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COMMITMENT & INTEGRITY DRIVE RESULTS

# Monthly Operating REPORT

Monmouth, Illinois

Department of  
Public Works

July 2016



## TABLE OF CONTENTS

SECTION	PAGE NO.
<b>Executive Summary</b> .....	<b>ES-1</b>
<b>1. WASTEWATER TREATMENT</b> .....	<b>1-1</b>
<b>2. WATER TREATMENT</b> .....	<b>2-2</b>
<b>3. BILLING AND COLLECTION</b> .....	<b>3-1</b>
<b>4. ESTIMATED ANNUAL COST</b> .....	<b>4-1</b>
<b>5. MAINTENANCE/REPAIR COST DETAIL</b> .....	<b>1</b>
5.1 Maintenance and Repair Costs .....	1
5.2 Chemical Cost Detail .....	3
<b>6. HEALTH &amp; SAFETY</b> .....	<b>4</b>
<b>7. CAPITAL PROJECTS</b> .....	

## LIST OF TABLES

TABLE	PAGE NO.
Table 1-1: Water Quality vs. NPDES Permit Limits .....	1-1
Table 2-1: Monthly Chemical Usage for Ion Exchange Softening .....	2-2
Table 3-1: Billing/Collection .....	3-1
Table 4-1: Estimated Annual Budget – Year 2 .....	4-1
Table 5-1: Maintenance and Repair Costs .....	1
Table 5-2: Process Chemical Costs .....	3

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## EXECUTIVE SUMMARY

The July Public Works monthly report provides an overview of the month's activities and statistical data including: wastewater treatment effluent quality, water production, billing and collection statistics for municipal services, maintenance activities, maintenance and repair costs vs. monthly thresholds, water treatment chemical costs, overall project cost and performance to annual budget.

Both the FAU North 6<sup>th</sup> Street project and the MFT General Maintenance project started up in late July with both projects anticipated completion by the end of September. The other capital projects in various stages include Well #10, water treatment capacity project, CSO Phase 1, and North WWTP study will be updated by Jennifer Anders at the upcoming City Council meeting on September 6.

Feel free to stop by the office or give me a call, 309-734-4026.

Regards, Andy

## 1. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 170 million gallons of wastewater in the month of July. There were 14 combined sewer overflow events in July. The weather station at the plant reported 6.7” of rainfall during the month. The Consolidated Plant continues to produce excellent effluent quality. The table below outlines the water quality vs. NPDES permit limits.

**Table 1-1: Water Quality vs. NPDES Permit Limits**

	Monthly Average	Permit Limit
Flow (MGD)	5.49	4.62
Ammonia N mg/l	0.2	1.5
CBOD5 mg/l	1	10
Chlorides mg/l	247	500
Suspended Solids mg/l	6	12
Total Phosphorus	0.8	1.0

## 2. WATER TREATMENT

The water treatment plants produced 76 million gallons of finished water in July. Finished water quality met all standards per the Clean Water Act for drinking water. The table below outlines the chemical usage for ion exchange softening for the month.

**Table 2-1: Monthly Chemical Usage for Ion Exchange Softening**

	Daily Average	Monthly Total
Treated Water to System	2.47 MG	76 MG
Poly Phosphate Usage-lbs.	76	2,354 lbs.
Salt Usage — lbs.	9,663	299,554 lbs.
Chlorine Usage - lbs.	98	3,030 lbs

### 3. BILLING AND COLLECTION

**Table 3-1: Billing/Collection**

The table below outlines the revenue collected for the month of July from the Municipal Services billings.

PAYMENTS JULY 2016										
DATE	PAYMENTS	WATER	SEWER	LANDFILL	RECYCLE	GARBAGE	YARD WASTE	FARM BONDS	FARM SURCHARGE	PENALTY
07/01/16	\$14,891.12	\$6,297.24	\$4,401.20	\$1,244.06	\$814.34	\$2,008.81	\$125.45	\$0.00	\$0.00	\$0.02
07/05/16	\$74,207.64	\$36,754.20	\$21,390.26	\$4,739.44	\$3,131.20	\$7,703.86	\$482.80	\$0.00	\$0.00	\$5.88
07/06/16	\$136,642.93	\$67,385.13	\$64,879.85	\$1,191.54	\$772.40	\$1,978.18	\$124.80	\$0.00	\$309.07	\$1.96
07/07/16	\$34,368.94	\$16,207.94	\$13,473.61	\$1,486.37	\$975.34	\$2,085.57	\$129.44	\$0.00	\$0.00	\$10.67
07/08/16	\$106,493.19	\$42,091.99	\$31,146.42	\$5,027.55	\$3,286.79	\$8,522.22	\$531.82	\$15,886.40	\$0.00	\$0.00
07/11/16	\$12,044.35	\$5,172.98	\$3,897.62	\$732.49	\$466.61	\$1,228.63	\$78.00	\$0.00	\$0.00	\$468.02
07/12/16	\$8,080.70	\$3,544.77	\$2,369.57	\$547.11	\$354.66	\$915.37	\$57.85	\$0.00	\$0.00	\$291.37
07/13/16	\$10,574.54	\$4,737.42	\$4,211.09	\$346.95	\$225.22	\$560.59	\$35.10	\$0.00	\$0.00	\$458.17
07/14/16	\$5,892.70	\$2,391.02	\$1,802.70	\$446.53	\$289.54	\$711.46	\$43.58	\$0.00	\$0.00	\$207.87
07/15/16	\$14,845.41	\$6,477.02	\$4,682.29	\$924.70	\$599.50	\$1,508.58	\$93.60	\$0.00	\$0.00	\$559.72
07/18/16	\$18,179.62	\$8,141.09	\$6,162.65	\$956.64	\$620.00	\$1,508.95	\$93.60	\$0.00	\$0.00	\$696.69
07/19/16	\$3,688.06	\$1,583.44	\$1,109.60	\$271.13	\$175.77	\$396.75	\$24.70	\$0.00	\$0.00	\$126.67
07/20/16	\$4,750.48	\$2,216.74	\$1,226.08	\$332.16	\$219.21	\$564.78	\$35.13	\$0.00	\$0.00	\$156.38
07/27/16	\$5,964.63	\$2,702.86	\$1,515.67	\$540.64	\$350.49	\$783.42	\$51.22	\$0.00	\$0.00	\$20.33
07/28/16	\$6,578.45	\$2,780.07	\$1,886.06	\$564.43	\$381.49	\$904.67	\$56.55	\$0.00	\$0.00	\$5.18
07/29/16	\$11,505.89	\$6,320.53	\$2,567.92	\$801.13	\$522.74	\$1,216.81	\$76.76	\$0.00	\$0.00	\$0.00
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	\$0.00									
<b>TOTAL</b>	<b>\$468,708.65</b>	<b>\$214,804.44</b>	<b>\$166,722.59</b>	<b>\$20,152.87</b>	<b>\$13,185.30</b>	<b>\$32,598.65</b>	<b>\$2,040.40</b>	<b>\$15,886.40</b>	<b>\$309.07</b>	<b>\$3,008.93</b>

#### 4. ESTIMATED ANNUAL COST

Table 4-1: Estimated Annual Budget – Year 4

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget
Labor (D.L. + FB)	\$124,386	\$127,788	\$373,158	\$342,108	\$1,492,633
Utilities	\$2,500	\$1,957	\$7,500	\$6,104	\$30,000
Chemicals Costs	\$22,667	\$22,903	\$68,000	\$59,198	\$272,000
Maintenance and Repair Costs	\$27,833	\$38,453	\$83,500	\$75,255	\$334,000
Sludge Disposal Costs	\$0	\$0	\$0	\$0	\$0
Lab Supplies & Equipment	\$3,375	\$4,142	\$10,125	\$7,997	\$40,500
Office Supplies	\$1,500	\$1,550	\$4,500	\$5,025	\$18,000
Miscellaneous Expenses	\$5,017	\$6,796	\$15,050	\$15,703	\$60,200
Other Operating Costs	\$12,494	\$19,287	\$37,482	\$39,365	\$149,927
Overhead (G&A of D.L.)	\$28,087	\$28,855	\$84,262	\$77,250	\$337,046
<b>Subtotal of Costs - Contract Year 4</b>	<b>\$227,859</b>	<b>\$251,732</b>	<b>\$683,577</b>	<b>\$628,006</b>	<b>\$2,734,306</b>
Fixed Fee for Contract Year 4	\$16,406	\$18,125	\$49,218	\$45,216	\$196,870

## 5. MAINTENANCE/REPAIR COST DETAIL

### 5.1 MAINTENANCE AND REPAIR COSTS

Maintenance and Repair costs as compared to the monthly threshold

**Table 5-1: Maintenance and Repair Costs**

	Month	YTD
Grounds	1,444	4,208
Electrical	5,182	6,623
Street	21,962	32,168
Water Distribution	3,995	11,966
Sewer Collection	768	1,605
Instrumentation	0	0
Mechanical	1,627	9,819
Vehicle	2,250	3,942
Tools	21	59
Janitorial/Misc.	762	2,108
HVAC Maintenance	420	2,688
Maintenance Agreements	23	68
Snow Removal	0	0
<b>Total Expenditures</b>	<b>38,453</b>	<b>75,254</b>
<b>Threshold</b>	<b>\$27,833</b>	<b>\$83,499</b>
<b>Over (Under)</b>	<b>\$10,620</b>	<b>\$(8,245)</b>

#### A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

##### Water/Street Facilities

Maintenance staff completed 67 preventative and 27 corrective work orders for the water plants, distribution system, and fleet in July. 114 requests for service were responded to by service personnel. 315 requests for City utility locates from the J.U.L.I.E. call center were completed.

Water distribution system and sewer collection system items:

- Replaced 13 water meters
- Repaired curb stop 300 West Boston
- Repaired curb stop 205 West 4<sup>th</sup>
- Repaired curb stop 1030 East Harlem
- Repaired curb stop 820 North C
- Repaired curb stop 200 East 11<sup>th</sup>
- Repaired curb stop 905 South Main
- Repaired water main 2090 North Main



- Repaired water main 600 block East Archer
- Repaired water main northeast quadrant of town square
- Televised/inspected central sewer interceptor from South A to North 5<sup>th</sup> Street

### Wastewater Facilities

Maintenance staff performed 76 preventative work orders at the Consolidated Plant, and, 41 preventatives and 1 corrective works orders at the Pre-Treatment plant.

- Installed new belts on return sludge pump

### Street/Grounds/Right of Way/Fleet

- Various tree removal
- Street patching
- Replaced pedestrian sign North Main Street and Boston Avenue
- Replaced stop sign North Main Street and Harlem Avenue
- Changed filters/cleaned Euclid and North Main traffic signal controller
- Scheduled vehicle service work (lube, oil, filters)
- Replaced brakes on T15
- Backfilled, tilled, and seeded graves at the Cemetery
- City grounds keeping including 2 cemeteries, all City owned lots, private lots as directed by Code Enforcement Officer, City right of ways, Water Plants, Wastewater Treatment Plants, City garage, Fountain maintenance, and downtown beautification
- Applied herbicide for weed control on City properties and right of way (various areas)
- Picked up residential storm debris from July 21/22<sup>nd</sup> storm

## 5.2 CHEMICAL COST DETAIL

Process chemical costs for water treatment

**Table 5-2: Process Chemical Costs**

	Month	YTD
Chlorine	2,025	6,045
Salt	14,667	46,436
Polyphosphate	6,717	6,717
Total	\$22,903	\$59,198
Threshold	\$22,667	\$68,001
Over (Under)	\$236	\$(8,803)

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## 6. HEALTH & SAFETY

Monthly training topic was review of respiratory protection. We did have a safety incident in July involving a finger injury whereby an employee was working on the large brush hog mower and his finger was lacerated along with a broken knuckle. The employee has recovered and has returned to work.

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## 7. CAPITAL PROJECTS

Jennifer Anders will be providing an update on the capital projects.