# OFFICIAL NOTICE

PLEASE TAKE NOTICE that the Water and Sewer Utility Commission will meet at the Oak Creek Water & Sewer Utility, 170 West Drexel Avenue, Oak Creek, Wisconsin, 53154 on Tuesday, December 11, 2018, at 10:00 am.

The purpose of this meeting will be to discuss the topics listed on the attached agenda.

It is possible that members of and possibly a quorum of members of our governmental bodies of the municipality may be in attendance at the above-stated meeting to gather information; no action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.

# **PUBLIC NOTICE**

**Please Note**: Upon reasonable notice, a good faith effort will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aid at no cost to the individual to participate in public meetings. Due to the difficulty in finding interpreters, requests should be made as far in advance as possible, preferably a minimum of 48 hours. For additional information or to request this service, contact the Oak Creek City Clerk at 414-766-7023 or write to the ADA Coordinator at the Health Department, City Hall, 8040 South 6<sup>th</sup> Street, Oak Creek, Wisconsin, 53154.

DATED, at Oak Creek, Wisconsin, this the 6th day of December, 2018.

/s/ Michael J. Sullivan General Manager

# A G E N D A WATER AND SEWER UTILITY COMMISSIONERS CITY OF OAK CREEK

TIME 10:00 am

DATE Tuesday

Tuesday December 11, 2018 LOCATION

Headquarters Building 170 West Drexel Avenue

# 1.0 OPENING OF MEETING

- 1.1 Roll Call
- 1.2 Minutes Approval Regular Meeting 11-13-18

# 2.0 CLOSED SESSION

- 2.1 Closed session in accordance with Section 19.85 (1) (e) and (g) of the Wisconsin State Statutes for the following purpose:
  - A. Water Quality Improvement Project
  - B. Oak Creek Franklin Municipal Water and Sewer Agreement

# 3.0 PROJECT APPROVALS

# 4.0 MISCELLANEOUS MATTERS

- 4.1 25th Consecutive Certificate of Achievement for Excellence in Financial Reporting
- 4.2 Chemical Bids

# 5.0 FINANCIAL MATTERS

- 5.1 Project Payment Approval
- 5.2 Voucher Approval
- 5.3 Utility Investments
- 5.4 2019 Capital Budget Approval

# 6.0 ADMINISTRATIVE & OPERATIONS REPORTS

- 6.1 Aldermanic Report
- 6.2 Administrative Operations Report
- 6.3 Engineering Operations Report
- 6.4 Distribution Operations Report
- 6.5 Plant Operations Report
- 6.6 Manager's Report

# 7.0 ADJOURN

# Memorandum

To: OCWSU Commissioners

CC: OCWSU Staff

From: Plant Manager Robe

Date: 12/5/2018

Re: Chemical Bids

The chemical quotes for 2019 are as follows:

Coagulant	H1050A

2019 Bid \$0.2600/lb.

2018 Bid \$0.2400/lb.

Est. Usage 325,000 lbs.

Est. Cost \$84,500.00

Vendor: ChemTrade-only bid

Disinfectant Sodium Hypochlorite

2019 Bid \$0.07800/lb.

2018 Bid \$0.07100/lb.

Est. Usage 550,000 lbs.

Est. Cost \$42,900.00

Vendor: Olin-low bid

Fluoride

Hydrofluosilicic Acid

2019 Bid

\$0.1760/lb.

2018 Bid

\$0.1680/lb.

Est. Usage

75,000 lbs.

Est. Cost

\$13,200.00

Vendor: Alexander

Rowell low bid @ \$0.1680/lb. not recommended due to product impurities

# **Potassium Permanganate**

Carus Free Flowing

2019 Bid

\$3.55/lb.

2018 Bid.

\$3.55/lb.

Est. Usage

6,000 lbs.

Est. Cost

\$21,300.00

Vendor: Hawkins Chemical-only bid

# **Powdered Activated Carbon**

2019 Bid

\$0.78/lb.

2018 Bid

\$0.68/lb.

Est. Usage

30,000 lbs.

Est. Cost

\$23,400.00

Vendor: Thatcher Company-low bid

# 2019 CAPITAL BUDGET SUMMARY SHEET

# Capital Budget Financed by Operations:

Total 2019 Capital Budget	\$ 15,095,297.00
Projects in Progress	 13,052,965.00
Capital Improvement Projects	1,775,000.00
Treatment Plant	62,232.00
Engineering	12,000.00
Distribution	193,100.00
Administrative and General	\$ -

		<u>Total</u>	<u>Water</u>	Sewer
Administration		\$ -	\$ -	\$ -
Distribution	Meter Exchange Program	82,000.00	82,000.00	-
	Howell Tower Washing	6,100.00	6,100.00	-
	Excavator and Trailer	105,000.00	105,000.00	
	Subtotal	193,100.00	193,100.00	_
Engineering	Digger's Hotline Ticket Automation and GIS			
· ·	Interface	12,000.00	8,400.00	3,600.00
4	Subtotal	12,000.00	8,400.00	3,600.00
Treatment Plant	Replacement of Turbidity Meters Replacement of Coagulation Control Center	25,000.00	25,000.00	-
	(CCC) Parts	8,000.00	8,000.00	-
	Complete Conversion of the Treatment Plant and Raw Water Buildings to LED Lighting Repair and Sealing of North and South Parking	22,232.00	22,232.00	-
	Lots	7,000.00	7,000.00	••
	Subtotal	62,232.00	62,232.00	-
Projects	Wildwood Drive Water Main and Sanitary Sewer			
1 10,000	Relay	700,000.00	700,000.00	-
	Fitzsimmons Road Water Main Relay	430,000.00	430,000.00	-
	College Avenue Water Main Extension	645,000.00	645,000.00	••
	Subtotal	1,775,000.00	1,775,000.00	
TOTAL		\$2,042,332.00	\$2,038,732.00	\$3,600.00

# Five Year History

<u>Year</u>	<u>Total</u>	Water	<u>Sewer</u>
2018	\$8,309,087.00	\$7,161,102.00	\$1,147,985.00
2017	4,764,150.00	3,328,500.00	1,435,650.00
2016	4,969,650.00	4,197,250.00	772,400.00
2015	1,875,000.00	1,758,500.00	116,500.00
2014	9,205,450.00	8,476,750.00	728,700.00

# **ADMINISTRATIVE AND GENERAL**

TOTAL ADMINISTRATIVE AND GENERAL BUDGET		\$
	Water	-
	Sewer	-
		\$ -

# DISTRIBUTION

Meter Exchange Program

82,000.00 \$

The meter department wants to continue the change out program, exchanging 450 meters and heads per year. The price of \$182.57 is locked in until June 1, 2019.

Water

82,000.00

Howell Tower Washing

6,100.00

The last time Howell Tower was cleaned on the outside was in 2008, and it needs needs to be washed again to remove the mildew and help protect the paint for a longer life.

Water

6,100.00

#### **Excavator and Trailer**

105,000.00

This budget item is to replace the 1998 John Deere 310 SE Backhoe with a 19,000 pound excavator and trailer. The backhoe is 20 years old with over 5,400 hours on it. The estimated cost of a new excavator and trailer to transport it is \$145,000. There is \$40,000 already set aside from previous years' budgets to purchase the new excavator and trailer, so the Utility would need to add \$105,000 to this year's budget. The 1998 backhoe would be sold on Wisconsin Surplus Auction, and has an estimated resale value of \$15,000.

The benefits of purchasing an excavator over another backhoe are as follows:

Efficiency for the Utility -

On most repairs, using an excavator would narrow up the space needed by only taking one lane of traffic to do the repair. Therefore, it would limit the need to close roads due to work which causes an inconvenience to local residents. It would also save time since a crew of three could have all of the equipment on site in one trip instead of having to jockey equipment back and forth.

Cost savings -

There are areas in Oak Creek where it is not practical to close roads to do a repair. South Chicago Road is one that a contractor would be called in to do the repair. The cost for water main repairs average about \$5,500 per job. There are some instances where a contractor would have to be called; for example, if the main is too deep where a larger machine is needed.

Water

105,000.00

# TOTAL DISTRIBUTION BUDGET

S	193,100.00	

Water Sewer

193,100.00
-
\$ 193,100.00

# **ENGINEERING**

### Digger's Hotline Ticket Automation and GIS Interface

This project will automate the process of receiving Digger's Hotline locate requests. Software for this project will enable the Utility to log and save locating requests digitally, and utilize GIS functionality to improve the work processes involved. The process would change from receiving locating requests by fax to receiving them by email. In turn, a GIS dashboard will be set up and populate as digital locate requests are brought in. After-hours locates will remain unchanged.

The benefits of this system are as follows:

- The Utility Locator will save time on data entry (approximately 4,800 tickets per year).
- Data entry errors are eliminated.
- The Utility Locator no longer has to sort the route on a daily basis, tickets would appear on the digital map utilizing coordinates provided in emails.
- Office staff would no longer have to keep watch over the fax machine and call
  or text emergency tickets to the Utility Locator.
- Eliminates the need for Digger's Hotline fax machine and supplies (analog phone line, paper, toner, etc.)
- Provides for easier access to information for public inquiries about flags/work in homeowners' yards and questions from contractors about past tickets.
- Software has the capability to incorporate photos of completed work with ticket record.



Water

8,400.00

Sewer

3,600.00

12,000.00

\$

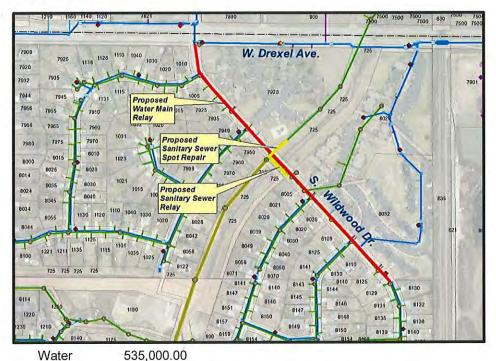
# TREATMENT PLANT

Replacement of Turbidity Meters  The turbidity meters used in the treatment plant are no longer supported.  Currently, there are 23 units in use at the plant. A two-year replacement schedule is in place, and this amount is needed to complete the replacement of the 23 units, a lab counter top unit and calibration accessories. The 2018 budget included \$40,000 for turbidity meters, and this \$25,000 will increase the total budget for this item to \$65,000.  Water 25,000.00	\$ 25,000.00
Replacement of Coagulation Control Center (CCC) Parts  The current valves and actuators on the CCC are approaching ten years of age.  This is a critical part of our treatment process, and we currently have no spare or replacement parts in stock. The old parts will be saved to use in emergency situations.  Water 8,000.00	8,000.00
Complete Conversion of the Treatment Plant and Raw Water Buildings to LED Lighting  The treatment plant has undergone a partial conversion to LED lighting. This amount is needed to complete the conversion of both inside and outside fixtures at both the treatment plant and raw water buildings. The return on investment is approximately .65 years.  Water 22,232.00	22,232.00
Repair and Sealing of the North and South Treatment Plant Parking Lots  The parking lots at the treatment plant are showing wear. This budget amount is for repairing the larger cracks, sealing the surface and striping the parking lots.  Water 7,000.00	 7,000.00
TOTAL TREATMENT PLANT BUDGET	\$ 62,232.00
Water Sewer	 62,232.00
	\$ 62,232.00

# CAPITAL IMPROVEMENT PROJECTS

# Wildwood Drive Water Main and Sanitary Sewer Relay

This project includes relaying approximately 1,800' of 8" water main in Wildwood Drive from Drexel Avenue to approximately 300' south of South White Oaks Drive. The City of Oak Creek will be repaving this street in 2019, thus giving the Utility the opportunity to relay the existing 1960's vintage 8" ductile iron water main that has had several breaks within the last 20 years. Additionally, the Utility will relay approximately 250' of sanitary sewer crossing underneath the creek that has a 100% sag in it. Engineering has also identified another location where there are structural problems with the existing sanitary sewer main that will be corrected with a spot repair of approximately 50'.



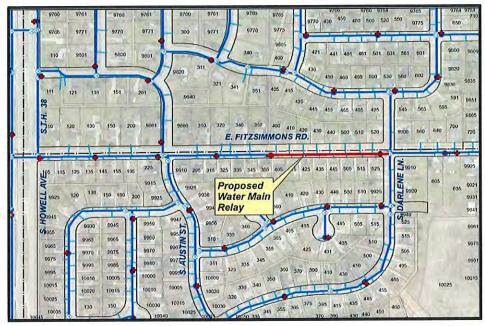
Sewer

165,000.00

\$ 700,000.00

# Fitzsimmons Road Water Main Relay

This project includes relaying approximately 650' of 12" water main in Fitzsimmons Road from Darlene Lane to approximately 650' west of Darlene Lane. The existing 1970's vintage ductile iron water main will be relayed prior to a proposed City of Oak Creek paving project. This line has experienced an unusual amount of breaks in and around the area of the water service connections where it is suspected that the main was not protected properly during installation.

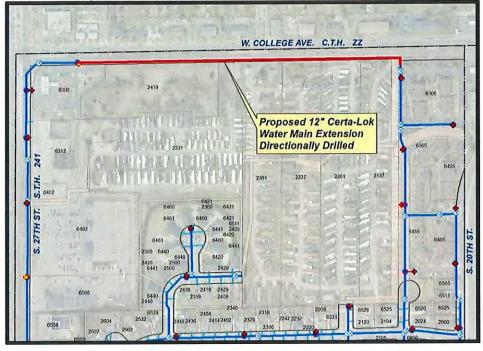


Water

430,000.00

### **College Avenue Water Main Extension**

This project completes a 12" water main loop from South 27th Street to South 20th Street and includes directional drilling 1,850' of 12" Cert-a-lok pipe with appurtenances and associated restoration. This loop will provide for improved water quality and more importantly, a secondary feed for the business district along the South 27th Street corridor.



Water

645,000.00

### TOTAL CAPITAL IMPROVEMENT PROJECTS BUDGET

\$	1,775,000.	OC
Ψ	1,110,000.	00

Water Sewer 1,610,000.00 165,000.00 \$ 1,775,000.00

	PROJECTS IN PROGRESS	Total Budgeted	A	Amount Remaining as of 12/31/18	<u>Water</u>	Sewer
16102	CT Tank Compliance Project	\$ 7,500,000.00	\$	7,500,000.00	\$ 7,500,000.00	\$ -
725	Full Water System Master Plan	350,000.00		350,000.00	350,000.00	-
18107	I-94 and Ryan Road Interchange Improvements	20,000.00		8,458.70	(1,541.30)	10,000.00
18105	Forest Hill Water Main Extension	600,000.00		549,570.39	549,570.39	-
-	Howell Avenue Water Main Lining (Spray Liner)	300,000.00		300,000.00	300,000.00	-
18104	South 27th Street Water Main Extension	275,000.00		248,602. <b>2</b> 5	248,602.25	-
18101	South 13th Street Hydrant and Manhole Relcation (Const)	320,000.00		191,572.67	89,014.26	102,558.41
-	Sanitary Sewer Rehabilitation Project - 2018	800,000.00		00.000,008	-	800,000.00
18108	I-94 and Puetz Road Water Main Crossing (Const)	889,665.00		795,298.69	795,298.69	-
	Sanitary Sewer Master Plan	150,000.00		150,000.00	-	150,000.00
-	Electrical Feasibility Study at Water Treatment Plant	28,300.00		28,300.00	28,300.00	••
720	Update Processing Computers and Software at Plant	75,000.00		75,000.00	75,000.00	-
721	Replacement of Treatment Plant West Effluent Meter	40,000.00		40,000.00	40,000.00	-
723	Replacement of Turbidity Meters	40,000.00		40,000.00	40,000.00	
18110	Treatment Plant Locker Room Remodel	350,000,00		308,281.16	308,281.16	-
397	Sewer Machine Dump Site	50,000.00		50,000.00	-	50,000.00
700	Backhoe Replacement Reserve	40,000.00		40,000.00	40,000.00	<del>fn</del>
701	Tandem Dump Truck Reserve	40,000.00		40,000.00	40,000.00	-
17103	Ridgeview Drive and Other Water Main Loops	<b>3</b> 75,000.00		3 <b>28</b> ,615.79	328,615.79	-
-	Security Upgrades	250,000.00		250,000.00	175,000.00	75,000.00
-	Low Lift Drive Landscaping Project	15,000.00		15,000.00	15,000.00	-
17106	Jewell Street Sanitary Sewer Lift Station Replacement	530,000.00		526,377.40	-	526,377.40
-	Dehumidification Equipment Installation at Plant	15,000.00		15,000.00	 15,000.00	 <del>-</del>
	TOTAL PROJECTS IN PROGRESS BUDGET	\$ 13,052,965.00	\$	12,650,077.05	\$ 10,936,141.24	\$ 1,713,935.81

# **ADMINISTRATIVE OPERATIONS**

November 2018

# Capital Budget:

Accounting Supervisor Stenzel prepared the Utility's capital budget for 2019.

# **Delinquent Notices:**

Senior Accountant Leranth compiled a list of delinquent accounts to be placed on the City of Oak Creek's tax roll. The following table summarizes the accounts rolled to the tax bills for 2018, 2017 and 2016:

	<u>2018</u>	<u>2017</u>	<u>2016</u>	Variance 2018 vs. 2017	Variance 2017 vs. 2016
Number of delinquent notices	1,498	1,459	1,406	2.67 %	3.77 %
Number of customers rolled	708	706	722	0.28 %	(2.22) %
Amounts rolled:					
Water Water penalties Total	\$ 245,593 24,564 270,157	\$ 233,862 23,095 256,957	\$ 249,033 25,069 274,102	5.02 % 6.36 5.14	(6.09) % (7.87) (6.25)
Sewer Sewer penalties Total	69,213 6,917 76,130	68,439 6,721 75,160	72,255 7,264 79,519	1.13 2.92 1.29	(5.28) (7.47) (5.48)
Metro Metro penalties Total	101,583 10,077 111,660	94,362 9,175 103,538	102,261 10,204 112,465	7.65 9.83 7.84	(7.72) (10.08) (7.94)
TOTAL	\$ 457,947	\$ 435,655	\$ 466,086	5.12 %	(6.53) %

# **Utility Clerk Position:**

Two candidates were selected to take the pre-employment behavioral assessment through Organization Development Consultants, Inc. One of these candidates backed out of the hiring process; and therefore, only one candidate followed through in taking the assessment. Due to her positive results on the assessment, Nicole Butler was offered the Utility Clerk position. Her start date is December 3.

# Meetings:

Accounting Supervisor Stenzel attended the Wisconsin Section of the AWWA Leadership Meeting held in Madison on November 2.

#### Training:

Accounting Supervisor Stenzel attended the Wisconsin Institute of Certified Public Accountants Accounting and Auditing seminar on November 15.

Accounting Supervisor Stenzel participated in the Government Finance Officers Association Pension and OPEB webinar on November 28.

# Workload:

Other administrative tasks included the following:

- 1. Added 6 customer accounts for the month.
- 2. Billed 3,299 water customers and 3,417 sewer customers.

# Gallons Billed (in thousands):

TD 014 Average
114 Average
717 71701450
73,423 378,08
04,850 420,47
72,230 406,68
16,877 15,65
19,490 1,105,16
86,870 2,326,06
N/A
-1.7%

## **New Customers:**

YTD	YTD	YTD	YTD	YTD	
2018	2017	2016	2015	2014	Average
31	26	26	22	20	25.0
20	27	27	10	1	17.0
0	0	0	1	0	0.2
1	0	1	3	1	1.2
0	0	0	0	0	-
52	53	54	36	22	43.4
	2018 31 20 0 1	2018         2017           31         26           20         27           0         0           1         0           0         0	2018         2017         2016           31         26         26           20         27         27           0         0         0           1         0         1           0         0         0	2018         2017         2016         2015           31         26         26         22           20         27         27         10           0         0         0         1           1         0         1         3           0         0         0         0	2018         2017         2016         2015         2014           31         26         26         22         20           20         27         27         10         1           0         0         0         1         0           1         0         1         3         1           0         0         0         0         0

### **New Residential Customers (YTD 2018):**

8219 S. Alisa Lane, 8223 S. Alisa Lane, 375 E. Lily Drive, 380 E. Lily Drive, 365 E. Lily Drive, 390 E. Lily Drive, 397 E. Lily Drive, 2230 W. Southland Drive, 2300 W. Southland Drive, 9441 S. Nicholson Road, 165 E. Golden Lane, 1101 E. Wildflower Drive, 10110 S. Barrington Drive, 10130 S. Barrington Drive, 990 E. Peach Tree Lane, 1880 E. Lilac Lane, 1927 E. Lilac Lane, 1927 E. Lilac Lane (lawn), 1930 E. Lilac Lane, 10311 S. Willow Creek Drive, 10390 S. Willow Creek Drive, 360 E. Forest Hill Avenue, 380 E. Forest Hill Avenue, 2620 E. Oakwood Road, 9838 S. Chicago Road, 10068 S. Macintosh Lane, 10405 S. Redwood Lane, 3413 E. Elm Road, 8675 S. 5<sup>th</sup> Avenue, 1515 E. Prairie View Drive, Psalm 127 Investments LLC, 2313

# New Commercial Customers (YTD 2018):

Drexel Square Hotel, HSI Drexel Ridge (11 accounts), Storage Shop USA, IKEA, warehouse building on 10651 S. Oakview Parkway, Bellissimo Distribution LLC, Howell Avenue Retail II, Hoffman Storage LLC, We Energies – Admin Building, Bliffert Lumber & Fuel Co.

# New Public Authority Customers (YTD 2018):

City of Oak Creek – 4001 E. Lake Vista Parkway

# **ENGINEERING OPERATIONS**

November 2018

# I-94 & Puetz Road Water Main Crossing

Globe has completed the casing and 16" water main pipe crossing at I-94 and Puetz Road. They have continued pipe installation on both the east and west side of I-94. The east side embankment has been fully restored with erosion matting and temporary seed. The contractor will soon be filling the pipe and testing the first week in December. Once the new pipe installation has been pressure tested and safe sampled, the connections on the east and west sides will be completed and the west side embankment and ditch line restored. This portion of the project should be complete in two to three weeks.

The second phase of this project will address the I-94 water main crossing south of Puetz Road. Similar to the 16" water main on the north side of Puetz Road, a new 24" pipe with casing will be jacked and bored at a different location and elevation to mitigate conflicts with the Wisconsin Department of Transportation's (WisDOT) I-94 north-leg paving project. Engineering anticipates that Phase Two will begin next year. In large part, the schedule for this part of the project will be dictated by WisDOT's prosecution and progress in this area.

# 27th Street Water Main Extension

The contractor (Globe) has signed the contract for this project and will mobilize to the site on December 10, at which time construction will begin. Water main installation will be cumbersome at the southeast corner of S. 27<sup>th</sup> Street and W. Southbranch Boulevard due the large presence of utilities in this area. However, once clear of these obstacles, the contractor will have a relatively unobstructed path for the remaining 900' of installation. This project will take approximately four weeks to complete depending on the weather conditions.

### Water System Master Plan

Engineering has received proposals from five different engineering consultants for this project: Strand, CDM Smith, Graef, Trotter, and Baxter & Woodman. The proposals were reviewed and ranked by each of the members of the internal team (Mike Sullivan, Ron Pritzlaff, Doug Schwartz, and Mike Robe). After the review, the Utility team met and selected the following three consultants to continue on to the interview phase: Strand, Graef, and CDM Smith.

Once interviews are complete, the Utility team will deliberate and select a consultant that is most qualified based on the proposal submitted and interview. Engineering expects that interviews will be complete and a final consultant candidate selected prior to Christmas 2018.

# **Utility Security Upgrades**

Engineering has engaged with members of the EPA and U.S. Army National Guard as initial information gathering for the upgrades related to the overall security of the Utility's assets. In particular, Engineering is considering both a cyber-security and physical security evaluation that will provide feasible measures available for implementation in order to provide an improved water resilience posture.

Engineering expects that the EPA and Army National Guard will assist in locating security consultants and provide assistance as to best management practices.

# **DISTRIBUTION & COLLECTION OPERATIONS**

#### November 2018

# Water Main Breaks:

There were no main breaks in the month of November.

# Lateral Repairs:

On November 1<sup>st</sup> a crew was sent to 7300 South Delaine Drive to repair a 1 1/2" copper water lateral. When the crew excavated the lateral, they found the curb stop was leaking. A new curb stop was installed. The main and lateral were installed in 1975.

# Fire Hydrant Repairs:

There were no hydrant repairs in the month of November.

# Valve Repair:

There were no valve repairs in the month of November.

# **Tower Inspections:**

In the month of October Howell Tower had a dry inspection and Sycamore Tower had a wet inspection.

# Sewer Repairs:

In the month of November Utility Workers performed maintenance tasks including treating roots in 6,036 feet of sewer mains, replaced three manhole frame riser rings, replaced ten manhole cover seals and cleaned the Clement Avenue lift station wet well.

## Miscellaneous:

In November Asphalt Contractors completed asphalting in three areas for the Utility, 9920 South Darlene Lane, 3953 East Depot Road and 9325 South 5<sup>th</sup> Avenue.

In November Distribution workers completed the inspection of the remote water and sewer mains.

In November Distribution workers located and repaired six valves that were buried under asphalt.

# DISTRIBUTION GOALS 2018

JOB DESCRIPTION	GOALS	JAN	FEB	MAR	APR	MAY	NUL	JUL	AUG	SEP	130	NOV	DEC	TOTALS
												1		
Meter Testing & Exchanges	450	24	159	217	112	118	149	33	127	49	116	2		1,115
New installs	920	9	ιC	3	5	7	4	4	8	မ	10	ю		56
Cross Connection Inspections	450	80	54	62	63	63	62	28	49	30	16	ဖ		458
Industrial Inspections		10	12	27	94	4	15	16	12	78	69	126		500
Orion Replacements	450	41	58	95	99	69	65	29	52	30	22	ω		508
														-
Water Main Repairs	-	3	3	1	2	ო	-	က	က	<b>~</b>	,	1	Ì	19
Water Lateral Repairs		е	-	*	-	ŧ	-	;	•	•	ı	-		£
Annual Hydrant Flushing	2,169				1,004	1,119	46							2,169
Semi-annual Flushing	215				Done with annual						222			222
Quarterly Flushing	75x2	75			Done with annual			89	7					150
Flush Emergency Connections	3										က	1		9
Watermain Crossings	63	63												83
Hydrant Greasing - Caps	2,169				1,004	1,119	46							2,169
Hydrant Greasing - Packing	10													•
Hydrant Painting	20							12	78					. 90
Winterize Hydrants	20										81			81
Clean Sewers	151,151	4.525.8	8.747.7	7,936.2	27,470.2	15,198.6	27,454.2	20,194.0	23,189.5	17,548.0	761.8			153,026.0
Camera Sewers	92,560			1,344.5	299.7	14,374.7	26,245.2	18,708.5	19,022.5	17,053.0	93.4	1		97,141.5
Root treatment			,								2,520	6,036		8,556
Manhole Maintenance Flowlines		4	6	5	15	4	9		-	1	2	-		39
Grout Manholes	25	2	က	3	4	8	7	'	t	1	6 .	•		31
Repair Manhole Chimneys			4	١	1	2	-	f	-	r	-	•		10
Replace Manhole Cover Seals		-	2	ζ	3	1	4	-	5	'	9	1		31
Check Problem Sewers	4×44	44			44			44			44			176
Check Remote Sewer Mains	40											40		40
Check Remote Water Mains	25											25		25
Operate Valves	1,000		•	65	E	13	47	629	330	-	-	٠		1,134
Valve Boxes Repaired or Adjusted		2	·	-	-	ဖ	1	***	1	က	Ż	12		35
Stop Boxes Repaired or Adjusted		_	-	·	3	4	4	2	_	S	-	1		20
Concrete/Asphalt/Landscaping		,	1	1	•	5	14	4	2	10	,	-		35
Cathodic Protection Tests	11										11			11
Winterize Equipment												Done		0
Summerize Equipment					Done									0
Run All Equipment					Done						DONE			0
MMSD Annual CMOM Report							Done							0
DNR eCMAR							Done							0
Revised 11/3/2017														٥

# **PLANT OPERATIONS**

November, 2018

PUMPAGE REPORT	2018	2017	% Change	5 Year %
Monthly Pumpage	203,068,000	196,699,000	+3.2	+1.3
Monthly Average Day	6,768,000	6,557,000	+3.2	+1.3
Monthly Peak Day	(11/04) 9,010,000	(11/24) 8,710,000	+3.4	+3.9
Yearly Pumpage	2,545,523,000	2,441,749,000	+4.2	+1.2
Yearly Average Day	7,621,300	7,311,000	+4.2	+1.2
Yearly Peak Day	(7/11) 12,110,000	(8/27) 10,510,000	+15.2	+2.7
West Zone Pumpage	83,680,000	87,390,000	-4.2	-11.7

WATER QUALITY REPORT	Raw Water	Finished Water
Average Free Chlorine		1.60 mg/l
Total Chlorine		1.77 mg/l
Average Alkalinity	111.6 mg/l	112.1 mg/l
Average pH	8.3	8.1
Average Fluoride	0.14 mg/l	0.76 mg/l
Average Turbidity	7.22 NTU	0.04 NTU
High Temperature	High 53.3 F Low 41.1 F	
Hardness	137 mg/l	137 mg/l

<u>Preventative Maintenance Tasks:</u> Staff completed 90 preventative maintenance tasks, 4 miscellaneous work orders, and 2 safety sessions during the month.

**Operators:** Operators Ludke and Bozich have completed their probationary period.

<u>Plant:</u> The gear box in sed basin 6 was able to be repaired in place. Basin 5 gear box will be repaired at next draw down. This repair saved significant costs of replacement. The backwash tower has been taken out of service for the season.



