was 1.8 inches compared to 4.6 inches for September 2015. The level of Lake Michigan for September 2016 is 580.0 (Feet IGLD 1985) compared to 579.7 (Feet IGLD 1985) for September of 2015

Water Conservation

Ongoing: Staff is working with SCARCE to earn their Earth Flag. The process consists of a green audit, staff training in recycling and conservation, an action that involves the Commission in the community (i.e. a book drive, cleaning a creek, adopting a highway, etc.), and finally presenting the Earth Flag to the Board Members. Staff has completed the green audit and is working with SCARCE to set up a date for staff training.

Facilities Construction Overview

Storage System Improvements

The Contract for the Rehabilitation of Coating Systems and Fall Protection Systems for Tank Sites No. 1 and No. 4 East (Contract SS-7/16) with Era-Valdivia Contractors, Inc. is ongoing. Standpipe No. 1 in Roselle is completed and the Contractor continues work at Standpipe No. 4E in Lisle Township by performing finish coating work and re-installing ancillary items. The Contract Completion Date is November 4th.

DuPage Pumping Station

The Masonry Rehabilitation and Window Replacement at the DuPage Pumping Station is ongoing. The exterior masonry work is nearing completion and the interior structural glazed tile work is underway. The window replacement work is still two months away.

Instrumentation / Remote Facilities Overview

Meter Testing Program

The annual customer meter testing program is underway and is approximately 17% complete.

Quick Response Electrical Contract QRE-7/15

Installation of a new security system hardware to monitor the reservoir hatches is complete. The programming modifications of the front end computer graphics and point definitions are being scheduled with the security system contractor.

Work Order Authorization No. 9 is ongoing. This work order allows for the reinstallation of electrical equipment necessary to operate the valve remotely. The work generally includes: the coring holes in vault wall; installation of conduits and boxes; installation of power, control, and SCADA wiring; installation of fixtures; and the installation of instrumentation.

Tests of the integrity of the fiber optic cable between the Pumping Station/Administration Building and the Sodium Hypochlorite Building revealed several dysfunctional fibers. Staff is working on developing the means and methods to remedy the problem.

Infor EAM

Staff has implemented the GIS module of the Infor system. The module connects GIS maps to the Infor asset database. It is expected this will be used in conjunction with the Infor Mobile program.

We are also considering upgrading from Infor 11.1 to version 11.2. Prior to the last upgrade consultant assistance was required to perform software upgrades. Staff experience with the product now enables us to perform upgrades in-house at considerable cost savings.

Pipeline Maintenance and Construction Overview

Vacuum Excavation and Thermite Welding work was completed on October 14th.

Butterfield Rd. and Fairfield Ave. valve replacement work is scheduled to commence on October 17^{th.} Work is expected to be completed and the main returned to service during the week of October 24th.

Staff continues work on cathodic protection test station installations along several transmission main routes.

Staff continues collecting cathodic protection test point data.

The amount of \$26,795.71 payable to The Village of Addison appears on the October Accounts Payable to reimbursement the Village for costs incurred to repair the Commission's pipeline downstream of Meter Station 1D. Addison, believing they had a leak in their system, initiated the repair work through the Village's contractor. Once exposed and the source of the leak was determined to be the Commission's responsibility as defined under the Commission's Water Purchase and Sales Contract. Rather than suspend the work and mobilize a Commission contractor to finish the repair, Village of Addison Staff and Commission Staff agreed to continue repair work with the Village's contractor with the costs associated being reimbursed by the Commission.

OCTOBER 2016 COMMISSION AGENDA ITEMS:

Attachments

- DuPage Laboratory Bench Sheets for September, 2016
- 2. Water Sales Analysis 01-September-2009 to 30- September -2016
- 3. DuPage Water Commission Chart Sales Vs. Historical Average
- 4. DuPage Water Commission Chart Sales Vs. Allocation

http://sp2013/Status%20of%20Operations/2016/161012.docx

DUPAGE WATER COMMISSION LABORATORY BENCH SHEET MONTHLY REPORT FOR SEPTEMBER 2016

LEXINGTON SUPPLY

DUPAGE DISCHARGE

DAY	FREE CL ₂	TURBIDITY	PO₄	FREE CL ₂	TURBIDITY	TEMP	Нq	Fluoride	PO₄	P.A.C.	ANALYST
	mg/l	NTU	mg/l	mg/l	NTU	°F			mg/l	LBS/MG	INT
	1.01	0.10	0.59	1.01	0.09	60	7.3	0.7	0.58	0	
	2 0.99	0.11	0.57	1.00	0.10	61	7.3	0.7	0.59	0	KD
	1.00	0.10	0.52	1.05	0.09	60	7.4	0.8	0.56	0	CT
	0.99	0.10	0.52	1.00	0.10	58	7.3	0.7	0.57	0	CT
	1.01	0.10	0.55	1.12	0.10	58	7.4	0.7	0.54	0	RC
		0.11	0.55	1.10	0.10	56	7.4	0.8	0.58	0	RC
7		0.10	0.54	1.13	0.11	56	7.5	0.7	0.59	0	CT
8		0.09	0.53	1.13	0.10	58	7.4	0.7	0.65	0	CT
		0.09	0.51	1.00	0.10	58	7.4	0.7	0.57	0	CT
10		0.10	0.56	1.13	0.08	59	7.4	0.7	0.56	0	RC
11		0.10	0.54	1.08	0.09	58	7.4	0.7	0.54	0	RC
12		0.09	0.55	1.10	0.11	58	7.4	0.7	0.58	0	CT
13		0.09	0.55	1.12	0.10	58	7.5	0.7	0.58	0	СТ
14		0.10	0.55	1.12	0.08	58	7.4	0.8	0.58	0	RC
15		0.11	0.56	1.17	0.09	58	7.4	0.7	0.55	0	RC
16		0.11	0.54	1.09	0.08	56	7.5	0.8	0.55	0	RC
17		0.09	0.58	1.02	0.10	58	7.4	0.8	0.58	0	RC
18		0.09	0.56	1.00	0.10	58	7.4	0.8	0.58	0	KD
19		0.10	0.55	1.14	0.09	52	7.4	0.7	0.55	0	RC
20		0.11	0.53	1.17	0.10	53	7.4	0.8	0.54	0	RC
21		0.09	0.53	1.10	0.09	52	7.4	0.7	0.55	0	CT
22		0.11	0.54	1.00	0.09	52	7.4	0.8	0.51	Ö	CT
23		0.11	0.54	1.10	0.09	50	7.4	0.8	0.61	0	CT
24		0.10	0.54	1.12	0.09	49	7.4	0.8	0.53	0	RC
25		0.11	0.54	1.16	0.09	49	7.4	0.8	0.54	0	RC
26		0.10	0.54	1.18	0.08	49	7.5	0.8	0.53	0	RC
27		0.10	0.54	1.00	0.09	49	7.5	0.8	0.54	0	CT
28		0.10	0.53	1.14	0.09	60	7.4	0.8	0.56	0	RC
29		0.10	0.53	1.11	0.08	61	7.4	0.8	0.54	0	RC
30		0.10	0.54	1.13	0.09	62	7.4	0.8	0.53	0	RC
31										ő	
AVG	1.08	0.10	0.54	1.09	0.09	56	7.4	0.8	0.56	0	
MAX	1,17	0.11	0.59	1.18	0.11	62	7.5	0.8	0.65	0	
MIN	0.99	0.09	0.51	1.00	0.08	49	7.3	0.7	0.51	Ö	

Terrance McGhee

Manager of Water Operations

01-May-92

TO

30-Sep-16

PER DAY AVERAGE

79,853,412

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-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
Aug-13	3,007,723,000	3,089,289,160	97.36%	\$9,985,640.36	\$8,903,331.36	1,323,465	0.04%	97.40%	\$3.32	\$2.882
Sep-13	2,537,241,000	2,606,351,145	97.35%	\$8,423,640.12	\$7,511,504.00	1,371,480	0.05%	97.40%	\$3.32	\$2.882
Oct-13	2,190,814,000	2,245,112,672	97.58%	\$7,273,502.48	\$6,470,414.72	763,519	0.03%	97.62%	\$3.32	\$2.882
Nov-13	1,996,890,000	2,051,521,527	97.34%	\$6,629,674.80	\$5,912,485.04	4,979,520	0.24%	97.58%	\$3.32	\$2.882
Dec-13	2,122,238,000	2,175,046,412	97.57%	\$7,045,830.16	\$6,268,483.76	749,215	0.03%	97.61%	\$3.32	\$2.882
Jan-14	2,223,778,000	2,287,994,451	97.19%	\$8,828,398.66	\$7,586,989.60	836,445	0.04%	97.23%	\$3.97	\$3.316
Feb-14	2,068,669,000	2,118,238,601	97.66%	\$8,212,615.93	\$7,024,079.20	2,069,443	0.10%	97.76%	\$3.97	\$3.316
Mar-14	2,170,575,000	2,234,019,300	97.16%	\$8,617,182.75	\$7,408,008.00	1,202,320	0.05%	97.21%	\$3.97	\$3.316
Арг-14	2,024,459,000	2,086,348,613	97.03%	\$8,037,102.23	\$6,918,332.00	5,230,699	0.25%	97.28%	\$3.97	\$3.316
May-14	2,278,578,000	2,351,587,455	96.90%	\$9,045,954.66	\$7,797,864.00	498,618	0.02%	96.92%	\$3.97	\$3.316
Jun-14	2,389,528,000	2,472,371,532	96.65%	\$9,486,426.16	\$8,198,384.00	11,296,747	0.46%	97.11%	\$3.97	\$3.316
Jul-14	2,517,890,000	2,597,231,604	96.95%	\$9,996,023.30	\$8,612,420.00	9,644,357	0.37%	97.32%	\$3.97	\$3.316
Aug-14	2,545,942,000	2,624,634,258	97.00%	\$10,107,389.74	\$8,703,287.20	1,259,369	0.05%	97.05%	\$3.97	\$3.316
Sep-14	2,228,595,000	2,290,499,879	97.30%	\$8,847,522.15	\$7,595,297.60	1,529,007	0.07%	97.36%	\$3.97	\$3.316
Oct-14	2,059,231,000	2,118,627,503	97.20%	\$8,175,147.07	\$7,025,368.80	786,729	0.04%	97.23%	\$3.97	\$3.316
Nov-14	1,930,966,000	1,981,464,656	97.45%	\$7,665,935.02	\$6,570,536.80	772,326	0.04%	97.49%	\$3.97	\$3.316
Dec-14	1,988,067,000	2,049,776,840	96.99%	\$7,892,625.99	\$6,797,060.00	675,456	0.03%	97.02%	\$3.97	\$3.316
Jan-15	2,054,769,000	2,114,481,626	97.18%	\$9,616,318.92	\$8,062,518. 44	717,028	0.03%	97.21%	\$4.68	\$3.813
Feb-15	1,886,817,000	1,941,072,846	97.20%	\$8,830,303.56	\$7,401,310.76	543,923	0.03%	97.23%	\$4.68	\$3.813
Mar-15	2,094,277,000	2,161,266,992	96.90%	\$9,801,216.36	\$8,240,911.04	965,682	0.04%	96.95%	\$4.68	\$3.813
Apr-15	1,984,985,000	2,045,765,854	97.03%	\$9,289,729.80	\$7,800,505.20	10,301,376	0.50%	97.53%	\$4.68	\$3.813
May-15	2,215,394,000	2,283,051,057	97.04%	\$10,744,660.90	\$8,705,273.68	649,444	0.03%	97.06%	\$4.85	\$3.813
Jun-15	2,196,780,000	2,266,453,659	96.93%	\$10,654,383.00	\$8,641,987.80	468,148	0.02%		\$4.85	\$3.813
Jul-15	2,448,256,000	2,522,026,667	97.07%	\$11,874,041.60	\$9,616,487.68	6,454,619	0.26%		\$4.85	\$3.813
Aug-15	2,723,202,000	2,807,092,033	97.01%	\$13,207,529.70	\$10,703,441.92	1,048,363	0.04%	97.05%	\$4.85	\$3.813
Sep-15	2,341,098,000	2,428,433,496	96.40%	\$11,354,325.30	\$9,259,616.92	870,425	0.04%		\$4.85	\$3.813
Oct-15	2,188,762,000	2,250,656,585	97.25%	\$10,615,495.70	\$8,581,753.56	1,989,028	0.09%		\$4.85	\$3.813
Nov-15	1,894,247,000	1,942,187,317	97.53%	\$9,187,097.95	\$7,405,560.24	1,150,890	0.06%		\$4.85	\$3.813
Dec-15	1,953,066,000	2,011,680,976	97.09%	\$9,472,370.10	\$7,670,539.56	516,414	0.03%		\$4.85	\$3.813
Jan-16	2,033,443,000	2,091,170,472	97.24%	\$9,862,198.55	\$7,973,633.01	862,718	0.04%		\$4.85	\$3.813
Feb-16	1,888,296,000	1,941,985,366	97.24%	\$9,158,235.60	\$7,404,790.20	563,984	0.03%		\$4.85	\$3.813
Mar-16	1,944,058,000	1,996,231,707	97.39%	\$9,428,681.30	\$7,611,617.24	6,400,732	0.32%		\$4.85	\$3.813
Apr-16	1,984,449,000	2,039,789,593	97.29%	\$9,624,577.65	\$7,777,717.72	9,448,858	0.46%	97.75%	\$4.85	\$3.813
May-16	2,268,225,000		96.98%	\$10,887,480.00	\$8,917,662.12	274,300	0.01%		\$4.80	\$3.813
Jun-16	2,454,342,000		97.01%	\$11,780,841.60	\$9,646,547.76	5,182,282	0.20%		\$4.80	\$3.813
Jul-16	2,641,551,000		96.24%	\$12,679,444.80	\$10,465,471.04	585,600	0.02%		\$4.80	\$3.813
Aug-16	2,533,936,000		97.15%	\$12,162,892.80	\$9,945,209.20	701,544	0.03%		\$4.80	\$3.813
Sep-16	2,369,372,000	2,450,251,707	96.70%	\$11,372,985.60	\$9,342,809.76	6,309,731	0.26%	96.96%	\$4.80	\$3.813
TOTALS (1)	712,212,577,798	732,320,136,130		\$1,290,290,197.13		713,380,800	0.10%		\$1.81	\$1.616
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^{(1) -} SINCE MAY 1, 1992

^{(3) -} DOES NOT INCLUDE FIXED COST PAYMENTS

YTD								
Sep-15	11,924,730,000	12,307,056,912	96.89%	57,834,941	46,926,808		\$4.85	
Sep-16	12,267,426,000	12,671,833,170	96.81%	58,883,645	48,317,700		\$4.80	
	342,696,000	364,776,258		\$1,048,704	\$1,390,892			
	2.9%	3.0%		1,8%	3.0%			
onth.								
Sep-15	2,341,098,000	2,428,433,496	96.40%	11,354,325	9,259,617		\$4.85	
Sep-16	2,369,372,000	2,450,251,707	96.70%	11,372,986	9,342,810		\$4.80	
	28,274,000	21,818,211	\$	18,660	\$ 83,193			
	1.2%	0.9%		0.2%	0.9%			
Sept>Aug	(164,564,000)	(157,985,691)		(789,907)	(602,399)			
	-6.5%							

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





