### CITY OF OAK CREEK WATER & SEWER UTILITY 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, February 12, 2019, at 9:00 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 7th day of February, 2019.

/s/ Michael J. Sullivan General Manager

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

**TIME** 9:00 am

**DATE** 

**LOCATION** 

Tuesday February 12

February 12, 2019

Headquarters Building 170 West Drexel Avenue

### 1.0 OPENING OF MEETING

- 1.1 Roll Call
- 1.2 Minutes Approval Regular Meeting 01-08-19

### 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

### 3.0 PROJECT APPROVALS

### 4.0 MISCELLANEOUS MATTERS

- 4.1 Introduction/Confirmation of Utility Engineer
- 4.2 Professional Services Agreement with CDM Smith, Water System Master Plan

### 5.0 FINANCIAL MATTERS

- 5.1 Project Payment Approval
- 5.2 Voucher Approval
- 5.3 Utility Investments
- 5.4 Interfund Loan Interest Rate

### 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

### Professional Services Agreement with CDM Smith, Inc. Water System Master Plan

Date:

February 12, 2019

RECOMMENDATION: That the Commission consider a motion to authorize the Utility Engineer to enter into an agreement with CDM Smith, Inc. for providing professional services in the production of a new water system master plan in the not to exceed amount of \$430,000.

This project consists of producing a comprehensive water system master plan (20-year planning period) whose primary objectives are as follows:

- Water Treatment Plant Evaluation
- Evaluation of Treatment Processes
- Recommended Treatment Goals
- Evaluate Water Distribution and Transmission Systems Including Distribution System Storage
- Equipment Inventory and Condition Assessment
- Evaluation of Whole Sale Water Supply Control
- Water System Hydraulic Model Calibration
- Water Age Evaluation
- Energy Efficiency Study
- Conservation Plan
- Water Main Replacement Prioritization System
- Identify Treatment, Transmission, and Distribution System Capital Improvement Projects

The last water system master plan (distribution only) was completed in 2008 and the last full water system master plan completed in 2002. Because of the comprehensive nature of this project, and the addition of the wire to water study (electrical efficiency of pumps) the project came in over the budgeted \$350,000. When comparing the level of effort with the cost, the hourly rate is approximately \$150 per hour for these professional services. This cost is entirely reasonable.

The Utility issued a request for proposals for this project and received a response from five different engineering consultants: 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.

Interviews have been complete and the consultant most qualified to complete the project is CDM Smith.

# APPLICATION AND CERTIFICATION FOR PAYMENT AIA DOCUMENT G702

TO (OWNER): City of Oak Creek 7300 S. 13 <sup>th</sup> Street Oak Creek, WI 53154	k st 3154	PROJECT: City of Plant L	City of Oak Creek Water Treatment APPLICATION NO: 1 Plant Locker Rooms PERIOD TO: 1/17/2019	Distribution to: OWNER  ARCHITECT
FROM (CONTRACTOR): William Sackerson Constr. Co., Inc. PO Box 100318 Cudahy, WI 53110	ír. Co., Inc.	VIA (ARCHITECT): CH2M Hill 135 S. 84 <sup>th</sup> St. Milwaukee, WI 53214		•
CONTRACT FOR: General Construction	ruction		CONTRACT DATE: 10/1/18	8
CONTRACTOR'S APPLICATION FOR PAYME	TION FOR PAYM	ENT	Application is made for Payment, as shown below, in connection with the Contract. Continuation Sheet	alract. Continuation Sheet,
CHANGE ORDER SUMMARY	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			600
Change Order approved in previous months by owner	ADDITIONS	DEDUCTIONS	2. Net change by Change Orders	0
TOTAL			3. CONTRACT SUM TO DATE (Line 1 ± 2)	223,500.00
Approval this Month			4. IOIAL CUMPLEIED & STORED TO DATES	34,390.00
Number Date Approved		in the second	S. RETAINAGE:	
			ei ei	
•			b. % of Stored Material \$	
	i		(Column F on G703) Total Retainage (Line 5a + 5b or	
TOTALS			Total in Column I of G703	3,439.00
Net change by change Orders			6. TOTAL EARNED LESS RETAINAGE	30.951.00
The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work conseed by this Amilication for Bayment has been information and belief the Work conseed by this Amilication for Bayment has been	that to the best of the large Amelication	Contractor's knowledge,	(Line 4 less Line 3 10fai) 7. LESS PREVIOUS CERTIFICATES FOR	
completed in accordance with the Contract Documents, that	ontract Documents, that	all amounts have been	PAYMENT (Line 6 from prior Certificate)S	00 05
paid by the Contractor for Work for which previous Cermicates for Fayment Were issued and payments received from the Owner, and that current payment shown herein	which previous certing Owner, and that current	cates for Payment Were it payment shown herein		192,549,00
is now due.			(Line 3 less Line 6)	
			County of Milwall	
CONTRACTOR: William Sackerson Constr. Co., Inc.	erson Constr. Co., I	nc.	nis 17 = day of Jamil	6102%
I falle	Date: 1	1/17/2019	SACKERSO	the same of the sa
ARCHITECT'S CERTIFICATION FOR PAYMENT	TCATION FOR	PAYMENT		
to necordance with the Contract Documents, based on on-site observations above application, the Architect certifies to the Owner that to the best of	based on on-site observations the Owner that to the best	s and the data comprising the of the Architect's knowledge	AMOUNT CERTIFIED	Sec.
information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract December 1995. The Progression of the Work is the accordance with the Contract December 1995.	d as indicated, the quality of a	the Work is in accordance with	(Attach explanation if amount certified differs from the amount applied for.) ARCHITECT:	• 'į
MVMMHT MAN KK WILKENEE W W	divided to grant terminal to be stated to			20, 20, 049

## OAK CREEK WATER AND SEWER UTILITY PROGRESS PAYMENT REPORT

PROJECT NO. 18104-South 27th Street Water Main Extension

,										1
\$195,554.00		\$14,714.00		\$180,840.00	Qξ	\$222,960.00	a		TOTAL ITEMS 1-13 (inclusive)	
\$3,000.00	1.00	\$1,500.00	0.5	\$1,500.00	0.5	\$3,000.00	\$3,000.00	1 LS	Traffic Control	
\$1,500.00	1.00	\$1,500.00	1.0	\$0.00		\$1,500.00	\$1,500.00	1 LS	12 Erosion Control	_
\$0.00	1	\$0.00		\$0.00	-	\$9,700.00	\$9,700.00	1 LS	11 Restoration	_
\$0.00	1	\$0.00	M.	\$0.00		\$6,500.00	\$100.00	65 LF	Concrete Curb and Gutter Type "C"	_
\$0.00	Ţ	\$0.00		\$0.00	**	\$3,300.00	\$30.00	110 TON	9 Base Aggregate Dense 3/4-Inch	
\$0.00	1	\$0.00		\$0.00		\$1,000.00	\$500.00	2 EA	Apron Endwalls for Culvert Pipe-12"	"
\$0.00	<b>1</b>	\$0.00		\$0.00		\$1,920.00	\$80.00	24 LF	7 12" RCP Driveway Culvert	
\$0.00		\$0.00		\$0.00		\$500.00	\$500.00	1 EA	Remove Existing Driveway Culvert	
\$5,664.00	37.76	\$5,664.00	37.76	\$0.00		\$6,750.00	\$150.00	45 TON	5 HMA Pavement	4,
\$15,600.00	3.00	\$0.00		\$15,600.00	3	\$15,600.00	\$5,200.00	3 EA	4 Type "B" Hydrant Assembly	
\$4,200.00	2.00	\$2,100.00	1.00	\$2,100.00	1.00	\$4,200.00	\$2,100.00	2 EA	Connect to Existing 12" Main	(.,
\$6,800.00	2.00	\$0.00		\$6,800.00	2.00	\$10,200.00	\$3,400.00	3 EA	2 12" Gate Valve	. 4
\$158,790.00	1,005.00	\$3,950.00	25.00	\$154,840.00	980.00	\$158,790.00	\$158.00	1,005 LF	12" PVC Water Main, 1-1/4" Crushed Aggregate Backfill	
Complete	Complete	Complete	Complete	Complete	Complete	Price	Price	Quantity	). Item Description	No.
Cost	Quantity	Cost	Quantity	Cost	Quantity	Total	Unit	Bid	E	Item
PROJECT TOTAL	PROJEC	Partial Payment No. 2 February 12, 2019	Partial Pay February	ment No. 1 8, 2019	Partial Payment No. January 8, 2019	Globe Contractors, Inc. N50W23076Belker Rd, Pewaukee, WI 53072	Globe C N50W23076B V			

\$0.00 \$195,554.00 -\$5,574.00 \$189,980.00 \$157,182.00 \$32,798.00 %0 2% TOTAL PAYMENT DUE THIS PERIOD Less Allowance for testing and approval Less Retainage (5% to 50% complete) Sub-Total Completed To Date Less Previous Payments Total

Recommended for Commission Approval by: Miles | Diagram | Diagram

Date: 2/4/19

### ADMINISTRATIVE OPERATIONS

January 2019

### **Bill Inserts:**

A listing of current water, sewer and metro rates will be included as a bill insert for all cycles, beginning with the January bills. The Utility is required to notify customers of current rates at least once a year and when rates change.

### 1099 Forms:

Confidential Secretary Esselman prepared 1099 forms and sent this information to the City for vendors who were required to receive them for 2018.

### **Commissioner Interview for Audit:**

The Utility's auditors from Baker Tilly have requested that the Commission Chairman stop in the office at approximately 10:00am on Thursday, March 21, for a brief interview for the annual audit.

### Workload:

Other administrative tasks included the following:

- 1. Added 5 customer accounts for the month.
- 2. Billed 906 water customers and 938 sewer customers.

### Gallons Billed (in thousands):

	YTD 2019	YTD 2018	YTD 2017	YTD 2016	YTD 2015	Average
Residential	6,474	6,507	6,739	6,569	6,973	6,652
Commercial	33,167	31,221	36,190	33,515	35,213	33,861
Industrial	37,177	36,561	30,596	28,031	33,029	33,079
Public Authority	207	201	197	364	311	256
Wholesale	216,925	209,286	207,796	206,247	228,948	213,840
Total	293,950	283,776	281,518	274,726	304,474	287,688
% Change to Prior Year	3.6%	0.8%	2.5%	-9.8%	N/A	
% Change to Average	2.2%	-1.4%	-2.1%	-4.5%	5.8%	

### New Customers:

	YTD 2019	YTD 2018	YTD 2017	YTD 2016	YTD 2015	Average
Residential	0	5	0	2	2	1.8
Commercial	5	3	1	0	0	1.8
Industrial	0	0	0	0	0	-
Public Authority	0	0	0	0	0	-
Wholesale	0	0	0	0	0	
Total	5	8	1	2	2	3.6

New Commercial Customers (YTD 2019):
Verizon Wireless, EVCAP Oak Creek LLC, Dr. Hartman/Dr. Tolzman, 120 W. Town Square Way (Ste 200), 120 W. Town Square Way (Ste 300)

### ENGINEERING OPERATIONS

January 2019

### I-94 & Puetz Road Water Main Crossing

Globe Contractors has completed the 16" ductile iron water main crossing at I-94 and Puetz Road and the main is in operation. The DOT has granted permission for the second phase to begin early. The second half will relay the existing 24" crossing at Puetz Road with 24" ductile iron water main pipe. Similar to the 16" pipe, this pipe will be jacked and bored underneath I-94.

### 27th Street Water Main Extension

Globe Contractors has completed the 12" water main installation in 27<sup>th</sup> Street south of Southbranch Boulevard. The main is now in service. Curb replacement and grass restoration will be completed in the spring.

### Water System Master Plan

The Utility team conducted interviews with Strand, Graef, and CDM Smith for this project. The team unanimously agreed that CDM Smith's proposal and interview demonstrated that they are the most qualified to take on this large project. The Utility team reviewed and revised the scope of work. Finally, a fee was negotiated for the consultant contract.

### Wildwood Drive Water and Sewer Replacement Project

The engineer has begun preliminary design. Due to difficult creek crossing requirements, the decision was made to install a structural liner in the existing water main under the bridge. While lining has been a common practice for sanitary sewer rehabilitation and used extensively in other parts of the country for water main rehabilitation, it has only recently seen use in Wisconsin. The sanitary sewers under and around the bridge have 100% sags and will need complete replacement. To avoid the lengthy and restrictive creek crossing permitting a casing will be bored and jacked under the creek to house the new sewer.

### College Avenue Water Main Replacement Project

Preliminary engineering is complete for the project. In early February the Common Council will be asked to adopt an intent to special assess resolution establishing a public hearing date of March 5<sup>th</sup>. The work will be entirely directional drilled in College Avenue to avoid pavement restoration costs.

### Fitzsimmons Road Water Main Replacement Project

Preliminary engineering has begun on this 700-foot project. Construction is anticipated in the fall.

### **Treatment Plant Electrical Study**

Electrical one-line drawings are complete for several options in order to better analyze the best option. Contacts have been made with Eaton and ABB to provide budgetary costs. The study report, including drawings, is still on schedule for completion by the end of February.

### Jewel Street Lift Station Elimination/Replacement

The estimated cost of the lift station replacement, at \$735,000, is significantly higher than the anticipated cost and budget. While the gravity line solution was previously pushed to the side of the table, now all options are being re-evaluated in greater detail.

### Utility Security Study and Upgrades

Contact has been made to both the Southeast Wisconsin Treat Analysis Center (STAC) and the Wisconsin National Guard to provide assistance and guidance with this project.

### **Development Project with Utility Construction**

The following development projects which involve utility construction are actively underway.

HSI Orchard Hills (27<sup>th</sup> Street, north of Honadel Boulevard) Amazon (13<sup>th</sup> Street and Ryan Road) St. John's Properties (Howell Avenue and Rawson Avenue) East Brooke Preserve Phase II (Nicholson Road, north of Ryan Road)

### **DISTRIBUTION & COLLECTION OPERATIONS**

### January 2019

### Water Main Breaks:

On January 14<sup>th</sup> at 1:30 p.m. a crew was sent to 8328 South Howell Avenue to repair a 12" CIP water main installed in 1958. When the crew excavated the water main, they found a blow hole and a circumferential break. Two repair clamps were installed to complete the repair.

### Water Lateral Repairs:

There were no water lateral repairs in the month of January.

### **Hydrant Repairs:**

There were no hydrant repairs in the month of January.

### Valve Repairs:

There were no valve repairs in the month of January.

### Sewer Repairs:

In January Utility workers inspected 44 problem manholes and replaced manhole cover seals along with starting the cleaning and televising for 2019.

### Miscellaneous:

In January Utility workers completed the quarterly flushing of dead-end water mains.

In January Utility workers inspected water main crossings for possible leaks.

In the month of January, the Utility workers attended Digger Hotline Meetings.

### DISTRIBUTION GOALS 2019

JOB DESCRIPTION	GOALS	JAN	FEB	MAR	APR	MAY	NDC	JUL	AUG	SEP	5	Ş	DEC	IOIALS
Meter Testing & Exchanges	920	77												77
New Installs	50	5												5
Cross Connection Inspections	450	14												14
Industrial Inspections		25												25
Orion Replacements	450	17												17
														1
Water Main Repairs		-												_
Water Lateral Repairs		r												1
Annual Hydrant Flushing	2,164													•
Semi-annual Flushing	215													1
Quarterly Flushing	2x70 (140)	70												70
Flush Emergency Connections	3													•
Watermain Crossings	63	63												63
Hydrant Greasing - Caps	2,164													
Hydrant Greasing - Packing	200													,
Hydrant Painting	100													•
Winterize Hydrants	58													1
Clean Sewers	175,700	10,642.0												10,642.0
Camera Sewers	84,600	395.5												395.5
Root freatment														1
Manhole Maintenance Flowlines														
Grout Manholes	25													1
Repair Manhole Chimneys														1
Replace Manhole Cover Seals		3												e e
Check Problem Sewers	4x44	44												4
Check Remote Sewer Mains	40													
Check Remote Water Mains	25													
Operate Valves	1,000													
Valve Boxes Repaired or Adjusted	•	•												
Stop Boxes Repaired or Adjusted		1												-
Concrete/Asphalt/Landscaping														
Cathodic Protection Tests	11													•
Winterize Equipment												Due		٥
Summerize Equipment					Due									٥
Run All Equipment					Due						Due			٥
MMSD Annual CMOM Report							Due							٥
DNR eCMAR							Due							۰
0.0000000000000000000000000000000000000														0

### PLANT OPERATIONS

January, 2019

PUMPAGE REPORT	2019	2018	% Change	5 Year %
Monthly Pumpage	209,174,000	210,681,000	-0.7	-1.0
Monthly Average Day	6,747,548	6,796,000	-0.7	-1.0
Monthly Peak Day	(01/02) 8,940,000	(01/07) 8,570,000	+4.3	+6.5
Yearly Pumpage	209,174,000	210,681,000	7	-1.0
Yearly Average Day	6,747,548	6,796,000	7	-1.0
Yearly Peak Day	(01/02) 8,940,000	(01/07) 8,570,000	+4.3	+6.5
West Zone Pumpage	88,000,000	96,970,000	-9.3	-8.4

WATER QUALITY REPORT	Raw Water	Finished Water
Average Free Chlorine	-	1.62 mg/l
Total Chlorine	SO	1.80 mg/l
Average Alkalinity	114.0 mg/l	114.3 mg/l
Average pH	8.3	8.2
Average Fluoride	0.15 mg/l	0.68 mg/l
Average Turbidity	8.19NTU	0.036 NTU
High Temperature	<b>High</b> 39.3 F <b>Low</b> 34.0 F	
Hardness	137 mg/l	137 mg/l

<u>Preventative Maintenance Tasks:</u> Staff completed 164 preventative maintenance tasks and 2 safety sessions during the month.

<u>Work Orders:</u> Staff completed 9 work orders. Some of the tasks include: updating to LED bulbs in the lab, generator room and conference room, repairing filter controllers, repairing a leaking chemical feed pump and insulating the Chlorine analyzer cabinets at each tower.

<u>Operators:</u> Operators Klees, Muschinski, Ludke, Bochat, White, Messerschmidt, Anaya, Bozich, and Krueger participated in CIVMIC safety training for confined space, lock out tag out, hearing protection and safe lifting.

<u>Plant:</u> Work continues on the locker room update including removal of old tile and HVAC installation. Operations were adjusted for the extreme cold and no issues were reported.



