

**ELECTRONIC PACKET**

**November 27, 2017 Commission Meeting**

**RELEASED: Monday, November 20, 2017**



# Milwaukee Metropolitan Sewerage District

260 West Seeboth  
Street  
Milwaukee, WI  
53204

## Meeting Agenda Commission

*John R. Hermes, Chair*  
*Kris Martinsek, Vice Chair*  
*James A. Bohl, Dan Devine, Kathy Ehley,*  
*LaTonya Johnson, Carl Krueger, Eugene Manzanet,*  
*José G. Pérez, John Swan, III*

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Monday, November 27, 2017

9:00 AM

Dennis M. Grzezinski Conference Room

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NOTICE IS HEREBY GIVEN, pursuant to Section 19.84, Wisconsin Statutes, that the Milwaukee Metropolitan Sewerage District's Commission will hold its regularly scheduled public meeting on Monday, November 27, 2017 at 9:00 a.m. at the District's Headquarters, 260 W. Seeboth Street, Milwaukee, Wisconsin, in the Dennis M. Grzezinski Conference Room.

PURSUANT TO SECTION 19.85(1)(g), Wisconsin Statutes, the Commission reserves the right to go into Closed Session on any item on the public portion of the agenda to confer with Legal Counsel when it appears the matter may involve the District in litigation. If the Commission does convene in such a Closed Session, it is contemplated that the Commission will again, before adjourning the meeting, reconvene at the same place in Open Session at which time the Commission may act upon any item(s) considered in the Closed Session and upon any unfinished items from the regular agenda.

### CALL TO ORDER

### RECORD ROLL

### Approval of Proceedings of Regular Commission Meeting held October 23, 2017

### NEW BUSINESS

17-004-1 Operations and Maintenance Report for October 2017 - Pat Obenauf & Scott Royer

### OPERATIONS COMMITTEE MEETING REPORT

- 1 17-107-11 Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities
- 2 17-108-11 Award of Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation

- 3      17-109-11      Approval of Funding Agreement BD02 Under Project M03044, 2017/2018 Village of Brown Deer Private Property Inflow and Infiltration Reduction Project

### **POLICY, FINANCE & PERSONNEL COMMITTEE MEETING REPORT**

- 4      17-110-11      Authorizing 2018 Capital Charges to Non-Member Communities
- 5      17-111-11      Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates
- 6      17-112-11      Declaration of the Public Necessity and Approval of the Acquisition Plat (Relocation Order) for the Permanent Pigging Station for the Landfill Gas Pipeline, Project P02003
- 7      17-113-11      Authorizing and Providing for the Sale and Issuance of Two Series of General Obligation Sewerage System Promissory Notes, Levying Taxes for the Payment Thereof, and All Related Details  
*Requires a 2/3 Affirmative Vote of the Commission for Adoption*
- 8      17-114-11      Authorizing the Executive Director to Extend the Contracts for Prescription Drug and Supplemental Medical Coverage for Post Medicare Retirees
- 9      17-115-11      Authorizing the Executive Director to Enter into a Contract for Pharmacy Benefit Management Services with Optum Rx Effective January 1, 2018
- 10     17-116-11      Authorizing the Executive Director to Extend a One-year Contract for Life Insurance Benefits to Humana Effective January 1, 2018, through December 31, 2018
- 11     17-117-11      Destruction of District Records Pursuant to Commission Policy 1-76.04, Records Retention Policy
- 12     17-118-11      An Agreement for the Establishment of Sister Utilities Relationship between the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority of the People's Republic of China

### **ORGANIZATION & ADMINISTRATION**

17-003-1      EXECUTIVE DIRECTOR'S REPORT

- A. Monthly Reports
- B. Staff Recognition (Kevin Shafer)
- C. Daily Reporter Newsmaker of the Year Award (Kevin Shafer)

**ADJOURNMENT**

PLEASE NOTE: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aids. For additional information or to request these services, contact the Office of the Commission at (414) 225-2088, (FAX) (414) 272-5057 or write to Office of the Commission, 260 W. Seeboth Street, Milwaukee, Wisconsin, 53204-1446.



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**Anna Kettlewell, Commission Secretary  
Milwaukee Metropolitan Sewerage District**



# Milwaukee Metropolitan Sewerage District

260 West  
Seeboth Street  
Milwaukee, WI  
53204

## Meeting Minutes

### Commission

*John R. Hermes, Chair*  
*Kris Martinsek, Vice Chair*  
*James A. Bohl, Dan Devine, Kathy Ehley,*  
*LaTonya Johnson, Carl Krueger, Eugene Manzanet,*  
*José G. Pérez, John Swan, III*

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Monday, October 23, 2017

9:00 AM

Dennis M. Grzezinski Conference Room

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### CALL TO ORDER

*Commission Chair Commissioner Hermes called the meeting to order at 9:00 a.m.*

### RECORD ROLL

**Present** 9 - James A. Bohl, Dan Devine, Kathy Ehley, John R. Hermes, LaTonya Johnson, Carl Krueger, Eugene Manzanet, Kris Martinsek, and José G. Pérez  
**Excused** 1 - John Swan III

*Commissioner Johnson arrived at 9:02 a.m. during the Operations and Maintenance Report.*

### Approval of Proceedings of Regular Commission Meeting held September 25, 2017

A motion was made by Commissioner Bohl, seconded by Commissioner Manzanet. The motion carried.

### NEW BUSINESS

17-004-1 Operations and Maintenance Report for September 2017 - Pat Obenauf & Scott Royer

*The Commission received a PowerPoint presentation from Patrick Obenauf, Manager of Contract Compliance, and Scott Royer, General Manager, Veolia Water Milwaukee, LLC.*

*Commissioner Johnson arrived at 9:02 a.m. during this report.*

### OPERATIONS COMMITTEE MEETING REPORT

*Items 1-4 were taken as a block.*

- 1     17-094-10     Award of Contract J06064C01, Jones Island and South Shore Gaseous Fire Suppression Systems and South Shore Administration Building Renovation, and Approve Changes in Total Project Costs
- A motion was made by Commissioner Krueger, seconded by Commissioner Manzanet, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.
- 2     17-095-10     Award of Contract S02013C01, South Shore Water Reclamation Facility Return Activated Sludge System Improvements, Approve Changes in Total Project Costs, and Restore the Executive Director's Original Delegated Authority on Contract S02013D01, Engineering Services - South Shore Water Reclamation Facility Return Activated Sludge System Improvements Project
- A motion was made by Commissioner Krueger, seconded by Commissioner Manzanet, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.
- 3     17-096-10     Contract P02004D02, Engineering Services, Landfill Gas Processing Facility - Metro Recycling and Disposal Facility
- A motion was made by Commissioner Krueger, seconded by Commissioner Manzanet, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.
- 4     17-097-10     Contract W20028D01, Engineering Services - Western Milwaukee Flood Management Project - Phase 2B
- A motion was made by Commissioner Krueger, seconded by Commissioner Manzanet, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.

## **POLICY, FINANCE & PERSONNEL COMMITTEE MEETING REPORT**

*Items 5-6 and 8-11 were taken as a block.*

- 5     17-098-10     Adopting the Operations and Maintenance Budget for the 2018 Fiscal Year
- A motion was made by Commissioner Manzanet, seconded by Commissioner Pérez, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.
- 6     17-099-10     Adopting the Capital Budget for the 2018 Fiscal Year
- A motion was made by Commissioner Manzanet, seconded by Commissioner Pérez, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.

- 7     17-100-10     Levying of Taxes for the Milwaukee Metropolitan Sewerage District Capital Purposes for the 2018 Fiscal Year
- A motion was made by Commissioner Manzanet, seconded by Commissioner Krueger, that this resolution be adopted by a roll call vote. The motion carried by the following roll call vote:**
- Yes:** 9 - Commissioner Bohl, Commissioner Devine, Commissioner Ehley, Commissioner Hermes, Commissioner Johnson, Commissioner Krueger, Commissioner Manzanet, Commissioner Martinsek and Commissioner Pérez
- No:** 0
- Excused:** 1 - Commissioner Swan III
- 8     17-101-10     Approve Updates to Commission Policy 1-15.02, Capital Budget
- A motion was made by Commissioner Manzanet, seconded by Commissioner Pérez, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.**
- 9     17-102-10     Declaration of Excess Lands and Authorization to Transfer Seven Greenseams® Purchased Properties
- A motion was made by Commissioner Manzanet, seconded by Commissioner Pérez, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.**
- 10    17-103-10     Award of Contract M01031C01, Central Laboratory Heating, Ventilation, and Air Conditioning Chiller Replacement
- A motion was made by Commissioner Manzanet, seconded by Commissioner Pérez, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.**
- 11    17-104-10     Authorization of a Public Hearing Regarding Proposed Amendments to MMSD Rules, Chapter 11, Discharge Regulations and Enforcement Procedures, to Allow the Discharge of Noncontact Cooling Water
- A motion was made by Commissioner Manzanet, seconded by Commissioner Pérez, that this resolution be adopted by a voice vote. The motion carried by a unanimous voice vote.**

## ORGANIZATION & ADMINISTRATION

17-003-1

## EXECUTIVE DIRECTOR'S REPORT

- A. Monthly Reports
- B. Staff Recognition (Kevin Shafer)
- C. 2050 Facilities Plan Update (Bill Krill)
- D. CLEAR Quarterly Report (Mickie Pearsall)
- E. Change in Definition of Small Business (Jeff Spence)

A. *No report.*

B. *No report.*

C. *The Commission received a PowerPoint presentation from Bill Krill, Senior Project Manager, and Greg Hottinger, Asset Management Program Director.*

D. *The Commission received a PowerPoint presentation from Mickie Pearsall, Deputy Director of Finance.*

E. *The Commission received a PowerPoint presentation from Jeff Spence, Director of Community Outreach and Business Engagement, and Charlotte Tisdale, Procurement and Business Development Manager, with comments by Kevin L. Shafer, P.E., Executive Director, and Susan Anthony, Director of Legal Services.*

*Commissioner Martinsek requested a list of the new North American Industry Classification Codes and the assigned size standards.*

**CLOSED SESSION**

*It was moved by Commissioner Martinsek, seconded by Commissioner Manzanet, to convene into closed session at 9:47 a.m. The motion carried.*

CS1 17-106-10

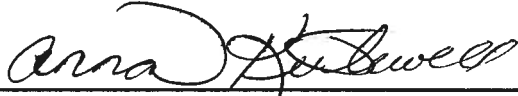
Potential Acquisition of Greenseams® Parcels for Wetland Banking

**Heard in closed session**

**ADJOURNMENT**

*The Commission adjourned from closed session at 9:59 a.m.*





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**Anna Kettlewell, Commission Secretary  
Milwaukee Metropolitan Sewerage District**

**COMMISSION MEETING**

**November 27, 2017**

**OPERATIONS AND MAINTENANCE REPORT FOR OCTOBER 2017 – PAT  
OBENAUF & SCOTT ROYER**

**17-004-01**

**PowerPoint presentation from Patrick Obenauf, Manager of Contract Compliance,  
and Scott Royer, General Manager, Veolia Water Milwaukee, LLC**



**COMMISSION FILE NO:** 17-107-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO:** Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities

**SUMMARY:**

The Commission is requested to authorize the Executive Director to execute on behalf of the District Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities, with Strand Associates, Incorporated, (Strand) in an amount not to exceed \$450,000. Strand was the highest scoring proposer, based on a qualifications-based selection method, among six proposals received.

The District has an ongoing need for smaller scale engineering services for the District's watercourse facilities. In general, staff anticipates needing engineering services six to 12 times per year, with costs for each task typically ranging from \$5,000 to \$50,000. Services provided under this contract may be funded from either the capital budget or the operations and maintenance budget.

The requested on-call contract will provide the District means to cost effectively and quickly respond to watercourse related engineering needs. Services will be related to the District's watercourse facilities. This contract is expected to last three years. On-call contracts allow the District to save costs and time as compared to individually procuring engineering services every time a service is needed.

**ATTACHMENTS:** **BACKGROUND**  **KEY ISSUES**  **RESOLUTION**   
**FISCAL NOTE**  **S/W/MBE**  **OTHER**  \_\_\_\_\_

*OP\_Contract\_TS-2642\_General\_On-Call\_WC\_legislative\_file.docx  
10-25-17*

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **SUMMARY (Cont'd)**

Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities

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A scope of services will be developed for each specific on-call task order as they arise. In summary, the scope of services may include, but is not limited to:

- Planning, studies, preliminary engineering, evaluation of alternatives, developing recommendations, and engineering design.
- Preparation and delivery of technical memoranda and reports.
- Preparation and delivery of plans, specifications, and construction contract bid documents.
- Engineering services during construction.

## RESOLUTION

Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to execute Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities, with Strand Associates, Incorporated, in an amount not to exceed \$450,000.



## O&M Budget Fiscal Note

**RELATING TO:**

Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities

<b>Cost Center:</b>	<b>Line Item:</b>
ENG _____	645 _____

<b>Line Item Impact</b>			
2018 Original Budget	_____	\$330,491	
Carryovers or Transfers	_____	\$0	
Adjusted Budget	_____	\$330,491	
Estimated Annual Expenditure including Request	_____	\$330,491	
Anticipated Year End Balance	_____	\$0	
Actual Year to Date Expenditures Through	_____	NA	
For unfavorable Year End Balance, identify funding source: <input type="checkbox"/> Absorbed within the Division			
<input type="checkbox"/> Other Division			
<input type="checkbox"/> Unallocated Reserve			
<b>Anticipated Expenditure Timing</b>	Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact
Current Year (2018)	\$35,000	\$0	\$35,000
Subsequent	\$190,000	\$0	\$190,000
Total Cost	\$225,000	\$0	\$225,000

**Comments: The expenses associated with this request will be charged to the projects and tasks requesting the services. The individual projects have budgeted for these services and it is estimated that 50% of the contract value will be charged to the O&M budget.**

Budget Review by:	Date
Theresa Zwieg _____	10/16/2017 _____



**Capital Budget Fiscal Note  
Total Project Cost**

**RELATING TO:**

Contract TS-2642, General On-Call Engineering Services for Watercourse Facilities

<b>Capital Project Number(s)</b>	<b>Impact of Requested Action on Total Project Cost:</b>
* _____	<input type="checkbox"/> Increase <input type="checkbox"/> Decrease <input type="checkbox"/> New Project <input checked="" type="checkbox"/> No Change

<u>Total Project Cost Analysis</u>	<u>Project Costs</u>
Adopted 2018 Total Project Cost	NA
Previously Approved Changes	NA
Approved Total Project Cost	NA
Requested Total Project Cost	NA
Requested (Increase)/Decrease	NA

<b>Action to be taken to Long-Range Financing Plan to address Total Project Cost change</b>	
_____	Transfer from Allowance for Cost and Schedule Changes
_____	Transfer from another project (specify in comments)
_____	Delay Project(s) (specify in comments)
_____	Delete Project(s) (specify in comments)
_____	Other _____
_____	Transfer to Allowance for Cost and Schedule Changes

**Comments**  
 The expenses associated with this request will be charged to the projects and tasks requesting the services. The individual projects have budgeted for these services and it is estimated that 50% of the contract value will be charged to the capital budget.

Budget Review by:	Date:
Theresa Zwieg _____	10/12/2017 _____

**Contract TS-2642, General On-Call Engineering Services Watercourse Facilities**



**Procurement & S/W/MBE Summary Information**

**Contract #**                     TS-2642                     **Cost Center:**           ENG          

**General On-Call Engineering Services Watercourse Facilities**

**PROPOSAL SUMMARY**

Proposal Receipt Date:                     9/11/2017                    

	<b>Total</b>	<b>SWMBE</b>	<b>Local</b>
# of Proposals	6	2	5
# of Acceptable Proposals	6	2	5

<b>Proposals (listed by rank)</b>	<b>Negotiated Price</b>	<b>Acceptable?</b>	<b>% Sub</b>	<b>% SWMBE</b>
	<i>Submitted Price</i>			
Strand Associates Milwaukee, WI 53202	<b>\$450,000.00</b>	Acceptable	20.0%	20.0%
	<i>\$450,000.00</i>			
Stantec Consulting Services Inc. Mequon, WI 53092	<b>n/a</b>	Acceptable	20.0%	20.0%
	<i>\$450,000.00</i>			
Baxter & Woodman Consulting Engineers Milwaukee, WI 53214	<b>n/a</b>	Conditionally Acceptable	n/a	n/a
	<i>n/a</i>			
Globetrotters Engineering Corporation Chicago, IL 60606 (MBE)	<b>n/a</b>	Conditionally Acceptable	n/a	n/a
	<i>n/a</i>			
K. Singh & Associates, Inc. Wauwatosa, WI 53222 (MBE)	<b>n/a</b>	Conditionally Acceptable	n/a	n/a
	<i>n/a</i>			
Ruekert & Mielke, Inc. Milwaukee, WI 53204	<b>n/a</b>	Conditionally Acceptable	n/a	n/a
	<i>n/a</i>			

*Compensation packages for proposals rated "Conditionally Acceptable" and "Unacceptable" are not opened.*



## SUBCONSULTANT INFORMATION

Type	Subconsultant Name	Type of Work	%	Amount
MBE	GESTRA Engineering, Inc. Milwaukee, WI 53205	Geotechnical Engineering, Remediation, Survey	TBD	TBD
MBE	K. Singh & Associates, Inc. Wauwatosa, WI 53222	Environmental Site Assessments Preparation, Preliminary Soils Management Plans	TBD	TBD
SBE	Ecological Services of Milwaukee, Inc. Milwaukee, WI 53209	Ecologist	TBD	TBD
SBE	Human Nature, Inc. Cincinnati, OH 44106	Watercourse Restoration	TBD	TBD
SBE	TRSear Engineer, LLC Cedarburg, WI 53012	Technical Advisor	TBD	TBD
WBE	P.A. Roeper & Associates, Inc. Milwaukee, WI 53216	CAD Drawing	TBD	TBD
Non-SWMBE	Inter-Fluve Madison, WI 53703	Fluvial Geomorphology	TBD	TBD
Non-SWMBE	TRC Environmental Corp. Brookfield, WI 53045	Environmental Engineering	TBD	TBD

## ECONOMIC DEVELOPMENT ELEMENTS

Local Office Preference?     Y    

Mentor Protégé?     n/a

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter, sent an e-mail notification to all registered firms in the engineering services category, sent targeted e-mails to 50 potential proposers, sent targeted e-mails to 30 SWMBE Engineering firms, and notified the various local chambers of commerce. The proposal opportunity is also publicly accessible from the MMSD website and Bonfire, the portal used to post RFPs. Bonfire also performs outreach to its users when an RFP is posted.

### S/W/MBE Document Takers:

Automation Service & Design, Inc., Fresh Water Engineering LLC, GESTRA ENGINEERING, INC., Himalayan Consultants, LLC, K. Singh & Associates, Inc., Stony Point Hydrology LLC, Stormwater Solutions Engineering, LLC, OTIE, The Reese Group, Globetrotters Engineering Corp, Sustainable Streams, Community Engineering & Building Services, Southeastern Wisconsin Watersheds Trust, Applied Science, Inc, Eclipse Controls, Inc, Fusion Integrated Solutions, TRSear Engineering, LLC

### If no or low S/W/MBE participation, explain why:

N/A

### Additional Comments:

Strand will meet or exceed the District's SWMBE participation goals of 13% MBE, 2% WBE, and 5% SBE.

However, due to the nature of this contract, it is unknown at this time the exact dollar participation among the sub-consultant firms.

## AWARDEE INFORMATION

Company:	Strand Associates, Inc.
Contact Person:	Philip A. Bzdusek
Phone Number:	414-271-0771
E-mail Address:	phil.bzdusek@strand.com

## EEO DATA

Local or National Office?	Local		Total # of Employees	400	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>	
<b>Minorities</b>	24	6.0%	<b>Females</b>	99	24.8%
African American	6	1.5%	African American	2	0.5%
Asian	9	2.3%	Asian	2	0.5%
Hispanic	9	2.3%	Hispanic	2	0.5%
Native American	0	0.0%	Native American	0	0.0%
<i>Labor Market Availability - Minorities</i>	<u>20.0%</u>		<i>Labor Market Availability - Females</i>	<u>48.0%</u>	

**PRIME PERFORMANCE HISTORY - S/W/MBE COMPLIANCE**

**Contract #** TS-2642

**General On-Call Engineering Services Watercourse Facilities**

**Potential Awardee:** Strand Associates, Inc.

**Contract Value:** \$90,000 **Percent Complete:** 15%

<b>Contract Title</b>	<b>Start Date</b>	<b>Payments to Prime</b>	<b>Proposed SWMBE \$</b>	<b>Proposed SWMBE %</b>	<b>SWMBE Actuals \$</b>
M03064P24 - On-Call Design Services for GI	8/16/2016	\$ 14,375.00	\$ 18,000.00	20%	\$ 2,675.00



**COMMISSION FILE NO:** 17-108-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO:** Award of Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation, to Butters Fetting Company, Incorporated, (Butters) in the amount of \$157,110. Butters was the lowest responsible, responsive bidder between two bids received.

At the Jones Island Water Reclamation Facility, three pumps are used to pump combined wastewater and stormwater from the Inline Storage System (ISS) to the surface for treatment at either of the District's two water reclamation facilities. These ISS pumps are critical for maximizing the District's treatment capacity during wet weather events. Maintaining maximum treatment capacity reduces the risk of overflows and basement backups occurring in the District's service area.

Inspections by Veolia Water Milwaukee (VWM) and the District show that Pump #1 is in need of rehabilitation, as the interior abrasion resistant coating used to maintain protection of the underlying metal has worn. Wear rings on Pump #1 are also worn beyond acceptable tolerances and need to be replaced.

The purpose of this project is to restore the full operating capacity and the protective coating on the pump interior of Pump #1.

**ATTACHMENTS:** BACKGROUND  KEY ISSUES  RESOLUTION   
FISCAL NOTE  S/W/MBE  OTHER  \_\_\_\_\_

*OP\_Award\_J01018C04\_ISS\_Pump\_1\_Rehab\_legislative\_file.docx*  
10-20-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **SUMMARY (Cont'd)**

Award of Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation

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The work on ISS Pump #1 includes:

- Removing the top half of the pump
- Inspecting pump internal components
- Restoring the internal protective coating
- Changing bearing oil
- Replacing wear rings and balancing rotating elements
- Aligning the motor, coupling, and pump
- Performing testing and equipment startup

The project duration is 60 days, with a maximum pump outage of 30 days. The pump will be placed back into service by March.

In accordance with the terms of the Management, Operations, and Maintenance Services Agreement between VWM and the District, VWM will contribute \$10,000 toward the cost of this contract.

## RESOLUTION

Award of Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation, is awarded to Butters Fetting Company, Incorporated, in the amount of \$157,110, and that the Executive Director is directed to execute the contract on behalf of the District.



## O&M Budget Fiscal Note

**RELATING TO:**

Award of Contract J01018C04, Jones Island Water Reclamation Facility Inline Storage System Pump #1 Rehabilitation

<b>Cost Center:</b> OCC _____	<b>Line Item:</b> 671 _____
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<b>Line Item Impact</b>			
2018 Original Budget		\$1,370,875	
Carryovers or Transfers		\$0	
Adjusted Budget		\$1,370,875	
Estimated Annual Expenditure including Request		\$1,370,875	
Anticipated Year End Balance		\$0	
Actual Year to Date Expenditures Through		NA	
For unfavorable Year End Balance, identify funding source: <input type="checkbox"/> Absorbed within the Division			
<input type="checkbox"/> Other Division			
<input type="checkbox"/> Unallocated Reserve			
<b>Anticipated Expenditure Timing</b>			
	Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact
Current Year (2018)	\$157,110	\$10,000	\$147,110
Subsequent	\$0	\$0	\$0
Total Cost	\$157,110	\$10,000	\$147,110

**Comments:** Requested expenditures are to perform repair services on ISS Pump #1. In accordance with the terms of the Management, Operations, and Maintenance Services Agreement between VWM and the District, VWM will contribute \$10,000 toward the cost of this contract.

Budget Review by:	Date
Theresa Zwieg _____	10/12/2017 _____





## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter, sent an e-mail notification to all registered firms in the general contracting, painting, HVAC and erecting categories, sent targeted e-mails to potential proposers, sent targeted e-mails to 17 SWMBE (NIGP commodity codes 91053, 91061, 91076, 96246, 90638, 91468, 91485, 91450 ) firms, and notified the various local chambers of commerce. The bid opportunity is also publicly accessible from the MMSD website and Quest, the portal used to post bids.

S/W/MBE Planholders:

Thomas A. Mason Co. Inc.

If no or low S/W/MBE participation, explain why:

N/A

Additional Comments:

N/A

## AWARDEE INFORMATION

Company:	<u>Butters-Fetting Co.</u>
Contact Person:	<u>Dave Ruffalo</u>
Phone Number:	<u>414-649-2182</u>
E-mail Address:	<u>druffalo@buttersfetting.com</u>

## EEO DATA

	Local or National Office?			Total # of Employees	
	<u>Total</u>	<u>%</u>		<u>Total</u>	<u>%</u>
<b>Minorities</b>	<u>11</u>	<u>4.6%</u>	<b>Females</b>	<u>10</u>	<u>4.2%</u>
African American	<u>3</u>	<u>1.3%</u>	African American	<u>0</u>	<u>0.0%</u>
Asian	<u>0</u>	<u>0.0%</u>	Asian	<u>0</u>	<u>0.0%</u>
Hispanic	<u>8</u>	<u>3.3%</u>	Hispanic	<u>0</u>	<u>0.0%</u>
Native American	<u>0</u>	<u>0.0%</u>	Native American	<u>0</u>	<u>0.0%</u>
<i>Labor Market Availability - Minorities</i>		<u>20.0%</u>	<i>Labor Market Availability - Females</i>		<u>48.0%</u>



**COMMISSION FILE NO:** 17-109-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO:** Approval of Funding Agreement BD02 Under Project M03044, 2017/2018 Village of Brown Deer Private Property Inflow and Infiltration Reduction Project

**SUMMARY:**

The Commission is requested to authorize and to direct the Executive Director to execute on behalf of the District Funding Agreement BD02 in the amount of \$425,000 for work outlined in Work Plan BD02 as submitted by the Village of Brown Deer under project M03044, Private Property Inflow and Infiltration (PPI/I) Program. Including this Work Plan BD02, the Village of Brown Deer has obligated 100% of the funding available to the Village through 2017 in the PPI/I Program.

In 2014 and 2015, the Village performed dye water flood testing of the sanitary sewers in rural street cross-sections in three sewersheds. Of the 675 lateral connections to the sewer in the project area, approximately 75% of the laterals were observed to have infiltration during the investigative work. The Village proposes to maximize the effectiveness of the available funding by focusing rehabilitation on the 50 laterals with the highest leakage rates.

**ATTACHMENTS:** **BACKGROUND**  **KEY ISSUES**  **RESOLUTION**   
**FISCAL NOTE**  **S/W/MBE**  **OTHER**  \_\_\_\_\_

*OP\_Brown\_Deer\_II\_Reduction\_Project\_legislative\_file.docx*  
10-20-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **SUMMARY (Cont'd)**

### **Approval of Funding Agreement BD02 Under Project M03044, 2017/2018 Village of Brown Deer Private Property Inflow and Infiltration Reduction Project**

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The 2014 and 2015 investigative work completed by the Village in the Bradley Estates, County Line Road, Kirkwood Subdivision, and Green Knoll Subdivision areas involved dye water flooding of the storm ditches while simultaneously closed-circuit televising the sanitary sewers to identify leaks in the public sewers and private laterals. The sewers in the four Village areas comprise three sewersheds – BD4003, BD4004 and BD4006 – that reside in District metersheds currently considered to be compliant with District Chapter 3 rules. The project area includes 20,000 linear feet of sanitary sewer with 675 lateral connections. The dye water testing indicated that approximately 450 gallons per minute of I/I are entering the Village's sewer system during extreme rain events, with 90% of that originating from private property sanitary sewer laterals. About 75% of all laterals were observed to be infiltrating during the investigative work. The Village rehabilitated the public and the private system in the project area consisting primarily of pressure grouting. The investigative work verified that the grouting completed on the sanitary laterals remains effective. The grouting was limited to the lower three feet of the lateral and did not address lateral defects beyond the lower lateral. The Village intends to repair defects further upstream of the lateral through cured-in-place-pipe lining. Based on the project cost estimates using current trends in unit prices, the Village intends to target the 50 leakiest laterals to maximize the effectiveness of the funding available. Depending on construction bid results, the Village will rehabilitate as many laterals as possible prioritizing by leakage rate.

The Village has maintained flow monitors in the project area through recent years to analyze the rehabilitation work completed. The Village will continue to collect data to determine the effectiveness of this phase of inflow and infiltration reduction work.

The cost of construction and engineering services for the proposed scope of work is estimated to be \$390,000. The Village intends to reserve an additional \$55,000 to add properties to the project as residents express interest during construction, resulting in a total project cost of \$445,000. The Village intends to pay \$20,000 of the design engineering costs with the remaining \$425,000 of the project to be funded through the District PPI/I Program.

Including this Work Plan BD02, the Village of Brown Deer has obligated 100% of the funding available to the Village through 2017 in the PPI/I Program.

## RESOLUTION

Approval of Funding Agreement BD02 Under Project M03044, 2017/2018 Village of Brown Deer Private Property Inflow and Infiltration Reduction Project

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized and directed to execute on behalf of the District Funding Agreement BD02 in the amount of \$425,000 for work outlined in Work Plan BD02 as submitted by the Village of Brown Deer under project M03044, Private Property Inflow and Infiltration Program.





**COMMISSION FILE NO:** 17-110-11      **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Authorizing 2018 Capital Charges to Non-Member Communities

**SUMMARY:**

The Commission is requested to authorize the Executive Director to transmit bills for 2018 capital charges to customer communities outside the District.

Annually, the District bills customer communities outside the District's boundaries (non-member communities) for their share of capital budget expenditures. Since September 6, 1984, when the Commission adopted a policy specifying a system of uniform charges, the District's charges have been based on the equalized valuation of property.

On September 11, 1996, the Public Service Commission ruled that capital charges related to watercourse improvement projects can only be collected from those non-member communities that are partially or wholly within an affected watercourse's drainage basin. In September 2017, the Commission amended Commission Policy 1-11.05, MMSD Infrastructure Includes Green Infrastructure, (Resolution 17-086-09) to allow financial billing credits to non-member communities that opt out of the green infrastructure (GI) program. The non-member communities which have opted out of GI for the 2018 Budget are the City of Brookfield, Village of Butler, Village of Caledonia, Village of Elm Grove, Village of Germantown, Village of Menomonee Falls, City of New Berlin, and Village of Thiensville. These actions require annual modifications to the amounts charged these communities.

Staff recommends that the Executive Director be authorized to bill the non-member communities for 2018 and to provide the appropriate credits.

**ATTACHMENTS:**    **BACKGROUND**     **KEY ISSUES**     **RESOLUTION**   
**FISCAL NOTE**     **S/W/MBE**     **OTHER**  Capital Rate Chart

*PFP\_CapitalChargesNonMemberCommunities2018\_legislative\_file.docx  
10-30-17*

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## SUMMARY (Cont'd)

### Authorizing 2018 Capital Charges to Non-Member Communities

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The amount of the credits for watercourse and flood management and GI projects is based on the 2018 budgeted amounts for these projects. The District will issue an additional charge or credit to each non-member community in the year 2020 for 2018 capital charges, after the actual expenditures for 2018 are finalized. The District will use the same equalized value in calculating this charge or credit as was used in calculating the 2018 capital charge.

As shown in Table 1, estimated 2018 capital charges of \$30.6 million to non-member communities represent a decrease of 0.8% or \$256,106 from the 2017 level of \$30.9 million. The estimated billing decrease of \$256,106 reflects the following factors:

• 3.6% Increase in Non-Member Equalized Value	\$1,114,977
• 1.4% Decrease in District Tax Rate (\$1.75 to \$1.73)	(\$534,622)
• Green Infrastructure Credit	(\$677,483)
• Change in Watercourse Credit	\$820,662
• Decrease from Prior Year Adjustment	<u>(\$979,640)</u>
Estimated Decrease in Capital Charges	<u>(\$256,106)</u>

Non-member tax rates for 2018 capital charges are expected to range from \$1.38 to \$1.48/\$1,000 equalized value, as compared to the \$1.73 tax rate billed to member communities.

In future years, projected watercourse and flood management and green infrastructure credits are expected to keep the capital rates for non-member communities below the rate charged to District member communities. The attached chart, "Capital Rate for Non-Member Communities", shows the weighted average annual capital rate for these communities as a whole from 2014 through 2017 with projections through 2023. The average capital rate of \$1.447/\$1,000 equalized value for non-member communities in 2018 reflects the 1.4% decrease in the 2017 District tax levy for 2018 purposes. The District tax levy is projected to increase 4.0% for 2019 and each year thereafter with property values in member and non-member communities increasing 2.5% and 2.6% respectively per year for 2019 and each year thereafter.

District staff either e-mailed or met with municipal officials of non-member communities in September and October to brief them on capital rate projections in the District's proposed 2018 Capital Budget and long-range financing plan.

## SUMMARY (Cont'd)

### Authorizing 2018 Capital Charges to Non-Member Communities

**Table 1**  
**2018 Estimated Capital Charges\***

Municipality	2017 Capital Charges	Capital Charges for 2018			Percentage Change
		From 2018 Budgeted Expenditures	From 2016 Watercourse Adjustment**	2018 Capital Charges Total	
Village of Butler	\$329,083	\$327,616	(\$19,772)	\$307,844	-6.5%
Village of Caledonia	\$51,588	\$49,924	(\$2,412)	\$47,512	-7.9%
Village of Elm Grove	\$1,587,541	\$1,664,773	(\$43,809)	\$1,620,964	2.1%
Village of Germantown	\$3,177,394	\$3,242,204	(\$182,050)	\$3,060,154	-3.7%
Village of Menomonee Falls	\$5,561,266	\$5,697,377	(\$319,460)	\$5,377,917	-3.3%
Village of Thiensville	\$447,381	\$427,732	(\$17,648)	\$410,084	-8.3%
City of Brookfield	\$3,908,620	\$3,996,910	(\$105,976)	\$3,890,934	-0.5%
City of Mequon	\$5,749,599	\$5,974,305	(\$285,046)	\$5,689,259	-1.0%
City of Muskego	\$3,800,216	\$3,903,770	(\$196,495)	\$3,707,275	-2.4%
City of New Berlin	\$6,264,312	\$6,697,614	(\$188,665)	\$6,508,949	3.9%
<b>Total</b>	<b>\$30,876,998</b>	<b>\$31,982,226</b>	<b>(\$1,361,333)</b>	<b>\$30,620,892</b>	<b>-0.8%</b>

\* 2018 Capital Charges will be finalized by early December, following determination of equalized property values for municipalities partially serviced by the District.

\*\* The 2016 adjustment reflects the difference between credits based on budgeted watercourse and flood management expenditures for 2016 compared to credits based on actual watercourse and flood management expenditures in 2016. The 2016 adjustment was calculated using equalized values in effect for 2016 billings.



## RESOLUTION

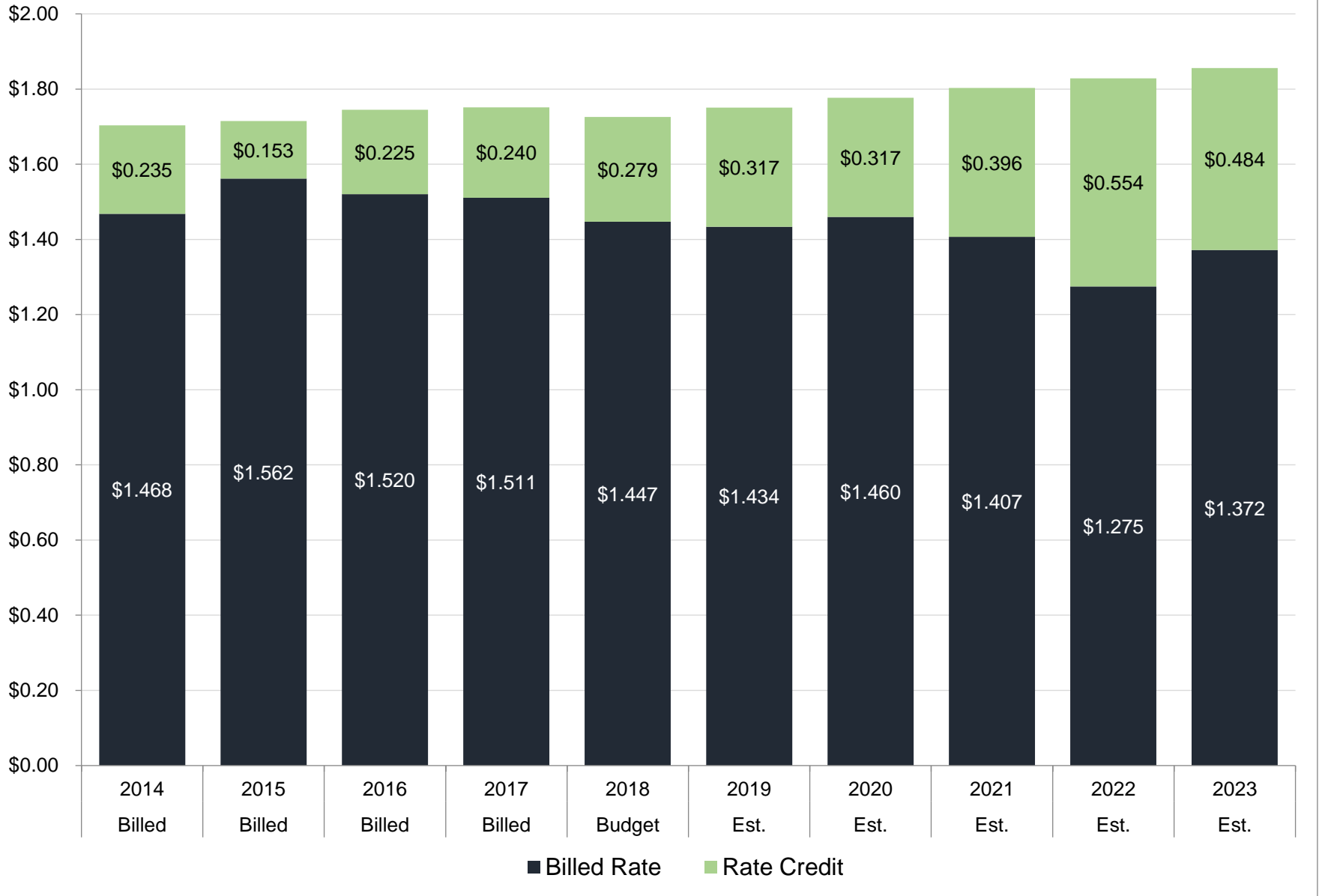
### Authorizing 2018 Capital Charges to Non-Member Communities

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that

- (1) The Executive Director is authorized to transmit bills for 2018 capital charges to non-member customer communities, i.e., those outside the District boundary, calculated in accordance with the method adopted by the Commission on September 6, 1984, which shall also reflect appropriate credits for watercourse improvements as ordered by the Wisconsin Public Service Commission on September 11, 1996; and
- (2) That the 2018 capital charge billings to the non-member communities shall also reflect appropriate credits for Green Infrastructure Program expenditures for the non-member customer communities which have formally opted out of the District's Green Infrastructure Program in accord with Commission Policy 1-11.05; these non-member customer communities are the City of Brookfield, Village of Butler, Village of Caledonia, Village of Elm Grove, Village of Germantown, Village of Menomonee Falls, City of New Berlin, and Village of Thiensville; and
- (3) The Executive Director is authorized to issue an additional charge or credit on the capital charges for the year 2020, after the actual 2018 watercourse/flood management and green infrastructure expenditures are finalized, using the same equalized values used in calculating the 2018 capital charges.

**Weighted Average Capital Rate per \$1,000 of Equalized Value from 2014 through 2023 for Non-Member Communities**





**COMMISSION FILE NO:** 17-111-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates

**SUMMARY:**

The Commission is requested to adopt revisions to Sections 1, 2, 3, 5, 10, 11, 12, 13, and 14 and the attached tables (2-1, 3-1 through 3-5, and 5-1) of the Cost Recovery Procedures Manual, including 2018 user charge rates. The Commission is also requested to authorize the Executive Director to transmit the Cost Recovery Procedures Manual to the User Charge Administrator of each municipality served by the District.

The estimated average household charge for District member communities is expected to increase 10.7% in 2018. The following table summarizes the estimated annual residential user charge over the last five years:

YEAR	ESTIMATED AVERAGE HOUSEHOLD CHARGE PER YEAR	PERCENT CHANGE FROM PRIOR YEAR
2018	\$137.37	10.7%
2017	\$124.04	1.3%
2016	\$122.42	-2.2%
2015	\$125.17	3.7%
2014	\$120.68	2.1%
2013	\$118.20	0.2%

**ATTACHMENTS:** BACKGROUND  KEY ISSUES  RESOLUTION   
 FISCAL NOTE  S/W/MBE  OTHER  Tables, Schedules, etc.

*PFP\_User\_Charge\_Rates2018TableSchedules\_legislative\_file.docx*  
 10-27-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **SUMMARY (Cont'd)**

### Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates

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The Cost Recovery Procedures Manual is a document incorporated by reference in Chapter 17, District Rules and Regulations, which presents specific policies and procedures for the administration of the User Charge Program. An annual update of this manual and revisions to seven sections are required to assure that the collection mechanism for the Operations and Maintenance Budget is based on current data.

## KEY ISSUES

### Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates

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The staff requests adoption of the following revised Sections and Tables:

- |    |   |
|----|---|
| 1  | Equivalent Residential Unit                                     |
| 2  | Residential Occupancy Factors, Table 2-1                        |
| 3  | Unit Process - Parameter Relationships, Tables 3-1 - Tables 3-5 |
| 5  | Municipal Wholesale Billings – Table 5-1                        |
| 10 | Unit Costs of Treatment   |
| 11 | Pretreatment Program and Monitoring Charges                     |
| 12 | Late Payment Penalty  |
| 13 | Charges for Special Waste                                       |
| 14 | Household Hazardous Waste Program Costs                         |

Attached are schedules showing 2018 User Charge Rate Analysis vs Approved 2017 Rate (Schedule A), Annual Single Family Household Charge by Community (Schedule B), Estimated Total Billings by Community (Schedule C), and Percent of Estimated Billings by Class of User (Schedule D).

A brief explanation of the revisions to those sections affecting 2018 user charge rates and billings is as follows:

#### **Section 1: Equivalent Residential Unit (ERU)**

Water consumption is projected to be 52 gallons per capita per day in 2018, as compared to 53 gallons per capita per day in 2017 (Schedule B).

#### **Section 2: Residential Occupancy Factors**

This includes an updated table of residential occupancy factors based on current population and household unit data in each municipality. Table 2-1 lists people per unit for 2017 and 2018. This factor is used in the formula for calculating the wholesale residential bill to each municipality.

#### **Section 3: Unit Process - Parameter Relationships**

The District's User Charge System allocates operation and maintenance costs of each unit process, including all supporting activities, to four user charge parameters: Flow, Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), and Connections.

Tables 3-1 and 3-2 detail the allocation, among charge parameters, of costs expected to be incurred by each of the District's unit processes during 2018, offsetting revenues from other sources, and adjustments to account for surpluses or deficits on each parameter in 2016 carried forward to 2018.

## KEY ISSUES (Cont'd)

### Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates

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On September 11, 1996, the Public Service Commission ruled that capital cost recovery charges related to watercourse improvement projects can only be collected from those extraterritorial municipalities that are tributary to the watercourse being improved.

Table 3-3 summarizes the 2018 budgeted dollars by watercourse and green infrastructure and the municipalities impacted by each watercourse green infrastructure. Table 3-4 portrays the total flow rate by adding the base flow rate (Table 3-2) and the watercourse rate (Table 3-3) and the green infrastructure rate (Table 3-3). In addition, Table 3-4 reports the volumetric charge and average household charge. Table 3-5 shows the current status of the User Charge Stabilization Fund.

#### **Section 5: Municipal Wholesale Billing**

Table 5-1 contains the Schedule for Transmission of User Data for each municipality for the year 2018. This schedule was provided to each of the Municipal User Charge Administrators within the past month for review and comment.

#### **Section 10: Unit Costs of Treatment**

This section contains the derivation of 2018 user charge rates. Projected 2018 wasteloads are listed for each parameter. Dividing budgeted dollars by these wasteloads yields rates for each parameter. The old and new rates are as follows:

	<b><u>2017</u></b>	<b><u>2018</u></b>
Flow (Base Rate):	\$1.09424/1000 gallon	\$1.20275/1000 gallon
Flow (Watercourse Rate):	See Table 3-4	See Table 3-4
BOD:	\$0.12730/pound	\$0.13589/pound
TSS:	\$0.16289/pound	\$0.17541/pound
Connection Charge:	\$23.98/year	\$30.34/year

#### **Section 11: Pretreatment Program and Monitoring Charges**

This section contains the annual fees for waste strength verification, sampling, and laboratory tests to recover the technical, monitoring, and laboratory costs of administering the Industrial Waste Pretreatment Program.

#### **Section 12: Late Payment Penalty**

This section contains the rate charged for a late payment penalty for the year 2018.

## KEY ISSUES (Cont'd)

Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates

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### **Section 13: Charges for Special Waste**

#### **Septic and Holding Tank Waste**

Staff recommends that the present disposal rates remain at \$25.19 per thousand gallons for holding tank waste, \$33.15 per thousand gallons for septic tank waste, and a permit fee of \$250/vehicle. These costs provide for recovery of treatment costs and capital costs, but only a portion of the program administration and compliance costs.

#### **Rates for Groundwater Discharge**

During 2018, staff recommends the rate to remain at \$2.50 per 1,000 gallons (\$0.0025/gallon).

#### **Rates for Beneficial High Strength Waste**

During 2018, the rate to discharge beneficial High Strength Waste at the South Shore Water Reclamation Facility to be used for Anaerobic Co-Digestion will be \$0.035 per gallon unless otherwise negotiated by contract.

### **Miscellaneous Special Waste**

This section contains how the District will establish charges for special waste according to MMSD Rules, sec. 17.211.

### **Section 14: Household Hazardous Waste Program Costs**

This section reflects the recovery of a separate municipal charge for Household Hazardous Waste Program costs. The actual costs incurred in operating the Household Hazardous Waste Program will be billed to each community on the basis of residential units. The Household Hazardous Waste Program Charge for 2018 will be billed to each participating community on or before March 1, 2019, and payable by April 1, 2019.

## RESOLUTION

### Update of Cost Recovery Procedures Manual, Including 2018 User Charge Rates

---

**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the revisions to Sections 1, 2, 3, 5, 10, 11, 12, 13, and 14 of the Cost Recovery Procedures Manual, including revisions to Table 2-1, Table 3-1, Table 3-2, Table 3-3, Table 3-4, Table 3-5, and Table 5-1 (attached), are hereby adopted for the calendar year 2018, and that the Executive Director shall incorporate these revisions and transmit the Cost Recovery Procedures Manual to the User Charge Administrator of each municipality served by the District.



Section: 1  
Title: Equivalent Residential Unit  
Reference: Secs. 17.103(9), 17.208, MMSD Rules, and Appendix A (1.)(A)

The residential user class accounts for a significant share of the total wastewater generated in the service area. In accordance with EPA regulations, user charges must be apportioned to each of these users or class of users on the basis of wastewater flow and strength discharged to the system. Since it would not be reasonable to monitor each user to determine this flow and strength due to the size of the class, the user charge will be based on the characteristics of a typical residential discharge, called an Equivalent Residential Unit (ERU).

The U. S. Environmental Protection Agency (EPA) has developed a standard ERU that should be adopted unless other values can be supported by the District. This standard ERU is a flow of 100 gallons per capita/day (including Infiltration/Inflow), a BOD of 0.167 pounds per capita/day (ppcd) (200 mg/l) and TSS of 0.209 ppcd (250 mg/l).

To determine the District's ERU, select portions of the service area were monitored during the dry months of July and August of 1976, as part of the UC Study conducted for the District. Sampling stations were chosen at points downstream of six strictly residential service areas that were believed to represent the typical user.

In each of the six study areas, wastewater samples were collected every 15 minutes for an average of 20 days. These samples were used to determine 24-hour composite values for BOD and TSS for each study area. Flow rates were calculated from measurements recorded at existing gauging stations.

The results were used to calculate average per capita wastewater characteristics. A detailed description of this activity can be found in Technical Memorandum 4A of the UC/ICR Study.

The study yielded an ERU consisting of 64 gallons/capita/day (excluding Infiltration/Inflow), with BOD of 0.166 pounds per capita/day (310 mg/l) and TSS of 0.197 pounds/capita/day (370 mg/l).

The calculated domestic flow rate compared very favorably with winter water consumption data. With allowance for I/I, BOD and TSS loadings compared favorably with EPA values. Consequently, the aforementioned ERU values were used in the formula for calculating MMSD's user charges to the constituent municipalities at start-up of the program in 1979.

Surveys conducted yearly of winter water consumption in municipalities with metered water, provide a basis for updating the calculations for the flow parameter. The most recent calculation supports an ERU of 52 gallons per capita per day.

The resultant EQUIVALENT RESIDENTIAL UNIT, effective January 2018, is as follows:

Domestic Flow	52 gallons/capita/day <u>(Excluding Infiltration/Inflow)</u>
B.O.D.	0.165 pounds capita/day (310 milligrams/liter)
T.S.S.	0.197 pounds/capita/day (370 milligrams/liter)

Section: 2  
 Title: Residential Occupancy Factors  
 Reference: Secs. 17.103(18), 17.208, MMSD Rules, and Appendix A(1.0)(A)

The residential occupancy factor means the average number of people residing in each residential housing unit. The 2018 residential occupancy factor assigned to each municipality is based on housing and population data as of January 1, 2017, and further explained in Section 5 of this manual.

MMSD relies on municipal user data transmissions and an annual housing unit survey to update the housing unit count reported in the 2010 census. Municipal reports are subject to verification by MMSD as explained in Section 8 of this manual.

Total municipal population as of January 1 is reported in October by the Wisconsin Department of Administration. To determine a residential occupancy factor, total population must be allocated between the residential and commercial sewer user classes. The residential allocation is derived by subtracting commercial population from total population. Commercial population is classified as follows:

- Apartments - Occupancy factors and vacancy rates for metered apartments are from the census. Occupancy factors for unmetered apartments served by MMSD are assigned as follows:

<u>Bedrooms</u>	<u>People/Unit</u>
1	1.5
2	2.5
3	Residential Occupancy Factor
Unknown	2.5

In lieu of using the assigned occupancy factor for apartments, a municipality may report the actual occupant count for each unmetered apartment. This occupant count must include all unmetered apartments and be updated at least once each year.

- Mixed Apartment/Business - Includes apartments in mercantile buildings such as stores or taverns. MMSD assigns an occupancy factor of 1.25 to these apartments. The rental vacancy rate from the census is used to estimate the number of vacant units.

- Mobile Home Parks - Includes all mobile homes not classified residential. Occupancy factors and vacancy rates are from the census.
- Group Quarters - Includes nursing homes, convents and monasteries, boarding houses, correctional institutions, college dormitories and other facilities without separate living and dining areas. Estimated population is based on the state report of institutional population and municipal reports of other group quarters facilities. A factor of .75 people per room is used to estimate boarding house population.
- Mixed Home/Business - Includes a business in the home classified as commercial for sewer billing. These units are assigned the residential occupancy factor.

The Residential Occupancy Factor for the District is 2.62 people per unit, computed as follows:

$$\begin{array}{rcccl}
 \underline{2017 \text{ Population}} & \div & \underline{\text{Occupied Units}} & = & \underline{\text{People Per Unit}} \\
 718,165 & & 273,838 & & 2.62
 \end{array}$$

Occupied residential units represent residential units reported to MMSD on municipal data transmissions including mixed home/business units. An update of the residential occupancy factor for each municipality is listed in Table 2-1 on page 2-3.

**Table 2-1 -- RESIDENTIAL OCCUPANCY FACTORS**

<b><u>Residential Billing Alternative</u></b>	<b><u>Municipality</u></b>	<b><u>People per Unit for UC Billings In:</u></b>	
		<b><u>2017</u></b>	<b><u>2018</u></b>
1 - 2 Family	Bayside	2.44	2.42
	Brookfield	2.53	2.55
	Brown Deer	2.63	2.60
	Caledonia	1.97	1.97
	Fox Point	2.41	2.42
	Franklin	2.82	2.84
	Glendale	2.27	2.25
	Muskego	2.70	2.69
	New Berlin	2.63	2.60
	Oak Creek	2.92	2.93
	Thiensville	2.42	2.40
	Wauwatosa	2.34	2.33
	West Allis	2.29	2.24
	West Milwaukee	2.52	2.50
1 - 4 Family	Butler	2.07	2.06
	Cudahy	2.30	2.30
	Elm Grove	2.41	2.40
	Germantown	2.49	2.45
	Greendale	2.61	2.64
	Greenfield	2.46	2.44
	Hales Corners	2.50	2.48
	Menomonee Falls	2.56	2.58
	Mequon	2.48	2.38
	Milwaukee	2.74	2.71
	River Hills	2.39	2.39
	Shorewood	2.20	2.22
	St. Francis	2.65	2.65
Whitefish Bay	2.69	2.68	

Section: 3  
Title: Unit Process-Parameter Relationships  
Reference: Secs. 17.103(25), 17.204, MMSD Rules

Unit Process-Parameter Relationships provide the basis for allocating the O & M costs of each unit process to the cost allocation parameters of flow, BOD, TSS, and connections. The relationships presented in Table 3-1 are based on the User Charge Program alternative recommended by Milwaukee County's Task Force on Metropolitan Sewerage Commission Development and its User Charge subcommittee, which alternative was adopted by the Commissions on 13 July 1978.

In 1991, a User Charge Rate and Cost Allocation Study determined that the 1991 unit process-parameter relationships were consistent with the 1978 study, except for five modifications which were recommended and adopted. The study identified the Inline Storage System (ISS) as a unit process qualifying as new and different from other existing unit processes. On November 30, 1992, the Commission adopted an alternative which allocated ISS and I/I treatment costs to the parameters of flow and connections based on a percentage of each to their totals (cost net of revenues).

In 2000, a User Charge Rate and Cost Allocation Study determined that the current unit process-parameter relationships adequately and equitably reflect process changes and capital additions since 1992 and these relationships are consistent with the 1992 study. However, 5 revisions to the unit process cost allocation procedures were recommended and adopted.

Table 3-2 summarizes, under the appropriate charge parameters, the 2018 budget dollars that Table 3-1 assigned to each unit process. Non-specific activities and miscellaneous services are apportioned to the four parameters in the same proportion as specific parameter costs bear to the total. Administrative support is distributed to the four parameters on the basis of labor costs, as charged in the operating cost centers. Adjustments to account for the surplus or deficit on each parameter in 2013 are also shown.

On September 11, 1996, the Public Service Commission ruled that capital cost recovery charges related to watercourse improvement projects can only be collected from those extraterritorial municipalities which are tributary to the watercourse being improved. In September 2017, the Commission amended Commission Policy 1-11.05, MMSD infrastructure Include Green Infrastructure, (Resolution 17-086-09) to allow financial billing credits to non-member communities for green infrastructure (GI) projects and expenditures. The following non-member communities have elected to receive financial billing credits: Brookfield, Butler, Caledonia, Elm Grove, Germantown, Menomonee Falls New Berlin and Thiensville.

Applying this determination to O&M costs, MMSD recovers operation and maintenance costs related to watercourses only from the non-member communities which are tributary to the watercourses being maintained and costs related to green infrastructure for non-member communities who have not opted out of the MMSD green infrastructure program. Table 3-3 summarizes the 2018 budget dollars by watercourse and green infrastructure assigned to the flow parameter. Table 3-4 adds the base flow rate from Table 3-2 and the watercourse and green infrastructure rate from Table 3-3 to show a total flow rate. In addition, Table 3-4 reports the volumetric charge and average household charge. Table 3-5 shows the current status of the user charge stabilization fund.

The Commission authorized the continuous use of this formula until further notice.

2018 BUDGETED UNIT PROCESS-PARAMETER RELATIONSHIPS  
IN THOUSANDS OF DOLLARS

TABLE 3-1  
Page 1 of 2

UNIT PROCESS OR ACTIVITY	BUDGET	FLOW	BOD	TSS	CONNECTIONS	NON-SPECIFIC	L.W.P.P.	PERMIT FEES	STORAGE COSTS	HOUSEHOLD HAZARDOUS WASTE	WATERCOURSE MAINTENANCE COSTS	GREEN INFRASTRUCTURE
<u>JONES ISLAND TREATMENT PLANT</u>												
<u>PRIMARY TREATMENT:</u>												
PUMPING, METERING AND SCREENING	\$2,824	\$932	\$0	\$0	\$1,892	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PRIMARY SEDIMENTATION	\$1,860	\$1,860	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DEBRIS/SCUM DISPOSAL	\$548	\$0	\$0	\$0	\$548	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>SECONDARY TREATMENT:</u>												
AERATION AND PROCESS AIR GENERATION	\$6,156	\$0	\$6,156	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLARIFICATION	\$1,244	\$1,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SLUDGE RETURN	\$1,778	\$0	\$1,778	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>ADVANCE WASTEWATER TREATMENT:</u>												
DISINFECTION AND PHOSPHORUS REMOVAL THICKENING	\$3,147	\$3,147	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTHER SLUDGE HANDLING PROCESSES	\$3,456	\$169	\$878	\$2,409	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MIL ORGANITE PRODUCTS	\$21,209	\$1,039	\$5,387	\$14,783	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
INTERPLANT PIPELINE	\$988	\$48	\$251	\$689	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PERMIT FEES	\$540	\$25	\$92	\$423	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OFF-PLANT FACILITIES AND PROGRAMS	\$468	\$0	\$0	\$0	\$0	\$0	\$0	\$468	\$0	\$0	\$0	\$0
OTHER	\$391	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NON-SPECIFIC ALLOCATION	\$0	\$0	\$358	\$18	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$44,609	\$9,822	\$14,555	\$18,322	\$2,442	\$0	\$0	\$468	\$0	\$0	\$0	\$0
<u>SOUTH SHORE TREATMENT PLANT</u>												
<u>PRIMARY TREATMENT:</u>												
PRECHLORINATION	\$269	\$269	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COARSE SCREENING AND GRIT REMOVAL	\$1,216	\$0	\$0	\$0	\$1,216	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PRIMARY SEDIMENTATION AND METER VAULT	\$866	\$866	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DEBRIS/SCUM REMOVAL AND DISPOSAL	\$1,038	\$0	\$0	\$0	\$1,038	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>SECONDARY TREATMENT:</u>												
AERATION AND PROCESS AIR GENERATION	\$4,143	\$0	\$4,143	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLARIFICATION	\$1,280	\$1,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SLUDGE RETURN	\$631	\$0	\$631	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LAB ANALYSIS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>ADVANCE WASTEWATER TREATMENT:</u>												
DISINFECTION AND PHOSPHORUS REMOVAL EFFLUENT PUMPING	\$1,675	\$1,675	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SOLIDS PROCESSING:	\$402	\$402	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FLATATION THICKENING	\$408	\$19	\$69	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTHER SLUDGE HANDLING PROCESSES	\$3,494	\$161	\$594	\$2,739	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PRIMARY SLUDGE SCREENING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AGRICULTURAL USE OF AGR-LIFE & POLYMER	\$9	\$0	\$2	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FILTER CAKE TO WPCO	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
INTERPLANT PIPELINE	\$1,141	\$52	\$194	\$895	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PERMIT FEES	\$418	\$0	\$0	\$0	\$0	\$0	\$0	\$418	\$0	\$0	\$0	\$0
OTHER	\$428	\$408	\$9	\$7	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NON-SPECIFIC ALLOCATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$17,418	\$5,132	\$5,642	\$3,968	\$2,258	\$0	\$0	\$418	\$0	\$0	\$0	\$0



2018 BUDGETED UNIT PROCESS-PARAMETER RELATIONSHIPS  
IN THOUSANDS OF DOLLARS

	BUDGET	FLOW	BOD	TSS	CONNECTIONS	NON-SPECIFIC	I.W.P.P.	PERMIT FEES	STORAGE COSTS	HOUSEHOLD HAZARDOUS WASTE	WATERCOURSE MAINTENANCE COSTS	GREEN INFRASTRUCTURE
REVENUE	(\$9,000)	\$0	(\$9,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MARKETING	\$4,648	\$0	\$4,648	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	(\$4,352)	\$0	(\$4,352)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTHER ALLOCABLE COST CENTERS												
IN-LINE STORAGE SYSTEM	\$2,658	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,658	\$0	\$0	\$0
HOUSEHOLD HAZARDOUS WASTE PROGRAM	\$1,197	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,197	\$0	\$0
ENGINEERING:												
LOCAL SEWER INSPECT./APPROVAL & MONIT. MISMUNI. SEWER	\$121	\$121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTHER	\$8,688	\$8	\$0	\$0	\$0	\$7,622	\$0	\$0	\$0	\$0	\$0	\$0
RESEARCH AND CENTRAL LAB:												
ANALYSIS OF I.W.P.P.	\$91	\$0	\$0	\$0	\$0	\$0	\$81	\$0	\$0	\$0	\$0	\$0
OTHER SERVICES	\$1,007	\$0	\$0	\$0	\$0	\$1,007	\$0	\$0	\$0	\$0	\$0	\$0
FIELD OPERATIONS:												
SEWER CLEANING, INSPECTION AND MAINTENANCE	\$3,893	\$3,893	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PUMP STATION AND INTERCEPTOR FACILITY	\$1,889	\$1,889	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAINTENANCE-WATER COURSE AND VEHICLES	\$2,367	\$1,412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$955	\$0
MAINTENANCE-BUILDINGS AND GROUNDS	\$1,554	\$1,554	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CENTRAL CONTROL SYSTEM	\$949	\$949	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OFF-PLANT FACILITIES AND PROGRAMS	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0
OTHER SERVICES	\$4,181	\$3,500	\$0	\$0	\$0	\$680	\$0	\$0	\$0	\$0	\$0	\$0
INDUSTRIAL WASTE PRETREATMENT PROGRAM:												
PRETREATMENT PROGRAM MANAGEMENT	\$336	\$0	\$0	\$0	\$0	\$0	\$336	\$0	\$0	\$0	\$0	\$0
SAMPLE COLLECTION AND ANALYSIS-LABOR	\$454	\$0	\$0	\$0	\$0	\$0	\$454	\$0	\$0	\$0	\$0	\$0
OFF-PLANT FACILITIES AND PROGRAMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTHER SERVICES	\$2,948	\$0	\$0	\$0	\$0	\$2,948	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$32,333	\$13,326	\$0	\$0	\$0	\$12,158	\$881	\$0	\$2,658	\$1,197	\$955	\$1,158
SUBTOTAL	\$90,008	\$27,280	\$15,845	\$22,290	\$4,700	\$12,158	\$881	\$886	\$2,658	\$1,197	\$955	\$1,158
OTHER ALLOCABLE COSTS AND REVENUES												
ALLOCATION OF NON-SPECIFIC COSTS	\$0	\$4,592	\$2,667	\$3,752	\$791	(\$12,158)	\$0	\$0	\$0	\$0	\$161	\$195
EQUIPMENT REPLACEMENT FUND	\$175	\$67	\$39	\$55	\$12	\$0	\$0	\$0	\$0	\$0	\$2	\$0
UNALLOCATED RESERVE	\$2,943	\$1,112	\$645	\$908	\$192	\$0	\$0	\$0	\$0	\$0	\$39	\$47
INDUSTRIAL WASTE PRETREATMENT PROGRAM	(\$924)	\$0	\$0	\$0	\$0	\$0	(\$924)	\$0	\$0	\$0	\$0	\$0
HOUSEHOLD HAZARDOUS WASTE PROGRAM	(\$1,197)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1,197)	\$0	\$0
WATERCOURSE MAINTENANCE	(\$685)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GREEN INFRASTRUCTURE	(\$945)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$685)	\$0
OTHER REVENUE	(\$2,253)	(\$620)	(\$361)	(\$507)	(\$107)	\$0	(\$17)	\$0	\$0	\$0	\$0	(\$945)
2016 SURPLUS APPLIED	(\$7,466)	(\$1,993)	(\$2,166)	(\$3,189)	(\$169)	\$0	\$60	\$2	\$275	\$0	(\$615)	(\$26)
USER CHARGE RATE STABILIZATION FUND	\$2,466	\$1,100	\$265	\$1,100	\$0	\$0	\$0	\$0	\$0	\$0	\$143	(\$429)
IWPP RATE STABILIZATION FUND	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	(\$7,887)	\$4,258	\$1,089	\$2,119	\$719	(\$12,158)	(\$881)	\$2	\$275	(\$1,197)	(\$955)	(\$1,158)
2018 BILLABLE COSTS	\$82,121	\$31,538	\$16,934	\$24,409	\$5,419	\$0	\$0	\$888	\$2,933	\$0	\$0	\$0

2018 BUDGETED UNIT PROCESS-PARAMETER RELATIONSHIPS  
IN THOUSANDS OF DOLLARS

	BUDGET	FLOW	BOD	TSS	CONNECTIONS	NON-SPECIFIC	I.W.P.P.	PERMIT FEES	STORAGE COSTS	HOUSEHOLD HAZARDOUS WASTE	WATERCOURSE MAINTENANCE COSTS	GREEN INFRASTRUCTURE
<b>JONES ISLAND TREATMENT PLANT</b>												
BUDGETED COSTS	\$44,609	\$8,822	\$14,555	\$18,322	\$2,442	\$0	\$0	\$468	\$0	\$0	\$0	\$0
NON-SPECIFIC ALLOCATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL	\$44,609	\$8,822	\$14,555	\$18,322	\$2,442	\$0	\$0	\$468	\$0	\$0	\$0	\$0
<b>SOUTH SHORE TREATMENT PLANT</b>												
BUDGETED COSTS	\$17,418	\$5,132	\$5,642	\$3,968	\$2,258	\$0	\$0	\$418	\$0	\$0	\$0	\$0
NON-SPECIFIC ALLOCATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL	\$17,418	\$5,132	\$5,642	\$3,968	\$2,258	\$0	\$0	\$418	\$0	\$0	\$0	\$0
<b>MILORGANITE</b>												
MILORGANITE REVENUE	(\$9,000)	\$0	(\$9,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MARKETING COST CENTER	\$4,648	\$0	\$4,648	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL	(\$4,352)	\$0	(\$4,352)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>OTHER ALLOCABLE COST CENTERS</b>												
INLINE STORAGE SYSTEM	\$2,658	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,658	\$0	\$0	\$0
HOUSEHOLD HAZARDOUS WASTE PROGRAM	\$1,197	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,197	\$0	\$0
ENGINEERING	\$8,809	\$129	\$0	\$0	\$0	\$7,522	\$0	\$0	\$0	\$0	\$0	\$1,158
RESEARCH AND CENTRAL LAB	\$1,098	\$0	\$0	\$0	\$0	\$1,007	\$91	\$0	\$0	\$0	\$0	\$0
INDUSTRIAL WASTE PRETREATMENT	\$3,798	\$0	\$0	\$0	\$0	\$2,946	\$790	\$0	\$0	\$0	\$0	\$0
FIELD OPERATIONS	\$14,833	\$13,197	\$0	\$0	\$0	\$681	\$0	\$0	\$0	\$0	\$955	\$0
SUBTOTAL	\$32,333	\$13,326	\$0	\$0	\$0	\$12,158	\$881	\$0	\$2,658	\$1,197	\$955	\$1,158
TOTAL	\$90,008	\$27,280	\$15,845	\$22,290	\$4,700	\$12,158	\$881	\$886	\$2,658	\$1,197	\$955	\$1,158
<b>OTHER ALLOCABLE COSTS AND REVENUES</b>												
NON-SPECIFIC ALLOCATION	\$0	\$4,592	\$2,667	\$3,752	\$791	(\$12,158)	\$0	\$0	\$0	\$0	\$161	\$195
EQUIPMENT REPLACEMENT FUND	\$175	\$67	\$39	\$55	\$12	\$0	\$0	\$0	\$0	\$0	\$2	\$0
UNALLOCATED RESERVE	\$2,943	\$1,112	\$645	\$908	\$192	\$0	\$0	\$0	\$0	\$0	\$39	\$0
I.W.P.P.	(\$924)	\$0	\$0	\$0	\$0	(\$924)	\$0	\$0	\$0	\$0	\$0	\$47
HOUSEHOLD HAZARDOUS WASTE PROGRAM	(\$1,197)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1,197)	\$0	\$0
WATERCOURSE MAINTENANCE	(\$685)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$685)	\$0
GREEN INFRASTRUCTURE	(\$945)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$945)	\$0
INTEREST AND OTHER REVENUE	(\$2,253)	\$0	(\$361)	(\$507)	(\$107)	\$0	(\$17)	\$0	\$0	\$0	(\$615)	(\$26)
2016 SURPLUS APPLIED	(\$7,466)	(\$1,993)	(\$2,166)	(\$3,189)	(\$169)	\$0	\$60	\$2	\$275	\$0	\$143	(\$429)
USER CHARGE RATE STABILIZATION FUND	\$2,465	\$1,100	\$265	\$1,100	(\$169)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IWPP RATE STABILIZATION FUND	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SUBTOTAL	(\$7,887)	\$4,238	\$1,089	\$2,119	\$719	(\$12,158)	(\$881)	\$2	\$275	(\$1,197)	(\$955)	(\$1,158)
ESTIMATED 2018 BILLABLE COSTS	\$82,121	\$31,538	\$16,934	\$24,409	\$5,419	\$0	\$0	\$888	\$2,933	\$0	\$0	\$0
% ALLOCATION FOR I/C COSTS		35.34%			14.65%							

2018 BUDGETED UNIT PROCESS-PARAMETER RELATIONSHIPS

2018 CONNECTIONS & PROJECTED WASTELOADS:

FLOW M.G.D.	BOD LBS./DAY	TSS LBS./DAY	CONNECTIONS
169.6	345,150	385,400	305,154

2018 UNIT COSTS (DOES NOT INCLUDE WATERCOURSE COSTS):

	FLOW CENTS/1000 GAL.	BOD CENTS/LBS.	TSS CENTS/LBS.	DOLLARS/CONN.
BILLABLE COSTS				
I/1 ALLOCATION	\$0.50947	\$0.13442	\$0.17352	\$17.76
	\$0.68031	\$0.00000	\$0.00000	\$12.25
	\$1.18978	\$0.13442	\$0.17352	\$30.01
PERMIT FEE SURCHARGE	\$0.01297	\$0.00147	\$0.00189	\$0.33
	\$1.20275	\$0.13589	\$0.17541	\$30.34

UNITS OF SERVICE BY CLASS OF USER:

CLASS OF USER	ESTIMATED BILLABLE FLOW (1000 GAL.)	ESTIMATED CONNECTIONS	ESTIMATED BOD LBS.	ESTIMATED TSS LBS.
RESIDENTIAL	16,069,080	265,131	41,538,571	49,589,182
NON-CERTIFIED COMMERCIAL	10,405,167	37,355	26,901,520	32,108,266
CERTIFIED COMMERCIAL	1,683,287	1,986	3,612,036	4,322,184
CERTIFIED INDUSTRIAL	3,824,481	682	45,099,565	19,339,780
TOTALS	31,982,015	305,154	117,151,692	105,359,412

ESTIMATED BILLABLE WASTELOADS PER DAY	87,621,959	320,964	288,656	
ESTIMATED INFILTRATION/INFLOW PER DAY	82,000,000	24,186	96,744	
TOTAL DAILY WASTELOADS	169,621,959	345,150	385,400	TOTAL I/1 COSTS

INFILTRATION/INFLOW COSTS (INCLUDES ISS)	\$15,248,437	\$1,186,645	\$6,127,262	\$25,495,344
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PERMIT FEES SURCHARGE:

PERMIT FEES	\$888,000
TOTAL BUDGET W/O PERMIT FEES	\$81,233,000
SURCHARGE	1.09%



2018 FLOW RATE AND VOLUMETRIC CHARGES BY COMMUNITY

FLOW-CENTS/1000 GAL.	MMSD	BROOKFIELD	BUTLER	CALEDONIA	ELM GROVE	GERMANTOWN	MENOMONEE FALLS	MEQUON	MUSKEGO	NEW BERLIN	THIENSVILLE
BASE FLOW RATE-PER TABLE 3-2	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275	\$1.20275
WATERCOURSE RATES	\$0.02412	\$0.00418	\$0.00396	\$0.00000	\$0.00418	\$0.00394	\$0.00396	\$0.00401	\$0.00058	\$0.00476	\$0.00004
GREEN INFRASTRUCTURE RATES	\$0.03278	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.03278	\$0.03278	\$0.00000	\$0.00000
2018 FLOW RATE BY COMMUNITY	\$1.25965	\$1.20693	\$1.20671	\$1.20275	\$1.20693	\$1.20669	\$1.20671	\$1.23954	\$1.23611	\$1.20751	\$1.20279

VOLUMETRIC CHARGES:  
(PER THOUSAND GALLONS)

FLOW	\$1.259650	\$1.206930	\$1.206710	\$1.202750	\$1.206930	\$1.206690	\$1.206710	\$1.239540	\$1.236110	\$1.207510	\$1.202790
BOD	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276	\$0.351276
TSS	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315	\$0.541315
TOTAL	\$2.152241	\$2.099521	\$2.099301	\$2.095341	\$2.099521	\$2.09281	\$2.099301	\$2.132131	\$2.128701	\$2.100101	\$2.095381

AVERAGE HOUSEHOLD CHARGE:

ANNUAL VOLUMETRIC CHARGE	\$107.03	\$101.61	\$82.08	\$78.35	\$95.64	\$97.62	\$102.80	\$96.31	\$108.68	\$103.64	\$95.45
CONNECTION CHARGE	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34	\$30.34
	\$137.37	\$131.95	\$112.42	\$108.69	\$125.98	\$127.96	\$133.14	\$126.65	\$139.02	\$133.98	\$125.79

**Table 3-5**

**User Charge Stabilization Fund**

	Flow	BOD	TSS	Connections	Total by Year
Fund Balance at December 31, 2016	\$ 4,080,730	\$ 108,856	\$2,580,279	\$ 877,088	\$ 7,646,953
Additions/(Withdrawals) net of interest earned in the year 2017	\$ 1,250,000	\$ 300,000	\$ 1,750,000	\$ 865,000	\$ 4,165,000
Fund Balance at December 31, 2017	\$ 5,330,730	\$ 408,856	\$4,330,279	\$ 1,742,088	\$11,811,953
Additions/(Withdrawals) in the year 2018	\$ 1,100,000	\$ 265,000	\$ 1,100,000	\$ -0-	\$ 2,465,000
Fund Balance at December 31, 2018	\$ 6,430,730	\$ 673,856	\$ 5,430,279	\$ 1,742,088	\$ 14,276,953

**TABLE 5-1  
SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
Bayside	All	6 Apr. 3 July 3 Oct. 8 Jan.	(Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept) (Oct-Nov-Dec)
Brookfield	All	7 Mar. 8 June 12 Sept. 7 Dec.	(Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept) (Oct-Nov-Dec)
Brown Deer	All	21 Feb. 18 May 22 Aug. 28 Nov.	(Dec-Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
Butler	All	2 Mar. 1 June 6 Sept. 3 Dec.	(Dec)(Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
Caledonia	All	5 Jan. 6 Apr. 6 July 10 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Crystal Ridge	All	2 Feb. 4 May 8 Aug. 7 Nov.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Cudahy	Industries	30 Jan. 27 Feb. 28 Mar. 27 Apr. 31 May 28 June 31 July 30 Aug. 28 Sept. 30 Oct. 28 Nov. 28 Dec.	(December) (January) (February) (March) (April) (May) (June) (July) (August) (September) (October) (November)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
Cudahy	#1	27 Feb. 28 June 30 Oct.	(Oct-Nov-Dec) (Jan) (Feb thru May) (June thru Sept)
Cudahy	#2	28 Mar. 28 June 28 Nov.	(Nov-Dec) (Jan-Feb) (Mar thru June) (July thru Oct)
Cudahy	#3	27 Apr. 30 Aug. 28 Dec.	(Dec thru Mar) (Apr thru July) (Aug thru Nov)
Cudahy	#4	30 Jan. 31 May 28 Sept.	(Sept thru Dec) (Jan thru Apr) (May thru Aug)
Cudahy	#5	28 Mar. 28 June 28 Sept. 28 Dec.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
Elm Grove	All	28 Dec. 28 Mar. 03 July 26 Sept.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Fox Point	All	16 Feb. 4 May 8 Aug. 7 Nov.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
Franklin	All	5 Jan. 6 Apr. 6 July 5 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Germantown	All	19 Jan. 11 Apr. 11 July 12 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)



**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
Glendale	#1	20 Feb. 22 May 21 Aug. 20 Nov.	(Dec) (Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
Glendale	#2	20 Mar. 22 June 21 Sept. 19 Dec.	(Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept) (Oct-Nov-Dec)
Glendale	#3	23 Jan. 24 Apr. 24 July 23 Oct.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
Greendale	#22	31 Jan. 30 Apr. 31 July 31 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Greenfield	All	18 Jan. 19 Apr. 18 July 11 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Hales Corners	All	14 Mar. 15 June 14 Sept. 14 Dec.	(Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept) (Oct-Nov-Dec)
Menomonee Falls	"A"	5 Jan. 6 Apr. 6 July 5 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Menomonee Falls	"B"	7 Feb. 4 May 3 Aug. 20 Nov.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>	
Menomonee Falls	"C"	8 Mar.	(Dec)(Jan-Feb)	
		6 June	(Mar-Apr-May)	
		7 Sept.	(June-July-Aug)	
		7 Dec.	(Sept-Oct-Nov)	
Mequon	All	23 Jan.	(Oct-Nov-Dec)	
		20 Apr.	(Jan-Feb-Mar)	
		20 July	(Apr-May-June)	
		19 Oct.	(July-Aug-Sept)	
Milwaukee (Residential Non-Certified)	#1	17 Jan.	(Oct-Nov-Dec)	
		13 Apr.	(Jan-Feb-Mar)	
		13 July	(Apr-May-June)	
		12 Oct.	(July-Aug-Sept)	
Milwaukee	#2	9 Feb.	(Nov-Dec) (Jan)	
		16 May	(Feb-Mar-Apr)	
		15 Aug.	(May-June-July)	
		14 Nov.	(Aug-Sept-Oct)	
Milwaukee	#3	14 Mar.	(Dec) (Jan-Feb)	
		15 June	(Mar-Apr-May)	
		14 Sept.	(June-July-Aug)	
		14 Dec.	(Sept-Oct-Nov)	
Milwaukee (Certified Users)	#1	11-12	(Jan-Feb-Mar)	
		13-14	(Jan-Feb-Mar)	
		15-16	(Jan-Feb-Mar)	
		17-19	(Jan-Feb-Mar)	
		99	(March)	
		11-12	30 May	(Apr-May-June)
		13-14	4 June	(Apr-May-June)
		15-16	11 June	(Apr-May-June)
		17-19	18 June	(Apr-May-June)
		99	25 June	(June)
		11-12	27 Aug.	(July-Aug-Sept)
		13-14	4 Sept.	(July-Aug-Sept)
		15-16	10 Sept.	(July-Aug-Sept)
		17-19	17 Sept.	(July-Aug-Sept)
		99	24 Sept.	(September)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
	11-12	26 Nov.	(Oct-Nov-Dec)
	13-14	3 Dec.	(Oct-Nov-Dec)
	15-16	10 Dec.	(Oct-Nov-Dec)
	17-19	17 Dec.	(Oct-Nov-Dec)
	99	20 Dec.	(December)
Milwaukee (Certified Users)	#2		
	21-22	3 Jan.	(Nov-Dec-Jan)
	23-24	8 Jan.	(Nov-Dec-Jan)
	25-26	16 Jan.	(Nov-Dec-Jan)
	27-29	22 Jan.	(Nov-Dec-Jan)
	99	24 Jan.	(January)
	21-22	2 Apr.	(Feb-Mar-Apr)
	23-24	9 Apr.	(Feb-Mar-Apr)
	25-26	16 Apr.	(Feb-Mar-Apr)
	27-29	23 Apr.	(Feb-Mar-Apr)
	99	23 Apr.	(April)
	21-22	2 July	(May-June-July)
	23-24	9 July	(May-June-July)
	25-26	16 July	(May-June-July)
	27-29	23 July	(May-June-July)
	99	25 July	(July)
	21-22	1 Oct.	(Aug-Sept-Oct)
	23-24	8 Oct.	(Aug-Sept-Oct)
	25-26	15 Oct.	(Aug-Sept-Oct)
	27-29	22 Oct.	(Aug-Sept-Oct)
	99	24 Oct.	(October)
Milwaukee (Certified Users)	#3		
	31-32	29 Jan.	(Dec-Jan-Feb)
	33-34	5 Feb.	(Dec-Jan-Feb)
	35-36	12 Feb.	(Dec-Jan-Feb)
	37-39	19 Feb.	(Dec-Jan-Feb)
	99	21 Feb.	(February)
	31-32	30 Apr.	(Mar-Apr-May)
	33-34	7 May	(Mar-Apr-May)
	35-36	14 May	(Mar-Apr-May)
	37-39	21 May	(Mar-Apr-May)
	99	24 May	(May)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
	31-32	30 July	(June-July-Aug)
	33-34	8 Aug.	(June-July-Aug)
	35-36	13 Aug.	(June-July-Aug)
	37-39	20 Aug.	(June-July-Aug)
	99	24 Aug.	(August)
	31-32	29 Oct.	(Sept-Oct-Nov)
	33-34	5 Nov.	(Sept-Oct-Nov)
	35-36	12 Nov.	(Sept-Oct-Nov)
	37-39	19 Nov.	(Sept-Oct-Nov)
	99	26 Nov.	(November)
Milwaukee Water Department	2 Plants	16 Jan. 17 Apr. 17 July 16 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Muskego	All	5 Jan. 6 Apr. 6 July 5 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Muskego	LF	16 Feb. 11 May 10 Aug. 14 Nov.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
New Berlin	All	14 Mar. 13 June 12 Sept. 11 Dec.	(Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept) (Oct-Nov-Dec)
Oak Creek	#1	16 Feb. 11 May 10 Aug. 7 Nov.	(Nov-Dec-Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
Oak Creek	#2	9 Mar. 8 June 7 Sept. 7 Dec.	(Dec-Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
Oak Creek	#3	6 Apr. 6 July 12 Oct. 23 Jan.	(Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept) (Oct-Nov-Dec)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
Oak Creek-Ash	LF	30 Jan. 27 Apr. 27 July 31 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Oak Creek	Industries	19 Jan. 20 Feb. 20 Mar. 20 Apr. 18 May 20 June 20 July 20 Aug. 20 Sept. 19 Oct. 20 Nov. 20 Dec.	(Dec-Jan) (Jan-Feb) (Feb-Mar) (Mar-Apr) (Apr-May) (May-June) (June-July) (July-Aug) (Aug-Sept) (Sept-Oct) (Oct-Nov) (Nov-Dec)
River Hills	All	13 Apr. 15 Aug. 19 Dec.	(Jan thru Apr) (May thru Aug) (Sept thru Dec)
Shorewood	All	7 Mar. 6 June 6 Sept. 5 Dec.	(Dec) (Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
St. Francis	All	7 Mar. 6 June 6 Sept. 5 Dec.	(Dec) (Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
Thiensville	All	23 Jan. 20 Apr. 20 July 19 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
Wauwatosa	#1	16 Feb. 16 May 15 Aug. 28 Nov.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
Wauwatosa	#2	14 Mar. 15 June 14 Sept. 19 Dec.	(Dec) (Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
Wauwatosa	#3	19 Jan. 18 Apr. 18 July 17 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)
Wauwatosa	#4	23 Jan. 16 Feb. 14 Mar. 18 Apr. 16 May 15 June 18 July 15 Aug. 14 Sept. 17 Oct. 28 Nov. 19 Dec.	(December) (January) (February) (March) (April) (May) (June) (July) (August) (September) (October) (November)
West Allis	#1	23 Feb. 31 May 29 Aug. 28 Nov.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
West Allis	#2	28 Mar. 27 June 26 Sept. 28 Dec.	(Dec) (Jan-Feb) (Mar-Apr-May) (June-July-Aug) (Sept-Oct-Nov)
West Allis	#3	26 Jan. 27 Apr. 27 July 26 Oct.	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)

**TABLE 5-1 (cont)**  
**SCHEDULES FOR TRANSMISSION OF USER DATA AND USER CHARGES**

<u>Municipality</u>	<u>Class or District</u>	<u>User Data to MMSD</u>	<u>Period Covered</u>
West Milwaukee	All	16 Feb. 04 May 10 Aug. 7 Nov.	(Nov-Dec) (Jan) (Feb-Mar-Apr) (May-June-July) (Aug-Sept-Oct)
West Milwaukee	Industries	26 Jan. 23 Feb. 27 Mar. 25 Apr. 24 May 26 June 26 July 24 Aug. 25 Sept. 26 Oct. 21 Nov. 21 Dec.	(January) (February) (March) (April) (May) (June) (July) (August) (September) (October) (November) (December)
Whitefish Bay	All	23 Jan. 20 Apr. 20 July 19 Oct	(Oct-Nov-Dec) (Jan-Feb-Mar) (Apr-May-June) (July-Aug-Sept)

Section: 10  
 Title: Unit Costs of Treatment  
 Reference: Secs. 17.103(24) and 17.205, MMSD Rules

District unit costs of treatment for 2018 are:

Flow (Base Rate)	=	\$1.20275/1000 gal.
Flow (Watercourse & Green Infrastructure Rate)	=	See Table 3-4.
BOD	=	\$0.13589/pound
TSS	=	\$0.17541/pound
Connection Charge	=	\$30.34/year

The derivation of these charges is described herein, as follows.

The net portion of the adopted 2018 Operation and Maintenance (O&M) budget billable via the user charge program is \$83,751,000. This total amount has been distributed to the cost allocation parameters and is described in Section 3 of the Cost Recovery Procedures Manual under UNIT PROCESS-PARAMETER RELATIONSHIPS.

That distribution yields the following breakdown between the parameters for 2018:

Flow	\$31,538,000	
BOD	16,934,000	(Biochemical oxygen demand)
TSS	24,409,000	(Total suspended solids)
Connections	5,419,000	
Permit Fees	888,000	
I/I Storage Costs	2,933,000	
Green Infrastructure	945,000	
Watercourse Costs	<u>685,000</u>	
	\$83,751,000	

This total treatment cost is to be recovered through a formula that recognizes that billable wasteloads of Flow, BOD, and TSS are directly traceable to users on a unit basis, and the remaining treatment costs, excluding permit fees and I/I storage costs, are best shared equally by the total number of connections to the system.

The first portion consists of assorted wastewater discharges (intentional discharges of domestic wastes, process wastes or cooling waters) comprising 52 percent of the total annual flow, 93 percent of the BOD load, and 75 percent of the TSS observed at the plants. The balance consists of the infiltration/inflow components which are extremely variable in volume and of comparatively indeterminate origin.



Dividing the various treatment costs by the corresponding total expected wasteloads yields unit costs of treatment for the coming year. Total wasteloads have been forecasted by analyzing previous years' billed quantities and projecting observed trends into 2018. Quantities assignable to wastewater discharge and infiltration/inflow are based on characterization of system users by the District, as presented in Technical Memoranda 4A through 4E for the sample year 1975, supplemented by more recent data collected by the District.

Residential Flows in 2018 is expected to be lower than that forecasted a year ago for 2017. Commercial and Industrial flow is expected to increase. Sources of wastewater flow are anticipated to be as follows:

- Residential - 44.0 MGD
  - Commercial - 28.5 MGD (non-certified)  
4.6 MGD (614 certified businesses)
  - Industrial - 10.5 MGD (385 process waste dischargers)
- 87.6 MGD

I/I flow is quite unpredictable. The projected amount for 2018 is 82 MGD. This is based on a five-year average. The projected sum of the wastewater and I/I flow is 169.6 MGD for 2018. Connections are expected to be 305,154.

BOD loading in the wastewater projection for 2018 is increased 4.3% and the TSS loading is decreased 0.7% from the previous year's projection. In making these projections, actual loadings for the first six months of 2018 were used along with historical trends, and a review of 100 of the largest users of the system.

The BOD and TSS assigned to infiltration/inflow is calculated from a sampling program which yielded strengths of 50 mg/l (417#/MGD) and 200 mg/l (1668#/MGD), respectively, for the inflow portion, estimated at 58 MGD; and zero strength for the 24 MGD infiltration portion.

The resultant estimated wasteloadings for 2018 are:

	Flow (MGD)	BOD (lbs/day)	TSS (lbs/day)
Wastewater	87.6	320,964	288,656
I/I	<u>82.0</u>	<u>24,186</u>	<u>96,744</u>
Total	169.6	345,150	385,400

Unit Costs of Treatment Excluding Permit Fees and Watercourse:

$$\text{Flow} = \frac{\$31,538,000}{169.6 \text{ MGD}/1,000 \times 365} = \$0.50947/1,000 \text{ gal.}$$

$$\text{BOD} = \frac{\$16,934,000}{345,150 \text{ lbs.} \times 365} = \$0.13442/\text{pound}$$

$$\text{TSS} = \frac{\$24,409,000}{385,400 \text{ lbs.} \times 365} = \$0.17352/\text{pound}$$

Infiltration/Inflow Costs:

The total cost is calculated herein, and allocated to the parameters of Flow (85.34%) and connections (14.66%) based on a percentage of each to their totals:

$$\text{I/I Flow} = \frac{82.0 \text{ MGD}}{1,000} \times \$0.50947 \times 365 \text{ days} = \$15,248,437$$

$$\text{I/I BOD} = 24,186 \times \$0.13442 \times 365 \text{ days} = 1,186,645$$

$$\text{I/I TSS} = 96,744 \times \$0.17352 \times 365 \text{ days} = 6,127,262$$

$$\text{I/I Storage Costs} = 2,933,000$$

$$\text{Total I/I Costs} = \$ 25,495,344$$

Flow portion of I/I:

$$\frac{\$ 25,495,344 \times 85.34\%}{87,621,959/1,000 \times 365} = \$0.68031/1,000 \text{ gal.}$$

District Unit Costs of Treatment Including Surcharge:

Flow =	Treatment Unit Costs	\$ 0.50947
	I/I Unit Costs	<u>0.68031</u>
		\$ 1.18978

Base Rate =	With 1.09% Surcharge	\$ 1.20275/1,000 gal.
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BOD =	Treatment Unit Costs	\$ 0.13442
	With 1.09% Surcharge	\$ 0.13589/pound

TSS =	Treatment Unit Costs	\$ 0.17352
	With 1.09% Surcharge	\$ 0.17541/pound

Volumetric Charges:

From these three rates, the volumetric charge can be computed for a given wastewater contribution. For the most common concentration, domestic strength, they can be conveniently combined into a single rate, using the equivalencies of 310 mg/l BOD = 2.585 lb/1000 gal., and 370 mg/l TSS = 3.086 lb./1000 gal., as follows:

Flow			See Table 3-4.
BOD = 2.585 lb./1000 gal. x .13589c/lb.	=		\$.351276/1,000 gal.
TSS = 3.086 lb./1000 gal. x .17541c/lb.	=		\$.541315/1,000 gal.
Volumetric charge (domestic strength)			See Table 3-4.

Connection Charge:

The cost of removing debris and other treatment costs that have not been assigned to Flow, BOD and TSS in addition to the I/I costs allocated to connection and the permit fee surcharge:

Debris and other treatment costs	=	$\frac{\$ 5,419,000}{305,154}$	=	\$ 17.76/year
I/I costs allocable to connection	=	$\frac{\$ 25,495,344 \times 14.66\%}{305,154}$	=	\$ 12.25/year
Permit fee surcharge @ 1.09%	=			$\frac{\$ 0.33/\text{year}}{\$30.34/\text{year}}$

District Average Household Charge:

See Table 3-4.

Recapitulation:

	<u>Recoverable Via Volumetric Chg.</u>	<u>Recoverable Via Connection Chg.</u>	<u>Total</u>
Flow costs	\$ 29,302,579	\$ 2,235,421	\$ 31,538,000
BOD costs	16,760,038	173,962	16,934,000
TSS costs	23,510,743	898,257	24,409,000
Debris & other costs	0	5,419,000	5,419,000
Watercourse costs	685,000	0	685,000
I/I storage costs	2,501,968	431,032	2,933,000
Green Infrastructure	945,000	0	945,000
Permit Fees	<u>787,299</u>	<u>100,701</u>	<u>888,000</u>
 Budget	 <u>\$ 74,492,627</u>	 <u>\$ 9,258,373</u>	 <u>\$ 83,751,000</u>

Since actual billings during the course of the year are dependent upon estimated wasteloads, reported water consumption (commercial and industrial) and number of units (residential), the revenue generated will not match the aforementioned budget figure. The surplus or deficit, as determined at the end of the yearly billing period, will enter into the computation of the future year's unit costs of treatment.

Section: 11  
Title: Pretreatment Program and Monitoring Charges  
Authority: Sections 17.103(15), 17.206, 17.207, and 17.211, MMSD Rules

In October, 1980, the Wisconsin Department of Natural Resources modified the District's WPDES discharge permits to include a schedule of compliance which required the development of an industrial waste pretreatment program. One requirement of this schedule was the development of a funding mechanism for financing the implementation and administration of this program. State and Federal regulations specified that the costs associated with the administration of such a program must be recovered solely from the industrial class. Since the user charge system adopted by the District on January 1, 1979, would recover these costs from all classes of users, it became necessary to establish a separate funding mechanism.

The funding method adopted by the District to accomplish this task also recovers the costs associated with the user charge verification sampling program (see Section 8) since both programs overlap in technical support and monitoring activities.

#### Technical Support Charge Derivation

The portion of the total program cost associated with technical support activities is recovered through a graduated schedule of flat fees which recognizes that users who are sampled more and have an Industrial Discharge Permit frequently are responsible for a greater percentage of these costs. This fee schedule is based on the class system for users established within the user charge wastestrength verification sampling program. This system classifies a user based upon the amount of sewer user charge paid (see Section 8), since this amount is a reflection of the wasteload contributed to the District by that user. The frequency at which the District samples a user is based upon this classification.

Based upon these sampling frequencies, a rating factor is assigned to each class which recognizes the anticipated level of effort to be expended by the District. Utilizing these rating factors and the number of users within each class, a total weight is assigned to each class. Summing the individual total weights and dividing the estimated technical costs by this total weight determines the dollar amount assigned to the base rating factor (1 X). It should be noted that Class 6 represents those users who are not sampled on a regular basis and do not have an Industrial Discharge permit but are still responsible for a portion of the overall program costs. The 2018 annual fees are as follows:

<u>Class</u>	<u>Rating Factor</u>	<u>Number of Facilities</u>	<u>Annual Fee</u>	
			<u>Permit</u>	<u>No Permit</u>
1	105X	1	\$20,356	\$ 13,571
2	70X	10	\$ 13,571	\$ 9,047
3	15X	8	\$ 2,908	\$ 1,939
4	10X	53	\$ 1,939	\$ 1,292
5	5X	87	\$ 969	\$ 646
6	1X	<u>204</u>		\$ 129
		<u>363</u>		

These annual fees are included on the sewer user charge billings for all users in the following classes:

- 30 Non-Certified Industrial
- 31 Discharge Certified Industrial
- 32 Wastestrength Certified Commercial
- 33 Wastestrength Certified Industrial

Notice of Intent to Discharge Fee

If the discharge from a site is contaminated groundwater, groundwater removed from an excavation during construction, or any other irregular non-domestic wastewater, then the District must receive a fee of \$250 when a Notice of Intent to Discharge is submitted, except as provided below. The fee is required once per calendar year per site.

If the site is already paying a technical support charge or will be paying a technical support charge in response to a new long-term discharge, then payment of the Notice of Intent fee is not required.

Monitoring Charge Derivation

Under the industrial waste program, samples are collected by District personnel for two basic purposes: 1) monitoring compliance with applicable effluent limitations; and 2) assuring that users are paying user charges which are representative of their true wastewater characteristics. The frequency at which the District conducts user charge sampling is identified within Section 8. The frequency at which the District conducts compliance sampling is prescribed by the approved pretreatment program or by a determination of the potential impact a given users discharges can have on District operations. In situations where compliance monitoring reveals that compliance with applicable effluent limitations is not being achieved, the District may increase its frequency of sampling until it is assured that consistent compliance is being achieved. The costs associated with the collection and analysis of these samples are recovered from the individual users.

The sample collection monitoring fee schedule is established annually and is based upon a series of rating factors which correspond to the level of effort involved in the collection of various types of samples. The District collects three different types of samples: 1) a grab sample, 2) time composite sample and 3) a flow proportioned composite sample.

Each of these three sample types is assigned a rating factor which represents the level of effort necessary to collect the particular type of sample. These rating factors are then multiplied by the estimated number of samples to be collected in 2018 to arrive at a total sampling weight.

The 2018 estimated monitoring costs (excluding lab analysis costs) are then divided by the total sampling weight to determine the sample collection fee for a grab sample. Multiplying this grab sample fee by the rating factors for the time composite and flow proportioned composite sample types establishes the corresponding sample collection fees for these sample types. Following are the 2018 sample collection fees.

<u>Sample Type</u>	<u>Rating Factor</u>	<u>Estimated No. of Samples</u>	<u>Weight</u>	<u>Fee</u>
Grab	1.5	683	1406	\$245
Time Composite	3.0	196	657	\$491
Flow Composite	4.5	287	1589	\$736
Continuous pH Monitoring				\$265 per event
Discrete pH Monitoring				\$20
Flow composite, facility equipment				\$245

When sampling is done on a daily basis and used for enforcement or to ensure compliance with state federal or local limits, then the costs will be as follows:

<u>Sample Type</u>	<u>Fee</u>
Flow Composite, starting with the second day	\$491.00

This cost will be used only after the initial set-up costs have been billed.

The schedule of laboratory analysis monitoring fees is established annually and consists of a charge per pollutant based upon the labor, chemicals and equipment needed to perform a given pollutant analysis. For 2018, the fee schedule is as follows:

Semivolatile Organics by GCMS	140.00
Semivolatile Organics by GCMS (Base/Neutrals Only)	125.00
BOD, 5-day Total	17.00
Cyanide, (Amenable)	42.00
Cyanide, (Total)	27.00

Fluoride	10.00
Mercury, (T)	18.00

Metals Analysis by ICP \$10.00/element

Elements analyzed include; Arsenic; Barium; Cadmium; Chromium; Cobalt; Copper; Iron; Lead; Manganese; Molybdenum; Nickel; Selenium; Silver; Tin; Titanium; Zinc. Other elements analyzed on request.

Oil and Grease, (HEM)	53.00
Total Hydrocarbons, (SGT-HEM)	53.00
Paper Fiber Count	64.00
Phenols, (T)	19.00
Phosphorus, (T)	16.00
PCBs as Aroclor	58.00
Sulfide, (T)	33.00
Suspended Solids, (T)	11.00
Volatile Organics by GCMS	58.00

Should it become necessary for the District to analyze for pollutants not listed above, representative charges for those pollutants will be developed by Laboratory Services.

The District at the conclusion of each sampling period bills the monitoring fees for both sample collection and laboratory analysis directly to the affected user.

In some cases, District monitoring will be only a visual inspection. The purpose of the inspection is to determine whether an obstruction is present. The District will charge for this inspection when (1) a particular user has caused the obstruction and (2) the District has previously notified the user of the obstruction and requested remedial action. The District will continue charging the user for inspections until the cause or source of the obstruction is eliminated. If an obstruction is large enough to cause an overflow, basement flooding, or other significant adverse effects, then the District may charge for the inspection without prior notice. The effort required for an inspection is similar to the effort required for a grab sample. Therefore, the inspection fee is equal to the grab sample fee, as established above.



Section: 12  
Title: Late Payment Penalty  
Reference: Sec. 17.105(3), MMSD Rules

The District may charge a late payment penalty when the payment of a bill is late or when an undercharge was caused by an error or omission of a municipality, user or other person receiving service from the District.

The late payment penalty for 2018 will be 12% of the amount due to the District compounded annually.

In cases of undercharges caused by fraud or other misrepresentation, the District will not waive the late payment penalty.

Section: 13

Title: Charges for Special Wastes

Reference: Secs. 17.210 and 17.211, MMSD Rules

### Septic and Holding Tank Waste

At the South Shore Water Reclamation Facility, the District accepts septic and holding tank waste. This waste must comply with the requirements of MMSD Rules, Chapter 11, particularly secs. 11.701 to 11.708. This waste is limited to domestic wastewater. Any waste with a BOD that exceeds 2,500 mg/l or a TSS that exceeds 2,500 mg/l must be classified as septic tank waste.

Any vehicle that delivers septic or holding tank waste must have a license from the District. The hauler must renew the license annually, on a calendar year basis.

The following table shows the charges for holding tank waste, septic tank waste, and the vehicle license fee.

<b>Item</b>	<b>Rate</b>
Holding Tank Waste	\$25.19/thousand gallons
Septic Tank Waste	\$33.15/thousand gallons
Vehicle License Fee	\$250/vehicle per year

The charges for septic and holding tank waste include an operating component and a capital component. An owner of a septic or holding tank who is also subject to property taxation by the District may, on an annual basis, obtain a refund of the capital component. To obtain this refund, the owner must submit to the District copies of waste hauling bills for the year, a copy of the property tax bill, and the owner's social security number or tax identification number.

### Groundwater Discharges

Generally, to conserve capacity within the sewerage system, the discharge of groundwater is prohibited. However, the District may occasionally approve discharges of groundwater when necessary for groundwater or soil remedial action, construction, or other special circumstances. The rate for discharging groundwater is \$2.50 per thousand gallons.

### Beneficial High Strength Waste

At the South Shore Water Reclamation Facility, the District accepts high strength waste for anaerobic co-digestion. For this purpose, the preferred type of waste has a BOD concentration greater than 50,000 mg/l and a TSS concentration less than 1,000 mg/l. However, the District may accept wastes with a lower BOD or higher TSS, if these wastes will promote the best interests of the District. The District feeds this waste directly into digesters.

Generally, the rate for waste received for anaerobic co-digestion is \$0.035 per gallon. Based upon a consideration of the volume to be received, BOD or TSS concentrations other than the typical concentrations, or other factors, the District may establish an alternative rate by contract.

#### Miscellaneous Special Wastes

When appropriate to serve the best interests of the District, the District may accept miscellaneous special wastes for disposal. For each waste, the District will establish charges for these wastes according to MMSD Rules, sec. 17.211. Considerations will include, but are not limited to: treatment costs, monitoring costs, administration costs, risks to the sewerage system or the environment, and the generator's or hauler's avoided costs.

Section: 14  
Title: Household Hazardous Waste Program Costs

The District currently has contracts with 19 municipalities listed below who are participating in the Household Hazardous Waste Program. The actual costs incurred in operating the Household Hazardous Waste Program are to be billed to each community on the basis of residential units.

A residential unit is defined as an individual residence such as a house, condominium, an apartment or mobile home (example: 4 unit apartment will be classified as 4 residential units). Apartments or condominiums that are larger than 4 units will be classified as 4 residential units). Participation municipalities shall report to the District the number of residential units within the municipality by July 31 of each year.

The Household Hazardous Waste Program Charge for 2018 will be billed to each participating community on or before March 1, 2019 and payable by April 1, 2019.

Municipalities participating in 2018:

Bayside	Oak Creek
Brown Deer	River Hills
Cudahy	South Milwaukee
Fox Point	St. Francis
Franklin	Shorewood
Glendale	Wauwatosa
Greendale	West Allis
Greenfield	West Milwaukee
Hales Corners	Whitefish Bay
Milwaukee	

UPDATE OF THE COST RECOVERY PROCEDURES MANUAL

2018 User Charge Rates Analysis vs. Approved 2017 Rates

Total User Charge Billings Proposed for 2018: \$83,750,613

Total User Charge Billings Proposed for 2017: \$75,112,768

Change from 2017: \$8,637,845

Percentage Increase 11.5%

	Flow	BOD	TSS	Conn.	MMSD
	Cents/1000	Cents/LBS.	Cents/LBS.	Dollars	Average Household Charge Est.
2018	\$1.25965	\$0.13589	\$0.17541	\$30.34	\$137.37
2017	\$1.12748	\$0.12730	\$0.16289	\$23.98	\$124.04
% Change from 2017	11.8%	6.7%	7.7%	26.5%	10.7%

Update of Cost Recovery Procedures Manual  
Including 2018 User Charge Rate

Schedule B

	ANNUAL SINGLE FAMILY HOUSEHOLD AVERAGE USER CHARGE			PEOPLE PER UNIT FOR USER CHARGE BILLING IN:		
	2017	2018	PERCENT CHANGE	2017	2018	PERCENT CHANGE
BAYSIDE	\$116.46	\$129.20	10.94%	2.44	2.42	-0.82%
BROOKFIELD	\$118.63	\$131.95	11.23%	2.53	2.55	0.79%
BROWN DEER	\$123.66	\$136.55	10.42%	2.63	2.60	-1.14%
BUTLER	\$101.42	\$112.42	10.85%	2.07	2.06	-0.48%
CALEDONIA	\$97.38	\$108.69	11.61%	1.97	1.97	0.00%
CUDAHY	\$111.15	\$124.29	11.82%	2.30	2.30	0.00%
ELM GROVE	\$114.14	\$125.98	10.37%	2.41	2.40	-0.41%
FOX POINT	\$115.32	\$129.20	12.04%	2.41	2.42	0.41%
FRANKLIN	\$130.86	\$146.35	11.84%	2.82	2.84	0.71%
GERMANTOWN	\$117.13	\$127.96	9.25%	2.49	2.45	-1.61%
GLENDALE	\$110.02	\$122.25	11.12%	2.27	2.25	-0.88%
GREENDALE	\$122.90	\$138.18	12.43%	2.61	2.64	1.15%
GREENFIELD	\$117.22	\$130.01	10.91%	2.46	2.44	-0.81%
HALES CORNERS	\$118.73	\$131.65	10.88%	2.50	2.48	-0.80%
MENOMONEE FALLS	\$119.75	\$133.14	11.18%	2.56	2.58	0.78%
MEQUON	\$116.79	\$126.65	8.44%	2.48	2.38	-4.03%
MILWAUKEE	\$127.83	\$141.04	10.33%	2.74	2.71	-1.09%
MUSKEGO	\$124.62	\$139.02	11.56%	2.70	2.69	-0.37%
NEW BERLIN	\$122.41	\$133.98	9.45%	2.63	2.60	-1.14%
OAK CREEK	\$134.65	\$150.03	11.42%	2.92	2.93	0.34%
RIVER HILLS	\$114.56	\$127.97	11.71%	2.39	2.39	0.00%
SHOREWOOD	\$107.36	\$121.03	12.73%	2.20	2.22	0.91%
ST. FRANCIS	\$124.42	\$138.59	11.39%	2.65	2.65	0.00%
THIENSVILLE	\$114.15	\$125.79	10.20%	2.42	2.40	-0.83%
WAUWATOSA	\$112.67	\$125.52	11.40%	2.34	2.33	-0.43%
WEST ALLIS	\$110.77	\$121.84	9.99%	2.29	2.24	-2.18%
WEST MILWAUKEE	\$119.49	\$132.46	10.85%	2.52	2.50	-0.79%
WHITEFISH BAY	\$125.93	\$139.82	11.03%	2.69	2.68	-0.37%
DISTRICT AVERAGE	\$124.04	\$137.37	10.74%	2.64	2.62	-0.76%

THE ANNUAL SINGLE FAMILY HOUSEHOLD AVERAGE USER CHARGE IS CALCULATED AS FOLLOWS:

ANALYSIS OF CHANGE IN THE DISTRICT'S AVERAGE USER CHARGE:

	2017	2018	2017	2018	PERCENT CHANGE	
DOMESTIC FLOW (EXCLUDING I/I) GAL/DAY TIMES	53	52	CHANGE IN VOLUMETRIC RATE	\$1,959,230	\$2,152,241	9.9%
OCCUPANCY FACTOR TIMES	2.64	2.62	CHANGE IN CONNECTION CHARGE	\$23.98	\$30.34	26.5%
NUMBER OF DAYS PER YEAR TIMES	365	365	CHANGE IN OCCUPANCY FACTOR	2.64	2.62	-0.8%
VOLUMETRIC CHARGE PER 1,000 GAL. ADD	\$1,959,230	\$2,152,241	CHANGE IN DOMESTIC FLOW	53	52	-1.9%
ANNUAL CONNECTION CHARGE	\$23.98	\$30.34	CHANGE IN AVERAGE CHARGE	\$124.04	\$137.37	10.7%
TOTAL ANNUAL USER CHARGE	\$124.04	\$137.37				

## Update of Cost Recovery Procedure Manual

## SUMMARY OF TOTAL ESTIMATED BILLINGS BY COMMUNITY

<u>COMMUNITY</u>	<u>2017 BUDGET</u>	<u>2018 BUDGET</u>	<u>PERCENT CHANGE</u>
BAYSIDE	\$232,979	\$259,525	11.4%
BROOKFIELD	\$975,161	\$1,089,391	11.7%
BROWN DEER	\$793,673	\$884,667	11.5%
BUTLER	\$202,958	\$440,381	117.0%
CALEDONIA	\$26,051	\$29,111	11.7%
CUDAHY	\$1,880,263	\$2,175,045	15.7%
ELM GROVE	\$339,972	\$366,903	7.9%
FOX POINT	\$365,456	\$409,321	12.0%
FRANKLIN	\$2,165,235	\$2,417,181	11.6%
GERMANTOWN	\$1,563,019	\$1,781,376	14.0%
GLENDALE	\$973,762	\$1,087,732	11.7%
GREENDALE	\$797,056	\$873,699	9.6%
GREENFIELD	\$2,080,442	\$2,319,261	11.5%
HALES CORNERS	\$464,408	\$515,145	10.9%
MENOMONEE FALLS	\$1,945,802	\$2,200,796	13.1%
MEQUON	\$1,244,326	\$1,407,618	13.1%
MILWAUKEE	\$43,080,279	\$47,740,615	10.8%
MUSKEGO	\$1,128,923	\$1,269,562	12.5%
NEW BERLIN	\$1,988,367	\$2,144,655	7.9%
OAK CREEK	\$2,293,748	\$2,620,744	14.3%
RIVER HILLS	\$86,117	\$97,629	13.4%
SHOREWOOD	\$695,725	\$776,905	11.7%
ST. FRANCIS	\$572,022	\$633,507	10.7%
THIENSVILLE	\$197,240	\$213,632	8.3%
WAUWATOSA	\$3,265,714	\$3,606,900	10.4%
WEST ALLIS	\$3,911,608	\$4,373,936	11.8%
WEST MILWAUKEE	\$1,030,813	\$1,042,639	1.1%
WHITEFISH BAY	\$719,584	\$795,698	10.6%
OTHER*	\$92,065	\$177,039	92.3%
	<u>\$75,112,768</u>	<u>\$83,750,613</u>	11.5%

\* Other includes Milwaukee County Land Fill, Oak Creek Ash, Valley Power Plant and Waste Management.



**COMMISSION FILE NO:** 17-112-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Declaration of the Public Necessity and Approval of the Acquisition Plat (Relocation Order) for the Permanent Pigging Station for the Landfill Gas Pipeline, Project P02003

**SUMMARY:**

The Commission is requested to approve the acquisition plat for the Permanent Pigging Station for the Landfill Gas (LFG) Pipeline, Project P02003, and to authorize the Executive Director to approve future minor changes to the identified parcels and to approve the addition of new parcels where they have a minor impact on the overall project and land rights acquisition process.

The approval of the acquisition plat authorizes the Executive Director to execute easements, licenses, permits, purchase agreements, intergovernmental cooperation agreements, memorandums of understanding, and any other related real estate documents with property owners and governmental agencies that have real estate that is affected by the project.

Upon approval and within 20 days, the acquisition plat (relocation order) will be filed with the Milwaukee County Clerk's office as required by law, thereby allowing acquisition matters to proceed.

The District owns, operates and maintains a 19-mile long pipeline that conveys LFG from the Advanced Disposal (AD) Landfill located in Muskego to the Jones Island Water Reclamation Facility (JIWRF). The Wisconsin Public Service Commission (WPSC) regulates design, construction, operation, and maintenance of this pipeline.

**ATTACHMENTS:** BACKGROUND  KEY ISSUES  RESOLUTION   
FISCAL NOTE  S/W/MBE  OTHER  Acquisition Plat

*PFP\_AcqPlat\_P02003\_PiggingStation\_legislative\_file.docx  
10-26-2017*

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_



## SUMMARY (Cont'd)

Declaration of the Public Necessity and Approval of the Acquisition Plat (Relocation Order) for the Permanent Pigging Station for the Landfill Gas Pipeline, Project P02003

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The District constructed about 12 miles of the pipeline using high density polyethylene (HDPE), starting at the AD Landfill and ending on College Avenue near the Union Pacific Railway. At that point, the HDPE pipeline connects to a steel pipeline, that travels to JIWRP. The District had purchased an existing seven miles of steel pipeline (previously used to transport petroleum products) and converted it to convey LFG. The transition point from the new HDPE pipeline to the existing steel pipeline is located on City of Milwaukee property, leased by the National Guard Refueling Wing (the 128<sup>th</sup>).

As the two pipelines are different materials, their inner and outer diameters are different. Equipment used for inspecting, maintaining, and cleaning the steel and HDPE pipelines are different. Thus, the District is required by the WPSC to provide a permanent means to access both two pipelines where they intersect. At the time of construction, due to project time constraints and inability to obtain a permanent easement from the 128<sup>th</sup>, the District, with WPSC concurrence, provided a temporary, buried connection between the two pipelines within temporary real estate rights. The District recognized that it would need to construct a permanent pigging station at a future date. Currently, any time pipeline access is needed, that buried connection needs to be excavated.

Project P02003 will provide this permanent two-way pigging station within a permanent location as required by WPSC.

Staff is requesting one permanent easement and two temporary easements for construction and ongoing operation and maintenance of the pigging station. Parcels 1 and 2 are on land owned by MKE Fuel Co. LLC (MKE Fuel). MKE Fuel is a consortium of airlines doing business at General Mitchell International Airport (GMIA). The land is used to store and pump jet fuel to GMIA through underground pipelines. This site is the most cost efficient for the station, as it involves the least amount of new and additional piping and is conveniently accessed off College Avenue. This site is also secured by barbed wire fence and electronic gates. Parcel 3 is on land owned by the City of Milwaukee, leased to the 128<sup>th</sup>, and represents a temporary easement needed to facilitate construction.

Cost of these acquisitions is anticipated to be within the Executive Director's spending authority.

## RESOLUTION

Declaration of the Public Necessity and Approval of the Acquisition Plat (Relocation Order) for the Permanent Pigging Station for the Landfill Gas Pipeline, Project P02003

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that

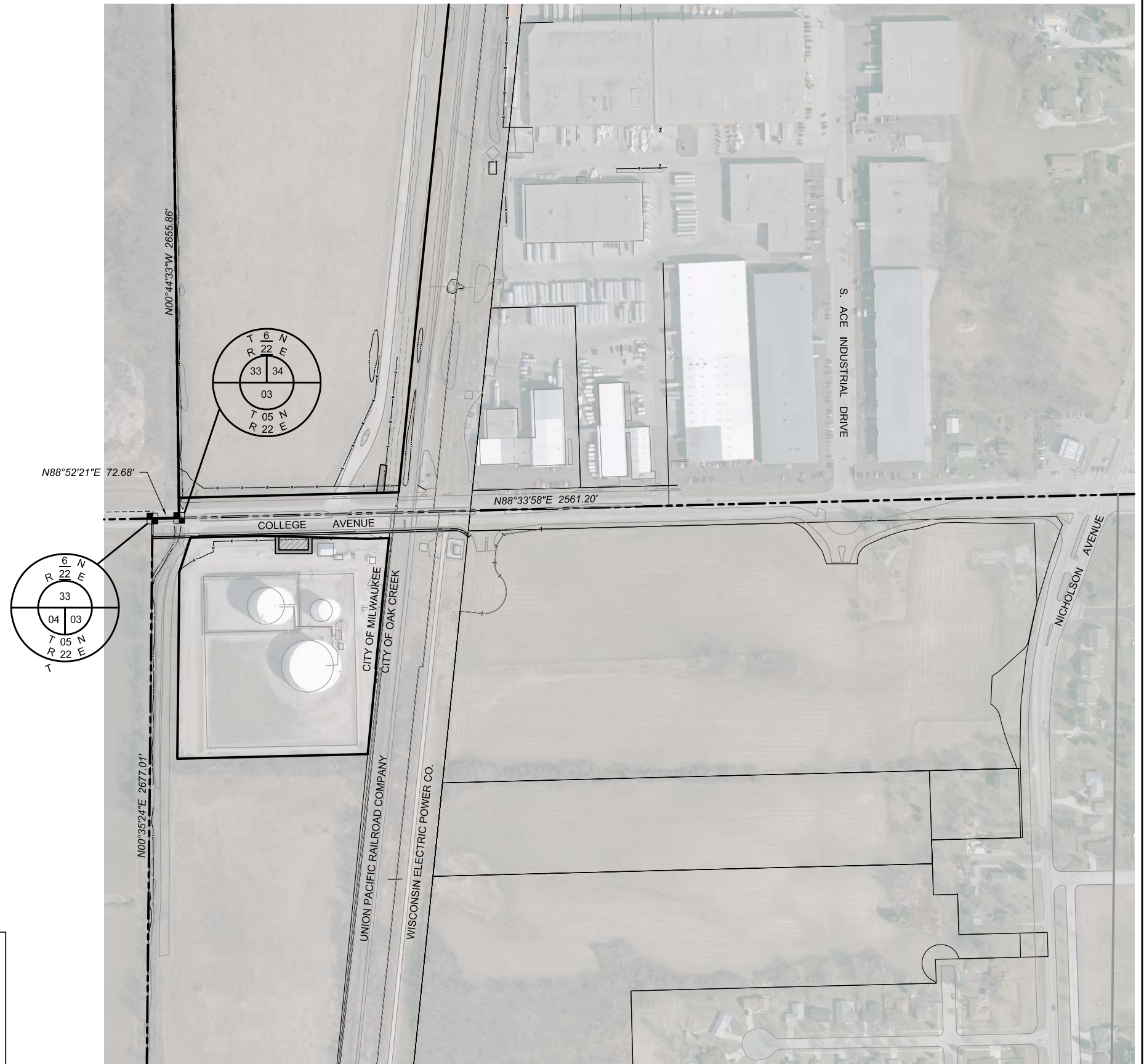
1. The attached acquisition plat (relocation order) that identifies Parcels 1, 2, and 3 are approved;
2. The Executive Director is authorized to approve future changes to the identified parcels and to approve the addition of new parcels where they have a minor impact on the overall project and the land rights acquisition process; and
3. The Executive Director may accept and execute on behalf of the Commission all project-related easement documents, memorandums of understanding, intergovernmental cooperation agreements, jurisdictional offers, awards of damages, leases, purchase agreements, deeds of conveyance, permits, licenses, or any other real estate related documents.

MILWAUKEE METROPOLITAN  
SEWERAGE DISTRICT  
PROJECT ID P02003

ACQUISITION PLAT  
FOR

**PERMANENT PIGGING  
STATION FOR THE  
LANDFILL GAS PIPELINE**

CITY OF MILWAUKEE  
MILWAUKEE COUNTY, WISCONSIN



**NOTES:**

- 1) PROPERTY LINES SHOWN ARE BASED ON LEGAL DESCRIPTIONS CONTAINED IN TITLE COMMITMENTS PROVIDED BY LAND TITLE SERVICES AGENT OF FIRST AMERICAN TITLE INSURANCE COMPANY. THESE LINES HAVE NOT BEEN VERIFIED BY A FIELD SURVEY.
- 2) CADASTRAL INFORMATION SHOWN IS FROM MILWAUKEE COUNTY.
- 3) AERIAL PHOTOS TAKEN FROM 2010 SEWRPC SID IMAGERY.
- 4) BEARINGS ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1927 (NAD 27), WISCONSIN SOUTH ZONE.
- 5) DISTANCES ARE EXPRESSED IN GRID U.S. SURVEY FEET

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**VERIFY SCALES**  
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

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G. OLSON  
DRFT  
R. CHAVEZ  
CHK  
D. TALARCZYK

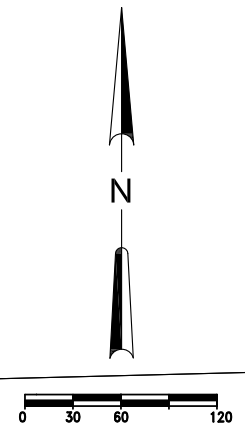
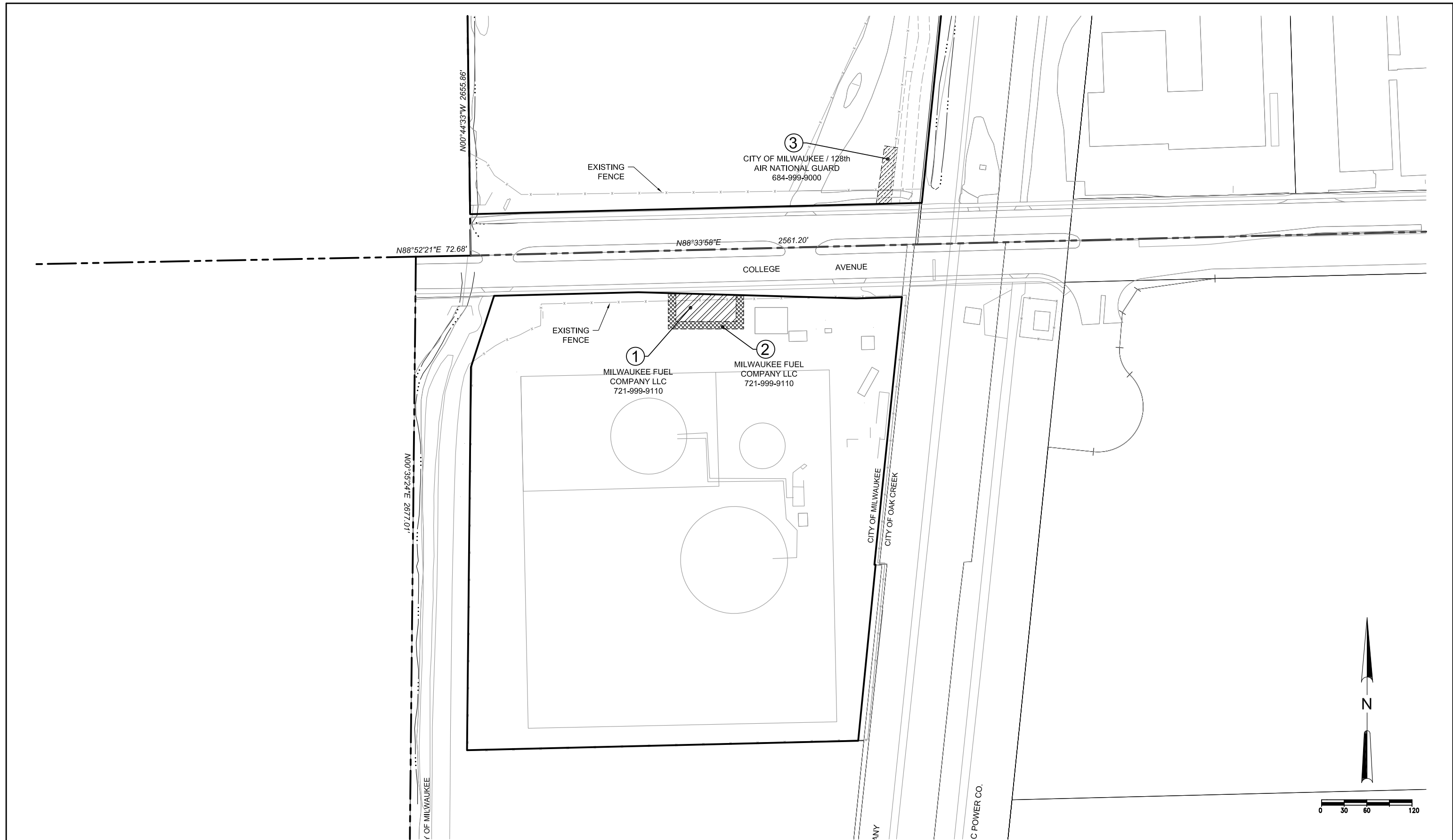
REV. NO.	DATE	REVISION DESCRIPTION

BY APVD  


MILWAUKEE METROPOLITAN SEWERAGE DISTRICT  
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT (MMSD)  
PERMANENT PIGGING STATION FOR THE LANDFILL GAS PIPELINE

DRAWING NO.: ACP-01  
SHEET: 1  
DATE: OCTOBER 2017  
CONTRACT: P02003E01  
MMSD FILE: ACP01.dwg





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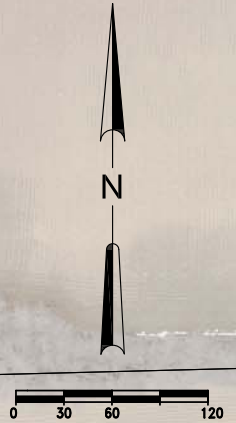
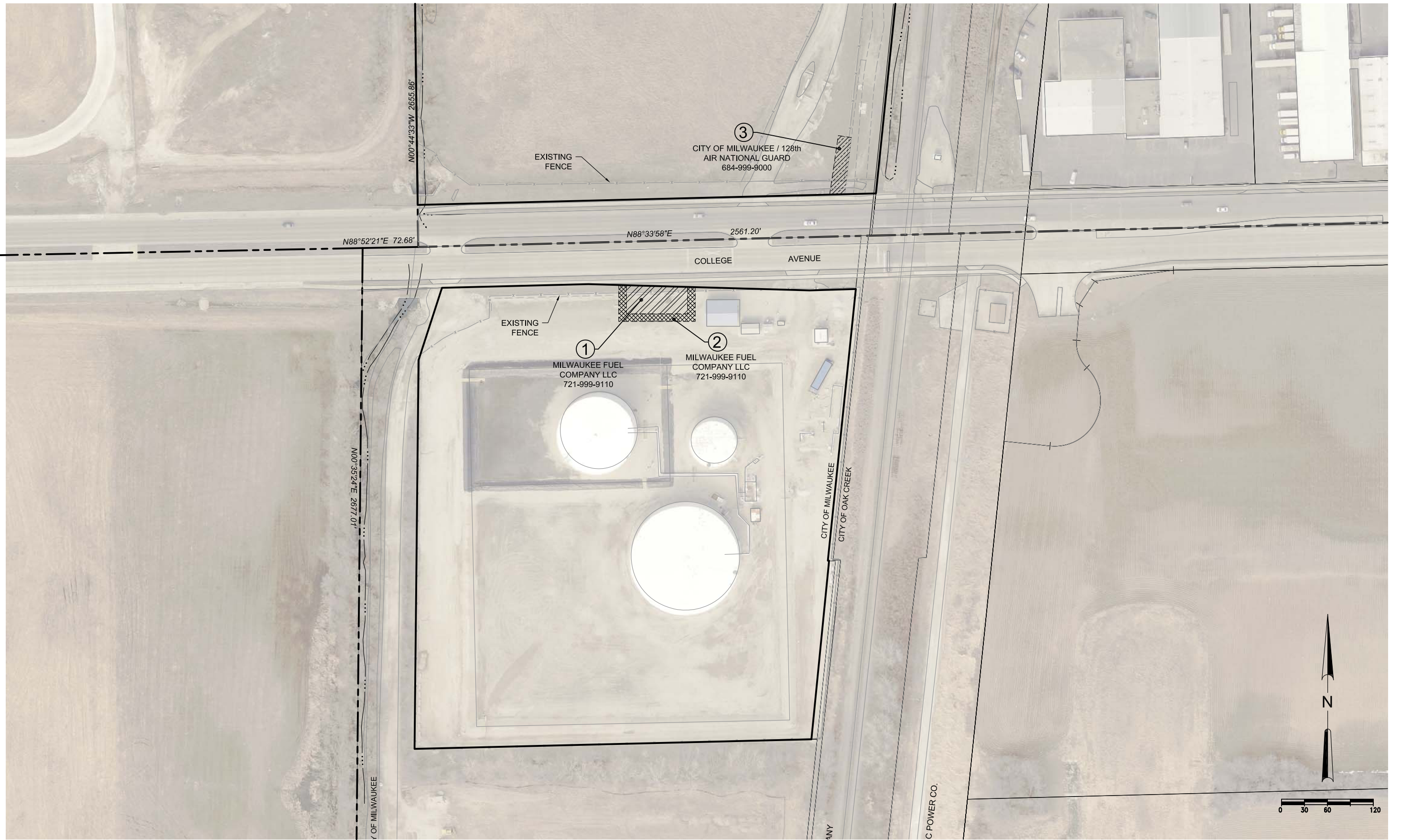
PM  
**G. OLSON**  
 DRFT  
**R. CHAVEZ**  
 CHK  
**D. TALARCZYK**

REV. NO.	DATE	REVISION DESCRIPTION	BY	APVD



MILWAUKEE METROPOLITAN SEWERAGE DISTRICT  
 MILWAUKEE METROPOLITAN SEWERAGE DISTRICT (MMSD)  
 PERMANENT PIGGING STATION FOR THE LANDFILL GAS PIPELINE

DRAWING NO.: ACP-04  
 SHEET: 4  
 DATE: OCTOBER 2017  
 CONTRACT: P02003E01  
 MMSD FILE: ACP04.dwg



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PM  
**G. OLSON**  
 DRFT  
**R. CHAVEZ**  
 CHK  
**D. TALARCZYK**

REV. NO.	DATE	REVISION DESCRIPTION	BY	APVD



MILWAUKEE METROPOLITAN SEWERAGE DISTRICT  
 MILWAUKEE METROPOLITAN SEWERAGE DISTRICT (MMSD)  
 PERMANENT PIGGING STATION FOR THE LANDFILL GAS PIPELINE

DRAWING NO.:	ACP-04
SHEET:	4
DATE:	OCTOBER 2017
CONTRACT:	P02003E01
MMSD FILE:	ACP04.dwg



**COMMISSION FILE NO:** 17-113-11      **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Authorizing and Providing for the Sale and Issuance of Two Series of General Obligation Sewerage System Promissory Notes, Levying Taxes for the Payment Thereof, and All Related Details

**SUMMARY:**

As part of the State of Wisconsin Clean Water Fund Program (CWFP), the Commission is requested to approve the issuance of up to \$9,538,326 in general obligation notes to finance two capital projects. These loans are included in the Milwaukee Metropolitan Sewerage District's (District) 2017 Capital Budget.

Approval of the attached sale resolutions will enable the District to finance project expenditures over a 20-year period with two CWFP loans. The District will save an estimated \$1,183,031 in interest costs over the 20-year period of debt repayment by obtaining low interest financing from the CWFP as compared to issuing its own debt (1.76% versus 2.85%).

The State of Wisconsin requires that all borrowing municipalities provide security for repayment of loans. One form of security is a general obligation pledge of ad valorem taxes. This pledge requires a resolution authorizing a sale of general obligation bonds or notes and provides for the collection of a non-repealable, direct annual tax to pay the principal and interest on the bonds or notes (i.e., the CWFP loans). The State is the purchaser and owner of the securities.

A two-thirds affirmative vote of the Commission is required for approval.

**ATTACHMENTS:**    **BACKGROUND**     **KEY ISSUES**     **RESOLUTION**   
**FISCAL NOTE**     **S/W/MBE**     **OTHER**  Sale Resolutions

*PFP\_Sale\_Issuance\_Promissory\_Notes\_3229\_3234\_legislative\_file.docx*  
10-20-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## BACKGROUND

### Authorizing and Providing for the Sale and Issuance of Two Series of General Obligation Sewerage System Promissory Notes, Levying Taxes for the Payment Thereof, and All Related Details

The Commission is requested to approve the issuance of up to \$9,538,326 in general obligation notes as security for two CWFP loans for the following projects:

<b>Note Series</b>	<b>CWFP Number</b>	<b>District Project</b>	<b>Project Name</b>	<b>Maximum Loan Amount</b>	<b>Interest Rate</b>
2017B	3229-01	C98051	Conveyance Gate Rehabilitation, Phase 3	\$3,852,100	1.76%
2017C	3234-01	J04041	Jones Island Milorganite® Facilities Improvements, Phase 3	\$5,686,226	1.76%
			<b>Total</b>	<b>\$9,538,326</b>	

District projects undertaken to maintain permit compliance are eligible for 20-year loans from the CWFP at an interest rate below the effective rate for state revenue bonds, with market rate funds currently available at 3.20%. The compliance maintenance interest rate is currently 55% of the CWFP market rate or 1.76% (3.20% x 55%).

Estimated principal and interest payments for the loans are as follows:

<u><b>Year</b></u>	<u><b>Principal</b></u>	<u><b>Interest</b></u>	<u><b>Total</b></u>
2017	\$ 402,035	\$ 144,751	\$ 546,787
2019 – 2023	2,118,838	712,066	2,830,903
2024 – 2037	<u>7,017,453</u>	<u>899,531</u>	<u>7,916,984</u>
<b>Total</b>	<b><u>\$9,538,326</u></b>	<b><u>\$1,756,348</u></b>	<b><u>\$11,294,674</u></b>

The District will save an estimated \$1,183,031 in interest costs over the 20-year period of debt repayment by obtaining low interest financing from the CWFP as compared to issuing its own debt (1.76% versus 2.85%).



## KEY ISSUES

### Authorizing and Providing for the Sale and Issuance of Two Series of General Obligation Sewerage System Promissory Notes, Levying Taxes for the Payment Thereof, and All Related Details

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Each Financial Assistance Agreement (FAA) for a CWFP loan requires that the borrowing municipality establish one or more dedicated sources of revenue that the State of Wisconsin Department of Administration deems sufficient for repayment of a project loan or loans. The municipality's obligation to repay a project loan may be in the form of a general obligation or a revenue obligation. The District has elected to make a general obligation pledge of ad valorem taxes.

This pledge requires a resolution authorizing a sale of general obligation bonds or notes for the purpose of financing capital projects and provides for the collection of a direct annual tax sufficient in amount to pay and discharge the principal and interest on these bonds or notes. The bonds or notes are in effect sold to the State of Wisconsin.

The attached sale resolutions for the two capital projects accomplish the following objectives:

- Provide low interest rate financing of capital project expenditures within the financing objectives set in the 2018 Capital Budget and long-range financing plan.
- Authorize the District to sell up to \$9,538,326 of notes for the CWFP to the State of Wisconsin in accordance with the terms and conditions of the FAA's. Authorizes the Commission Chairperson and the Commission Secretary to execute the FAA's.
- Provide security for the State of Wisconsin.
- Provide for levying upon all the taxable property in the District, a non-repealable, direct annual tax in an amount sufficient to pay the principal and interest on the notes (i.e., the CWFP loan).
- Provide for continuing disclosure to bondholders in compliance with Rule 15c2-12(b)(5) promulgated by the Securities and Exchange Commission.
- Provide a repayment schedule up to 20 years.

A two-thirds affirmative vote of the Commission is required for approval.

## RESOLUTION

Authorizing and Providing for the Sale and Issuance of Two Series of General  
Obligation Sewerage System Promissory Notes, Levying Taxes for the Payment  
Thereof, and All Related Details

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**WHEREAS**, the State of Wisconsin Clean Water Fund Program permits the Milwaukee Metropolitan Sewerage Commission to obtain financial assistance for the construction of eligible wastewater pollution abatement projects; and

**WHEREAS**, the Milwaukee Metropolitan Sewerage Commission intends to authorize, sell, and issue general obligation sewerage system promissory notes for two separate Clean Water Fund Program projects as described below; and

**WHEREAS**, the Milwaukee Metropolitan Sewerage Commission has determined to sell the notes by private rather than public sale due to efficiencies of borrowing through the Clean Water Fund Program, including reduced issuance costs, flexible draw-down of principal and favorable interest rates.

**NOW, THEREFORE, BE IT RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the resolutions attached hereto and described below are hereby adopted.

1. "A Resolution Authorizing and Providing for the Sale and Issuance of up to \$3,852,100 General Obligation Sewerage System Promissory Notes, Series 2017B, Levying Taxes for the Payment Thereof, and All Related Details" for CWFP Project Number 3229-01, consisting of replacement of hydraulic cylinders and/or hydraulic accumulator tanks at nine dropshafts in the MMSD conveyance system, replacement of hydraulic conduits, electrical conduits, structural grating, handrails, electrical systems, and associated work all in connection with the Conveyance Gate Rehabilitation Phase 3 Project.
  
2. "A Resolution Authorizing and Providing for the Sale and Issuance of up to \$5,686,226 General Obligation Sewerage System Promissory Notes, Series 2017C, Levying Taxes for the Payment Thereof, and All Related Details" for CWFP Project Number 3234-01, consisting of the replacement of main recycle screw conveyors #3 and #4, west recycle screw conveyors #1 and #2, recycle/product bin bucket discharge transfer screw conveyors #1 and #2, and recycle bin bucket elevators #1 and #2 in connection with Phase 3 of the Milorganite® Facility Improvements Project.

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**A Resolution Authorizing and Providing for the Sale and Issuance of up to  
\$3,852,100 General Obligation Sewerage System Promissory Notes, Series 2017B,  
Levying Taxes for the Payment Thereof,  
and All Related Details**

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RECITALS

The Metropolitan Sewerage District Commission (the “**Governing Body**”) of the Milwaukee Metropolitan Sewerage District, Wisconsin (the “**Issuer**”) makes the following findings and determinations:

1. Certain improvements to the Issuer’s sewerage system (the “**System**”) are necessary to meet the needs of the communities served by the System and the residents thereof, consisting of replacement of hydraulic cylinders and/or hydraulic accumulator tanks at nine dropshafts in the MMSD conveyance system, replacement of hydraulic conduits, electrical conduits, structural grating, handrails, electrical systems, and associated work all in connection with the Conveyance Gate Rehabilitation Phase 3 Project (collectively, the “**Project**”).

2. The Project has been assigned Clean Water Fund Program Project No. 3229-01 by the State of Wisconsin Department of Natural Resources (the “**Department of Natural Resources**”), and as defined in Department of Natural Resources approval letter for the Plans and Specifications of the Project, or portions thereof, issued under Section 281.41 of the Wisconsin Statutes; and assigned Number S-2014-0627 dated November 24, 2014, and Number S-2016-0426, dated August 15, 2016.

3. The Governing Body wishes to borrow the funds needed for the Project by selling and issuing general obligation sewerage system promissory notes pursuant to the provisions of Section 67.12 (12) of the Wisconsin Statutes.

4. The Issuer has taken all actions required by law and has the power to sell and issue the \$3,852,100 Milwaukee Metropolitan Sewerage District, Wisconsin General Obligation Sewerage System Promissory Notes, Series 2017B authorized by this resolution.

RESOLUTIONS

The Governing Body resolves as follows:

**Section 1. Definitions.**

In this resolution, the following terms have the meanings given in this section, unless the context requires another meaning.

“**Commission Officers**” means the Chairperson and the Secretary of the Governing Body of the Issuer. These are the officers required by law to execute general obligations on the Issuer’s behalf.

**“Continuing Disclosure Agreement”** means the Continuing Disclosure Agreement, dated as of the Original Issue Date, to be executed by the Issuer and delivered on the closing date for the Obligations.

**“CWFP”** means the State of Wisconsin Clean Water Fund Program.

**“Debt Service Fund”** means the fund created by the Issuer pursuant to Section 67.11 of the Wisconsin Statutes to provide for the payment of debt service on its general obligations.

**“Debt Service Fund Account”** has the meaning given in Section 13.

**“Director of Finance/Treasurer”** means the Issuer’s Director of Finance/Treasurer.

**“Financial Assistance Agreement”** means the Financial Assistance Agreement, dated as of the Original Issue Date, by and between the Issuer and the State of Wisconsin by the Department of Natural Resources and the Department of Administration, pursuant to which the Obligations are to be issued and sold to the State, in substantially the form accompanying this resolution and incorporated herein by reference.

**“Financial Officer”** means the Director of Finance/Treasurer.

**“Fiscal Agent”** means the Director of Finance/Treasurer or any successor fiscal agent appointed by the Issuer to act as authentication agent, paying agent, and registrar for the Obligations pursuant to Section 67.10 (2) of the Wisconsin Statutes.

**“Governing Body”** means the Issuer’s Metropolitan Sewerage District Commission.

**“Issuer”** means the Milwaukee Metropolitan Sewerage District, Wisconsin.

**“Obligations”** means the \$3,852,100 Milwaukee Metropolitan Sewerage District, Wisconsin General Obligation Sewerage System Promissory Notes, Series 2017B, which will be issued pursuant to this resolution.

**“Original Issue Date”** means December 13, 2017.

**“Project”** has the meaning given in the recitals to this resolution.

**“Purchase Price”** means up to \$3,852,100.

**“Record Date”** means the 15th day (whether or not a business day) of the calendar month just before each regularly scheduled interest payment date for the Obligations.

**“Recording Officer”** means the Secretary of the Issuer’s Governing Body.

**“Register”** means the register maintained by the Fiscal Agent at its principal office, in which the Fiscal Agent records:

- (i) The name and address of the owner of each Obligation.
- (ii) All transfers of each Obligation.

“**State**” means the State of Wisconsin Department of Administration.

**Section 2. Exhibits.**

The attached exhibits are also a part of this resolution as though they were fully written out in this resolution:

- (i) *Exhibit A* — Form of Obligation.
- (ii) *Exhibit B* — Notice to Electors of Sale.

**Section 3. Purposes of Borrowing; Issuance of Obligations.**

The Governing Body authorizes the Obligations and orders that they be prepared, executed, and issued. The Obligations will be fully registered, negotiable, general obligation sewerage system promissory notes of the Issuer in the principal amount of up to \$3,852,100. The Obligations will be issued pursuant to the provisions of the Financial Assistance Agreement and Section 67.12 (12) of the Wisconsin Statutes to pay the costs of the Project and to pay certain expenses of issuing the Obligations (including, but not limited to, printing costs and fees for financial consultants, bond counsel, rating agencies, insurance, and registration, as applicable).

**Section 4. Terms of Obligations.**

The Obligations will be named “Milwaukee Metropolitan Sewerage District, Wisconsin General Obligation Sewerage System Promissory Notes, Series 2017B.” The Obligations will be dated the Original Issue Date, even if they are actually issued or executed on another date. Each Obligation will also be dated the date to which it is authenticated by the Fiscal Agent. That date is its registration date.

The face amount of each Obligation will be in denominations of \$.01 or any multiple of \$.01 up to the principal amount authorized for that maturity.

The Obligations will bear interest from the Original Issue Date, or from the date principal evidenced by the Obligations was drawn by the Issuer (as described below), or from the most recent interest payment date to which interest has been paid. Interest will be due and payable on each May 1 and November 1 until the principal of the Obligations has been paid, beginning on May 1, 2018. Interest on each Obligation will be (i) computed on the basis of a 360-day year of twelve 30-day months and (ii) payable to the person or entity in whose name the Obligation is registered on the Register at the end of the day on the applicable Record Date. The Obligations will be numbered consecutively as may be required to comply with any applicable rules or customs or as determined by the Commission Officers executing the Obligations. The Obligations will mature on May 1, 2037 and will bear interest at the rate of 1.76%.

The principal evidenced by the Obligations may be drawn upon by the Issuer in accordance with the Financial Assistance Agreement. The principal of the Obligations so drawn

is payable in annual installments on each May 1, beginning on May 1, 2018, in the amounts set forth in the repayment schedule attached as Exhibit B to the Financial Assistance Agreement and in the attached Schedule 2 to Exhibit A. The repayment schedule has been calculated by the State assuming the full principal amount of the Obligations has been drawn by the Issuer on the Original Issue Date. The repayment schedule will be adjusted by the State from time to time based on the actual principal amounts drawn by the Issuer. The principal amounts so drawn shall be repaid in an amount equal to an amount which when amortized over the remaining term of the Obligations plus current payments of interest (but only on amounts drawn) at the interest rate set forth above shall result in equal annual payments of the total of principal of and interest due on the Obligations. The State shall record such draws of principal and principal repayments in the format shown on the attached Schedule 1 to Exhibit A.

The principal of and interest on the Obligations will be payable in lawful money of the United States of America.

**Section 5. Fiscal Agent.**

The Issuer appoints the Fiscal Agent to act as authentication agent, paying agent, and registrar for the Obligations. Among other things, the Fiscal Agent must maintain the Register.

**Section 6. Redemption.**

The Obligations are subject to optional redemption prior to maturity only as provided in the Financial Assistance Agreement and upon the written consent of the CWFP.

**Section 7. Manner of Payment/Transfers/Redemption Notices.**

*Payment.* On each principal payment date (whether at maturity, installment payment date, or redemption date) and on each interest payment date, the Fiscal Agent will pay the principal of, and interest on, each Obligation by electronic funds transfer or by check mailed to the person or entity in whose name the Obligation is registered on the Register at the end of the day on the applicable Record Date.

*Transfers.* Each Obligation is transferable, only upon the Register, for a like aggregate principal amount of the same maturity and interest rate in denominations of \$.01. A transfer may be requested by the registered owner in person or by a person with a written power of attorney. The Obligation must be surrendered to the Fiscal Agent, together with a written instrument of transfer satisfactory to the Fiscal Agent signed by the registered owner or by the person with the written power of attorney. The Issuer will issue one or more new fully registered Obligations in the same aggregate principal amount to the transferee or transferees, as applicable, in exchange for the surrendered Obligations and upon the payment of a charge sufficient to reimburse the Issuer or the Fiscal Agent for any tax, fee, or other governmental charge required to be paid with respect to such registration.

The Fiscal Agent will not be required to make any transfer of the Obligations (i) during the 15 calendar days before the date of any proposed redemption of the Obligations, or (ii) with respect to any particular Obligation, after the Obligation has been called for redemption.

*Partial Redemptions.* If less than all of the Obligations have been called for redemption, then the State will adjust the principal repayment schedule to reflect such partial redemption.

*Notice of Redemption.* So long as the CWFPP is the registered owner of the Obligations, no redemption notice is required to be sent in the event of any redemption of the Obligations.

*Accrual of Interest.* If payment of an Obligation called for redemption has been made or provided for, then interest on the Obligation stops accruing on the stated redemption date.

*Register.* The Issuer and the Fiscal Agent may treat the entity or person in whose name any Obligation is registered on the Register as the absolute owner of the Obligation for all purposes whatsoever under this resolution.

**Section 8. Form of Obligations.**

The Obligations shall be in substantially the form shown in Exhibit A. Omissions, insertions, or variations are permitted if they are deemed necessary or desirable and are consistent with this resolution or any supplemental resolution.

**Section 9. Execution of Obligations.**

The Obligations shall be signed by the persons who are the Commission Officers on the Original Issue Date. The Obligations shall be sealed with the Issuer's corporate seal (or a facsimile), if the Issuer has one, and they shall also be authenticated by the manual signature of the Fiscal Agent.

The Obligations will be valid and binding even if before they are delivered any person whose signature appears on the Obligations is no longer living or is no longer the person authorized to sign the Obligations. In that event, the Obligations will have the same effect as if the person were living or were still the person authorized to sign the Obligations.

A facsimile signature may be used as long as at least one signature of a Commission Officer is a manual signature or the Fiscal Agent's certificate of authentication has a manual signature. If a facsimile signature is used, then it will be treated as the officer's own signature.

**Section 10. Continuing Disclosure.**

The appropriate officers of the Issuer are directed to sign the Continuing Disclosure Agreement, and the Issuer agrees to comply with all of its terms. The Issuer shall amend the Continuing Disclosure Agreement from time to time as the CWFPP may require and to conform with any changes in rules or regulations by the Securities and Exchange Commission with respect to continuing disclosure.

**Section 11. Sale of Obligations; Financial Assistance Agreement.**

The Issuer awards the sale of the Obligations to the CWFP at the Purchase Price, plus any accrued interest from the Original Issue Date to the date of delivery of the Obligations. The Issuer approves and accepts the Financial Assistance Agreement presented by the CWFP to purchase the Obligations and agrees to perform all obligations of the Issuer set forth therein. The Commission Officers are directed to (i) sign the Financial Assistance Agreement in the Issuer's name and (ii) take any additional actions needed to complete the sale of the Obligations, including arranging for a closing of the sale. The Purchase Price for the Obligations shall be paid upon request therefor as provided in the Financial Assistance Agreement.

The Commission Officers are directed to sign the Obligations and to arrange for delivery of the Obligations to the CWFP upon payment by the CWFP of the Purchase Price, plus any accrued interest, as required by this resolution.

Unless waived by the CWFP, the sale of the Obligations is conditioned upon the Issuer furnishing the following items to the CWFP:

- (i) The Obligations, together with the written, unqualified approving opinions of the law firms of MWH Law Group LLP and Foley & Lardner LLP, co-bond counsel, evidencing the legality of the Obligations and that interest on the Obligations will be excluded from gross income for federal income tax purposes.
- (ii) A transcript of the proceedings relating to the issuance of the Obligations.
- (iii) A certificate showing that no litigation has been threatened or is pending that would affect the legality of the Obligations or the right of the Issuer to issue them at the time of their delivery.

**Section 12. General Obligation Pledge; Tax Levy.**

For the prompt payment of the principal of and interest on the Obligations, the Issuer irrevocably pledges its full faith and credit. The Issuer hereby levies upon all taxable property in its territory a direct, annual, and irrevocable tax in an amount sufficient to pay, and for the express purpose of paying, the interest on the Obligations as it falls due and also to pay and discharge the principal of the Obligations on the principal installment payment dates and at maturity.

This tax shall be carried from year to year into the Issuer's tax roll. It shall be collected in addition to all other taxes and in the same manner and at the same time as all other taxes. The amount of this tax that is carried into the Issuer's tax roll may be reduced in any year by the amount of any surplus money in the Debt Service Fund Account available to pay debt service on the Obligations for such year. Assuming the entire principal amount of the Obligations is drawn, the tax for each year the levy is made will be in the following amounts:



<u>Levy Year</u>	<u>Debt Service Amount Due in Following Year</u>	<u>Levy Year</u>	<u>Debt Service Amount Due in Following Year</u>
2017	\$ 220,822.45	2027	\$ 228,459.75
2018	228,706.95	2028	228,429.81
2019	228,681.36	2029	228,399.35
2020	228,655.32	2030	228,368.34
2021	228,628.82	2031	228,336.79
2022	228,601.85	2032	228,304.68
2023	228,574.42	2033	228,272.01
2024	228,546.50	2034	228,238.78
2025	228,518.09	2035	228,204.95
2026	228,489.17	2036	228,170.52

**Section 13. Debt Service Fund Account.**

The Issuer shall create a separate account within the Debt Service Fund solely for the Obligations (the “**Debt Service Fund Account**”), which shall be maintained and administered as provided in Section 67.11 of the Wisconsin Statutes. The Director of Finance/Treasurer is directed to keep the proceeds of the taxes levied under this resolution, when they are collected, in the Debt Service Fund Account. Any accrued interest received at the time of delivery of the Obligations and the premium, if any, paid to the Issuer by the CWFP in excess of the stated principal amount of the Obligations must be deposited into the Debt Service Fund Account and used to pay interest on the Obligations. If the money in the Debt Service Fund Account is insufficient to make a payment of principal of or interest on the Obligations on a date on which such a payment is due, then the Issuer will promptly provide the necessary funds to make the payment from other available sources. Money in the Debt Service Fund Account may be temporarily invested as provided in Section 66.0603 (1m) of the Wisconsin Statutes.

**Section 14. Borrowed Money Fund.**

In accordance with Section 67.10(3) of the Wisconsin Statutes, the sale proceeds of the Obligations (not including any accrued interest or premium received) shall be deposited and kept by the Director of Finance/Treasurer in a separate fund. The fund shall be designated with both the name of the Obligations and the name Borrowed Money Fund (herein referred to as the “**Borrowed Money Fund**”). Money in the Borrowed Money Fund, including any earnings, shall be (i) used to pay the costs of the Project, the costs of issuing the Obligations, and the costs of investing amounts in the Borrowed Money Fund, or (ii) transferred to the Debt Service Fund Account as provided by law. Money in the Borrowed Money Fund may be temporarily invested as provided in Section 66.0603 (1m) of the Wisconsin Statutes; *provided, however*, that pursuant to the terms of the Financial Assistance Agreement, money in the Borrowed Money Fund must

be disbursed within three business days after the Original Issue Date, or the date of receipt by the Issuer of any draws of principal on the Obligations, and must not be invested in an interest bearing account.

**Section 15. Publication of Notice.**

The Recording Officer is directed to publish notice that the Issuer has agreed to sell the Obligations. The notice shall be published in the Issuer's official newspaper as a class 1 notice under Chapter 985 of the Wisconsin Statutes promptly after the execution of the Financial Assistant Agreement. The notice shall be in substantially the form shown in Exhibit B. The Recording Officer shall obtain proof, in affidavit form, of the publication, and shall compare the notice as published with the attached form to make sure that no mistake was made in publication.

**Section 16. Authorization of Officers.**

The appropriate officers of the Issuer are directed to prepare and furnish the following items to the CWFP and the attorneys approving the legality of the Obligations:

- (i) Certified copies of proceedings and records of the Issuer relating to the Obligations and to the financial condition and affairs of the Issuer.
- (ii) Other affidavits, certificates, and information that may be required to show the facts about the legality of the Obligations, as such facts appear on the books and records under the officer's custody or control or as are otherwise known to the officer.

All certified copies, affidavits, certificates, and information furnished for such purpose will be representations of the Issuer as to the facts they present.

**Section 17. Tax Law Covenants.**

The Issuer covenants that it will comply with all requirements of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations promulgated thereunder, that must be satisfied so that interest on the Obligations will be excluded from gross income for federal income tax purposes.

**Section 18. Amendments.**

This resolution may (i) be amended from time to time without the written consent of the CWFP, to cure any ambiguity, administrative conflicts, formal defect, or omission or procedural inconsistency of this resolution, and (ii) be amended from time to time with the written consent of the CWFP, to modify any terms of the Obligations deemed necessary or advisable by the Issuer or the CWFP.

In the event the CWFP sells all or a portion of the Obligations, written consent referred to in (ii) above shall be required by the owners of not less than two-thirds of the principal amount then outstanding of the Obligations.

**Section 19. Further Authorization.**

The Issuer authorizes its officers, attorneys, and other agents or employees to do all acts required of them to carry out the purposes of this resolution.

**Section 20. Conflict with Prior Acts.**

In case any part of a prior action of the Governing Body conflicts with this resolution, that part of the prior action is hereby rescinded.

**Section 21. Severability of Invalid Provisions.**

If a court holds any provision of this resolution to be illegal or invalid, then the illegality or invalidity shall not affect any other provision of this resolution.

**Section 22. Resolution Effective upon Adoption and Approval.**

This resolution takes effect upon its adoption and approval in the manner provided by law.

*[Signature Page Follows]*

Adopted: November 27, 2017.

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John Hermes  
Commission Chairperson

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Anna Kettlewell  
Commission Secretary

EXHIBIT A  
FORM OF OBLIGATION

STATE OF WISCONSIN  
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

No. R-1

Registered  
\$3,852,100

GENERAL OBLIGATION SEWERAGE SYSTEM PROMISSORY NOTE,  
SERIES 2017B

<u>Interest Rate</u>	<u>Maturity Date</u>	<u>Original Issue Date</u>	<u>CUSIP</u>
1.76%	May 1, 2037	December 13, 2017	None

REGISTERED OWNER: STATE OF WISCONSIN CLEAN WATER FUND PROGRAM

PRINCIPAL AMOUNT: THREE MILLION EIGHT HUNDRED FIFTY-TWO THOUSAND  
ONE HUNDRED DOLLARS

THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WISCONSIN (herein called the “**Issuer**”), hereby acknowledges itself to owe and for value received promises to pay the Principal Amount to the Registered Owner on the Maturity Date or earlier installment payment date (as hereinafter described), and interest on the Principal Amount from the Original Issue Date at the annual rate of the Interest Rate. The actual interest amount due is based on the amount of principal drawn, from the dates so drawn (as hereinafter described), or from the most recent interest payment date to which interest has been paid. Interest is due and payable on each May 1 and November 1 until the Principal Amount has been paid, beginning on May 1, 2018. Interest is computed on the basis of a 360-day year of twelve 30-day months.

This Obligation is one of a duly authorized issue of notes (the “**Obligations**”) of the Issuer of an aggregate principal amount of \$3,852,100, all of like tenor, except as to denomination, issued by the Issuer pursuant to the provisions of Section 67.12 (12) of the Wisconsin Statutes, and is authorized by the resolution duly adopted by the governing body of the Issuer on November 27, 2017, entitled: “A Resolution Authorizing and Providing for the Sale and Issuance of up to \$3,852,100 General Obligation Sewerage System Promissory Notes, Series 2017B, Levying Taxes for the Payment Thereof, and All Related Details” (the “**Resolution**”). The Obligations are issuable only in the form of fully registered notes.

The Principal Amount evidenced by this Obligation may be drawn upon by the Issuer in accordance with the Financial Assistance Agreement (as defined in the Resolution).

The Principal Amount so drawn shall be repaid in annual installments on each May 1, beginning on May 1, 2018, in the amounts set forth in the repayment schedule attached as Exhibit B to the Financial Assistance Agreement and in the attached Schedule 2. The repayment schedule has been calculated by the State of Wisconsin Department of Administration (the “**State**”) assuming the full Principal Amount of the Obligations has been drawn by the Issuer on the Original Issue Date. The repayment schedule will be adjusted by the State from time to time based on the actual Principal Amounts drawn by the Issuer. The Principal Amounts so drawn shall be repaid in an amount equal to an amount which when amortized over the remaining term of this Obligation plus current payments of interest (but only on amounts drawn hereunder) at the Interest Rate shall result in equal annual payments of the total of principal of and interest on the Obligations. The State shall record draws of principal and principal repayments in the format shown on the attached Schedule 1.

On each principal payment date (whether at maturity or earlier installment payment or redemption date) and on each interest payment date, the Director of Finance/Treasurer of the Issuer (who will act as authentication agent, paying agent, and registrar for the Obligations), or any successor fiscal agent appointed by the Issuer to act as authentication agent, paying agent, and registrar for the Obligations under Section 67.10 (2) of the Wisconsin Statutes (hereinafter called the “**Fiscal Agent**”), will pay the principal of, and interest on, this Obligation by electronic funds transfer or by check mailed to the person or entity in whose name this Obligation is registered on the register (hereinafter called the “**Register**”) maintained by the Fiscal Agent at the end of the 15<sup>th</sup> day (whether or not a business day) of the calendar month just before a regularly scheduled interest payment date for the Obligations (the “**Record Date**”).

The principal of and interest on this Obligation is payable in lawful money of the United States of America. For the prompt payment of the principal of and interest on this Obligation, the Issuer has irrevocably pledged its full faith and credit. The Issuer has levied upon all taxable property in its territory a direct, annual, and irrevocable tax sufficient in amount to pay, and for the express purpose of paying, the interest on this Obligation as it falls due and the principal of this Obligation on the Maturity Date or earlier installment payment date.

The Obligations are subject to optional redemption prior to maturity only as provided in the Financial Assistance Agreement and upon the written consent of the Registered Owner.

*Transfers.* Each Obligation is transferable, only upon the Register, for a like aggregate principal amount of the same maturity and interest rate in denominations of \$.01. A transfer may be requested by the registered owner in person or by a person with a written power of attorney. The Obligation shall be surrendered to the Fiscal Agent, together with a written instrument of transfer satisfactory to the Fiscal Agent signed by the registered owner or by the person with the written power of attorney. The Issuer will issue one or more new fully registered Obligations, in the same aggregate principal amount to the transferee or transferees, as applicable, in exchange for the surrendered Obligations and upon the payment of a charge sufficient to reimburse the Issuer or the Fiscal Agent for any tax, fee, or other governmental charge required to be paid with respect to such registration.

The Fiscal Agent will not be required to make any transfer of the Obligations (i) during the 15 calendar days before the date of any proposed redemption of the Obligations, or (ii) with respect to any particular Obligation, after such Obligation has been called for redemption.

*Partial Redemptions.* If less than all of the Obligations have been called for redemption, then the State will adjust the principal repayment schedule to reflect such partial redemption.

*Notice of Redemption.* So long as the State of Wisconsin Clean Water Fund Program is the registered owner of the Obligations, no redemption notice is required to be sent in the event of any redemption of the Obligations.

*Accrual of Interest.* If payment of an Obligation called for redemption has been made or provided for, then interest on the Obligation stops accruing on the stated redemption date.

*Register.* The Issuer and the Fiscal Agent may treat the entity or person in whose name this Obligation is registered on the Register as the absolute owner of this Obligation for all purposes.

The Issuer certifies, recites, and declares that all acts, conditions, and procedures required by law to exist, to have happened, and to be performed, leading up to and in the issuing of this Obligation and of the issue of which it is a part, do exist, have happened, and have been performed in regular and due form, time, and manner as required by law; that the indebtedness of the Issuer, including this Obligation and the issue of which it is a part, does not exceed any limitation, general or special, imposed by law; and that a valid, direct, annual and irrevocable tax has been levied by the Issuer sufficient to pay the interest on this Obligation when it falls due and also to pay and discharge the principal of this Obligation at maturity or earlier installment payment date.

IN WITNESS WHEREOF, the Issuer, by its governing body, has caused this Obligation to be executed in its name and on its behalf by the manual or facsimile signatures of its Commission Chairperson and Commission Secretary and to be sealed with its corporate seal (or a facsimile thereof), if any, all as of the date specified above.

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT,  
WISCONSIN

By: \_\_\_\_\_  
John Hermes  
Commission Chairperson

[SEAL]

And: \_\_\_\_\_  
Anna Kettlewell  
Commission Secretary

Certificate of Authentication

Dated: December 13, 2017

This Obligation is one of the Obligations described in the Resolution.

By: \_\_\_\_\_  
Director of Finance/Treasurer, as Fiscal Agent





## SCHEDULE 2

### PRINCIPAL REPAYMENT SCHEDULE

<u>Date</u>	<u>Principal Amount</u>
May 1, 2018	\$ 162,363.94
May 1, 2019	165,221.54
May 1, 2020	168,129.44
May 1, 2021	171,088.52
May 1, 2022	174,099.68
May 1, 2023	177,163.83
May 1, 2024	180,281.92
May 1, 2025	183,454.88
May 1, 2026	186,683.69
May 1, 2027	189,969.32
May 1, 2028	193,312.78
May 1, 2029	196,715.08
May 1, 2030	200,177.27
May 1, 2031	203,700.39
May 1, 2032	207,285.52
May 1, 2033	210,933.74
May 1, 2034	214,646.17
May 1, 2035	218,423.95
May 1, 2036	222,268.21
May 1, 2037	226,180.13

ASSIGNMENT

For value received, the undersigned hereby sells, assigns, and transfers unto

PLEASE INSERT SOCIAL SECURITY OR  
OTHER IDENTIFYING NUMBER OF ASSIGNEE

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(Please Print or Type Name and Address of Assignee)

the within-mentioned Obligation and all rights thereunder and does hereby irrevocably constitute and appoint \_\_\_\_\_ attorney-in-fact, to transfer the same on the books of the registry in the office of the Fiscal Agent, with full power of substitution in the premises.

Dated: \_\_\_\_\_

Signature Guaranteed

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NOTICE: Signatures must be guaranteed by an “eligible guarantor institution” meeting the requirements of the Fiscal Agent. Those requirements include membership or participation in the Securities Transfer Association Medallion Program (“STAMP”) or such other “signature guarantee program” as may be determined by the Fiscal Agent in addition to, or in substitution for, STAMP, all in accordance with the Securities Exchange Act of 1934, as amended.

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Note: The signature to this assignment must correspond with the name as written on the face of the within Obligation in every particular, without any alteration or change. When assignment is made by a guardian, trustee, executor or administrator, an officer of a corporation, or anyone in a representative capacity, proof of the person’s authority to act must accompany this Obligation.

EXHIBIT B

NOTICE TO THE ELECTORS  
RESIDING IN THE  
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WISCONSIN  
RELATING TO NOTE SALE

On November 27, 2017, pursuant to Section 67.12 (12) of the Wisconsin Statutes, a resolution was offered, read, approved, and adopted whereby the Milwaukee Metropolitan Sewerage District, Wisconsin authorized the borrowing of money and the execution and delivery of a contract to sell general obligation sewerage system promissory notes in the principal amount of up to \$3,852,100. It is anticipated that the closing of this note financing will be held on or about December 13, 2017. A copy of all proceedings had to date with respect to the authorization and sale of said notes is on file and may be examined in the office of the Commission Secretary of the Milwaukee Metropolitan Sewerage District, at 260 West Seeboth Street, Milwaukee, Wisconsin between the hours of 9:00 a.m. and 4:30 p.m. on weekdays.

This notice is given pursuant to Section 893.77 of the Wisconsin Statutes, which provides that an action or proceeding to contest the validity of such financing, for other than constitutional reasons, shall be commenced within 30 days after the date of publication of this notice.

Publication Date: \_\_\_\_\_, 2017

/s/ Anna Kettlewell  
Commission Secretary

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**A Resolution Authorizing and Providing for the Sale and Issuance of up to  
\$5,686,226 General Obligation Sewerage System Promissory Notes, Series 2017C,  
Levying Taxes for the Payment Thereof,  
and All Related Details**

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RECITALS

The Metropolitan Sewerage District Commission (the “**Governing Body**”) of the Milwaukee Metropolitan Sewerage District, Wisconsin (the “**Issuer**”) makes the following findings and determinations:

1. Certain improvements to the Issuer’s sewerage system (the “**System**”) are necessary to meet the needs of the communities served by the System and the residents thereof, consisting of the replacement of main recycle screw conveyors #3 and #4, west recycle screw conveyors #1 and #2, recycle/product bin bucket discharge transfer screw conveyors #1 and #2, and recycle bin bucket elevators #1 and #2 in connection with Phase 3 of the Milorganite Facility Improvements Project (collectively, the “**Project**”).

2. The Project has been assigned Clean Water Fund Program Project No. 3234-01 by the State of Wisconsin Department of Natural Resources (the “**Department of Natural Resources**”), and as defined in Department of Natural Resources approval letter for the Plans and Specifications of the Project, or portions thereof, issued under Section 281.41 of the Wisconsin Statutes; and assigned Number S-2016-0305 dated June 22, 2016.

3. The Governing Body wishes to borrow the funds needed for the Project by selling and issuing general obligation sewerage system promissory notes pursuant to the provisions of Section 67.12 (12) of the Wisconsin Statutes.

4. The Issuer has taken all actions required by law and has the power to sell and issue the \$5,686,226 Milwaukee Metropolitan Sewerage District, Wisconsin General Obligation Sewerage System Promissory Notes, Series 2017C authorized by this resolution.

RESOLUTIONS

The Governing Body resolves as follows:

**Section 1. Definitions.**

In this resolution, the following terms have the meanings given in this section, unless the context requires another meaning.

“**Commission Officers**” means the Chairperson and the Secretary of the Governing Body of the Issuer. These are the officers required by law to execute general obligations on the Issuer’s behalf.

**“Continuing Disclosure Agreement”** means the Continuing Disclosure Agreement, dated as of the Original Issue Date, to be executed by the Issuer and delivered on the closing date for the Obligations.

**“CWFP”** means the State of Wisconsin Clean Water Fund Program.

**“Debt Service Fund”** means the fund created by the Issuer pursuant to Section 67.11 of the Wisconsin Statutes to provide for the payment of debt service on its general obligations.

**“Debt Service Fund Account”** has the meaning given in Section 13.

**“Director of Finance/Treasurer”** means the Issuer’s Director of Finance/Treasurer.

**“Financial Assistance Agreement”** means the Financial Assistance Agreement, dated as of the Original Issue Date, by and between the Issuer and the State of Wisconsin by the Department of Natural Resources and the Department of Administration, pursuant to which the Obligations are to be issued and sold to the State, in substantially the form accompanying this resolution and incorporated herein by reference.

**“Financial Officer”** means the Director of Finance/Treasurer.

**“Fiscal Agent”** means the Director of Finance/Treasurer or any successor fiscal agent appointed by the Issuer to act as authentication agent, paying agent, and registrar for the Obligations pursuant to Section 67.10 (2) of the Wisconsin Statutes.

**“Governing Body”** means the Issuer’s Metropolitan Sewerage District Commission.

**“Issuer”** means the Milwaukee Metropolitan Sewerage District, Wisconsin.

**“Obligations”** means the \$5,686,226 Milwaukee Metropolitan Sewerage District, Wisconsin General Obligation Sewerage System Promissory Notes, Series 2017C, which will be issued pursuant to this resolution.

**“Original Issue Date”** means December 13, 2017.

**“Project”** has the meaning given in the recitals to this resolution.

**“Purchase Price”** means up to \$5,686,226.

**“Record Date”** means the 15th day (whether or not a business day) of the calendar month just before each regularly scheduled interest payment date for the Obligations.

**“Recording Officer”** means the Secretary of the Issuer’s Governing Body.

**“Register”** means the register maintained by the Fiscal Agent at its principal office, in which the Fiscal Agent records:

- (i) The name and address of the owner of each Obligation.
- (ii) All transfers of each Obligation.

“State” means the State of Wisconsin Department of Administration.

**Section 2. Exhibits.**

The attached exhibits are also a part of this resolution as though they were fully written out in this resolution:

- (i) *Exhibit A* — Form of Obligation.
- (ii) *Exhibit B* — Notice to Electors of Sale.

**Section 3. Purposes of Borrowing; Issuance of Obligations.**

The Governing Body authorizes the Obligations and orders that they be prepared, executed, and issued. The Obligations will be fully registered, negotiable, general obligation sewerage system promissory notes of the Issuer in the principal amount of up to \$5,686,226. The Obligations will be issued pursuant to the provisions of the Financial Assistance Agreement and Section 67.12 (12) of the Wisconsin Statutes to pay the costs of the Project and to pay certain expenses of issuing the Obligations (including, but not limited to, printing costs and fees for financial consultants, bond counsel, rating agencies, insurance, and registration, as applicable).

**Section 4. Terms of Obligations.**

The Obligations will be named “Milwaukee Metropolitan Sewerage District, Wisconsin General Obligation Sewerage System Promissory Notes, Series 2017C.” The Obligations will be dated the Original Issue Date, even if they are actually issued or executed on another date. Each Obligation will also be dated the date to which it is authenticated by the Fiscal Agent. That date is its registration date.

The face amount of each Obligation will be in denominations of \$.01 or any multiple of \$.01 up to the principal amount authorized for that maturity.

The Obligations will bear interest from the Original Issue Date, or from the date principal evidenced by the Obligations was drawn by the Issuer (as described below), or from the most recent interest payment date to which interest has been paid. Interest will be due and payable on each May 1 and November 1 until the principal of the Obligations has been paid, beginning on May 1, 2018. Interest on each Obligation will be (i) computed on the basis of a 360-day year of twelve 30-day months and (ii) payable to the person or entity in whose name the Obligation is registered on the Register at the end of the day on the applicable Record Date. The Obligations will be numbered consecutively as may be required to comply with any applicable rules or customs or as determined by the Commission Officers executing the Obligations. The Obligations will mature on May 1, 2037 and will bear interest at the rate of 1.76%.

The principal evidenced by the Obligations may be drawn upon by the Issuer in accordance with the Financial Assistance Agreement. The principal of the Obligations so drawn

is payable in annual installments on each May 1, beginning on May 1, 2018, in the amounts set forth in the repayment schedule attached as Exhibit B to the Financial Assistance Agreement and in the attached Schedule 2 to Exhibit A. The repayment schedule has been calculated by the State assuming the full principal amount of the Obligations has been drawn by the Issuer on the Original Issue Date. The repayment schedule will be adjusted by the State from time to time based on the actual principal amounts drawn by the Issuer. The principal amounts so drawn shall be repaid in an amount equal to an amount which when amortized over the remaining term of the Obligations plus current payments of interest (but only on amounts drawn) at the interest rate set forth above shall result in equal annual payments of the total of principal of and interest due on the Obligations. The State shall record such draws of principal and principal repayments in the format shown on the attached Schedule 1 to Exhibit A.

The principal of and interest on the Obligations will be payable in lawful money of the United States of America.

**Section 5. Fiscal Agent.**

The Issuer appoints the Fiscal Agent to act as authentication agent, paying agent, and registrar for the Obligations. Among other things, the Fiscal Agent must maintain the Register.

**Section 6. Redemption.**

The Obligations are subject to optional redemption prior to maturity only as provided in the Financial Assistance Agreement and upon the written consent of the CWFP.

**Section 7. Manner of Payment/Transfers/Redemption Notices.**

*Payment.* On each principal payment date (whether at maturity, installment payment date, or redemption date) and on each interest payment date, the Fiscal Agent will pay the principal of, and interest on, each Obligation by electronic funds transfer or by check mailed to the person or entity in whose name the Obligation is registered on the Register at the end of the day on the applicable Record Date.

*Transfers.* Each Obligation is transferable, only upon the Register, for a like aggregate principal amount of the same maturity and interest rate in denominations of \$.01. A transfer may be requested by the registered owner in person or by a person with a written power of attorney. The Obligation must be surrendered to the Fiscal Agent, together with a written instrument of transfer satisfactory to the Fiscal Agent signed by the registered owner or by the person with the written power of attorney. The Issuer will issue one or more new fully registered Obligations in the same aggregate principal amount to the transferee or transferees, as applicable, in exchange for the surrendered Obligations and upon the payment of a charge sufficient to reimburse the Issuer or the Fiscal Agent for any tax, fee, or other governmental charge required to be paid with respect to such registration.

The Fiscal Agent will not be required to make any transfer of the Obligations (i) during the 15 calendar days before the date of any proposed redemption of the Obligations, or (ii) with respect to any particular Obligation, after the Obligation has been called for redemption.



*Partial Redemptions.* If less than all of the Obligations have been called for redemption, then the State will adjust the principal repayment schedule to reflect such partial redemption.

*Notice of Redemption.* So long as the CWFP is the registered owner of the Obligations, no redemption notice is required to be sent in the event of any redemption of the Obligations.

*Accrual of Interest.* If payment of an Obligation called for redemption has been made or provided for, then interest on the Obligation stops accruing on the stated redemption date.

*Register.* The Issuer and the Fiscal Agent may treat the entity or person in whose name any Obligation is registered on the Register as the absolute owner of the Obligation for all purposes whatsoever under this resolution.

**Section 8. Form of Obligations.**

The Obligations shall be in substantially the form shown in Exhibit A. Omissions, insertions, or variations are permitted if they are deemed necessary or desirable and are consistent with this resolution or any supplemental resolution.

**Section 9. Execution of Obligations.**

The Obligations shall be signed by the persons who are the Commission Officers on the Original Issue Date. The Obligations shall be sealed with the Issuer's corporate seal (or a facsimile), if the Issuer has one, and they shall also be authenticated by the manual signature of the Fiscal Agent.

The Obligations will be valid and binding even if before they are delivered any person whose signature appears on the Obligations is no longer living or is no longer the person authorized to sign the Obligations. In that event, the Obligations will have the same effect as if the person were living or were still the person authorized to sign the Obligations.

A facsimile signature may be used as long as at least one signature of a Commission Officer is a manual signature or the Fiscal Agent's certificate of authentication has a manual signature. If a facsimile signature is used, then it will be treated as the officer's own signature.

**Section 10. Continuing Disclosure.**

The appropriate officers of the Issuer are directed to sign the Continuing Disclosure Agreement, and the Issuer agrees to comply with all of its terms. The Issuer shall amend the Continuing Disclosure Agreement from time to time as the CWFP may require and to conform with any changes in rules or regulations by the Securities and Exchange Commission with respect to continuing disclosure.

**Section 11. Sale of Obligations; Financial Assistance Agreement.**

The Issuer awards the sale of the Obligations to the CWFP at the Purchase Price, plus any accrued interest from the Original Issue Date to the date of delivery of the Obligations. The Issuer approves and accepts the Financial Assistance Agreement presented by the CWFP to purchase the Obligations and agrees to perform all obligations of the Issuer set forth therein. The Commission Officers are directed to (i) sign the Financial Assistance Agreement in the Issuer's name and (ii) take any additional actions needed to complete the sale of the Obligations, including arranging for a closing of the sale. The Purchase Price for the Obligations shall be paid upon request therefor as provided in the Financial Assistance Agreement.

The Commission Officers are directed to sign the Obligations and to arrange for delivery of the Obligations to the CWFP upon payment by the CWFP of the Purchase Price, plus any accrued interest, as required by this resolution.

Unless waived by the CWFP, the sale of the Obligations is conditioned upon the Issuer furnishing the following items to the CWFP:

- (i) The Obligations, together with the written, unqualified approving opinions of the law firms of MWH Law Group LLP and Foley & Lardner LLP, co-bond counsel, evidencing the legality of the Obligations and that interest on the Obligations will be excluded from gross income for federal income tax purposes.
- (ii) A transcript of the proceedings relating to the issuance of the Obligations.
- (iii) A certificate showing that no litigation has been threatened or is pending that would affect the legality of the Obligations or the right of the Issuer to issue them at the time of their delivery.

**Section 12. General Obligation Pledge; Tax Levy.**

For the prompt payment of the principal of and interest on the Obligations, the Issuer irrevocably pledges its full faith and credit. The Issuer hereby levies upon all taxable property in its territory a direct, annual, and irrevocable tax in an amount sufficient to pay, and for the express purpose of paying, the interest on the Obligations as it falls due and also to pay and discharge the principal of the Obligations on the principal installment payment dates and at maturity.

This tax shall be carried from year to year into the Issuer's tax roll. It shall be collected in addition to all other taxes and in the same manner and at the same time as all other taxes. The amount of this tax that is carried into the Issuer's tax roll may be reduced in any year by the amount of any surplus money in the Debt Service Fund Account available to pay debt service on the Obligations for such year. Assuming the entire principal amount of the Obligations is drawn, the tax for each year the levy is made will be in the following amounts:

<u>Levy Year</u>	<u>Debt Service Amount Due in Following Year</u>	<u>Levy Year</u>	<u>Debt Service Amount Due in Following Year</u>
2017	\$ 325,964.11	2027	\$ 337,237.81
2018	337,602.71	2028	337,193.61
2019	337,564.93	2029	337,148.63
2020	337,526.50	2030	337,102.87
2021	337,487.39	2031	337,056.31
2022	337,447.59	2032	337,008.92
2023	337,407.08	2033	336,960.69
2024	337,365.85	2034	336,911.61
2025	337,323.91	2035	336,861.68
2026	337,281.23	2036	336,810.86

**Section 13. Debt Service Fund Account.**

The Issuer shall create a separate account within the Debt Service Fund solely for the Obligations (the “**Debt Service Fund Account**”), which shall be maintained and administered as provided in Section 67.11 of the Wisconsin Statutes. The Director of Finance/Treasurer is directed to keep the proceeds of the taxes levied under this resolution, when they are collected, in the Debt Service Fund Account. Any accrued interest received at the time of delivery of the Obligations and the premium, if any, paid to the Issuer by the CWFP in excess of the stated principal amount of the Obligations must be deposited into the Debt Service Fund Account and used to pay interest on the Obligations. If the money in the Debt Service Fund Account is insufficient to make a payment of principal of or interest on the Obligations on a date on which such a payment is due, then the Issuer will promptly provide the necessary funds to make the payment from other available sources. Money in the Debt Service Fund Account may be temporarily invested as provided in Section 66.0603 (1m) of the Wisconsin Statutes.

**Section 14. Borrowed Money Fund.**

In accordance with Section 67.10(3) of the Wisconsin Statutes, the sale proceeds of the Obligations (not including any accrued interest or premium received) shall be deposited and kept by the Director of Finance/Treasurer in a separate fund. The fund shall be designated with both the name of the Obligations and the name Borrowed Money Fund (herein referred to as the “**Borrowed Money Fund**”). Money in the Borrowed Money Fund, including any earnings, shall be (i) used to pay the costs of the Project, the costs of issuing the Obligations, and the costs of investing amounts in the Borrowed Money Fund, or (ii) transferred to the Debt Service Fund Account as provided by law. Money in the Borrowed Money Fund may be temporarily invested as provided in Section 66.0603 (1m) of the Wisconsin Statutes; *provided, however*, that pursuant to the terms of the Financial Assistance Agreement, money in the Borrowed Money Fund must

be disbursed within three business days after the Original Issue Date, or the date of receipt by the Issuer of any draws of principal on the Obligations, and must not be invested in an interest bearing account.

**Section 15. Publication of Notice.**

The Recording Officer is directed to publish notice that the Issuer has agreed to sell the Obligations. The notice shall be published in the Issuer's official newspaper as a class 1 notice under Chapter 985 of the Wisconsin Statutes promptly after the execution of the Financial Assistant Agreement. The notice shall be in substantially the form shown in Exhibit B. The Recording Officer shall obtain proof, in affidavit form, of the publication, and shall compare the notice as published with the attached form to make sure that no mistake was made in publication.

**Section 16. Authorization of Officers.**

The appropriate officers of the Issuer are directed to prepare and furnish the following items to the CWFP and the attorneys approving the legality of the Obligations:

- (i) Certified copies of proceedings and records of the Issuer relating to the Obligations and to the financial condition and affairs of the Issuer.
- (ii) Other affidavits, certificates, and information that may be required to show the facts about the legality of the Obligations, as such facts appear on the books and records under the officer's custody or control or as are otherwise known to the officer.

All certified copies, affidavits, certificates, and information furnished for such purpose will be representations of the Issuer as to the facts they present.

**Section 17. Tax Law Covenants.**

The Issuer covenants that it will comply with all requirements of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations promulgated thereunder, that must be satisfied so that interest on the Obligations will be excluded from gross income for federal income tax purposes.

**Section 18. Amendments.**

This resolution may (i) be amended from time to time without the written consent of the CWFP, to cure any ambiguity, administrative conflicts, formal defect, or omission or procedural inconsistency of this resolution, and (ii) be amended from time to time with the written consent of the CWFP, to modify any terms of the Obligations deemed necessary or advisable by the Issuer or the CWFP.

In the event the CWFP sells all or a portion of the Obligations, written consent referred to in (ii) above shall be required by the owners of not less than two-thirds of the principal amount then outstanding of the Obligations.

**Section 19. Further Authorization.**

The Issuer authorizes its officers, attorneys, and other agents or employees to do all acts required of them to carry out the purposes of this resolution.

**Section 20. Conflict with Prior Acts.**

In case any part of a prior action of the Governing Body conflicts with this resolution, that part of the prior action is hereby rescinded.

**Section 21. Severability of Invalid Provisions.**

If a court holds any provision of this resolution to be illegal or invalid, then the illegality or invalidity shall not affect any other provision of this resolution.

**Section 22. Resolution Effective upon Adoption and Approval.**

This resolution takes effect upon its adoption and approval in the manner provided by law.

*[Signature Page Follows]*

Adopted: November 27, 2017.

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John Hermes  
Commission Chairperson

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Anna Kettlewell  
Commission Secretary

EXHIBIT A  
FORM OF OBLIGATION

STATE OF WISCONSIN  
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

No. R-1

Registered  
\$5,686,226

GENERAL OBLIGATION SEWERAGE SYSTEM PROMISSORY NOTE,  
SERIES 2017C

<u>Interest Rate</u>	<u>Maturity Date</u>	<u>Original Issue Date</u>	<u>CUSIP</u>
1.76%	May 1, 2037	December 13, 2017	None

REGISTERED OWNER: STATE OF WISCONSIN CLEAN WATER FUND PROGRAM

PRINCIPAL AMOUNT: FIVE MILLION SIX HUNDRED EIGHTY-SIX THOUSAND  
TWO HUNDRED TWENTY-SIX DOLLARS

THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WISCONSIN (herein called the “**Issuer**”), hereby acknowledges itself to owe and for value received promises to pay the Principal Amount to the Registered Owner on the Maturity Date or earlier installment payment date (as hereinafter described), and interest on the Principal Amount from the Original Issue Date at the annual rate of the Interest Rate. The actual interest amount due is based on the amount of principal drawn, from the dates so drawn (as hereinafter described), or from the most recent interest payment date to which interest has been paid. Interest is due and payable on each May 1 and November 1 until the Principal Amount has been paid, beginning on May 1, 2018. Interest is computed on the basis of a 360-day year of twelve 30-day months.

This Obligation is one of a duly authorized issue of notes (the “**Obligations**”) of the Issuer of an aggregate principal amount of \$5,686,226, all of like tenor, except as to denomination, issued by the Issuer pursuant to the provisions of Section 67.12 (12) of the Wisconsin Statutes, and is authorized by the resolution duly adopted by the governing body of the Issuer on November 27, 2017, entitled: “A Resolution Authorizing and Providing for the Sale and Issuance of up to \$5,686,226 General Obligation Sewerage System Promissory Notes, Series 2017C, Levying Taxes for the Payment Thereof, and All Related Details” (the “**Resolution**”). The Obligations are issuable only in the form of fully registered notes.

The Principal Amount evidenced by this Obligation may be drawn upon by the Issuer in accordance with the Financial Assistance Agreement (as defined in the Resolution).

The Principal Amount so drawn shall be repaid in annual installments on each May 1, beginning on May 1, 2018, in the amounts set forth in the repayment schedule attached as Exhibit B to the Financial Assistance Agreement and in the attached Schedule 2. The repayment schedule has been calculated by the State of Wisconsin Department of Administration (the “**State**”) assuming the full Principal Amount of the Obligations has been drawn by the Issuer on the Original Issue Date. The repayment schedule will be adjusted by the State from time to time based on the actual Principal Amounts drawn by the Issuer. The Principal Amounts so drawn shall be repaid in an amount equal to an amount which when amortized over the remaining term of this Obligation plus current payments of interest (but only on amounts drawn hereunder) at the Interest Rate shall result in equal annual payments of the total of principal of and interest on the Obligations. The State shall record draws of principal and principal repayments in the format shown on the attached Schedule 1.

On each principal payment date (whether at maturity or earlier installment payment or redemption date) and on each interest payment date, the Director of Finance/Treasurer of the Issuer (who will act as authentication agent, paying agent, and registrar for the Obligations), or any successor fiscal agent appointed by the Issuer to act as authentication agent, paying agent, and registrar for the Obligations under Section 67.10 (2) of the Wisconsin Statutes (hereinafter called the “**Fiscal Agent**”), will pay the principal of, and interest on, this Obligation by electronic funds transfer or by check mailed to the person or entity in whose name this Obligation is registered on the register (hereinafter called the “**Register**”) maintained by the Fiscal Agent at the end of the 15<sup>th</sup> day (whether or not a business day) of the calendar month just before a regularly scheduled interest payment date for the Obligations (the “**Record Date**”).

The principal of and interest on this Obligation is payable in lawful money of the United States of America. For the prompt payment of the principal of and interest on this Obligation, the Issuer has irrevocably pledged its full faith and credit. The Issuer has levied upon all taxable property in its territory a direct, annual, and irrevocable tax sufficient in amount to pay, and for the express purpose of paying, the interest on this Obligation as it falls due and the principal of this Obligation on the Maturity Date or earlier installment payment date.

The Obligations are subject to optional redemption prior to maturity only as provided in the Financial Assistance Agreement and upon the written consent of the Registered Owner.

*Transfers.* Each Obligation is transferable, only upon the Register, for a like aggregate principal amount of the same maturity and interest rate in denominations of \$.01. A transfer may be requested by the registered owner in person or by a person with a written power of attorney. The Obligation shall be surrendered to the Fiscal Agent, together with a written instrument of transfer satisfactory to the Fiscal Agent signed by the registered owner or by the person with the written power of attorney. The Issuer will issue one or more new fully registered Obligations, in the same aggregate principal amount to the transferee or transferees, as applicable, in exchange for the surrendered Obligations and upon the payment of a charge sufficient to reimburse the Issuer or the Fiscal Agent for any tax, fee, or other governmental charge required to be paid with respect to such registration.



The Fiscal Agent will not be required to make any transfer of the Obligations (i) during the 15 calendar days before the date of any proposed redemption of the Obligations, or (ii) with respect to any particular Obligation, after such Obligation has been called for redemption.

*Partial Redemptions.* If less than all of the Obligations have been called for redemption, then the State will adjust the principal repayment schedule to reflect such partial redemption.

*Notice of Redemption.* So long as the State of Wisconsin Clean Water Fund Program is the registered owner of the Obligations, no redemption notice is required to be sent in the event of any redemption of the Obligations.

*Accrual of Interest.* If payment of an Obligation called for redemption has been made or provided for, then interest on the Obligation stops accruing on the stated redemption date.

*Register.* The Issuer and the Fiscal Agent may treat the entity or person in whose name this Obligation is registered on the Register as the absolute owner of this Obligation for all purposes.

The Issuer certifies, recites, and declares that all acts, conditions, and procedures required by law to exist, to have happened, and to be performed, leading up to and in the issuing of this Obligation and of the issue of which it is a part, do exist, have happened, and have been performed in regular and due form, time, and manner as required by law; that the indebtedness of the Issuer, including this Obligation and the issue of which it is a part, does not exceed any limitation, general or special, imposed by law; and that a valid, direct, annual and irrevocable tax has been levied by the Issuer sufficient to pay the interest on this Obligation when it falls due and also to pay and discharge the principal of this Obligation at maturity or earlier installment payment date.

IN WITNESS WHEREOF, the Issuer, by its governing body, has caused this Obligation to be executed in its name and on its behalf by the manual or facsimile signatures of its Commission Chairperson and Commission Secretary and to be sealed with its corporate seal (or a facsimile thereof), if any, all as of the date specified above.

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT,  
WISCONSIN

By: \_\_\_\_\_  
John Hermes  
Commission Chairperson

[SEAL]

And: \_\_\_\_\_  
Anna Kettlewell  
Commission Secretary

Certificate of Authentication

Dated: December 13, 2017

This Obligation is one of the Obligations described in the Resolution.

By: \_\_\_\_\_  
Director of Finance/Treasurer, as Fiscal Agent

**SCHEDULE 1**

RECORD OF DRAWS OF PRINCIPAL AND PRINCIPAL REPAYMENTS

\$5,686,226

Milwaukee Metropolitan Sewerage District, Wisconsin  
General Obligation Sewerage System Promissory Notes, Series 2017C

<u>Amount of Principal Drawn</u>	<u>Draw Date</u>	<u>Amount of Principal Repaid</u>	<u>Principal Outstanding After Repayment</u>
\$ _____	_____	\$ _____	\$ _____
_____	_____	_____	_____
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**SCHEDULE 2**

PRINCIPAL REPAYMENT SCHEDULE

<u>Date</u>	<u>Principal Amount</u>
May 1, 2018	\$ 239,671.36
May 1, 2019	243,889.58
May 1, 2020	248,182.03
May 1, 2021	252,550.04
May 1, 2022	256,994.92
May 1, 2023	261,518.03
May 1, 2024	266,120.75
May 1, 2025	270,804.47
May 1, 2026	275,570.63
May 1, 2027	280,420.67
May 1, 2028	285,356.08
May 1, 2029	290,378.34
May 1, 2030	295,489.00
May 1, 2031	300,689.61
May 1, 2032	305,981.75
May 1, 2033	311,367.03
May 1, 2034	316,847.09
May 1, 2035	322,423.59
May 1, 2036	328,098.25
May 1, 2037	333,872.78

ASSIGNMENT

For value received, the undersigned hereby sells, assigns, and transfers unto

PLEASE INSERT SOCIAL SECURITY OR  
OTHER IDENTIFYING NUMBER OF ASSIGNEE

[Empty rectangular box for Social Security or other identifying number]

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(Please Print or Type Name and Address of Assignee)

the within-mentioned Obligation and all rights thereunder and does hereby irrevocably constitute and appoint \_\_\_\_\_ attorney-in-fact, to transfer the same on the books of the registry in the office of the Fiscal Agent, with full power of substitution in the premises.

Dated: \_\_\_\_\_

Signature Guaranteed

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NOTICE: Signatures must be guaranteed by an “eligible guarantor institution” meeting the requirements of the Fiscal Agent. Those requirements include membership or participation in the Securities Transfer Association Medallion Program (“STAMP”) or such other “signature guarantee program” as may be determined by the Fiscal Agent in addition to, or in substitution for, STAMP, all in accordance with the Securities Exchange Act of 1934, as amended.

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Note: The signature to this assignment must correspond with the name as written on the face of the within Obligation in every particular, without any alteration or change. When assignment is made by a guardian, trustee, executor or administrator, an officer of a corporation, or anyone in a representative capacity, proof of the person’s authority to act must accompany this Obligation.

EXHIBIT B

NOTICE TO THE ELECTORS  
RESIDING IN THE  
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WISCONSIN  
RELATING TO NOTE SALE

On November 27, 2017, pursuant to Section 67.12 (12) of the Wisconsin Statutes, a resolution was offered, read, approved, and adopted whereby the Milwaukee Metropolitan Sewerage District, Wisconsin authorized the borrowing of money and the execution and delivery of a contract to sell general obligation sewerage system promissory notes in the principal amount of up to \$5,686,226. It is anticipated that the closing of this note financing will be held on or about December 13, 2017. A copy of all proceedings had to date with respect to the authorization and sale of said notes is on file and may be examined in the office of the Commission Secretary of the Milwaukee Metropolitan Sewerage District, at 260 West Seeboth Street, Milwaukee, Wisconsin between the hours of 9:00 a.m. and 4:30 p.m. on weekdays.

This notice is given pursuant to Section 893.77 of the Wisconsin Statutes, which provides that an action or proceeding to contest the validity of such financing, for other than constitutional reasons, shall be commenced within 30 days after the date of publication of this notice.

Publication Date: \_\_\_\_\_, 2017

/s/ Anna Kettlewell  
Commission Secretary



**COMMISSION FILE NO:** 17-114-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Authorizing the Executive Director to Extend the Contracts for Prescription Drug and Supplemental Medical Coverage for Post Medicare Retirees

**SUMMARY:**

The Commission is requested to authorize the Executive Director to extend contracts with Express Scripts for prescription coverage and with United American Insurance to provide supplemental medical coverage for Medicare-eligible retirees from January 1, 2018, through December 31, 2018.

The District currently carries post-65 (Medicare) retiree medical coverage with United American and prescription coverage with Express Scripts. The renewal for retiree medical coverage with United American increased 3.2% from \$188.00 to \$194.00 per retiree per month (PRPM). In January 2015, the District changed carriers for retiree medical from Monumental Life to United American, decreasing costs from \$224.87 PRPM on the renewal to \$177.00 PRPM. This was a savings to the District of approximately \$320,000. In addition to the savings, United American had a five-year history of very stable, modest renewals (all between 2- 4%). The 3.2% increase for 2018 is within this range and below average medical inflation.

The renewal for the retiree prescription program increased from \$221.65 to \$232.29 PRPM, or 4.8% for 2018. Increased pharmacy cost trend (or inflation), plan utilization, and the increase in specialty drug utilization lead to the increase in pharmacy. The 4.8% retiree prescription renewal is equivalent to the increase received last year and what the industry has seen on other retiree prescription programs. The District and many retirees have also expressed extreme satisfaction in the customer service provided by the two vendors.

**ATTACHMENTS:** **BACKGROUND**  **KEY ISSUES**  **RESOLUTION**   
**FISCAL NOTE**  **S/W/MBE**  **OTHER**  \_\_\_\_\_

*PDF\_ExtendContractsRetirees\_legislative\_file.docx  
10-20-17*

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## SUMMARY (Cont'd)

Authorizing the Executive Director to Extend the Contracts for Prescription Drug and Supplemental Medical Coverage for Post Medicare Retirees

---

The current contracts with United American and Express Scripts are authorized through December 31, 2017. The table below summarizes PRPM rate changes from 2017 to 2018 and the percentage rate increase/decrease anticipated with the recommended carrier:

### Rates (PRPM)

	2017	2018	% Increase/Decrease
Express Scripts (Rx)	\$221.65	\$232.29	4.8%
United American (proposed Medical Supplement)	\$188.00	\$194.00	3.2%



## **BACKGROUND**

### **Authorizing the Executive Director to Extend the Contracts for Prescription Drug and Supplemental Medical Coverage for Post Medicare Retirees**

---

In August 2003, health insurance coverage for Medicare-eligible retirees and their spouses over the age of 65 was changed to an insured Medicare supplemental insurance plan. This transition to the insured Medicare supplemental plan was, in part, done because the District was having difficulty obtaining claims administration and stop loss quotes for self-insured health insurance due to the high retiree population. Since this is an insured plan, it is easier to budget the health plan expenditures for the retiree population. This plan has provided efficiencies in claims administration for the retiree population. With the retiree's concurrence, the claims administrator can obtain the Medicare payment on claims for retirees electronically, which expedites the claims processing time.

The recommendation is to keep the retiree medical coverage with United American and prescription coverage with Express Scripts. United American and Express Scripts are two highly regarded carriers, and the increases at renewal have been reasonable over the last couple of years, staying within or slightly below medical trend.

## RESOLUTION

Authorizing the Executive Director to Extend the Contracts for Prescription Drug and Supplemental Medical Coverage for Post Medicare Retirees

---

**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to extend the contracts with Express Scripts for prescription coverage and with United American Insurance to provide supplemental medical coverage for Medicare-eligible retirees from January 1, 2018, through December 31, 2018.



## O&M Budget Fiscal Note

**RELATING TO:**

Authorizing the Executive Director to Extend the Contracts for Prescription Drug and Supplemental Medical Coverage for Post Medicare Retirees

<b>Cost Center:</b> Fringe Benefits _____	<b>Line Item:</b> 582 - Group Health Insurance - Retirees _____																
<b>Line Item Impact</b>																	
2018 Original Budget	\$5,969,323																
Carryovers or Transfers	\$0																
Adjusted Budget	\$5,969,323																
Estimated Annual Expenditure including Request	\$5,969,323																
Anticipated Year End Balance	\$0																
Actual Year to Date Expenditures Through 10/19	N/A																
For unfavorable Year End Balance, identify funding source: <input type="checkbox"/> Absorbed within the Division																	
<input type="checkbox"/> Other Division																	
<input type="checkbox"/> Unallocated Reserve																	
<b>Anticipated Expenditure Timing</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;"></th> <th style="width: 33%; text-align: center;">Requested Expenditures</th> <th style="width: 33%; text-align: center;">Anticipated Savings/Revenues</th> <th style="width: 33%; text-align: center;">Net Fiscal Impact</th> </tr> </thead> <tbody> <tr> <td>Current Year (2018)</td> <td style="text-align: right;">\$241,162</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$241,162</td> </tr> <tr> <td>Subsequent</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$0</td> </tr> <tr> <td>Total Cost</td> <td style="text-align: right;">\$241,162</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$241,162</td> </tr> </tbody> </table>		Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact	Current Year (2018)	\$241,162	\$0	\$241,162	Subsequent	\$0	\$0	\$0	Total Cost	\$241,162	\$0	\$241,162
	Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact														
Current Year (2018)	\$241,162	\$0	\$241,162														
Subsequent	\$0	\$0	\$0														
Total Cost	\$241,162	\$0	\$241,162														

**Comments:** The requested expenditures reflect the current number of subscribers; actual costs in 2018 may change contingent on the actual post-Medicare health plan number of subscribers.

The cost estimates include expenditures for retired United Water Services and Veolia Water Milwaukee employees. The District will receive reimbursements for these expenditures. However, due to the unknown nature of retirements and claim costs, these reimbursements are not quantified as anticipated savings/revenues.

Budget Review by:	Date
Christine Durkin _____	10/19/2017 _____



**COMMISSION FILE NO:** 17-115-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Authorizing the Executive Director to Enter into a Contract for Pharmacy Benefit Management Services with Optum Rx Effective January 1, 2018

**SUMMARY:**

The Commission is requested to authorize the Executive Director to enter into a three-year contract beginning January 1, 2018, with Optum Rx (formerly Catamaran and Restat) to provide pharmacy benefit management (PBM) services for District employees and pre-Medicare retirees for the period of January 1, 2018, through December 31, 2020.

The District's current contract with Optum Rx for PBM services will expire on December 31, 2017. The District's benefit consultant marketed the PBM services to four other firms and requested Optum Rx to come forward with their best pricing. The four other pharmacy benefit managers that submitted quotes were Express Scripts, MedImpact, WellDyne, and Serve You. The best pricing for the alternate carriers came from Express Scripts, as their discounts and dispensing fees were better than the other three. Through their recent mergers and restructuring, Optum Rx negotiated more favorable pricing with the pharmaceutical companies that improves pricing discounts from the prior agreement. Average wholesale price (AWP) discount guarantees have improved for both retail and brand drugs under the regional and non-regional networks. Mail service guaranteed discounts are also better in the new agreement. These enhanced discounts and overall pricing are expected to generate approximately \$100,000 in prescription savings for MMSD each year over the three-year agreement.

**ATTACHMENTS:** BACKGROUND  KEY ISSUES  RESOLUTION   
FISCAL NOTE  S/W/MBE  OTHER  \_\_\_\_\_

*PPF\_PharmBenefit\_legislative\_file.docx*  
10-25-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **BACKGROUND**

### **Authorizing the Executive Director to Enter into a Contract for Pharmacy Benefit Management Services with Optum Rx Effective January 1, 2018**

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Under the current and renewal Optum Rx plan, there is a two-tier network, which allows employees to enter a broad prescription network with a \$10/25/40 copay structure or the narrower regional plan (Align Network) with a \$5/20/35 copay. The purpose of adding the narrower regional network (implemented in 2012) was to include a lower cost pharmacy alternative for employees choosing to utilize regional pharmacies for prescription medications resulting in savings for both the employee and PBM services.

The renewal terms of the Optum Rx agreement improve pricing discounts from the prior agreement. AWP discount guarantees have improved for both retail and brand drugs under the regional and narrow network. Mail service guaranteed discounts are also better in the new agreement.

The recommendation is to accept the terms and new pricing with Optum Rx for PBM services for the next three years. The reason for this is that the overall package and pricing have improved and are superior to the four quoted carriers when considering brand and generic discounts, rebates, and mail order pricing. The customer service from Optum Rx has also been very good, and staff expects it to continue in the future. Due to the enhanced pricing, strong customer service, and continuity for members, staff recommends accepting the three-year proposal to remain with Optum Rx.

## RESOLUTION

Authorizing the Executive Director to Enter into a Contract for Pharmacy Benefit Management Services with Optum Rx Effective January 1, 2018

---

**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to enter into a three-year contract with Optum Rx to provide pharmacy benefit management services for District employees and pre-Medicare retirees for the period of January 1, 2018, through December 31, 2020.



## O&M Budget Fiscal Note

**RELATING TO:**

Authorizing the Executive Director to Enter into a Contract for Pharmacy Benefit Management Services with Optum Rx Effective January 1, 2018

<b>Cost Center:</b> Fringe Benefit _____	<b>Line Item:</b> 542 / 582 _____																
<b>Line Item Impact</b>																	
2018 Original Budget	\$10,531,514																
Carryovers or Transfers	\$0																
Adjusted Budget	\$10,531,514																
Estimated Annual Expenditure including Request	\$10,531,514																
Anticipated Year End Balance	\$0																
Actual Year to Date Expenditures Through 10/19	N/A																
For unfavorable Year End Balance, identify funding source: <input type="checkbox"/> Absorbed within the Division																	
<input type="checkbox"/> Other Division																	
<input type="checkbox"/> Unallocated Reserve																	
<b>Anticipated Expenditure Timing</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 20%; text-align: center;">Requested Expenditures</th> <th style="width: 20%; text-align: center;">Anticipated Savings/Revenues</th> <th style="width: 30%; text-align: center;">Net Fiscal Impact</th> </tr> </thead> <tbody> <tr> <td>Current Year (2018)</td> <td style="text-align: right;">\$2,369,927</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$2,369,927</td> </tr> <tr> <td>Subsequent</td> <td style="text-align: right;">\$4,739,854</td> <td style="text-align: right;">\$0</td> <td style="text-align: right;">\$4,739,854</td> </tr> <tr> <td><b>Total Cost</b></td> <td style="text-align: right;"><b>\$7,109,781</b></td> <td style="text-align: right;"><b>\$0</b></td> <td style="text-align: right;"><b>\$7,109,781</b></td> </tr> </tbody> </table>		Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact	Current Year (2018)	\$2,369,927	\$0	\$2,369,927	Subsequent	\$4,739,854	\$0	\$4,739,854	<b>Total Cost</b>	<b>\$7,109,781</b>	<b>\$0</b>	<b>\$7,109,781</b>
	Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact														
Current Year (2018)	\$2,369,927	\$0	\$2,369,927														
Subsequent	\$4,739,854	\$0	\$4,739,854														
<b>Total Cost</b>	<b>\$7,109,781</b>	<b>\$0</b>	<b>\$7,109,781</b>														

**Comments:** The requested expenditures reflect the current number of subscribers; actual costs in 2018, 2019, and 2020 may change contingent on the actual number of subscribers.

Budget Review by:	Date
Christine Durkin _____	10/19/2017 _____



**COMMISSION FILE NO:** 17-116-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Authorizing the Executive Director to Extend a One-year Contract for Life Insurance Benefits to Humana Effective January 1, 2018, through December 31, 2018

**SUMMARY:**

The Commission is requested to authorize the Executive Director to extend a one-year contract beginning January 1, 2018, with Humana to provide life insurance benefits for District employees and retirees for the period of January 1, 2018, through December 31, 2018. The District's current contract with Humana for life insurance benefits will expire on December 31, 2017. Humana, the District's active and retiree life insurance carrier since 2006, offered a 10% renewal, or \$52,865 increase in premium for 2018. This is a significant decrease in last year's renewal of 33%.

**ATTACHMENTS:** BACKGROUND  KEY ISSUES  RESOLUTION   
FISCAL NOTE  S/W/MBE  OTHER  \_\_\_\_\_

*PFP\_HumanaExtension\_legislative\_file.docx*  
10-25-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_



## BACKGROUND

### Authorizing the Executive Director to Extend a One-year Contract for Life Insurance Benefits to Humana Effective January 1, 2018, through December 31, 2018

---

The percentage of retirees covered compared to active employees has continued to grow. There are approximately twice as many retirees covered under the life insurance plan as there are active employees. This is a higher than average age mix than most group employer life insurance plans, which leads to increased risk by the insurance company and ultimately more claims. The District's life insurance plan has a 106% loss ratio (premiums paid vs claims paid) over the last four years and is running at a 112% loss ratio through the past 20 months.

The District's benefits consultant marketed life insurance last year; however, due to the extremely large percentage of covered retirees and the historical unfavorable loss ratio, all carriers declined to quote. Previous marketing efforts have also generated little interest from alternate carriers in providing life insurance coverage for the retiree population of MMSD.

Based on the evaluation of the renewal provided by Humana, it is recommended that the District enter into a one-year agreement with Humana to provide basic, supplemental, and dependent life insurance benefits for MMSD employees and retirees at the monthly rate of \$1.40/\$1,000 for active employees and retirees, \$1.00 per unit for dependent life, and supplemental life insurance at the following rates:

#### Attained Age Band

Age	Current employee rate	Renewal employee rate
0-29	\$0.05	\$0.05
30-34	\$0.05	\$0.05
35-39	\$0.07	\$0.07
40-44	\$0.14	\$0.14
45-49	\$0.26	\$0.26
50-54	\$0.40	\$0.40
55-59	\$0.68	\$0.68
60-64	\$1.16	\$1.16
65-69	\$2.06	\$2.06
70-74	\$3.18	\$3.18
75-79	\$5.32	\$5.32
80-84	\$8.70	\$8.70
85-89	\$14.21	\$14.21
90-94	\$21.76	\$21.76
95+	\$63.17	\$63.17

## RESOLUTION

Authorizing the Executive Director to Extend a One-year Contract for Life Insurance Benefits to Humana Effective January 1, 2018, through December 31, 2018

---

**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to enter into a one-year contract with Humana for the period of January 1, 2018, through December 31, 2018, to provide life insurance benefits for active employees and retirees at the monthly rate of \$1.40 per \$1,000 of life insurance, \$1.00 per unit of dependent life insurance, and supplemental life insurance at the following rates per \$1,000 of coverage:

### **Attained Age Band**

<b>Age</b>	<b>Renewal Employee Rate</b>
0-29	\$0.05
30-34	\$0.05
35-39	\$0.07
40-44	\$0.14
45-49	\$0.26
50-54	\$0.40
55-59	\$0.68
60-64	\$1.16
65-69	\$2.06
70-74	\$3.18
75-79	\$5.32
80-84	\$8.70
85-89	\$14.21
95+	\$63.17



## O&M Budget Fiscal Note

**RELATING TO:**

Authorizing the Executive Director to Extend a One-year Contract for Life Insurance Benefits to Humana Effective January 1, 2018, through December 31, 2018

<b>Cost Center:</b>	<b>Line Item:</b>
Fringe Benefit _____	543 / 583 _____

<b>Line Item Impact</b>			
2018 Original Budget	_____	\$502,285	
Carryovers or Transfers	_____	\$0	
Adjusted Budget	_____	\$502,285	
Estimated Annual Expenditure including Request	_____	\$542,901	
Anticipated Year End Balance	_____	(\$40,616)	
Actual Year to Date Expenditures Through 10/19	_____	N/A	
For unfavorable Year End Balance, identify funding source: <input checked="" type="checkbox"/> Absorbed within the Division			
<input type="checkbox"/> Other Division			
<input type="checkbox"/> Unallocated Reserve			
<b>Anticipated Expenditure Timing</b>	Requested Expenditures	Anticipated Savings/Revenues	Net Fiscal Impact
Current Year (2017)	\$0	\$0	\$0
Subsequent	\$0	\$0	\$0
Total Cost	\$0	\$0	\$0

**Comments:** The actual expenditures are contingent on the number of positions filled and the actual salary expenditures. It is anticipated that the unfavorable variance can be absorbed within the total Fringe Benefit budget.

Budget Review by:	Date
Christine Durkin _____	10/19/2017 _____



**COMMISSION FILE NO:** 17-117-11 **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** Destruction of District Records Pursuant to Commission Policy 1-76.04, Records Retention Policy

**SUMMARY:**

The Commission is requested to approve the destruction of District records pursuant to Commission Policy 1-76.04, Records Retention Policy. During the summer of 2017, the District conducted a review of a subset of District records with the goal of destroying those records past their required retention period and having no more permanent legal, historical, financial, or operational value to the District.

The District followed a procedure of review by Division Directors, the Information Governance Manager, the Commission Secretary/Executive Administrator, and the Director of Legal Services. A list of those records (attached) identified by District staff for destruction was sent to the Wisconsin State Historical Society (WSHS) in accord with requirements of Wis. Stats. §19.21(8). WSHS has notified District staff that it determined the records have no value to WSHS and can be destroyed.

**ATTACHMENTS:** BACKGROUND  KEY ISSUES  RESOLUTION   
FISCAL NOTE  S/W/MBE  OTHER  MMSD Boxes for Destruction in 2017

*PFP\_RecordsDestruction2017\_legislative\_file.docx*  
10-25-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **RESOLUTION**

Destruction of District Records Pursuant to Commission Policy 1-76.04, Records Retention Policy

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to destroy the District records on the attached list of "MMSD Boxes for Destruction in 2017", pursuant to Commission Policy 1-76.04, Records Retention Policy.

MMSD Boxes for Destruction in 2017  
Boxes Offered to the WI State Historical Society

Box Number	Department	Box Content Summary
36-4143	PROCUREMENT	PURCHASE REQUISITIONS
36-4144	PROCUREMENT	PURCHASE REQUISITIONS
36-1017	PROCUREMENT	PURCHASE REQUISITIONS
36-4145	PROCUREMENT	PURCHASE REQUISITIONS
36-3110	PROCUREMENT	PURCHASE REQUISITIONS
36-3099	PROCUREMENT	PURCHASE REQUISITIONS
36-5585	PROCUREMENT	RECEIVING REPORTS
36-450	PROCUREMENT	RECEIVING REPORTS
36-473	PROCUREMENT	PURCHASE REQUISITIONS
36-4867	PROCUREMENT	PURCHASE REQUISITIONS
36-4934	PROCUREMENT	CORRESPONDENCE
36-640	PROCUREMENT	RECEIVING REPORTS
36-641	PROCUREMENT	RECEIVING REPORTS
36-642	PROCUREMENT	PURCHASE REQUISITIONS
36-914	PROCUREMENT	PURCHASE REQUISITIONS
36-1018	PROCUREMENT	PURCHASE REQUISITIONS
36-4935	PROCUREMENT	CORRESPONDENCE
36-3686	INFORMATION SERVICES	DEPARTMENT BUDGET & UNOFFICIAL RFPs
36-1757	INFORMATION SERVICES	TELEPHONE BILLS & UNOFFICIAL RFPs
12259	INFORMATION SERVICES	SOFTWARE AND SOFTWARE REFERENCE
12329	INFORMATION SERVICES	COMPUTER SYSTEM PROJECT FILES
14924	INFORMATION SERVICES	UNOFFICIAL PURCHASE REQUISITIONS OR PURCHASE ORDERS
36-7128	INFORMATION SERVICES	REFERENCE MATERIALS
36-8501	INFORMATION SERVICES	UNOFFICIAL MANAGEMENT TASK ORDERS
36-8504	INFORMATION SERVICES	UNOFFICIAL MANAGEMENT TASK ORDERS
36-8505	INFORMATION SERVICES	UNOFFICIAL MANAGEMENT TASK ORDERS
36-8506	INFORMATION SERVICES	UNOFFICIAL MANAGEMENT TASK ORDERS
36-8507	INFORMATION SERVICES	UNOFFICIAL MANAGEMENT TASK ORDERS
36-8511	INFORMATION SERVICES	UNOFFICIAL MANAGEMENT TASK ORDERS
36-4303	INFORMATION SERVICES	SOFTWARE AND SOFTWARE REFERENCE
36-4931	INFORMATION SERVICES	TELEPHONE BILLS & DEPARTMENT BUDGET
36-1999	JONES ISLAND MAINTENANCE	REFERENCE MATERIAL
36-2897	JONES ISLAND MAINTENANCE	REFERENCE MATERIAL
36-3000	JONES ISLAND MAINTENANCE	REFERENCE MATERIAL
36-2896	JONES ISLAND MAINTENANCE	REFERENCE MATERIAL
36-2726	SOUTH SHORE MAINTENANCE	REFERENCE MATERIAL
13398	SOUTH SHORE MAINTENANCE	CONFERENCE AND SEMINARS ATTENDED & UNOFFICIAL OPERATING REPORTS
36-128	SOUTH SHORE MAINTENANCE	REFERENCE MATERIAL & UNOFFICIAL TELEPHONE DIRECTORY
36-2391	LEGAL SERVICES	REFERENCE MATERIAL
36-2400	LEGAL SERVICES	REFERENCE MATERIAL
36-2744	LEGAL SERVICES	REFERENCE MATERIAL
36-2390	LEGAL SERVICES	REFERENCE MATERIAL
36-2463	LEGAL SERVICES	REFERENCE MATERIAL
36-2465	LEGAL SERVICES	REFERENCE MATERIAL
36-2462	LEGAL SERVICES	REFERENCE MATERIAL
36-2464	LEGAL SERVICES	REFERENCE MATERIAL
36-2407	LEGAL SERVICES	REFERENCE MATERIAL
36-2487	LEGAL SERVICES	REFERENCE MATERIAL
36-2387	LEGAL SERVICES	REFERENCE MATERIAL
19888	RESEARCH AND CENTRAL LABORATORY	REFERENCE MATERIAL
19891	RESEARCH AND CENTRAL LABORATORY	REFERENCE MATERIAL
16673	RESEARCH AND CENTRAL LABORATORY	REFERENCE MATERIAL
19892	RESEARCH AND CENTRAL LABORATORY	REFERENCE MATERIAL

MMSD Boxes for Destruction in 2017

Boxes Offered to the WI State Historical Society

Box Number	Department	Box Content Summary
36-3091	ACCOUNTING	TIME DISTRIBUTION REPORTS
36-3095	ACCOUNTING	TIME DISTRIBUTION REPORTS
36-3096	ACCOUNTING	TIME DISTRIBUTION REPORTS
36-3060	ACCOUNTING	TIME DISTRIBUTION REPORTS
36-3094	ACCOUNTING	TIME DISTRIBUTION REPORTS
36-4141	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-514	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2970	ACCOUNTING	CANCELLED CHECKS
36-2976	ACCOUNTING	CANCELLED CHECKS
36-4139	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2971	ACCOUNTING	CANCELLED CHECKS
36-2978	ACCOUNTING	CANCELLED CHECKS
36-2979	ACCOUNTING	CANCELLED CHECKS
36-2980	ACCOUNTING	CANCELLED CHECKS
36-4148	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2943	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2944	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2945	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2948	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2972	ACCOUNTING	CANCELLED CHECKS
36-2984	ACCOUNTING	CANCELLED CHECKS
36-4140	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-603	ACCOUNTING	CANCELLED CHECKS
36-2910	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2911	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2913	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2916	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2918	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2958	ACCOUNTING	CANCELLED CHECKS
36-2959	ACCOUNTING	CANCELLED CHECKS
36-604	ACCOUNTING	CANCELLED CHECKS
36-613	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-614	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2919	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2921	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2924	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2960	ACCOUNTING	CANCELLED CHECKS
36-2962	ACCOUNTING	CANCELLED CHECKS
36-3102	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-4147	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-201	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-202	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-203	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-204	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-205	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-207	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-208	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-2963	ACCOUNTING	CANCELLED CHECKS
36-2964	ACCOUNTING	CANCELLED CHECKS
36-4138	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-206	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-209	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-211	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-212	ACCOUNTING	ACCOUNTS PAYABLE INVOICES

MMSD Boxes for Destruction in 2017

Boxes Offered to the WI State Historical Society

Box Number	Department	Box Content Summary
36-213	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-214	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-215	ACCOUNTING	ACCOUNTS PAYABLE INVOICES
36-486	ACCOUNTING	PAYROLL REGISTER
36-1104	HUMAN RESOURCES	REFERENCE MATERIAL
36-1763	HUMAN RESOURCES	SALARY PLAN IMPLEMENTATION
36-3265	HUMAN RESOURCES	SALARY PLAN IMPLEMENTATION
36-957	HUMAN RESOURCES	SALARY PLAN IMPLEMENTATION
36-1267	HUMAN RESOURCES	CONFERENCE AND SEMINARS REFERENCE MATERIAL
36-1713	HUMAN RESOURCES	UNION CONTRACT NEGOTIATIONS
36-1715	HUMAN RESOURCES	UNION CONTRACT NEGOTIATIONS
36-1765	HUMAN RESOURCES	SALARY PLAN IMPLEMENTATION
36-2345	HUMAN RESOURCES	SALARY PLAN IMPLEMENTATION
36-3266	HUMAN RESOURCES	REFERENCE MATERIAL





**COMMISSION FILE NO:** 17-118-11                      **DATE INTRODUCED:** November 13, 2017

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Policy, Finance, and Personnel Committee

**RELATING TO:** An Agreement for the Establishment of Sister Utilities Relationship between the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority of the People’s Republic of China

**SUMMARY:**

In 2009, the United Nations designated Milwaukee as a Global Compact City as part of a strategy to encourage city and regional governments to collaborate with the private and public sectors to address complex global challenges at the local level. As a member of the United Nations Cities Programme, the Milwaukee region is expected to share its knowledge, expertise, and innovations related to water technology with the rest of the world.

The Water Council, of which the Milwaukee Metropolitan Sewerage District is a member, has a mission of collaborating with global organizations that support common goals for freshwater research, innovation, education, and business development. The Water Council has been actively engaged in the Cities Programme and has facilitated the development of a relationship between the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority of the People’s Republic of China.

On November 29, 2017, the Milwaukee Metropolitan Sewerage District’s Executive Director Kevin L. Shafer will be featured as a keynote speaker at a conference entitled, “One Water, One World: The US-China Conference on Water and Sponge Cities,” in Beijing, China. A main objective of the conference is to showcase the work of a consortium of Wisconsin water companies, including A.O. Smith, Rockwell Automation, and Rexnord, in successfully addressing water challenges through a complete water cycle process. As part of this exchange, the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority will enter into a Sister Utilities relationship consistent with the attached Commission resolution.

**ATTACHMENTS:**    **BACKGROUND**     **KEY ISSUES**     **RESOLUTION**   
**FISCAL NOTE**     **S/W/MBE**     **OTHER**  \_\_\_\_\_

*PFP\_Sister\_Utilities\_Agreement\_legislative\_file.docx*  
10-31-17

**COMMITTEE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**COMMISSION ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## RESOLUTION

An Agreement for the Establishment of Sister Utilities Relationship between the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority of the People's Republic of China

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**WHEREAS**, the Milwaukee Metropolitan Sewerage District of the United States of America and the Beijing Water Authority of the People's Republic of China have achieved the following agreement through friendly negotiation and herewith express the intention to promote the friendship and understanding between their respective organizations; and

**WHEREAS**, the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority agree to support and encourage opportunities for the mutual benefit of their metropolitan areas by exploring practical exchanges in the water resource protection industry; and

**WHEREAS**, the Milwaukee Metropolitan Sewerage District and the Beijing Water Authority of the People's Republic of China agree to support the exchange of ideas and best management practices related to the protection of public health, the management of water resources, economic development, and the restoration of waterways and natural habitat; and

**WHEREAS**, the Milwaukee Metropolitan Sewerage District and Beijing Water Authority of the People's Republic of China, sharing a common interest in water resources management and environmental protection and a desire to promote mutual understanding among the residents they serve, do hereby proclaim themselves Sister Utilities beginning on November 13, 2017, the date of the Milwaukee Metropolitan Sewerage District Commission resolution establishing the Sister Utilities relationship becomes effective.

**NOW, THEREFORE, BE IT RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Milwaukee Metropolitan Sewerage District does hereby proclaim itself a Sister Utility with the Beijing Water Authority of the People's Republic of China.

**COMMISSION MEETING**

**November 27, 2017**

**EXECUTIVE DIRECTOR'S REPORT**

**17-003-01**

- A. Monthly Reports**
- B. Staff Recognition (Kevin Shafer)**
- C. Daily Reporter Newsmaker of the Year Award (Kevin Shafer)**

# November 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10 VETERAN'S DAY (OBSERVED)- MMSD OFFICES CLOSED	11
12	13 Operations Committee-9:00 a.m. PF&P Committee-9:05 a.m.	14	15	16	17	18
19	20	21	22	23 THANKSGIVING- MMSD OFFICES CLOSED	24 MMSD OFFICES CLOSED	25
26	27 Commission-9:00 a.m.	28	29	30		