DOWNERS GROVE SANITARY DISTRICT GENERAL MANAGER'S REPORT March 18, 2016

March Board Meeting

Copies of the following items are enclosed for the March 22, 2016 meeting:

- 1) Proposed Agenda
- 2) Minutes of February 16, 2016 regular meeting
- 3) Claim Ordinance 1839
- 4) Resolution of appreciation for Beverlee Fleming
- 5) Memo regarding final approval of budget and five year financial plan and adoption of appropriation ordinance for FY 16-17
- 6) Memo regarding Ordinance 16-01 Amending Fees
- 7) Operations Report Billing and Payment Options
- 8) Operations Report Web Site Updates
- 9) Annexation Ordinance AO 2016-03, 7211 and 7215 Matthias, Downers Grove
- 10) Annexation Ordinance AO 2016-.4, 1358 35th St, Downers Grove
- 11) There is a confidential briefing memo regarding General Manager Performance and Compensation review under separate cover.

BOLI Meeting

There is no BOLI meeting scheduled for this month.

Operations Reports

Copies of the following are enclosed for February operations:

- 1) Progress Report from Clay on Administrative Services activities.
- 2) The WWTC Operations Report from Marc.
- 3) The Maintenance Report from Jeff.
- 4) Progress Report from Bob on Collection System Maintenance activities.
- 5) Progress Report from Ted on Collection System Construction activities.
- 6) Progress Report from Reese on Laboratory activities.

I/I Removal Work

Inspection efforts on private property under the I/I program with the intention of conducting I/I removal is shifting from the 1-M-008 area to the 1-K-028 area. Maps showing progress for both areas are included here, as well as a status summary sheet for 1-K-028. Flow metering continues.

Financial

A copy of the Investment Schedule as of February 29, 2016 is enclosed. The Treasurer's Report for February, 2016 covering the first ten months of FY15-16 is enclosed, along with a summary memo.

<u>Meetings</u>

I attended the following meetings since the February 12, 2016 General Manager's Report:

-February 16 attended Executive Committee meeting of the DRSCW. Larry also attended.

- -February 18 attended telecom with IAWA and IEPA discussing new variance procedures being considered by IEPA.
- -February 19 attended meeting in Wheaton with DRSCW and IEPA discussing new variance procedures being considered by IEPA.
- -February 24 attended Downers Grove Village Administrators meeting.
- -February 24 attended regular meeting of DRSCW in Lombard. Larry also attended.
- -February 25 attended East Branch DuPage River watershed meeting at Downers Grove Public Works Office.
- -March 2 hosted tour of CHP facility for students from Northwestern University Kellogg School of Management. Their resulting project work is attached.
- -March 2 attended CSWEA/IAWA collection system committee meeting to plan the June collection system workshop. Bob chaired the meeting, as the CSWEA committee chair.
- -March 8 attended progress meeting for stakeholders regarding the Illinois Nutrient Loss Reduction Strategy in Springfield.
- -March 10 attended work session with Danish Parliament committee in Glen Ellyn to discuss Denmark's Water Technology Alliance.
- -March 14 attended interview with AWWA consultant working on asset management case study development.
- -March 18 attended Downers Grove Economic Development Corporation Board of Directors meeting.

Miscellaneous

Copies of the following items are enclosed:

- 1) General Manager's Reports to Employees dated February 19, March 4 and 18, 2016.
- 2) February 23, 2016 letter from board of owners of Acadia on the Green Building III condominiums.
- 3) Solar energy proposal from Convergence Energy.
- 4) Report reviewing Industrial Pretreatment Local Limits, as required in NPDES permit.
- 5) IAWA comment letter to IEPA on the 2016 Integrated Report on water quality.
- 6) CMOM Report, as required in NPDES permit.

cc: WDVB, ASK, DFP, BOLI, TTC, WCC, MGP

DOWNERS GROVE SANITARY DISTRICT BOARD OF TRUSTEES MEETING MARCH 22, 2016 – 7:00 PM

PROPOSED AGENDA

- I. APPROVE REGULAR MEETING MINUTES FBERUARY 16, 2016
- II. APPROVAL OF CLAIM ORDINANCE NO. 1839
- III. PUBLIC COMMENT
- IV. OLD BUSINESS
- V. NEW BUSINESS
 - A. RESOLUTION OF APPRECIATION FOR BEVERLEE FLEMING
 - B. APPROVAL OF FY16-17 BUDGET AND FIVE-YEAR FINANCIAL PLAN
 - C. ADOPT FY16-17 APPROPRIATION ORDINANCE
 - D. ADOPT ORDINANCE 16-01 AMENDING FEES
 - E. OPERATIONS REPORT BILLING AND PAYMENT OPTIONS
 - F. OPERATIONS REPORT WEB SITE UPDATES
 - G. ANNEXATION ORDINANCE AO 2016-03, 7211 AND 7215 MATTHIAS, DG
 - H. ANNEXATION ORDINANCE AO 2016-04, 1358 35TH STREET, DG
- VI. EXECUTIVE SESSION PERSONNEL

MINUTES

The monthly meeting of the Downers Grove Sanitary District Board of Trustees was held on Tuesday, February 16, 2016, convening at 7:00 p.m. The meeting was held at the District's Administration Center, 2710 Curtiss Street, Downers Grove. Present were President Wallace D. Van Buren, Trustee Amy S. Kovacevic, Trustee Donald F. Peters, General Manager Nicholas J. Menninga, Administrative Services Director W. Clay Campbell, Sewer Construction Supervisor Ted Cherwak, Information Coordinator Alyssa J. Cherwak and Attorney Michael G. Philipp.

Minutes of Regular Meeting – January 19, 2016

A motion was made by Trustee Kovacevic seconded by Trustee Peters approving the minutes of the regular meeting held on January 19, 2016 as presented and authorizing the President and Clerk to sign same. The motion carried.

Minutes of Executive Session – January 19, 2016

A motion was made by Trustee Kovacevic seconded by Trustee Peters approving the minutes of the executive session held on January 19, 2016 as presented and authorizing the President and Clerk to sign same. The motion carried.

Claim Ordinance No. 1838

A motion was made by Trustee Kovacevic seconded by Trustee Peters adopting Claim Ordinance No. 1838 in the total amount of \$519,336.48 as presented and authorizing the President and Clerk to sign same. The motion carried. (Votes recorded: Ayes—Van Buren, Kovacevic and Peters.)

Public Comment - None

Old Business - None

New Business:

Insurance Renewals

Administrative Services Director Campbell reviewed the proposal for renewal of the District's property and liability coverages effective April 14. The proposal includes Property, General Liability, Automobile, Public Officials Liability, Excess Liability, Employee Dishonesty and Tank Storage Pollution Liability. The renewal of the District's Workers Compensation coverage with the Illinois Public Risk Fund was approved in December for the 2016 calendar year. Total annual premiums (including Workers Compensation) are \$197,050. A motion was made by Trustee Kovacevic seconded by Trustee Peters authorizing the Administrative Services Director to renew the District's insurance coverages as presented in his February 8, 2016 memo. The motion carried. (Votes recorded: Ayes–Van Buren, Kovacevic and Peters.)

Operations Report - Social Media

Information Coordinator Cherwak presented an operations report to the Board on the District's use of social media to inform our customers of District programs and services. She provided a review of the District's Facebook page and performance over the last two years. She noted various analytics that Facebook offers to the District to better understand the reach and scope of the page. She recommended future steps by staff to develop more content for both the District's website and social media presence. No action was needed on this item.

Five Year Financial Plan and Budget Review – Fiscal Year 2016-2017 to Fiscal Year 2020-2021

General Manager Menninga presented the following budget documents: Five-Year Financial Plan for Fiscal Years 2016-17 to 2020-21, Notice of Availability of Fiscal Year 2016-17 Appropriation Ordinance/Budget for public review, revised Budget Calendar and proposed Appropriation Ordinance for Fiscal Year 2016-17. He reviewed the Five-Year Financial Plan including the General Corporate, Construction, Improvement and Public Benefit funds. The Notice of Availability of the Fiscal Year 2016-17 Appropriation Ordinance/Budget will be published in the local paper on February 17. Final approval of the Five Year Financial Plan and the Appropriation Ordinance is scheduled for the March 22 regular meeting. A motion was made by Trustee Kovacevic seconded by Trustee Peters authorizing publication of the Notice of Availability. The motion carried. (Votes recorded: Ayes—Van Buren, Kovacevic and Peters.)

Review of Executive Session Minutes

Administrative Services Director Campbell reviewed his memo dated February 12, 2016 regarding the review of executive session minutes as required by the Illinois Open Meetings Act. The executive session minutes were last reviewed in August 2015. The Board reviewed the written minutes of the meetings of March 25, 2014 and August 19, 2014 to determine if the verbatim records could be destroyed as provided by state statutes. A motion by Trustee Peters seconded by Trustee Kovacevic was made authorizing the destruction of the verbatim records of the executive sessions held on March 25, 2014 and August 19, 2014 in accordance with the Illinois Open Meetings Act. The motion carried.

Annexation Ordinance No. AO 2016-02 – 4330 Lacey Road, Downers Grove

Sewer Construction Supervisor Cherwak presented Annexation Ordinance No. AO 2016-02 for the annexation of one lot located at 4330 Lacey Road, Downers Grove. A motion was made by Trustee Peters seconded by Trustee Kovacevic accepting the Petition for Annexation, adopting Annexation Ordinance No. AO 2016-02 as presented and authorizing the President and Clerk to sign same. The motion carried. (Votes recorded: Ayes–Van Buren, Kovacevic and Peters.)

Other New Business

Trustee Kovacevic discussed the staff's presentation to 7th grade students at O'Neill Middle School on January 22 and 25 regarding the District's biosolids program.

Trustee Peters inquired if the National Power Rodding trucks he has seen around the Village were performing work for the District. Staff informed him that they were operating as a cleaning and televising subcontractor for Insituform.

A motion was made by Trustee Peters seconded meeting at 7:50 p.m. The motion carried.	by Trustee Kovacevic to adjourn the regular
Approved: March 22, 2016	
	President
Attest:	

Downers Grove, Illinois

Date: March 22, 2016

Claim Ordinance No. 1839

An Ordinance Providing for the Payment of Certain Claims.

WHEREAS, it appears to the Board of Trustees of the Downers Grove Sanitary District that there are certain claims against said District which would be allowed and paid therefore,

BE IT ORDAINED, by the Board of Trustees of the Downers Grove Sanitary District

That the following claims be and they are hereby approved and ordered paid and that an order be drawn on the Treasurer of said District out of the funds shown below. Said claims, totaling \$ 565,880.91 being in words and figures as follows:

DATE 02/16/16 PERIOD END 02/15/16 PAGE 4

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT
01-00.1001	CASH - PAYROLL ACCOUNT		17480.23-
01-00.2000	FEDERAL TAX WITHHELD		2907.06-
01-00.2001	STATE TAX WITHHELD		924.39-
01-00.2002	SOCIAL SECURITY WITHHELD		2164.62-
01-00.2003	IMRF WITHHELD		1273.30-
01-00.2013	CREDIT UNION WITHHELD		750.00-
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		1264.83-
01-00.2020	DEFERRED COMPENSATION WITHHELD		1375.00-
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		345.75-
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		143.01-
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		17.33-
01-11.A003	GENERAL MANAGEMENT	9175.61	
01-11.A004	FINANCIAL RECORDS	181.67	
01-11.A007	CODE ENFORCEMENT	8230.76	
01-11.A008	SAFETY ACTIVITIES	20.50	
01-12.A009	OPERATIONS MANAGEMENT	3359.23	
01-12.A011	MAINTENANCE - WWTC	3934.32	
01-12.A014	MAINTENANCE - ELECTRICAL	211.93	
01-12.A021	WWTC OPERATIONS	337.34	
01-13.A009	OPERATIONS MANAGEMENT	3071.80	
01-13.A042	LAB - PRETREATMENT	122.36	
		28645.52	28645.52-
		20045.52	20013.32-

Payroll Ending 02/15/16
Payroll Paid 02/17/16
GL Date 03/31/16

DATE 02/17/16 PERIOD END 02/13/16 PAGE 5

Payroll Ending 02/13/16

02/16/16

03/31/16

Paid Date

GL Date

G/L NUMBER COST DESCRIPTION DEBIT CREDIT -----01-00.1001 CASH - PAYROLL ACCOUNT 44349.63-01-00.2000 FEDERAL TAX WITHHELD 10211.18-01-00.2001 STATE TAX WITHHELD 2494.21-01-00.2002 SOCIAL SECURITY WITHHELD 5388.37-01-00.2003 IMRF WITHHELD 3089.65-01-00.2005 CLEARING 59.70-01-00.2012 WAGE DEDUCTION ORDER 950.31-01-00.2013 CREDIT UNION WITHHELD 2821.31-01-00.2014 VOLUNTARY ADDITIONAL PENSION CONTRIBUTION 646.83-01-00.2017 VOLUNTARY GROUP LIFE 224.00-01-00.2020 DEFERRED COMPENSATION WITHHELD 96.76-01-00.2021 FLEXIBLE ACCOUNT WITHHELD - MEDICAL 389.00-PLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION 01-00.2024 847.92-01-00.2025 EMPLOYEE INS PREM CONTRIBUTION - POST TAX 104.00-01-11.A003 GENERAL MANAGEMENT 2341.21 01-11.A004 FINANCIAL RECORDS 9590.42 01-11.A005 ADMINISTRATIVE RECORDS 1387.79 CODE ENFORCEMENT 01-11.A007 4194.74 01-11.A008 SAFETY ACTIVITIES 26.26 01-11.A030 BUILDING & GROUNDS 286.00 01-12.A011 MAINTENANCE - WWTC 14106.85 01-12.A012 MAINTENANCE - VEHICLES 236.33 01-12.A014 MAINTENANCE - ELECTRICAL 2359.06 01-12.A021 WWTC OPERATIONS 10318.75 01-12.A022 WWTC SLUDGE HANDLING 4625.66 01-12.A030 BUILDING & GROUNDS 1628.48 01-13.A041 LAB - WWTC 4153.25 01-14.A051 SEWER MAINTENANCE 33.86 01-14.A054 SEWER MAINTENANCE - BACK-UPS & HIGH FLOWS 146.30 01-14.A062 INSPECTION - CONSTRUCTION OF DGSD PROJECTS 5090.40 01-14.A063 INSPECTION - PERMIT INSPECTIONS 1488.20 01-14.A064 INSPECTION - MISCELLANEOUS 2521.26 INSPECTION-CONSTR BY VILLAGES, UTILITIES 01-14.A065 2274.18 INSPECTION - CODE ENFORCEMENT 01-14.A066 3718.45 01-14.A072 SEWER INVESTIGATIONS 167.04 01-15.A080 LIFT STATION MAINTENANCE 978.38

71672.87

71672.87-

01-13.A009 OPERATIONS MANAGEMENT

DATE 03/01/16 PERIOD END 02/29/16 PAGE 4

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT	GL Date	03-31-16
01-00.1001	CASH - PAYROLL ACCOUNT		17307.50-		
01-00.2000	FEDERAL TAX WITHHELD		2905.18-		
01-00.2001	STATE TAX WITHHELD		924.01-		
01-00.2002	SOCIAL SECURITY WITHHELD		2163.84-		
01-00.2003	IMRF WITHHELD		1272.84-		
01-00.2013	CREDIT UNION WITHHELD		750.00-		
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		1361.06-		
01-00.2017	VOLUNTARY GROUP LIFE		80.00-		
01-00.2020	DEFERRED COMPENSATION WITHHELD		1375.00-		
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		345.75-		
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		143.01-		
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		17.33-		
01-11.A003	GENERAL MANAGEMENT	8334.59			
01-11.A004	FINANCIAL RECORDS	205.62			
01-11.A007	CODE ENFORCEMENT	8496.49			
01-11.A008	SAFETY ACTIVITIES	111.13			
01-12.A009	OPERATIONS MANAGEMENT	3975.95			
01-12.A011	MAINTENANCE - WWTC	3721.44			
01-12.A014	MAINTENANCE - ELECTRICAL	424.81			
01-12.A021	WWTC OPERATIONS	181.33			

3194.16

28645.52 28645.52-

Payroll Ending 02-29-16

Payroll Paid 03-02-16

Payroll Ending 02-27-16 DATE 03/02/16 PERIOD END 02/27/16 PAGE 5 Payroll Paid 03-04-16 -31-16

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT	GL	Date	03-
	CASH - PAYROLL ACCOUNT		45244.72-	-		
01-00.2000	FEDERAL TAX WITHHELD		10441.88-			
01-00.2001	STATE TAX WITHHELD		2541.02-			
01-00.2002	SOCIAL SECURITY WITHHELD		5487.82-			
01-00.2003	IMRF WITHHELD		3140.32-			
01-00.2005	CLEARING		89.70-			
01-00.2012	WAGE DEDUCTION ORDER		950.31-			
01-00.2013	CREDIT UNION WITHHELD		2821.31-			
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		814.41-			
01-00.2020	DEFERRED COMPENSATION WITHHELD		97.21-			
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		389.00-			
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		898.92-			
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		107.00-			
01-11.A003	GENERAL MANAGEMENT	2579.01				
01-11.A004	FINANCIAL RECORDS	9412.00				
01-11.A005	ADMINISTRATIVE RECORDS	1351.50				
01-11.A007	CODE ENFORCEMENT	4210.91				
01-11.A030	BUILDING & GROUNDS	364.50				
01-12.A011	MAINTENANCE - WWTC	17644.38				
01-12.A012	MAINTENANCE - VEHICLES	189.06				
01-12.A014	MAINTENANCE - ELECTRICAL	1182.72				
01-12.A021	WWTC OPERATIONS	7988.38				
01-12.A022	WWTC SLUDGE HANDLING	5339.54				
01-12.A030	BUILDING & GROUNDS	2098.73				
01-13.A041	LAB - WWTC	4103.73				
01-14.A051	SEWER MAINTENANCE	3624.76				
01-14.A054	SEWER MAINTENANCE - BACK-UPS & HIGH FLOWS	338.40				
01-14.A062	INSPECTION - CONSTRUCTION OF DGSD PROJECTS	2949.69				
01-14.A063	INSPECTION - PERMIT INSPECTIONS	835.80				
01-14.A064	INSPECTION - MISCELLANEOUS	2952.76				
01-14.A065	INSPECTION-CONSTR BY VILLAGES, UTILITIES	2047.38				
01-14.A066	INSPECTION - CODE ENFORCEMENT	2467.70				
01-14.A072	SEWER INVESTIGATIONS	741.06				
01-15.A080	LIFT STATION MAINTENANCE	601.61				

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DATE 03/16/16 PERIOD END 03/12/16 PAGE 5

Payroll End Date: 03/12/16 Payroll Paid Date: 03/18/16 GL Date: 03/31/16

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT
	CASH - PAYROLL ACCOUNT		43530.93-
01-00.2000	FEDERAL TAX WITHHELD		10238.68-
01-00.2001	STATE TAX WITHHELD		2469.46-
01-00.2002	SOCIAL SECURITY WITHHELD		5327.97-
01-00.2003	IMRF WITHHELD		3117.51-
01-00.2005	CLEARING		59.70-
01-00.2012	WAGE DEDUCTION ORDER		950.31-
01-00.2013	CREDIT UNION WITHHELD		2821.31-
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		718.19-
01-00.2017	VOLUNTARY GROUP LIFE		208.00-
01-00.2020	DEFERRED COMPENSATION WITHHELD		97.67-
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		389.00-
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		867.92-
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		107.00-
01-11.A003	GENERAL MANAGEMENT	1029.15	
01-11.A004	FINANCIAL RECORDS	9504.14	
01-11.A005	ADMINISTRATIVE RECORDS	1448.47	
01-11.A007	CODE ENFORCEMENT	4102.80	
01-11.A030	BUILDING & GROUNDS	198.60	
01-12.A011	MAINTENANCE - WWTC	13125.43	
01-12.A012	MAINTENANCE - VEHICLES	63.02	
01-12.A014	MAINTENANCE - ELECTRICAL	2291.44	
01-12.A021	WWTC OPERATIONS	10126.01	
01-12.A022	WWTC SLUDGE HANDLING	6776.50	
01-12.A030	BUILDING & GROUNDS	815.41	
01-13.A041	LAB - WWTC	4117.61	
01-14.A051	SEWER MAINTENANCE	4056.43	
01-14.A054	SEWER MAINTENANCE - BACK-UPS & HIGH FLOWS	288.05	
01-14.A062	INSPECTION - CONSTRUCTION OF DGSD PROJECTS	3279.38	
01-14.A063	INSPECTION - PERMIT INSPECTIONS	1412.60	
01-14.A064	INSPECTION - MISCELLANEOUS	1808.31	
01-14.A065	INSPECTION-CONSTR BY VILLAGES, UTILITIES	2421.53	
01-14.A066	INSPECTION - CODE ENFORCEMENT	2793.85	
01-14.A072	SEWER INVESTIGATIONS	417.60	
01-15.A030	BUILDING & GROUNDS	189.68	
01-15.A080	LIFT STATION MAINTENANCE	637.64	

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GENERAL LEDGER RECAP

DATE 03/16/16 PERIOD END 03/15/16 PAGE 4

Payroll Ending: 03/15/16

Payroll Paid: 03/17/16

GL Date: 03/31/16

CASH - PAYROLL ACCOUNT

17387.05-

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT
01-00.1001	CASH - PAYROLL ACCOUNT		17387.05-
01-00.2000	FEDERAL TAX WITHHELD		2905.37-
01-00.2001	STATE TAX WITHHELD		924.13-
01-00.2002	SOCIAL SECURITY WITHHELD		2164.03-
01-00.2003	IMRF WITHHELD		1272.96-
01-00.2013	CREDIT UNION WITHHELD		750.00-
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		1360.91-
01-00.2020	DEFERRED COMPENSATION WITHHELD		1375.00-
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		345.75-
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		143.01-
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		17.33-
01-11.A003	GENERAL MANAGEMENT	6492.99	
01-11.A004	FINANCIAL RECORDS	262.45	
01-11.A007	CODE ENFORCEMENT	8291.45	
01-11.A008	SAFETY ACTIVITIES	100.88	
01-12.A009	OPERATIONS MANAGEMENT	3112.43	
01-12.A011	MAINTENANCE - WWTC	4052.01	
01-12.A021	WWTC OPERATIONS	471.19	
01-13.A009	OPERATIONS MANAGEMENT	2835.21	
01-13.A042	LAB - PRETREATMENT	2897.25	
01-14.A051	SEWER MAINTENANCE	35.44	
01-15.A080	LIFT STATION MAINTENANCE	94.24	

28645.54 28645.54-

CHECK		=====VENDOR=======	PURCHASE	=====INVOI	~P				AMOUNT	CHECK
NUMBER	NUMBER	NAME	ORDER NBR	NUMBER	DATE	EXPENSES	G/L NUMBER	DISCOUNT	PAID	AMOUNT
058052		AA SECURITY SAFETY SUPPLY		6062799	03/09/16		01-14.B116	.00	238.80	238.80
058053	A000085	AT & T MOBILITY	0	831873915	03/03/16	50.76	01-15.B112	.00	50.76	50.76
058054	A000095	ACE HARDWARE	0	326494/3	02/17/16		01-12.B509	.00	138.77	138.77
058055	A000150	ADVOCATE OCCUPATIONAL HEAL	TO	604427	03/03/16	27.00	01-11.B117	.00	27.00	
			0	604427	03/03/16	27.00	01-12.B117	.00	27.00	54.00
058056	A000153	ADVANCED DISPOSAL	0	T80002008360		231.13	01-12.B102	.00	231.13	231.13
058057	A000170	AIRGAS SAFETY INC.	0	9048474385	02/18/16	133.36	01-14.B113	.00	133.36	133.36
058058	A000255	ALLIED WASTE SERVICE	0	012311163	02/15/16		01-12.B102	.00	72.37	
			0	012397096	03/15/16	1192.33	01-12.B102	.00	1192.33	1264.70
058059	A000303	AMERICA'S BEST FLAGS LLC	0	3320	03/18/16	1080.00	01-11.B118	.00	1080.00	1080.00
058060	A000320	AMERICAN NATIONAL SKYLINE	0	79152.2A	02/26/16	61.00	01-11.B118	.00	61.00	61.00
058061	A000380	ANALYTICAL SERVICES, INC.	LAB991	26414	02/15/16	745.00	01-13.B123	.00	745.00	745.00
058062	A000460		0	2080435953	02/16/16		01-12.B117	.00	66.03	
			0	2080435953	02/16/16		01-14.B117	. 00	26.97	
			0	2080445873	02/23/16		01-12.B117	.00	65.06	
			0	2080445873	02/23/16		01-14.B117	.00		
			0	2080455780	03/01/16		01-12.B117	.00	66.60	
			0	2080455780	03/01/16		01-14.B117	.00	27.20	
			0	2080465734	03/08/16		01-12.B117	.00	65.71	
			0	2080465734	03/08/16		01-14.B117	.00	27.74	
			0	2080475663	03/15/16		01-12.B117	.00	62.81	
		•	0	2080475663	03/15/16		01-14.B117	.00	25.98	461.84
058063	A 000600	AUTOZONE - AZ COMMERCIAL	0	2576219581	02/16/16		01-11.B116	.00	7.17	401.04
030003	AUUUUU	AUTOBONE - AZ COMENCIAL	0	2576240012	03/11/16		01-11.B110	.00	6.99	14.16
058064	B000120	BAXTER & WOODMAN, INC.	0	0184670	02/19/16		01-14.B124	.00	282.30	14.10
030004	5000120	BARTER & WOODPEN, INC.	0	0184671	02/19/16		01-11.B115	.00	927.50	
			0	0184672	02/19/16		01-11.B113	.00	2610.55	
			0	0184672	02/19/16		01-11.B124	.00	69.80	
			0				01-12.B812 01-14.B902		6206.88	
			0	0184675 0184905	02/19/16		01-14.B502 01-15.B529	.00 .00	630.00	10727 07
050065	D000340	DRIMMON ELECTRONICO	-		03/09/16					10727.03
058065	B000340	BRITTON ELECTRONICS &	VENARD	2166881	02/18/16		01-15.B527	.00	857.09	1714 10
050066	G000073	ON LOWE	0	2166890	02/26/16		01-15.B520	.00	857.09	1714.18
058066	C000073	CALLONE	0	1214468	03/15/16		01-11.B112	.00	700.40	
			0	1214468	03/15/16		01-12.B112	.00	162.79	
			0	1214468	03/15/16		01-15.B112	.00	105.04	968.23
058067	C000075	WILLIAM C CAMPBELL	0	BEV LUNCH	03/17/16		01-11.B117	.00	123.76	400.00
			TEXTBOOK	REIMBURSE	03/17/16		01-11.B117	.00	298.32	422.08
058068		CHICAGO METROPOLITAN FIRE	0	IN00125588	02/29/16		01-12.B812	.00	492.50	492.50
058069	C000320	CINTAS FIRST AID & SAFETY		5004480285	02/18/16		01-11.B116	.00	38.23	
			0	5004480285	02/18/16		01-12.B113	.00	141.31	179.54
	C000373		0	0550568	03/03/16		01-11.B112	.00	149.85	149.85
058071	C000380	COMED	COLLEGE	0055025057	02/18/16		01-15.B100	.00	327.20	
			CENTEX	0068029014	02/18/16		01-15.B100	.00	85.33	
			WROBLE	0120089072	02/18/16		01-15.B100	.00	454.55	
			LIB PK	0458029046	02/18/16		01-15.B100	.00	285.79	
			VENARD	0562080004	02/26/16		01-15.B100	.00	314.92	
			NW	1095091170	02/18/16		01-15.B100	.00	667.83	
			0	1108062005	02/26/16		01-11.B100	.00	106.65	
			0	1108062005	02/26/16		01-12.B100	.00	5680.44	
			EARLSTON	1810068039	02/18/16		01-15.B100	.00	227.55	
			BFIELD	3240038012	02/18/16		01-15.B100	.00	123.19	
			HOBSON	4657083017	02/24/16	1928.95	01-15.B100	.00	1928.95	

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		HOBSON 1	4657083017/	02/21/16	1766.13	01-15.B100	.00	1766.13	
		WAL HSE	6770572011	02/26/16	86.19	01-12.B100	.00	86.19	
		BIG TOP	8762083052	02/26/16	76.24	01-12.B100	.00	76.24	12130.96
058072	C000399 COMPASS MINERALS	0	71462479	03/01/16	4259.85	01-12.B401	.00	4259.85	4259.85
058073	C000400 COMPBENEFITS	0	033213520	02/23/16	1971.54	01-17.E455	.00	1971.54	1971.54
058074	C000560 JOHN CRANE INC.	0	3202250	03/14/16	2815.57	01-12.B505	.00	2815.57	2815.57
058075	C000650 CUMMINS NPOWER, LLC	0	711-87145	02/25/16	71.94	01-14.B115	.00	71.94	71.94
058076	C000660 CURTIS MARTIN GROUP, INC.	0	5208	03/12/16	330.00	01-11.B115	.00	330.00	330.00
058077	D000210 DELTA INDUSTRIES, INC.	0	124386	02/26/16	403.41	01-12.B513	.00	403.41	
		0	124490	02/29/16	484.80	01-12.B512	.00	484.80	888.21
058078	D000220 DELTA SONIC	0	8714703	02/28/16	4.99	01-11.C225	.00	4.99	
		0	8714703	02/28/16	14.97	01-12.C225	.00	14.97	
		0	8714703	02/28/16	9.98	01-14.C225	.00	9.98	
		0	8743098	02/26/16	24.95	01-12.C225	.00	24.95	
		0	8743098	02/26/16	14.97	01-14.C225	.00	14.97	69.86
058079	D000231 DIGITAL BUYER	0	0820037	02/24/16	1249.00	01-11.B115	.00	1249.00	1249.00
058080	D000315 DORNER VALVES & AUTOMATION	0	132031-IN	02/16/16		01-12.B506	.00	2735.45	2735.45
058081	D000400 D.G. SANIT DIST #269503021	1017	PAYROLL	03/22/16	185300.06	01-00.1001	.00	185300.06	185300.06
058082	D000420 D.G. SANIT DIST #269503118	1014	REFUNDS	03/04/16	2121.85	01-05.3001	.00	2121.85	2121.85
058083	D000440 D.G. SANIT DIST #269503022		CK 3386-90	03/17/16		01-12.B116	.00	61.52	
		0	CK 3386-90	03/17/16		01-14.B910	.00	952.28	
		0	CK 3386-90	03/17/16		01-17.E452	.00	119.98	1133.78
058084	D000480 VILLAGE OF DOWNERS GROVE	FUEL	110752	02/05/16		01-11.C222	.00	41.03	
*******	2000000 (22202 01 2000200 00002	FUEL	110752	02/05/16		01-12.B104	.00	98.98	
		FUEL	110752	02/05/16		01-12.B812	.00	16.06	
		FUEL	110752	02/05/16		01-12.C222	.00	604.39	
		FUEL	110752	02/05/16		01-12.C222	.00	23.71	
		FUEL	110752	02/05/16		01-14.C222	.00	718.21	
		DATA	110732	02/05/16		01-11.B121	.00	396.08	
		VOC	110927	02/15/16		01-11.B121	.00	29.79	
		ELEVATOR	111003	02/16/16		01-11.B112	.00	145.00	
						01-12.B113	.00	116.17	
		FUEL	111102 111102	03/07/16					
		FUEL		03/07/16		01-12.B104	.00	142.63	
		FUEL	111102	03/07/16		01-12.B812	.00	34.04	
		FUEL	111102	03/07/16		01-12.C222	.00	647.39	
		FUEL	111102	03/07/16		01-13.C222	.00	18.96	
		FUEL	111102	03/07/16		01-14.C222	.00	517.60	
		PLANT	2027.2700	02/29/16		01-12.B102	.00	1423.86	
		OFFICE	2027.2710	02/29/16		01-11.B102	.00	132.13	5106.03
058085	D000500 DREISILKER ELECTRIC MOTORS		1997032	02/11/16		01-12.B809	.00	213.34	213.34
058086	D000540 DRYDON EQUIPMENT INC.	0 .	15416	02/24/16		01-12.B502	.00	1344.17	1344.17
058087	D000620 DUPAGE COUNTY RECORDER	0	201602020118			01-11.B121	.00	81.00	
		0	201602100193	, ,		01-11.B124	.00	240.00	
		0	201602100193			01-14.B128	.00	30.00	
		0	201602100193			01-14.B910	.00	451.00	
		0	201602160228			01-11.B121	.00	300.00	
		HAJEK	201603090134			01-00.2005	.00	30.00	1132.00
058088	D000800 DYNEGY ENERGY SERVICES	0	VARIOUS	02/22/16		01-15.B100	.00	2369.59	2369.59
058089	E000030 EJ EQUIPMENT, INC.	0	P01303	03/09/16		01-14.B115	.00	305.80	305.80
058090	E000085 EENIGENBURG MFG. INC.	0	20740	02/23/16		01-12.B510	.00	2893.00	2893.00
058091	E000360 EVERCLEAN BY CHEM-DRY	0	20160062	03/05/16		01-11.B118	.00	458.00	458.00
058092	E000480 EXODUS TECHNOLOGY SERVICE	0	16-215	03/08/16	1331.25	01-11.B115	.00	1331.25	1331.25

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058093	E000600 EYE MED VISION CARE	0	9476186	03/01/16	406.96	01-17.E455	.00	406.96	406.96
058094	F000060 FASTENAL COMPANY	0	ILWES46289	02/12/16	3.00	01-12.B505	.00	3.00	
		0	ILWES46291	02/12/16	7.00	01-12.B501	.00	7.00	
		0	ILWES46334	02/17/16	204.80	01-12.B503	.00	204.80	
		0	ILWES46431	02/24/16	32.94	01-12.B503	.00	32.94	
		0	ILWES46515	03/03/16	37.98	01-12.B511	.00	37.98	
		0	ILWES46546	03/04/16	16.46	01-15.B520	.00	16.46	
		0	ILWES46675	03/15/16	25.95	01-12.B503	.00	25.95	328.13
058095	F000090 FERGUSON ENTERPRISES #1550	0	3275091	03/03/16	21.58	01-14.B116	.00	21.58	
		0	3282289	03/10/16	32.37	01-14.B116	.00	32.37	53.95
058096	F000295 FOX VALLEY SANDBLASTING &	0	29013	03/09/16	750.00	01-12.B501	.00	750.00	750.00
058097	F000440 FULLIFE LLC	0	29900	01/04/16	532.00	01-12.B117	.00	532.00	
		0	29900	01/04/16	342.00	01-13.B117	.00	342.00	
		0	29900	01/04/16	76.00	01-14.B117	.00	76.00	
		0	31153	12/10/15	358.30	01-12.B113	.00	358.30	
		0	31621	12/17/15	12.86	01-12.B113	.00	12.86	
		0	31922	03/10/16	500.00	01-12.B113	.00	500.00	1821.16
058098	F000500 FULLSERV OIL CHANGE	M187501	093482	02/11/16	42.17	01-14.C225	.00	42.17	
		M199862	95863	03/04/16	45.03	01-12.C225	.00	45.03	87.20
058099	G000070 G.P. MAINTENANCE SERVICES	0	15-02	02/22/16	700.00	01-12.B510	.00	700.00	
		0	15-02	02/22/16	7500.00	01-12.B812	.00	7500.00	8200.00
058100	G000200 GASVODA & ASSOCIATES INC.	0	16IPTS0093	02/25/16	97.46	01-12.B513	.00	97.46	
		0	16IPTS0097	02/25/16	1077.22	01-15.B529	.00	1077.22	1174.68
058101	G000410 GLENBARD ELECTRIC SUPPLY I	NO	1183521-01	03/11/16	75.00	01-12.B512	.00	75.00	75.00
058102	G000520 W. W. GRAINGER, INC.	0	9024769763	02/15/16		01-12.B116	.00	41.60	
		0	9024889819	02/12/16		01-12.B802	.00	58.86	
		0	9028216431	02/17/16		01-12.B116	.00	44.70	
		0	9028832716	02/17/16		01-12.B802	.00	80.64	
		0	9029034361	02/17/16		01-12.B802	.00	19.62	
		0	90300083324	02/18/16		01-12.B512	.00	62.55	
		0	9030083332	02/18/16		01-12.B505	.00	83.88	
		0	9034182254	02/23/16		01-12.B116	.00	6.78	
		0	9034689332	02/24/16		01-12.B116	.00	60.87	
		0	9035445643	02/24/16		01-12.B113	.00	18.54	
		0	9035445650	02/24/16		01-12.B113	.00	22.64	
		0	9035983965	02/24/16		01-12.B510 01-12.B513	.00	305.29	
		0				01-12.B513	.00	165.20	
		0	9035983973	02/25/16 02/25/16					
			9036713643			01-12.B812	.00	118.28	
		0	9037982635	02/26/16		01-12.B511	.00	191.16	
		0	9042554262	03/02/16		01-12.B510 01-12.B811	.00	21.84	
		0	9043435230	03/03/16			.00	66.36	
		0	9044190925	03/03/16		01-12.B116	.00	66.24	
		0	9045124436	03/04/16		01-12.B509	.00	166.18	
		0	9048125901	03/08/16		01-12.B116	.00	308.40	
		0	9049245211	03/09/16		01-12.B510	.00	19.60	1
		0	9050770511	03/10/16		01-12.B512	.00	17.53	•
		0	9055247770	03/16/16		01-12.B503	.00	41.44	
		0	9055247770	03/16/16		01-12.B813	.00	23.82	2012.02
058103	H000030 HD SUPPLY WATERWORKS, LTD.		F148551	02/26/16		01-14.B910	.00	1164.00	1164.00
058104	H000060 HARBOR FREIGHT TOOLS	0	748220	03/01/16		01-12.B116	.00	35.97	35.97
058105	H000090 HARRINGTON IND. PLASTICS L		023C3208	01/08/16		01-12.B502	.00	29.22	29.22
058106	H000400 HOME DEPOT	0	0024022	02/18/16	59.95	01-12.B113	.00	59.95	

PAGE 4

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		0	0024022	02/18/16	213.68	01-12.B812	.00	213.68	
		0	0903668	03/09/16	3.87	01-11.B115	.00	3.87	
		0	1010456	03/08/16	56.60	01-12.B116	.00	56.60	
		0	2015297	02/26/16	155.66	01-12.B116	.00	155.66	
		0	3060543	02/25/16	235.35	01-12.B512	.00	235.35	
		0	4025569	02/24/16	84.10	01-12.B510	.00	84.10	
		0	4574481	02/24/16	7.47	01-14.B115	.00	7.47	
		0	5010293	03/04/16	138.63	01-12.B811	.00	138.63	
		0	5083303	02/23/16	15.97	01-12.B116	.00	15.97	
		0	5085826	03/14/16	49.06	01-12.B116	.00	49.06	
		0	7030533	03/12/16	23.92	01-14.B116	.00	23.92	
		0	8010049	03/01/16	47.91	01-15.B116	.00	47.91	1092.17
058107	1000320 ILLINOIS PAPER COMPANY	0	IN209630	02/22/16	157.50	01-11.B115	.00	157.50	157.50
058108	1000350 ILLINOIS PUBLIC RISK FUND	0	33937	02/15/16	8155.00	01-17.E452	.00	8155.00	
		0	33938	03/14/16	8155.00	01-17.E452	.00	8155.00	16310.00
058109	1000415 INFOSEND, INC.	0	101667	01/29/16	3816.12	01-11.B121	.00	3816.12	
		0	102668	02/29/16	4154.78	01-11.B121	.00	4154.78	7970.90
058110	J000060 JAKE'S MACHINING INC.	0	36824	03/02/16	3121.60	01-12.B503	.00	3121.60	
		0	36824	03/02/16	320.00	01-12.B512	.00	320.00	
		0	36828	03/14/16	2900.00	01-12.B503	.00	2900.00	
		0	36829	03/16/16	2832.00	01-12.B505	.00	2832.00	9173.60
058111	J000250 JULIE, INC.	0	2016-0418/2	03/20/16	3986.41	01-14.B127	.00	3986.41	3986.41
058112	K000130 KIEFT BROS., INC.	0	216789	03/09/16	425.00	01-14.B903	.00	425.00	425.00
058113	K000180 KIPP'S LAWNMOWER SALES	0	448833	02/27/16	20.00	01-12.B501	.00	20.00	20.00
058114	L000012 LAI, LTD	0	16-13704	03/08/16	700.00	01-12.B511	.00	700.00	700.00
058115	L000205 LELUND ENTERPRISES, INC.	0	78435	02/16/16	524.00	01-12.B809	.00	524.00	524.00
058116	M000010 MBM SERVICES INC.	0	27599	03/01/16	37.40	01-11.B116	.00	37.40	
		0	27599	03/01/16	331.00	01-11.B118	.00	331.00	368.40
058117	M000106 MAILFINANCE	0	N5793893	02/21/16	432.81	01-11.B115	.00	432.81	432.81
058118	M000115 MARCOTT ENTERPRISES, INC.	0	17381	03/08/16	398.12	01-12.B116	.00	398.12	398.12
058119	M000360 MCMASTER-CARR SUPPLY COMPA	NO	51783057	03/08/16	22.25	01-12.B510	.00	22.25	
		0	51898039	03/09/16	76.72	01-14.B115	.00	76.72	
		0	52658033	03/17/16	68.59	01-12.B113	.00	68.59	167.56
058120	M000430 MENARDS - BOLINGBROOK	0	89564	03/05/16	34.99	01-14.B115	.00	34.99	34.99
058121	M000550 MICRO CENTER	0	3866514	03/08/16	153.96	01-12.B513	.00	153.96	153.96
058122	M000556 MIDAMERICA ADMINISTRATIVE	0	6098	01/19/16	180.00	01-17.E455	.00	180.00	
		0	6114	01/16/16	67.50	01-17.E455	.00	67.50	247.50
058123	M000750 MOTION INDUSTRIES, INC.	0	IL10-569546	02/26/16	178.14	01-12.B510	.00	178.14	
		0	IL10-571502	03/17/16	10.23	01-12.B503	.00	10.23	188.37
058124		0	50607	02/23/16	400.00	01-14.B116	.00	400.00	400.00
058125	N000010 3266-NCPERS - IL IMRF	0	32660316	02/23/16	304.00	01-00.2017	.00	304.00	304.00
058126	N000020 NADLER GOLF CARS, INC	0	3880617	02/19/16	1596.43	01-12.B512	.00	1596.43	
		0	3881560	03/04/16	154.53	01-12.B512	.00	154.53	1750.96
058127	N000040 NAPA AUTO PARTS	0	417352	02/11/16	408.87	01-12.C225	.00	408.87	
		0 .	417762	02/15/16		01-12.C225	.00	31.11	
		0	419217	02/24/16		01-14.B115	.00	7.86	447.84
058128	N000050 NAPCO STEEL, INC.	0	392766	02/17/16		01-12.B504	.00	330.00	
		0	393046	02/25/16		01-12.B512	.00	74.95	
		0	393124	02/26/16		01-12.B512	.00	457.20	862.15
058129		0	610561	01/25/16		01-11.B137	.00	395.00	395.00
058130	N000260 NEUCO, INC.	0	1854649	02/17/16		01-12.B509	.00	212.40	212.40
058131	N000330 NICOR GAS	WAL HSE	2833584	02/23/16	114.85	01-12.B101	.00	114.85	

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			OFFICE	3892638	02/23/16	155.23	01-11.B101	.00	155.23	
			PLANT/	4330574	02/23/16	228.55	01-12.B101	.00	228.55	
			CHEMFEED	4664113	02/22/16	228.90	01-12.B101	.00	228.90	727.53
058132		NORTHERN FILTER MEDIA, INC	.0	34399	02/29/16	2397.00	01-12.B116	.00	2397.00	2397.00
058133		OFFICE DEPOT	0	829180957001			01-11.B116	.00	80.97	80.97
058134		OFFICIAL PAYMENTS	0	3928535	01/31/16		01-11.B110	.00	39.40	39.40
058135		PACKEY WEBB FORD	0	133052	03/09/16		01-12.C225	.00	91.85	91.85
058136	P000150	PATTEN INDUSTRIES, INC.	0	PM600252928	02/16/16		01-12.B513	.00	150.00	
			0	PM600252929	02/16/16		01-12.B513	.00	150.00	
			0	PM600252930	02/16/16		01-12.B513	.00	150.00	
			0	PM600253297	02/26/16		01-15.B523	.00	620.00	1070.00
058137	P000350	PETTY CASH	0	CASH BOX	03/18/16		01-11.B115	.00	5.38	
			0	CASH BOX	03/18/16		01-11.B116	.00	13.04	
			0	CASH BOX	03/18/16		01-11.B117	.00	77.06	
			0	CASH BOX	03/18/16		01-11.B118	.00	64.13	
			0	CASH BOX	03/18/16		01-11.B119	.00	6.49	
			0	CASH BOX	03/18/16		01-11.C222	.00	24.06	
			0	CASH BOX	03/18/16		01-12.B113	.00	21.32	
			0	CASH BOX	03/18/16		01-12.B117	.00	30.00	241.48
058138	P000420	PORTER PIPE AND SUPPLY CO.		11419962	02/26/16		01-12.8502	.00	84.27	
			0	11422254	03/03/16		01-12.B511	.00	183.55	267.82
058139		POSTMASTER, DOWNERS GROVE	BOX 1412	BOX 1412	03/01/16		01-11.B121	,00	1224.00	1224.00
058140		PRINCIPAL LIFE INSURANCE C		1053846	02/16/16		01-17.E455	.00	386.30	386.30
058141		PROFINISH	0	201583	03/10/16		01-12.B103	.00	48.52	48.52
058142		RAINBOW ELECTRIC CO.	0	MRINV6352	02/17/16		01-12.B503	.00	2795.00	2795.00
058143	R000180	RED WING SHOE STORE	KL MS	1-045	02/27/16		01-13.B117	.00	250.73	
			F FURTAK	9696	02/20/16		01-12.B117	.00	118.99	369.72
058144		MARCO RENDON	RENDON	GLASSES	03/15/16		01-12.B117	.00	150.00	150.00
058145	R000305		0	5040657924	02/23/16		01-11.B115	.00	148.61	148.61
058146		SAF-T-GARD INTERNATIONAL	0	1663643	02/18/16		01-14.B113	.00	94.02	94.02
058147	S000045	SAFEDAY, INC.	0	13190	03/07/16		01-14.B113	.00	54.00	
		annun aunn a	0	13191	03/07/16		01-14.B113	.00	642.00	696.00
058148	S000200	SEAWAY SUPPLY CO.	0	113771-01	03/08/16		01-12.B512	.00	56.31	
			0	114194	02/16/16		01-12.B116	.00	46.00	
			0	114224	02/17/16		01-12.B116	.00	252.00	
			0	114385	02/26/16		01-12.B512	.00	235.63	
			0	114386	02/24/16		01-12.B116	.00	180.25	
			0	114387	02/24/16		01-13.B116	.00	29.00	
			0	114673	03/16/16		01-12.B512 01-12.B113	.00	161.10 87.45	1047 74
050140	5000330	SHERWIN-WILLIAMS CO.	0	114869 7488-6	02/16/16		01-12.B113	.00 .00	63.05	1047.74
030143	3000320	Shekwik-wildiams co.	0	8050-3	02/26/16		01-12.B502	.00	66.54	129.59
050150	5000300	SIGNS NOW	0	SN195-49964	03/02/16		01-14.B115	.00	1050.00	1050.00
		SITEONE LANDSCAPE SUPPLY	0	74553618	02/15/16		01-11.B118	.00	110.25	1050.00
030131	3000403	SITEONE EMIDSCAPE SUPPLI	0	74553618	02/15/16		01-12.B812	.00	110.25	220.50
055152	8000463	SOUTHLAND ELECTRICAL SUPPL		3005001	02/13/16		01-12.B512	.00	103.51	220.30
030132	3000433	COLIMAND BUDGIRICAN SOFFU	0	3005673	02/26/16		01-12.B504	.00	132.23	235.74
058152	SOONEAN	STAPLES INC.	0	8038220122	02/27/16		01-12.B303	.00	172.13	453.74
444133	200010		0	8038220122	02/27/16		01-12.B116	.00	81.63	
			0	8038220122	02/27/16		01-14.B116	.00	6.00	259.76
058154	SOONERO	STEPHENS PLUMBING AND	1944WELL	173955	03/07/16		01-14.B910	.00	301.65	301.65
058155		STEVENSON CRANE SERVICE, I		28051	02/25/16		01-12.B510	.00	675.00	675.00
	2000.20		- •							

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NUMBER	NUMBER NAME	ORDER NBR	NUMBER	DATE	EXPENSES	G/L NUMBER	DISCOUNT	PAID	AMOUNT
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058156	S000865 SUBURBAN LABORATORIES, INC	C.LAB1000	131951	02/29/16	131.50	01-13.B123	.00	131.50	131.50
058157	S000867 SUBURBAN LIFE PUBLICATIONS	S 0	10071278	02/17/16	62.52	01-11.B124	.00	62.52	62.52
058158	S000892 SUPERIOR INDUSTRIAL EQUIPM	MEOT	16-0601	03/01/16	144.10	01-12.B505	.00	144.10	144.10
058159	S000895 ROBERT SWIRSKY	DESK	180971	03/04/16	395.00	01-11.B118	.00	395.00	
		BOOT	W1028081434	02/19/16	148.75	01-14.B117	.00	148.75	543.75
058160	T000096 TECH 3 SOLUTIONS INC.	0	502	03/10/16	1371.99	01-12.B513	.00	1371.99	1371.99
058161	T000250 TERRACE SUPPLY COMPANY	0	00961636	02/29/16	46.40	01-12.B116	.00	46.40	
		0	70290183	03/04/16	35.89	01-12.B512	.00	35.89	
		0	70290184	03/04/16	25.34	01-12.B512	.00	25.34	107.63
058162	T000550 TRI-POWER TRADING CO., INC	C.0	3458	03/02/16	557.00	01-12.B513	.00	557.00	557.00
058163	U000150 USABLUEBOOK	LAB998	867548	02/08/16	142.38	01-13.B114	.00	142.38	
		0	887970	03/02/16	329.89	01-12.B511	.00	329.89	
		0	890093	03/04/16	259.52	01-15.B520	.00	259.52	731.79
058164	U000300 UNITED PARCEL SERVICE	0	3Y0091076	02/13/16	6.99	01-14.B113	.00	6.99	
		0	3Y0091096	02/27/16	28.80	01-14.B113	.00	28.80	
		0	3Y0091116	03/12/16	4.27	01-13.B123	.00	4.27	40.06
058165	U000450 UNO CONSTRUCTION CO., INC.	. 0	PAYMENT 8	02/29/16	36606.76	01-14.B910	.00	36606.76	36606.76
058166	V000030 VWR INTERNATIONAL INC.	LAB996	8043937794	02/04/16	226.74	01-13.B114	.00	226.74	226.74
058167	V000135 VERIZON WIRELESS	0	9761275855	02/28/16	155.06	01-11.B112	.00	155.06	
		0	9761275855	02/28/16	630.47	01-12.B112	.00	630.47	
		0	9761275855	02/28/16	318.17	01-14.B112	.00	318.17	
		0	9761275855	02/28/16	99.94	01-15.B112	.00	99.94	
		0	9761351755	03/01/16	40.08	01-12.B112	.00	40.08	
		0	9761351755	03/01/16	4.14	01-14.B112	.00	4.14	
		0	9761351755	03/01/16	10.02	01-15.B112	.00	10.02	1257.88
058168	W000180 WATER ENVIRONMENT FEDERAT	100	9000383261	03/04/16	183.00	01-11.B117	.00	183.00	
		0	9000383261	03/04/16	158.00	01-12.B117	.00	158.00	
		0	9000383261	03/04/16	158.00	01-13.B117	.00	158.00	
		0	9000383261	03/04/16	96.00	01-14.B117	.00	96.00	595.00
058169	W000400 WESTFIELD INSURANCE	0	0001620126	02/27/16	500.00	01-17.E452	.00	500.00	500.00
058170	W000450 VILLAGE OF WESTMONT	DATA	78784	03/02/16	370.01	01-11.B121	.00	370.01	370.01
058171	W000551 WIEDEL, PHILIPP & INDELICA	ATO	14338	02/18/16	675.00	01-11.B124	.00	675.00	
		0	14339	02/24/16	270.00	01-11.B124	.00	270.00	945.00
058172	X000110 XYLEM WATER SOLUTIONS USA	0	3556881837	02/08/16	360.00	01-12.B513	.00	360.00	
		0	3556885567	03/02/16	691.19	01-12.B513	.00	691.19	1051.19
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					200211 22			272211 22	22221 22

372211.23 .00 372211.23 372211.23

DATE 03/18/16 MANUAL PAGE 7

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NUMBER	NUMBER NAME	ORDER NBR	NUMBER	DATE	EXPENSES	G/L NUMBER	DISCOUNT	PAID	AMOUNT
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020001	1000750 INVOICE CLOUD	0	607-2016_2	02/29/16	174.30	01-11.B121	.00	174.30	174.30
030001	V000120 VANTAGEPOINT TRANSFER AGE	NT0-457	PR 02-15-16	02/15/16	1375.00	01-00.2020	.00	1375.00	1375.00
030002	V000120 VANTAGEPOINT TRANSFER AGE	NT0-457	PR 02-13-16	02/13/16	96.76	01-00.2020	.00	96.76	96.76
030003	V000120 VANTAGEPOINT TRANSFER AGE	NT0-457	PR 02-29-16	02/29/16	1375.00	01-00.2020	.00	1375.00	1375.00
030004	V000120 VANTAGEPOINT TRANSFER AGE	NT0-457	PR 02-27-16	02/27/16	97.21	01-00.2020	.00	97.21	97.21
030005	V000120 VANTAGEPOINT TRANSFER AGE	NT0-457	PR 03/12/16	03/12/16	97.67	01-00.2020	.00	97.67	97.67
030006	V000120 VANTAGEPOINT TRANSFER AGE	NT0-457	PR 03/15/16	03/15/16	1375.00	01-00.2020	.00	1375.00	1375.00
041372	H000190 HEALTH CARE SERVICE CORP.	BC/BS	165585	02/15/16	34352.90	01-17.E455	.00	34352.90	34352.90
041378	S000650 STATE DISBURSEMENT UNIT	0	PR 02-13-16	02/13/16	627.23	01-00.2012	.00	627.23	627.23
041379	S000650 STATE DISBURSEMENT UNIT	0	PR02-13-16	02/13/16	323.08	01-00.2012	.00	323.08	323.08
041380	T000330 TIVOLI BOWL	0	EMPL OUTTING	02/22/16	100.00	01-11.B117	.00	100.00	
		0	EMPL OUTTING	02/22/16	75.00	01-12.B117	.00	75.00	175.00
041381	1000100 IL ASSN OF WASTEWATER AGE	NC0ES	MINI CONF	03/01/16	540.00	01-11.B117	.00	540.00	540.00
041382	S000650 STATE DISBURSEMENT UNIT	0	PR 02-27-16	02/27/16	627.23	01-00.2012	.00	627.23	627.23
041383	S000650 STATE DISBURSEMENT UNIT	0	PR02-27-16/	02/27/16	323.08	01-00.2012	.00	323.08	323.08
041384	M000305 SUSAN MAY	BACKUP	REIMBURSE	03/09/16	2171.98	01-14.B129	.00	2171.98	2171.98
041385	L000245 MARTIN LINDENBERGER	BACKUP	REIMBURSE	03/09/16	2500.00	01-14.B129	.00	2500.00	2500.00
041386	S000894 SUPAROSSA RESTAURANT	0	RETI DINNER	03/11/06	161.00	01-00.2005	.00	161.00	
		0	RETI DINNER	03/11/06	235.58	01-11.B117	.00	235.58	
		0	RETI DINNER	03/11/06	306.90	01-12.B117	.00	306.90	
		0	RETI DINNER	03/11/06	74.79	01-13.B117	.00	74.79	
		0	RETI DINNER	03/11/06	155.38	01-14.B117	.00	155.38	933.65
041387	S000650 STATE DISBURSEMENT UNIT	0	PR 03/12/16	03/12/16	323.08	01-00.2012	.00	323.08	323.08
041388	S000650 STATE DISBURSEMENT UNIT	0	PR03/12/16	03/12/16	627.23	01-00.2012	.00	627.23	627.23
055551	D000650 DUPAGE CREDIT UNION	0	PR 02-15-16	02/15/16	750.00	01-00.2013	.00	750.00	750.00
055552	D000650 DUPAGE CREDIT UNION	0	PR 02-13-16	02/13/16	2821.31	01-00.2013	.00	2821.31	2821.31
055553	D000650 DUPAGE CREDIT UNION	0	PR 02-29-16	02/29/16	750.00	01-00.2013	.00	750.00	750.00
055554	D000650 DUPAGE CREDIT UNION	0	PR 02-27-16	02/27/16	2821.31	01-00.2013	.00	2821.31	2821.31
055555	D000650 DUPAGE CREDIT UNION	0	PR 03/12/16	03/12/16	2821.31	01-00.2013	.00	2821.31	2821.31
055556	D000650 DUPAGE CREDIT UNION	0	PR 03/15/16	03/15/16	750.00	01-00.2013	.00	750.00	750.00
077771	1000240 ILLINOIS DEPARTMENT OF RE	VEOUE	PR 02-15-16	02/15/16	924.39	01-00.2001	.00	924.39	924.39
077772	1000240 ILLINOIS DEPARTMENT OF RE	VE0UE	PR 02-13-16	02/13/16	2494.21	01-00.2001	.00	2494.21	2494.21
077773	1000240 ILLINOIS DEPARTMENT OF RE	VEOUE	PR 02-29-16	02/29/16	924.01	01-00.2001	.00	924.01	924.01
077774	1000240 ILLINOIS DEPARTMENT OF RE	VE0UE	PR 02-27-16	02/27/16	2541.02	01-00.2001	.00	2541.02	2541.02
077775	1000240 ILLINOIS DEPARTMENT OF RE	VE0UE	PR 03/12/16	03/12/16	2469.46	01-00.2001	.00	2469.46	2469.46
077776	1000240 ILLINOIS DEPARTMENT OF RE	VE0UE	PR 03/15/16	03/15/16	924.13	01-00.2001	.00	924.13	924.13
088881	1000300 ILLINOIS MUNICIPAL	0	PR 02-29-16	03/08/16	8745.43	01-00.2003	.00	8745.43	
		0	PR 02-29-16	03/08/16	3863.74	01-00.2014	.00	3863.74	
		0	PR 02-29-16	03/08/16	23146.25	01-17.E460	.00	23146.25	35755.42
090001	Y000100 YAHOO SMALL BUSINESS	0	24222677	02/16/16	21.95	01-11.B112	.00	21.95	21,95
090002	Y000100 YAHOO SMALL BUSINESS	0	P-01545554	03/14/16	21.95	01-11.B112	.00	21.95	21.95
099991	B000050 CHASE	0	PR 02-15-16	02/15/16	2907.06	01-00.2000	.00	2907.06	
		.0	PR 02-15-16	02/15/16	2164.62	01-00.2002	.00	2164.62	
		0	PR 02-15-16			01-17.E461	.00	2164.63	7236.31
099992	B000050 CHASE	0	PR 02-13-16	02/13/16	10211.18	01-00.2000	.00	10211.18	
		0	PR 02-13-16			01-00.2002	.00	5388.37	
		0	PR 02-13-16			01-17.E461	.00	5388.33	20987.88
099993	B000050 CHASE	0	PR 02-29-16			01-00.2000	.00	2905.18	
		0	PR 02-29-16			01-00.2002	.00	2163.84	
		0	PR 02-29-16			01-17.E461	.00	2163.83	7232.85
099994	B000050 CHASE	0	PR 02-27-16			01-00.2000	.00	10441.88	
		0	PR 02-27-16			01-00.2002	.00	5487.82	
		-							

01 GENERAL FUND CHECK REGISTER FOR 03/22/16

DATE 03/18/16 MANUAL PAGE 8

CHECK	======VE	NDOR=====	PURCHASE	=====INVOI	CE======				AMOUNT	CHECK
NUMBER	NUMBER	NAME	ORDER NBR	NUMBER	DATE	EXPENSES	G/L NUMBER	DISCOUNT	PAID	AMOUNT
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			0	PR 02-27-16	02/27/16	5487.75	01-17.E461	.00	5487.75	21417.45
099995	B000050 CHASE		0	PR 03/12/16	03/12/16	10238.68	01-00.2000	.00	10238.68	
			0	PR 03/12/16	03/12/16	5327.97	01-00.2002	.00	5327.97	
			0	PR 03/12/16	03/12/16	5327.98	01-17.E461	.00	5327.98	20894.63
099996	B000050 CHASE		0	PR 03/15/16	03/15/16	2905.37	01-00.2000	.00	2905.37	
			0	PR 03/15/16	03/15/16	2164.03	01-00.2002	.00	2164.03	
			0	PR 03/15/16	03/15/16	2164.04	01-17.E461	.00	2164.04	7233.44
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						189908.43		.00	189908.43	189908.43

03 CONSTRUCTION FUND CHECK REGISTER FOR 03/22/16

CHECK NUMBER	NUMBER	====VEN	NDOR======: NAME	8888888	PURCHASE ORDER NBR	number	OICE====== DATE	EXPENSES	G/L NUMBER	DISCOUNT	AMOUNT PAID	CHECK AMOUNT
					2005555555555				********			
058173	B000120	BAXTER &	WOODMAN,	INC.	0	0184674	02/19/16	3761.25	03-35.0502	.00	3761.25	3761.25
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								3761.25		.00	3761.25	3761.25
		DATE REVIEWED					,					
		TRUSTEE	APPROVAL				PRESIDENT					
							CLERK					

ACCOUNTS PAYABLE GENERAL LEDGER RECAP FOR 03/22/16

	ACCOUNTS PAYABLE GENERAL LEDGER RECAP FOR 03/22/	16
G/L NUMBER	COST ACCTG DESCRIPTION	DEBIT CREDIT
		888888888888888888888888888888888888888
01-00.1000	CASH	562119.66-
01-00.1001	CASH - PAYROLL ACCOUNT	185300.06
	FEDERAL TAX WITHHELD	39609.35
01-00.2001	STATE TAX WITHHELD	10277.22
01-00.2002	SOCIAL SECURITY WITHHELD	22696.65
01-00.2003	IMRF WITHHELD	8745.43
01-00.2005	CLEARING	191.00
01-00.2012	WAGE DEDUCTION ORDER	2850.93
01-00.2013	CREDIT UNION WITHHELD	10713.93
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION VOLUNTARY GROUP LIFE	3863.74
01-00.2017		304.00
01-00.2020	DEFERRED COMPENSATION WITHHELD	4416.64
01-05.3001	USER RECEIPTS	2121.85
01-11.B100	ELECTRICITY	106.65
01-11.B101	NATURAL GAS	155.23
01-11.B102	WATER, GARBAGE AND OTHER UTILITIES	132.13
01-11.B110	BANK CHARGES COMMUNICATION	39.40
01-11.B112		1079.00
01-11.B115 01-11.B116	EQUIPMENT/EQUIPMENT REPAIR	4585.92
	SUPPLIES	348.94
01-11.B117 01-11.B118	EMPLOYEE/DUTY COSTS BUILDING & GROUNDS	1584.72 2499.38
	POSTAGE	
01-11.B119 01-11.B121	USER BILLING MATERIALS	6.49 10516.29
01-11.B121 01-11.B124	CONTRACT SERVICES	3858.07
01-11.B124 01-11.B137	MEMBERSHIPS/SUBSCRIPTIONS	395.00
01-11.B137	GAS/FUEL	181.26
01-11.C222	OPERATION/REPAIR	4.99
01-12.B100	ELECTRICITY	5842.87
01-12.B101	NATURAL GAS	572.30
01-12.B102	WATER, GARBAGE AND OTHER UTILITIES	2919.69
01-12.B103	ODOR CONTROL	48.52
01-12.B104	FUEL - GENERATORS	241.61
01-12.B112	COMMUNICATION	833.34
01-12.B113	EMERGENCY/SAFETY EQUIPMENT	1413.32
01-12.B116	SUPPLIES	4304.77
01-12.B117	EMPLOYEE/DUTY COSTS	1724.10
01-12.B401	CHEMICALS - DISINFECTION	4259.85
01-12.8501	EQPT/EQPT REPAIR - BIOSOLIDS AGING & DISPOSAL	777.00
01-12.B502	EQPT/EQPT REPAIR - DISINFECTION	1524.20
01-12.B503	EQPT/EQPT REPAIR - EXCESS FLOW	9131.96
01-12.B504	EQPT/EQPT REPAIR - GRIT REMOVAL	433.51
01-12.8505	EQPT/EQPT REPAIR - INFLUENT PUMPING	6010.78
01-12.B506	EQPT/EQPT REPAIR - PRIMARY TREATMENT	2735.45
01-12.B509	EQPT/EQPT REPAIR - SLUDGE DEWATERING	517.35
01-12.B510	EQPT/EQPT REPAIR - SLUDGE DIGESTION	4623.56
01-12.B511	EQPT/EQPT REPAIR - TERTIARY TREATMENT	1442.58
01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	3992.61
01-12.B513	EQPT/EQPT REPAIR - WWTC UTILITIES	4555.50
01-12.B802	BLDG & GROUNDS - DISINFECTION	159.12
01-12.B809	BLDG & GROUNDS - SLUDGE DEWATERING	737.34
01-12.B810	BLDG & GROUNDS - SLUDGE DIGESTION	63.05
01-12.B811	BLDG & GROUNDS - TERTIARY TREATMENT	204.99
01-12.B812	BLDG & GROUNDS - WWTC GENERAL	8554.61
01-12.B813	BLDG & GROUNDS - WWTC UTILITIES	23.82

7

ACCOUNTS PAYABLE GENERAL LEDGER RECAP FOR 03/22/16

G/L NUMBER	COST ACCTG DESCRIPTION	DEBIT	CREDIT
	=======================================	==========	********
01-12.C222	GAS/FUEL	1251.78	
01-12.C225	OPERATION/REPAIR	616.78	
01-13.B114	CHEMICALS	369.12	
01-13.B116	SUPPLIES	29.00	
01-13.B117	EMPLOYEE/DUTY COSTS	825.52	
01-13.B123	OUTSIDE LAB SERVICES	880.77	
01-13.C222	GAS/FUEL	42.67	
01-14.B112	COMMUNICATION	322.31	
01-14.B113	EMERGENCY/SAFETY EQUIPMENT	959.17	
01-14.B115	EQUIPMENT/EQUIPMENT REPAIR	1554.78	
01-14.B116	SUPPLIES	722.67	
01-14.B117	EMPLOYEE/DUTY COSTS	611.76	
01-14.B124	CONTRACT SERVICES	282.30	
01-14.B127	JULIE SYSTEM	3986.41	
01-14.B128	OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM	30.00	
01-14.B129	REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGES	4671.98	
01-14.B902	SEWER SYSTEM REPAIRS - REPLACEMENT	6206.88	
01-14.B903	SEWER SYSTEM REPAIRS - REHABILITATION	425.00	
01-14.B910	SEWER SYSTEM REPAIRS - BSSRAP PROGRAM	39475.69	
01-14.C222	GAS/FUEL	1235.81	
01-14.C225	OPERATION/REPAIR	67.12	
01-15.B100	ELECTRICITY	8551.03	
01-15.B112	COMMUNICATION	265.76	
01-15.B116	SUPPLIES	47.91	
01-15.B520	EQUIP/EQUIP REPAIR - BUTTERFIELD	1133.07	
01-15.B523	EQUIP/EQUIP REPAIR - EARLSTON	620.00	
01-15.B527	EQUIP/EQUIP REPAIR - VENARD	857.09	
01-15.8529	EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL	1707.22	
01-17.E452	LIABILITY/PROPERTY	16929.98	
01-17.E455	EMPLOYEE GROUP HEALTH	37365.20	
01-17.E460	IMRF	23146.25	
01-17.E461	SOCIAL SECURITY	22696.56	
03-00.1000	CASH		3761.25-
03-35.0502	DESIGN ENGINEERING/ARCHITECTURAL	3761.25	

565880.91 565880.91-

Vendor	Invoice Date	Amount	Coding	Coding Description	Purchase Location	Emp.	Procurement	Project Name (If applicable)	Item Description
Grainger	02/15/16	\$41.60	01-12.B116	WWTC SUPPLIES	Delivered	СР		Push to Test Lights	(40) # 755 & (40) # MB120 Miniature Bulbs
Grainger	02/12/16	\$58.86	01-12.B802	BLDG & GROUNDS - DISINFECTION	In-Store	MR		Hypo Building Indoor Lighting	42W CFL Bulbs
Grainger	02/17/16	\$44.70	01-12.B116	WWTC SUPPLIES	Delivered	RS	Circle K	Electrical Repairs	(10) Rolls Super 33+ Electrical Tape
Grainger	02/16/16	\$80.64	01-12.B802	BLDG & GROUNDS - DISINFECTION	In-Store	MR		Lighting Repair Hypo Bldg.	(4) CFL Electronic Ballasts
Grainger	02/17/16	\$19.62	01-12.B802	BLDG & GROUNDS - DISINFECTION	Delivered	MR		Hypo Building Indoor Lighting	42W CFL Bulbs
Grainger	02/18/16	\$62.55	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	MR		Marco Tool Replacement (Worn out)	Diagonal Cutters & Wire Strippers
Grainger	02/18/16	\$83.88	01-12.B505	EQPT/EQPT REPAIR - INFLUENT PUMPING	Delivered	MR		Bar Screen 1 Power Cord Repair	15 Amp Control Fuses
Grainger	02/23/16	\$6.78	01-12.B116	WWTC SUPPLIES	Delivered	СР		Shop Tool	1/4" Arbor Pilot Bit
Grainger	02/24/16	\$60.87	01-12.B116	WWTC SUPPLIES	Delivered	СР		Shop Supplies	40, 80 & 100 Grit Emery Cloth
Grainger	02/24/16	\$18.54	01-12.B113	WWTC EMERGENCY/SAFETY EQUIPMENT	Delivered	AC		Safety Equipment	Dense Foam Kneeling Pad
Grainger	02/24/16	\$22.64	01-12.B510	EQPT/EQPT REPAIR - SLUDGE DIGESTION	Delivered	AC		Pearth 2 Overhaul	V-Belts for the Oiler System
Grainger	02/25/16	\$305.29	01-12.B513	EQPT/EQPT REPAIR - WWTC UTILITIES	Delivered	RS		Generator Cooling Water Pump Upgrades	Electrical Supplies
Grainger	02/25/16	\$165.20	01-12.B513	EQPT/EQPT REPAIR - WWTC UTILITIES	Delivered	RS		Generator Cooling Water Pump Upgrades	Electrical Supplies
Grainger	02/25/16	\$118.28	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	Delivered	FF		MSB Fire Alarm Sprinkler System	Pressure Gauges
Grainger	02/26/16	\$191.16	01-12.B511	EQPT/EQPT REPAIR - TERTIARY TREATMENT	Delivered	NW		Sand Filter 5 Carriage Drive	3ph, 1/3hp Motor
Grainger	03/02/16	\$21.84	01-12.B510	EQPT/EQPT REPAIR - SLUDGE DIGESTION	In-Store	JM		Gas Compressor Overhaul	Brass Oil Line Fittings
Grainger	03/03/16	\$66.36	01-12.B811	BLDG & GROUNDS - TERTIARY TREATMENT	Delivered	MR		Filter Building Lighting	(6) Ballasts
Grainger	03/03/16	\$66.24	01-12.B116	WWTC SUPPLIES	Delivered	СР		Shop Horizontal Band Saw	11ft - 3in Saw Blade
Grainger	03/04/16	\$166.18	01-12.B509	EQPT/EQPT REPAIR - SLUDGE DEWATERING	Delivered	RS		Belt Press Repair	Heavy Duty Limit Switch
Grainger	03/08/16	\$308.40	01-12.B116	WWTC SUPPLIES	Delivered	СР		Stock	sc, Arbor Flap Disc, Arbor Mount Flap Disc (Med), Arbor Mount Flap Disc (Fine)
Grainger	03/09/16	\$19.60	01-12.B510	EQPT/EQPT REPAIR - SLUDGE DIGESTION	Delivered	AC		Primary ODS Pumps	Pressure Gauge
Grainger	03/10/16	\$17.53	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	RS		Stock	Misc. Hardware
Grainger	03/16/16	\$41.44	01-12.B503	EQPT/EQPT REPAIR - EXCESS FLOW	In-Store	СР		Excess Bridge Skimmer Blade Replacement	(2) 5/8" Drill Bits
Grainger	03/16/16	\$23.82	01-12.B813	BLDG & GROUNDS - WWTC UTILITIES	In-Store	СР		Outdoor Lighting Repair	(2) HPS Light Bulbs
Home Depot	02/18/16	\$59.95	01-12.B113	WWTC EMERGENCY/SAFETY EQUIPMENT	In-Store	ST			Mechanics Safety Gloves
Home Depot	02/18/16	\$213.68	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	ST	Shopped	Tunnel Bracket Piping replacement	Strut channel, head bolts and spring nuts
Home Depot	03/09/16	\$3.87	01-11.B115	EQUIPMENT	In-Store	AK		Phone training	Inline Cord Coupler
Home Depot	03/08/16	\$56.60	01-12.B116	WWTC SUPPLIES	In-Store	JM		Goose Proofing Digester Roof	Nails & Mason Line
Home Depot	02/26/16	\$155.66	01-12.B116	WWTC SUPPLIES	In-Store	JM		Misc. Supplies	Ice Scrapers, Copper Tubing & Fittings, WD-40, Brake Fluid
Home Depot	02/25/16	\$235.35	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	In-Store	FF		MSB Fire Alarm Sprinkler System	Plumbing Supplies, Saw Blades
Home Depot	02/24/16	\$84.10	01-12.B510	EQPT/EQPT REPAIR - SLUDGE DIGESTION	In-Store	СР		Grease Receiving Tank Screen	Rake and Poles for rag screen
Home Depot	02/24/16	\$7.47	01-14.B115	SEWER SYSTEM EQUIPMENT/EQUIPMENT REPAIR	In-Store	AH		Flow meters	Wrench for flow meter installation
Home Depot	03/04/16	\$138.63	01-12.B811	BLDG & GROUNDS - TERTIARY TREATMENT	In-Store	RS		Filter Building Electrical Clean -up	Electrical Supplies, Caulk, Concrete Parch
Home Depot	02/23/16	\$15.97	01-12.B116	WWTC SUPPLIES	In-Store	СР		Lab Shop Vac Repair	Shop Vac Filter
Home Depot	03/14/16	\$49.06	01-12.B116	WWTC SUPPLIES	In-Store	AC		Painting Supplies	Mini Rollers & Paint Trays
Home Depot	03/12/16	\$23.92	01-14.B116	SEWER SYSTEM SUPPLIES	In-Store	AH		Flow meters	8 carabineers
Home Depot	03/01/16	\$47.91	01-15.B116	LIFT STATION SUPPLIES	In-Store	СР		Re-stock Misc. Supplies	Chain connecting links, Trash bags for stations

DOWNERS GROVE SANITARY DISTRICT

<u>M E M O</u>

TO: Board of Trustees

FROM: W. Clay Campbell

Administrative Services Director

DATE: March 14, 2016

RE: Resolution of Appreciation for

Beverlee A. Fleming

Attached is a Resolution of Appreciation for Beverlee A. Fleming to recognize her twenty-eight years of service to the District. This item is on the agenda for the March 22 meeting. A framed original of the resolution was presented to Bev at the dinner on Friday, March 11.

Attachment

cc: KJR, RTJ, MJS, NJM, MGP

RESOLUTION OF APPRECIATION

WHEREAS, BEVERLEE A. FLEMING, has served the residents of the DOWNERS GROVE SANITARY DISTRICT since 1987 as Secretary/Billing Staff from 1987 to 1991, Accounting Assistant from 1991 to 1993, User Accounts Coordinator from 1993 to 2003 and as Accounting Assistant of the District from 2003 to 2016; and

WHEREAS, the outstanding professionalism and integrity of BEVERLEE A. FLEMING has resulted in the District being recognized by professional and peer groups year after year as a model for sanitary districts statewide; and

WHEREAS, BEVERLEE A. FLEMING has exhibited the necessary skills, knowledge, ability, and judgment to properly support operation of the District's Administration Center; and

WHEREAS, BEVERLEE A. FLEMING has exhibited a dedication to transparency, accountability and efficiency in all administrative aspects of the District's operations; and

WHEREAS, the ceaseless efforts of BEVERLEE A. FLEMING as Accounting Assistant enabled the District to find cost-effective solutions to difficult issues, to operate its Administration Center in an efficient and professional manner and to continue to provide exceptional service to the residents of the District; and

WHEREAS, BEVERLEE A. FLEMING has exhibited an unfailing dedication to public service by her constant concern and attention to all matters important to the administration of the District during her twenty-eight years of public service.

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the DOWNERS GROVE SANITARY DISTRICT, that BEVERLEE A. FLEMING is hereby commended for her dedicated and exemplary service to the DOWNERS GROVE SANITARY DISTRICT and to the residents thereof; and

BE IT FURTHER RESOLVED that a copy of this Resolution be spread upon the records of the DOWNERS GROVE SANITARY DISTRICT and an embossed copy thereof be delivered by the Clerk of this District to the said BEVERLEE A. FLEMING.

PASSED AND APPROVED by the Board of Trustees of the DOWNERS GROVE SANITARY DISTRICT, this 22nd day of March, 2016, in honor of the twenty-eight years of outstanding service by BEVERLEE A. FLEMING to the District.

DOWNERS GROVE SANITARY DISTRICT

BY:		
	President	
ATTEST:		
	Clerk	

Board of Trustees
Wallace D. Van Buren
President
Amy S. Kovacevic
Vice President
Donald F. Peters
Clerk



2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org Staff
Nicholas J. Menninga
General Manager
W. Clay Campbell
Administrative Services

Legal Counsel Michael G. Philipp

Director

Providing a Better Environment for South Central DuPage County

Memo

To: Board of Trustees

From: Nick Menninga, General Manager

Date: March 18, 2016

Subject: Five Year Financial Plan and Appropriation Ordinance

Attached is a revised cover sheet for the Five Year Financial Plan for Fiscal Years 2016-2017 to 2020-2021. Also attached is a corrected Attachment A cash flow sheet from the appropriation ordinance distributed last month. The User Fee line item had a typographical error that Clay flagged in his review.

The Proposed Five Year Financial Plan for Fiscal Years 2016-2017 to 2020-2021 and the FY 16-17 Appropriation Ordinance distributed for last month's Board of Trustees meeting have been on public notice for 30 days, starting February 17, 2016. No comments have been received.

I will be seeking final Board approval of the Five Year Financial Plan for Fiscal Years 2016-2017 to 2020-2021 at the March 22, 2016 regular meeting. I will also be seeking adoption of the FY 16-17 Appropriation Ordinance, and for the President and Clerk to sign the same.

C: BOLI, WCC, MGP

DOWNERS GROVE SANITARY DISTRICT
FIVE YEAR FINANCIAL PLAN
FISCAL YEARS 2016-2017 TO 2020-2021

ATTACHMENT A

CASH FLOW FISCAL YEAR 2016-2017

	General <u>Corporate</u>	<u>Improvement</u>	Construction	Public <u>Benefit</u>
Projected Cash Balance on 5/1/16	<u>\$2,156,937</u>	<u>\$1,451,212</u>	\$1,227,367	\$ 35,302
Receipts:				
Const and Televising Insp Fees	650			
User Fees	6,462,600			
Interest	9,650	7,250	4,500	200
Plan Review Fees	1,000			
Surcharges	310,000			
Permit Insp Fees	20,000			
Sampling Charges	65,000			
Tap-in Fees			250,000	
Trunk and Lateral Sewer Charges		90,000		
Replacement Taxes	79,800			
Real Estate Taxes	1,127,250			
Grease Waste	140,000			
Miscellaneous	37,500		74,000	
Total Receipts	8,253,450	97,250	328,500	200
Subtotal	\$10,410,387	<u>\$1,548,462</u>	\$ 1,555,867	35,502
Disbursements:				
O & M Budget	9,820,000			
Capital Improvements Budget		120,000	1,200,000	0
Total Disbursements	9,820,000	120,000	1,200,000	0
Projected Cash Balance on 4/30/17	<u>\$ 590,387</u>	<u>\$ 1,428,462</u>	\$ 355,867	\$ 35,502

STATEMENT OF ESTIMATED REVENUES

I, William Clay Campbell, Treasurer of the Downers Grove Sanitary District, do hereby state that the above document entitled "Cash Flow, Fiscal Year 2016-2017" indicates an estimate of revenues by source anticipated to be received in Fiscal Year 2016-2017.

DOWNERS GROVE SANITARY DISTRICT

BY:			
	Treasurer		

DOWNERS GROVE SANITARY DISTRICT

<u>MEMO</u>

TO: Board of Trustees

FROM: Nick Menninga

General Manager

DATE: March 18, 2016

RE: Proposed Ordinance No. ORD 16-01

Attached please find a copy of proposed Ordinance No. ORD 16-01 which contains recommended ordinance amendments as described below.

A. <u>Tap-in Fee, Trunk Sewer Service Charge and Lateral Sewer Charge (Article II Sections 13c, d and e)</u>

In accordance with the practice established in 1993, staff proposes to increase the tap-in fee, trunk sewer service charge and the lateral sewer charge based on the change in the Engineering News Record magazine's Construction Cost Index (CCI) from December 2014 to December 2015. The CCI increased 2.00% during this period. Applying this change results in the proposed rates indicated in Table 1 - Summary of rate adjustments.

B. <u>Permit Inspection Fee (Article II Section 13b) and Sewer Construction Inspection Rate</u> (Article IV Section 4b)

The permit inspection fee and sewer construction inspection rates are proposed to be increased by roughly 3.9% to reflect budgeted wage adjustments.

C. <u>Monthly Fees (Article VI Section 14)</u>

The monthly service fee on all accounts will increase to \$13.50 per month, as indicated in the 5-year plan.

Sampling and monitoring charges will increase by roughly 3.9%, commensurate with budgeted salary increases for FY 16-17, as indicated below:

- 1) Significant industrial users will be assessed \$110.12 per month. There are 5 accounts in the billing system in this class.
- 2) Industrial users who have been issued wastewater discharge permits by the District would be assessed \$41.30 per month. There are 2 accounts in the billing system in this class.

- 3) Users subject to surcharge, either based on actual sampling or at the flat rate, would be assessed a sampling and monitoring charge of \$15.72 per month. There are 213 accounts in this class.
- 4) All commercial or industrial users not included in one of the three classes described above would be assessed sampling and monitoring charges of \$4.96 per month. There are 655 accounts in this class.

I will request Board approval of Ordinance No. ORD 16-01 at the March 22 regular meeting. If approved, this ordinance would be published in the Downers Grove Reporter on March 23, 2016 and would be effective on April 2, 2016.

cc: BOLI, TTC, WCC, DRB, MGP

AN ORDINANCE AMENDING AN ORDINANCE REGULATING THE USE OF SANITARY SEWERS ORDINANCE NO. ORD 16-01

BE IT ORDAINED by the President of the Board of Trustees of the Downers Grove Sanitary District, a body politic and corporate of DuPage County, Illinois, that the following portions of "An Ordinance Regulating the Use of Sanitary Sewers, adopted May 16, 1967, as Amended" are hereby amended to read as follows:

Article II Section 13

- (b) An Inspection Fee shall be charged to cover the cost to the District of inspections of the installation of building sanitary services to ensure sanitary service lines are adequate and suitable for connection to the District and to insure compliance with District ordinances and regulations, as follows:
 - (1) Single Family Class \$185.00 \$192.00 per building sanitary service.
 - (2) All Other Classes \$307.00 \$319.00 per building sanitary service or \$177.00 \$184.00 per building if no work on building sanitary service is required.
- (c) A Tap-In Fee shall be charged for all connections to the District for the necessary construction, expansion, and extension of wastewater treatment plant facilities. The tap-in fee shall be calculated upon a rate of \$810.00 \frac{\$826.00}{} per population equivalent (P.E.), and shall be assessed as follows:
 - (1) Single Family Class 3.5 P.E. per unit or \$2,835.00 \$2,891.00 per unit.
 - (2) Multiple Family Class -

Efficiency or studio apartment unit - 1.0 P.E. or \$\frac{\\$810.00}{\}\$826.00 per unit.

One bedroom apartment unit - 1.5 P.E. or \$1215.00 \$1,239.00 per unit.

Two or three bedroom apartment unit - 3.0 P.E or \$2,430.00 \$2,478.00 per unit.

- (d) A Trunk Sewer Service Charge shall be charged for the necessary construction, expansion, and extension of trunk sewer facilities. The trunk sewer service charge shall be calculated upon a rate of \$375.00 \$383.00 per population equivalent (P.E.) and shall be assessed as follows:
 - (1) Single Family Class 3.5 P.E per unit or \$1,312.50 \$1,340.50 per unit.
 - (2) Multiple Family Class -

Efficiency or studio apartment unit - 1.0 P.E. or \$375.00 \$383.00 per unit.

One bedroom apartment unit - 1.5 P.E. or $\$562.50 \ \574.50 per unit. Two or three bedroom apartment unit - 3.0 P.E. or $\$1,125.00 \ \$1,149.00$ per unit.

- (4) Minimum Charges The minimum trunk sewer service charge for commercial, industrial, or business use shall be \$9,375.00 \$9,575.00 per acre (25 P.E. per acre). The minimum trunk sewer service charge for all other uses shall be \$3,750.00 \$3,830.00 per acre (10 P.E. per acre).
- (e) A Lateral Sewer Charge shall be charged for the necessary construction, expansion, and extension of lateral sanitary sewer facilities. The lateral sewer service charge shall be assessed whenever a building is to be connected to a public sanitary sewer which was installed at the expense of the District. The lateral sewer service charge shall be assessed as follows:
 - (1) All Classes

\$10,441.00 \$10,650.00 per building sanitary service to near side property

\$7,569.00 \$7,720.00 per building sanitary service to far side property.

Article IV Section 4

(b) The person constructing or causing to have constructed said public sanitary sewer shall reimburse the District for all costs of inspecting said sewer installation, at the rates of \$58.00 \$60.00 per hour straight time and \$87.00 \$90.00 per hour overtime if said inspection is performed by District personnel, and at billed cost if said inspection is performed by others.

Article VI Section 14

Monthly fees consist of a service fee of \$12.00 \(\frac{\$13.50}{} \) per month for all accounts, and sampling and monitoring charges if applicable.

The sampling and monitoring charges shall be as follows:

- (a) \$\frac{\$105.99}{200}\$ \frac{\$110.12}{200}\$ per month for each significant industrial user subject to any National Categorical Pretreatment Standard or discharging an average of 25,000 gallons or more of wastewater per day.
- (b) \$39.75 \$41.30 per month for each industrial user subject to a wastewater discharge permit issued by the District and not included in (a) above.
- (c) \$15.13 \$15.72 per month for each user subject to surcharge.
- (d) \$4.77 \(\frac{\\$4.96}{\}\) per month for all industrial (including commercial) users not included in (a), (b) or (c) above.

PASSED AND APPROVED by the President and Board of Trustees of the Downers Grove Sanitary District at a regular meeting of the Trustees held on the 22nd day of March, 2016, to become effective ten (10) days after publication thereof.

DOWNERS GROVE SANITARY DISTRICT

	DV.	
	BY: President	
	Tosident	
ATTEST:		
Clerk		

DOWNERS GROVE SANITARY DISTRICT TAP-IN FEE, TRUNK SEWER SERVICE CHARGE AND LATERAL SEWER CHARGE SUMMARY OF RATE ADJUSTMENTS

				TRUNK		LATERAL		LATERAL	
	ENR			SEWER		SEWER		SEWER	
DATE	CCI	TAP-IN	PERCENT	SERVICE	PERCENT	CHARGE-	PERCENT	CHARGE-	PERCENT
ADOPTED	US	FEE	CHANGE	CHARGE	CHANGE	NEAR SIDE	CHANGE	FAR SIDE	CHANGE
04/02/16	2.0%	826.00	2.0%	383.00	2.1%	10,650.00	2.0%	7,720.00	2.0%
04/05/15	2.8%	810.00	2.8%	375.00	2.7%	10,441.00	2.8%	7,569.00	2.8%
04/04/14	2.7%	788.00	2.7%	365.00	2.8%	10,160.00	2.7%	7,365.00	2.7%
03/30/13	2.6%	767.00	2.7%	355.00	2.6%	9,895.00	2.6%	7,172.00	2.6%
03/24/12	2.5%	747.00	2.5%	346.00	2.4%	9,644.00	2.5%	6,990.00	2.5%
04/02/11	3.6%	729.00	3.6%	338.00	3.7%	9,412.00	3.6%	6,822.00	3.6%
04/04/10	1.1%	704.00	1.1%	326.00	1.2%	9,085.00	1.1%	6,585.00	1.1%
04/05/09	5.7%	696.00	5.6%	322.00	5.6%	8,985.00	5.7%	6,515.00	5.7%
03/25/08	2.6%	659.00	2.6%	305.00	2.7%	8,500.00	2.6%	6,165.00	2.6%
03/27/07	3.1%	642.00	3.0%	297.00	3.1%	8,285.00	3.1%	6,010.00	3.1%
04/25/06	4.4%	623.00	4.4%	288.00	4.3%	8,035.00	4.4%	5,830.00	4.4%
04/19/05	7.8%	597.00	7.8%	276.00	7.8%	7,696.00	7.8%	5,584.00	7.8%
05/24/04	3.3%	554.00	3.4%	256.00	3.2%	7,142.00	3.3%	5,182.00	3.3%
04/29/03	2.7%	536.00	2.7%	248.00	2.5%	6,914.00	2.7%	5,016.00	2.7%
04/23/02	1.7%	522.00	1.8%	242.00	1.7%	6,732.00	1.7%	4,884.00	1.7%
04/24/01	2.6%	513.00	2.6%	238.00	2.6%	6,620.00	2.6%	4,802.00	2.6%
04/25/00	2.3%	500.00	2.5%	232.00	1.8%	6,452.00	2.3%	4,680.00	2.3%
04/20/99	2.3%	488.00	2.1%	228.00	1.8%	6,306.00	2.3%	4,574.00	2.3%
04/28/98	2.0%	478.00	1.9%	224.00	1.8%	6,167.00	2.0%	4,473.00	2.0%
07/01/97	3.7%	469.00	3.1%	220.00	3.3%	6,046.00	3.2%	4,385.00	3.2%
04/23/96	1.6%	455.00	2.5%	213.00	2.4%	5,859.00	2.5%	4,249.00	2.5%
04/27/95	2.4%	444.00	3.5%	208.00	3.5%	5,716.00	3.6%	4,145.00	3.6%
								•	
04/26/94	5.0%	429.00	5.7%	201.00	5.8%	5,517.00	5.7%	4,001.00	5.7%
04/20/93	3.5%	406.00	4.6%	190.00	4.4%	5,220.00	4.8%	3,785.00	4.8%
07/23/92		388.00	6.9%	182.00	7.7%	4,980.00	7.7%	3,611.00	7.7%
04/16/91		363.00	3.4%	169.00	2.7%	4,625.00	2.6%	3,354.00	2.6%
02/20/90		351.00	5.4%	164.50	3.1%	4,508.00	3.2%	3,269.00	3.2%
02/21/89		333.00	2.1%	159.50	2.2%	4,368.00		3,168.00	
02/16/88		326.00	63.0%	156.00	5.4%				
05/06/86				148.00	2.1%				
04/16/85		200.00	115.4%						
05/01/84				145.00	14.6%				
04/06/82				126.50	8.1%				
04/01/80				117.00	25.8%				
12/19/78		92.86							
04/04/78				93.00	8.1%				
02/15/77				86.00	14.7%				
06/17/75				75.00	20.0%				
11/06/73		107.14							
10/19/73				62.50	34.8%				
09/25/72				46.38	34.4%				
03/30/71				34.50	13.1%				
04/08/70				30.50	6.1%				
01/01/69				28.75	5.8%				
02/01/68				27.18	5.0%				
05/16/67		85.71							
02/01/67		-		25.88					
11/18/58		57.14							
,,,									

DOWNERS GROVE SANITARY DISTRICT

MEMO

TO: Board of Trustees

FROM: W. Clay Campbell

Administrative Services Director

DATE: March 18, 2016

RE: Operations Report – Bill Payment Methods and Online Billing Portal

The District has experienced many changes over the last ten years in both the various forms of payment the District accepts as well as the way in which the District processes payments. This operations report summarizes these changes into the following topics:

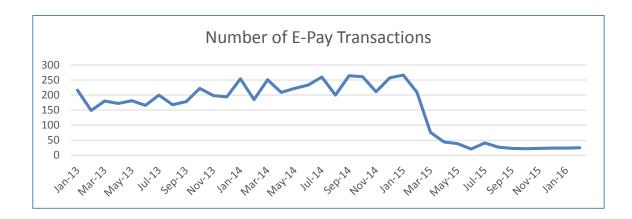
- E-Pay Service
- Remote Image Capture of Checks
- DGSD AutoPay/EasyPay Program
- Check Aggregation
- DGSD Online Billing Portal (partnered with InvoiceCloud)

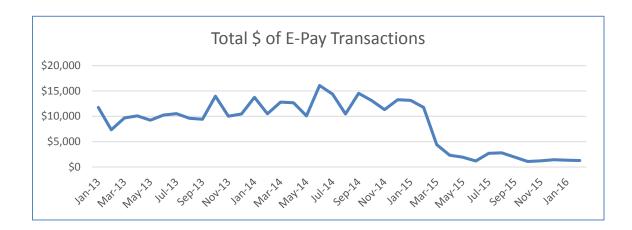
E-Pay Service

In 2006, the District offered cash, check and automatic direct debit (known as "AutoPay") to our customers as acceptable forms of payment. In 2008, the District enrolled in the E-Pay service offered by the Illinois State Treasurer's Office as a way of offering the District's customers additional payment options such as credit card (Mastercard, Discover and American Express) and electronic check (electronic ACH). This was the first time the District offered credit card payment as an option to customers for paying their sanitary sewer bill. The service charges a sliding-scale fee for each transaction that is paid by the customer. For a typical transaction of \$45, payment by electronic check incurs a \$1.00 convenience fee while payment by credit card incurs a convenience fee of 2.35% (\$1.06 in this case) of the transaction total with a minimum of \$1.00. These fees are borne by the customer making the payment and there is no direct cost to the District. The District never collects this fee – it is managed directly by the Illinois State Treasurer's Office and their third-party provider. E-Pay transactions do require a significant amount of administrative time as each payment must be manually printed, manually applied in our accounting system, and any fees related to payment rejections (due to either insufficient funds or incorrect account information) must then be entered as an adjustment for additional monies now owed.

In 2014, the E-Pay service processed 2,807 successful transactions (representing approximately \$153,065) for the District. In reviewing the tables below, use of the E-Pay service appeared to be slowly trending upward from early 2013 to early 2015, but has dramatically declined since February 2015 with the launch of the District's online billing portal twelve months ago. Since the billing portal's launch, the E-Pay service has averaged only 25 transactions (representing approximately \$1,500) per month. Due to this significantly diminishing use of the service and the

associated high administrative costs, staff has determined that discontinuing the service on June 1, 2016 is appropriate.

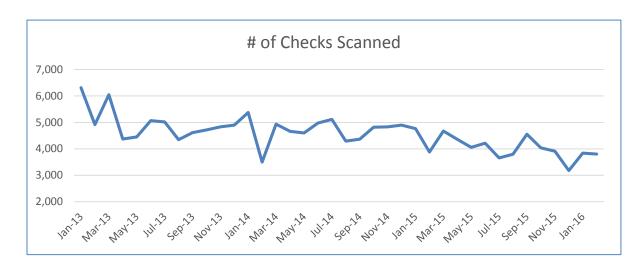


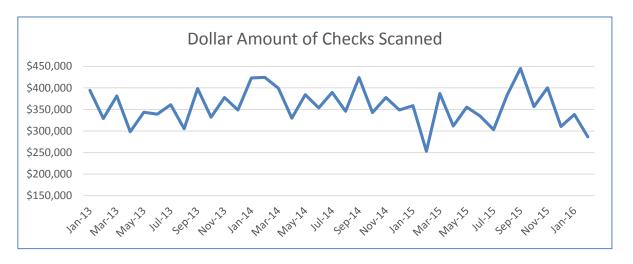


Remote Image Capture of Checks

In 2010, the District started to process paper checks using a technology called "remote image capture," which is used almost everywhere by bank tellers to process customers' checks for deposit. The technology relies on the use of a small desktop check scanner that creates an image for each check and coordinates with an online portal to create batches of checks for deposit using the information on the check. The technology allows the District to deposit and clear checks the same day or shortly after we receive them meaning the District receives its funds much quicker with less human error involved and eliminates most trips to the bank. Billing staff has its own balancing procedures to ensure accurate payment application. In 2011, staff started using handheld scanners to scan a pre-printed portion of the bill to speed up this balancing procedure. Previously, staff would use a 10-key calculator to run a tape for balancing – a process that has been proven to be more prone to mis-keying of data and human error. The following charts clearly identify the decline in paper checks that the District has received as customers are transitioning to other forms

of payment now offered by the District. We now receive approximately two-thirds of the volume of paper checks as compared to three years ago.

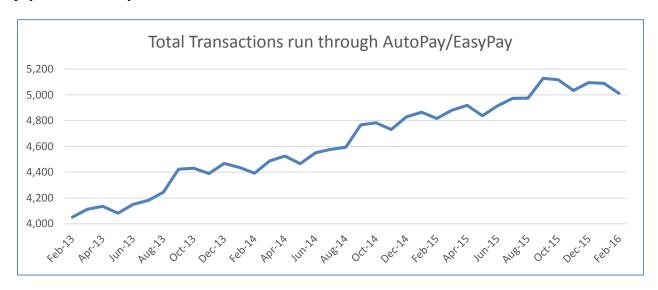


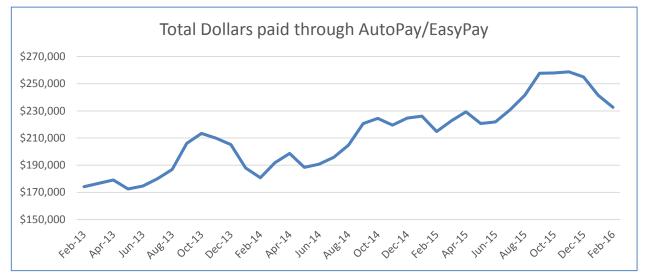


DGSD AutoPay/EasyPay Program

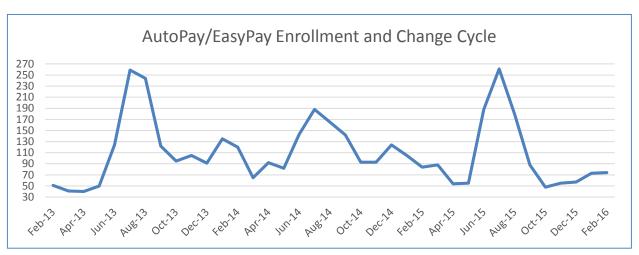
The District's AutoPay program has been offered to our customers since April 1, 1996. The service has provided customers with the option to have their sanitary sewer bill automatically paid directly from their checking account two to three days before the due date. They continue to receive a bill reminding them that payment will be withdrawn. Over the last twenty years, enrollment in the program has steadily increased since its introduction. This service involves very little administrative cost as the payments are applied automatically in the District's accounting system and approximately 25% of the District's customers utilize this service. It is estimated that approximately 5,050 accounts (the District bills roughly 20,000 accounts) representing approximately \$252,000 of revenue run through this Program. It is rare, but billing staff does periodically have to adjust for bank fees when a customer has either closed their account or has insufficient funds. The District does pay ACH processing fees to its banking partner for these transactions each month, but it pales in comparison to the administrative cost if these transactions were still being processed manually. In the tables below, it is worth noting that the program's

consistent growth over time reflects that the automated service continues to offer our customers payment reliability for zero cost.





In 2011, the District began including an AutoPay enrollment form with our annual newsletter mailed out to customers. In compiling our data, we observed a noticeable uptick in the program's enrollment in those months following delivery of the form in the months of May, June and July.

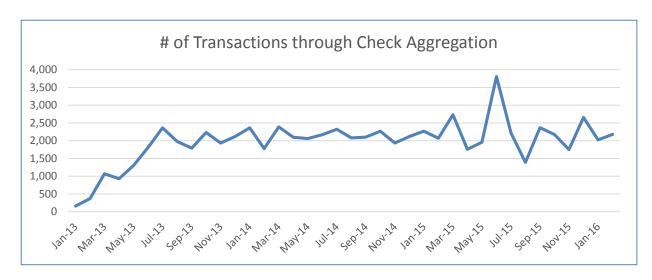


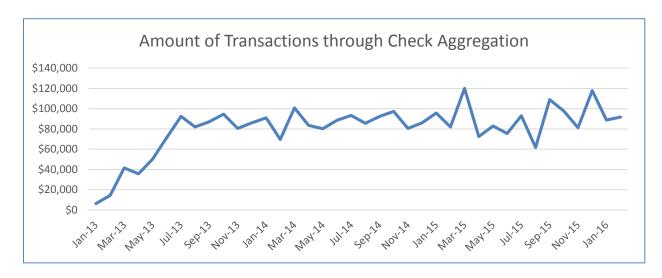
The District's online billing portal also offers an automated payment system (which is also named Autopay) and it offers automated credit card and ACH payments to our customers for a fee. Over the last year, we have had several customers enroll in the online billing portal's Autopay service when they intended to utilize the District's comparable free service. To help make it easier for our customers, the District's free automatic payment program has been renamed to EasyPay. We are utilizing all avenues (including the new website) to notify our customers of the name change.



Check Aggregation

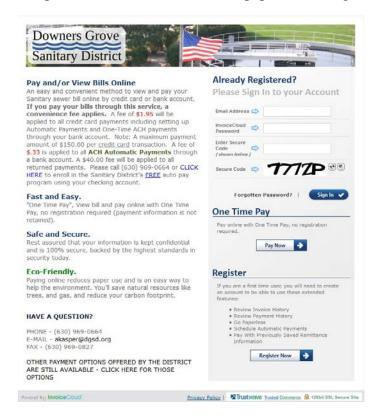
When a customer goes online to their bank's website and directs the bank to pay their bills, the bank would traditionally issue a paper check to the District with the customer's account information in the memo section of the check. These checks would still need to be processed manually to apply the payment correctly to a customer's account. Check aggregation involves the use of a third-party provider that establishes the District as an identified "pay merchant." The third-party provider then collects the payment requests electronically, delivers the data to the District in a file format that can be uploaded automatically to our system, and deposits the funds directly into the District's bank account. In one form or another, the District has utilized check aggregation to receive its payments since 2009. In 2013, the District was able to partner with Online Resources Corporation to consolidate several different check aggregation providers into one resulting in optimal use of this service. Since using such a service, the District has been able to significantly reduce both the administrative costs and the volume of physical checks being processed through the office. At this time, the District estimates that approximately 20% of the District's payments come through this way. The tables below quantifying number and amount of transactions highlight the growth of this payment option. This services costs the District roughly \$40 per month.



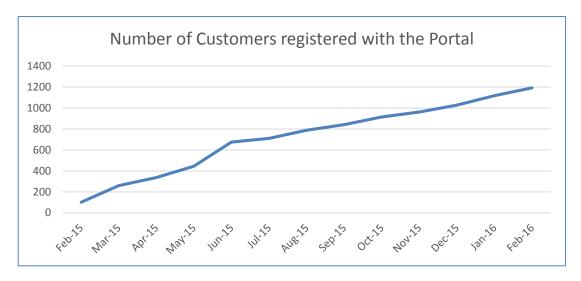


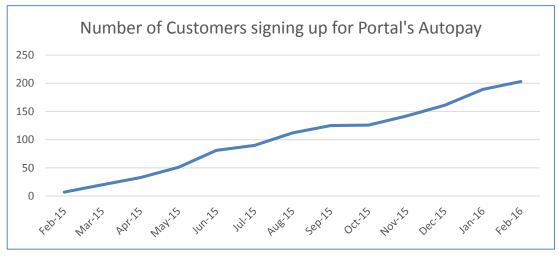
DGSD Online Billing Portal (partnered with InvoiceCloud)

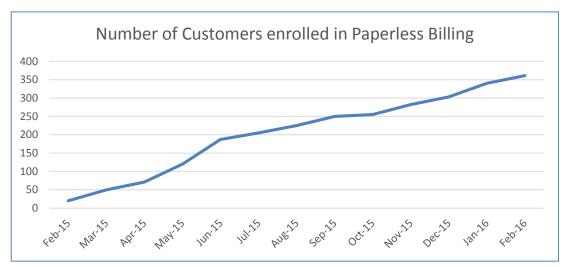
Roughly one year ago, the District launched its own online billing portal by partnering with InvoiceCloud, a third-party provider that offers payment by credit card (Visa, Mastercard and Discover) and electronic ACH. The additional option of paying with Visa was very well received by our customers. The system provides District customers with the ability to obtain a copy of their bill at any time, pay online and to even go paperless (an option that saves the District approximately \$.05 per bill). There are both one-time and automatic payment options. The billing portal reflects an accurate daily total of the customer's account with the District and transactions are reconciled daily as well. The District's costs for offering this service is kept very low through the third-party provider charging a flat convenience fee of \$1.95 per transaction for credit card payments and one-time ACH payments. Automated ACH payments incur a \$0.33 fee each transaction. It is worth noting that use of the portal accelerated last summer after promotion in both the annual newsletter and through the use of an additional insert. The following charts identify appreciable growth in the portal's use by our customers over the last year by tracking number of registrations, enrollments in the online portal's automated service and paperless billing.





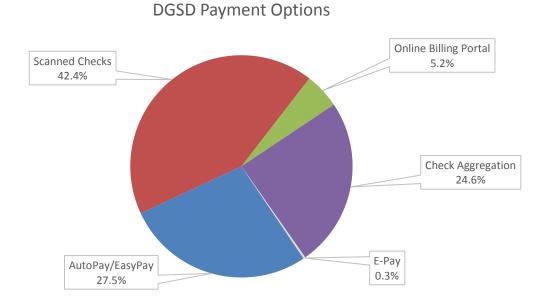






The District's online billing portal has been responsible for facilitating 4,691 transactions representing \$255,430 over the last year. The cost to the District of offering this service is approximately \$112 per month or \$1,350 annually.

Finally, the below pie chart identifies the various non-cash payment options offered by the District and their makeup of the total number of payments each month.



The District has come a long way in the last ten years to accommodate increased demands from our customers as to their payment options. These changes have leveraged newer technologies to be able to offer expanding payment flexibility while maintaining or even lowering the administrative costs of providing such service. The Administration department staff is dedicated to continuing this trend into the future.

cc: KJR, RTJ, MJS, NJM, AK, AJC, MGP

DOWNERS GROVE SANITARY DISTRICT

MEMO

TO: Board of Trustees

FROM: Alyssa Cherwak, Information Coordinator

W. Clay Campbell, Administrative Services Director

DATE: March 18, 2015

SUBJECT: Website Redesign Report

Below is the link for the District's completed website redesign for the Board's review:

http://dgsd.ideamktg.net/

The website redesign began in May 2015 with Idea Marketing Group, the company selected to develop and design the new site. District staff worked with Idea to create a site with District customers in mind to be more user-friendly and easier to navigate. Idea created a site with a streamlined appearance and improved content organization to make it easier for users to find information they need. The new site is also responsive (mobile-friendly) which means users can easily access it on a smartphone or tablet because the website changes to fit the width of the screen it is being viewed on.

The new site uses a comprehensive color scheme and a significant amount of photos that makes the site visually appealing. The new site is managed with a content management system that allows staff to easily add new photos, videos or graphics as needed. Some features to highlight on the new website include:

- DGSD news section where the latest information and news about the District will be posted
- Forms & Documents page that centralizes all the District's forms and documents
- Virtual tour of the wastewater treatment plant and biosolids processes
- Contact Us form where customers can easily get in touch with District staff
- Educational Opportunities page that offers the community ways to learn more about the District and get involved
- How to Maintain Your Sewer Line and External Resources pages that offer customers information and resources on how they can be better sewer stewards

Staff plans to launch the new website on Wednesday, March 23, 2016, unless substantive changes are desired by the Board after their review.

DOWNERS GROVE SANITARY DISTRICT

MEMO

TO: Board of Trustees

FROM: Ted Cherwak

Sewer Construction Supervisor

DATE: March 7, 2016

RE: Annexation Ordinance No. AO 2016-03 - 7211 & 7215 Matthias,

Downers Grove

This annexation involves one lot for a proposed two unit townhome located at 7211 & 7215 Matthias Road. Service will be provided by connection to the existing sewer located on Matthias Road and Crystal Avenue as indicated on the attached location map. This project did not require BOLI action. This annexation does not need any right-of-way annexations to make the property contiguous. All tap fees and trunk sewer service charges have been paid as required by ordinance.

Attachments

CC: KJR, RTJ, MJS, NJM, WCC & MGP

ANNEXATION ORDINANCE NO. A0 2016-03

BE IT ORDAINED by the President and Board of Trustees of the DOWNERS GROVE SANITARY

DISTRICT, a body politic and corporate of DuPage County, Illinois:

WHEREAS, the provisions of Section 2405/23.4 of the Illinois Compiled Statutes, as made and

provided, authorize the Trustees of any Sanitary District to annex any property which is not within the

corporate limits of any sanitary district but is contiguous to a sanitary district, and which territory has been

petitioned for annexation by the owners of record and the electors residing thereon, if any.

WHEREAS, the property hereinafter described is not within the corporate limits of any other Sanitary

District, and is contiguous to the corporate limits of the DOWNERS GROVE SANITARY DISTRICT; and has

been petitioned for annexation by the owners of record.

NOW, THEREFORE, BE IT RESOLVED by the President and Board of Trustees of the DOWNERS

GROVE SANITARY DISTRICT that the following described property be and the same is annexed to the

DOWNERS GROVE SANITARY DISTRICT, to-wit:

LOT 3 IN DUNHAM SUBDIVISION, BEING A RESUBDIVISION OF LOT 7 IN PINE HILLS UNIT #1 (EXCEPT THE WEST 9.00 FEET OF SAID LOT 7 AND EXCEPT A PARCEL OF LAND DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID LOT 7; THENCE

EASTERLY ALONG THE SOUTH LINE OF SAID LOT 7, A DISTANCE OF 498.02 FEET FOR A PLACE OF BEGINNING; THENCE CONTINUING EASTERLY ALONG THE SOUTH LINE OF SAID LOT 7, A DISTANCE OF 165.16 FEET TO THE SOUTHEAST CORNER OF SAID LOT 7; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 7, A DISTANCE OF 73.56 FEET; THENCE SOUTHWESTERLY A DISTANCE OF 180.62 FEET TO THE PLACE OF BEGINNING) OF THE

NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MARCH 25, 2014 AS DOCUMENT NO. R2014-024226, IN DUPAGE

COUNTY, ILLINOIS.

P.I.N.: 09-29-100-125

BE IT FURTHER RESOLVED that the Clerk of the DOWNERS GROVE SANITARY DISTRICT be

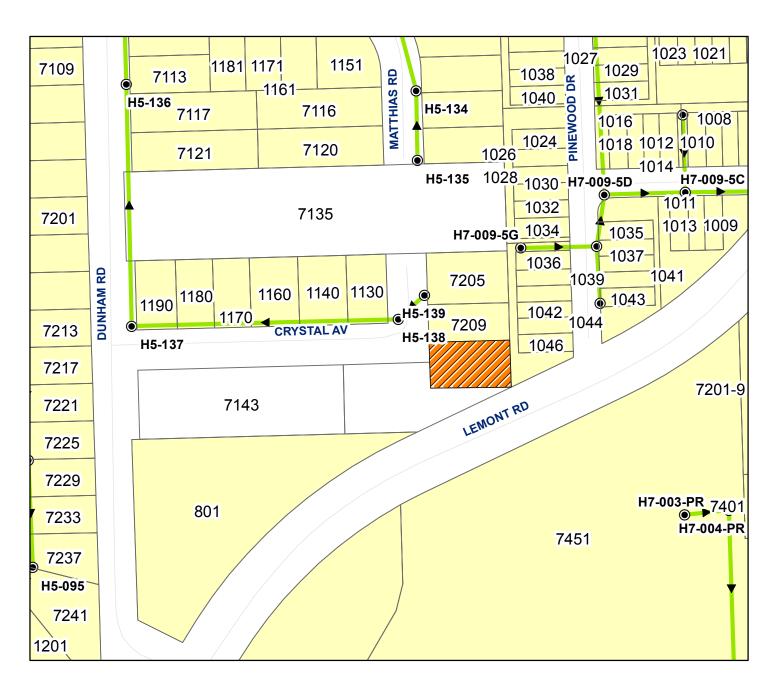
and he is hereby authorized to file a copy of this Ordinance, together with an accurate map of the annexed

territory, certified as correct by the Clerk of this District with the County Clerk of DuPage County, Illinois.

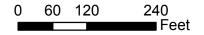
PASSED and APPROVED by the President and Board of Trustees of the DOWNERS GROVE SANITARY DISTRICT at their regular meeting held on the 22th day of March 2016.

	President	
ATTEST:		
Clerk		

7211 & 7215 Matthias AO 2016-03







DOWNERS GROVE, IL 60516

SURVEYOR'S NOTES:
BASIS OF BEARINGS: EAST LINE OF DUNHAM ROAD ASSUMED NOO'01'02'W ALL DISTANCES IN FEET AND DECIMAL PARTS THEREOF. NO DIMENSIONS TO BE ASSUMED FROM SCALING. COMPARE YOUR DESCRIPTION AND SITE MARKINGS WITH THIS PLAT AND AT ONCE REPORT ANY DISCREPANCIES WHICH YOU MAY FIND.

DOWNERS GROVE SANITARY DISTRICT

<u>MEMO</u>

TO: Board of Trustees

FROM: Ted Cherwak

Sewer Construction Supervisor

DATE: March 10, 2016

RE: Annexation Ordinance No. AO 2016-04 – 1358 35th St., Downers Grove

This annexation involves one lot for a proposed single family home located at 1358 35th Street. Service will be provided by connection to the existing sewer located on 35th Street as indicated on the attached location map. This project did not require BOLI action. This annexation does not need any right-of-way annexations to make the property contiguous. All tap fees and trunk sewer service charges have been paid as required by ordinance.

Attachments

CC: KJR, RTJ, MJS, NJM, WCC & MGP

ANNEXATION ORDINANCE NO. A0 2016-04

BE IT ORDAINED by the President and Board of Trustees of the DOWNERS GROVE SANITARY

DISTRICT, a body politic and corporate of DuPage County, Illinois:

WHEREAS, the provisions of Section 2405/23.4 of the Illinois Compiled Statutes, as made and

provided, authorize the Trustees of any Sanitary District to annex any property which is not within the

corporate limits of any sanitary district but is contiguous to a sanitary district, and which territory has been

petitioned for annexation by the owners of record and the electors residing thereon, if any.

WHEREAS, the property hereinafter described is not within the corporate limits of any other Sanitary

District, and is contiguous to the corporate limits of the DOWNERS GROVE SANITARY DISTRICT; and has

been petitioned for annexation by the owners of record.

NOW, THEREFORE, BE IT RESOLVED by the President and Board of Trustees of the DOWNERS

GROVE SANITARY DISTRICT that the following described property be and the same is annexed to the

DOWNERS GROVE SANITARY DISTRICT, to-wit:

LOT 6 IN 35TH AND SARATOGA SUBDIVISION, BEING A SUBDIVISION OF PARCEL 5 IN REST HAVEN WEST SECOND ASSESSMENT PLAT, BEING PART OF THE NORTHEAST OF THE THIRD OF SECTION 34, TOWNSHIP 30 NORTH, BANCE 14, EAST OF THE THIRD.

QUARTER OF SECTION 31, TOWNSHIP 39 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 12,

2015 AS DOCUMENT NO. R2015-089485, IN DUPAGE COUNTY, ILLINOIS.

P.I.N.: 06-31-201-043 (underlying P.I.N.)

BE IT FURTHER RESOLVED that the Clerk of the DOWNERS GROVE SANITARY DISTRICT be

and he is hereby authorized to file a copy of this Ordinance, together with an accurate map of the annexed

territory, certified as correct by the Clerk of this District with the County Clerk of DuPage County, Illinois.

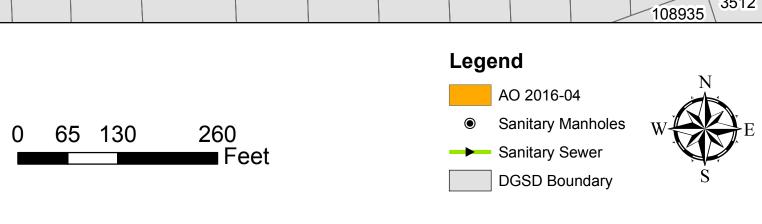
PASSED and APPROVED by the President and Board of Trustees of the DOWNERS GROVE

SANITARY DISTRICT at their regular meeting held on the 22th day of March 2016.

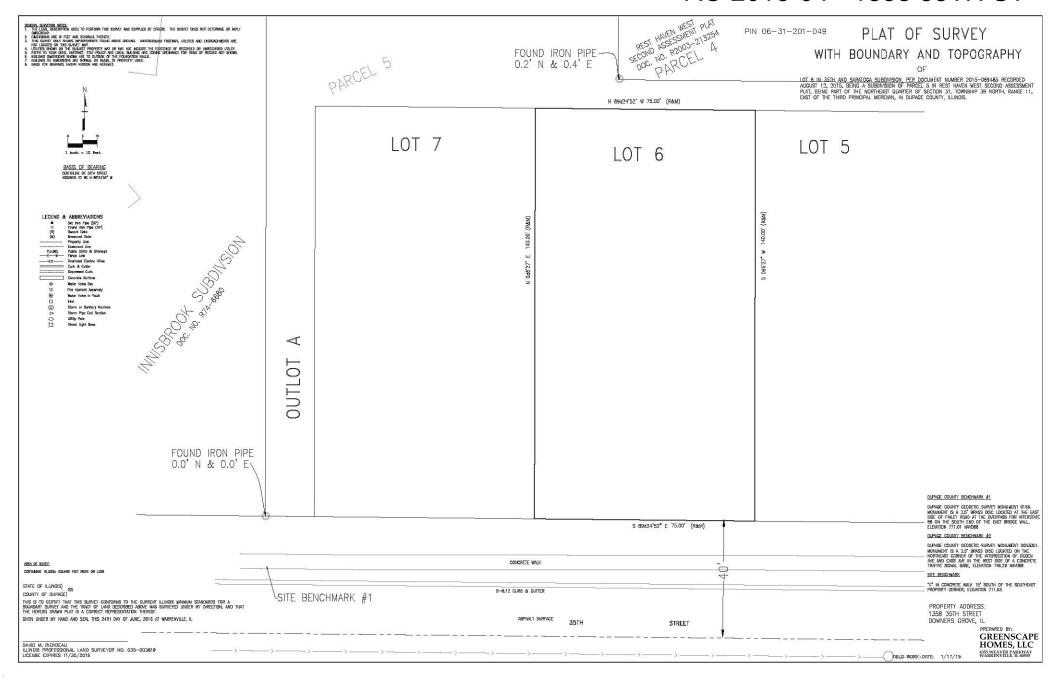
	President	
ATTEST:		
Clerk		

AO 2016-04 1358 35th Street Downers Grove





AO 2016-04 - 1358 35TH ST



DOWNERS GROVE SANITARY DISTRICT

M E M O

TO: Nicholas J. Menninga General Manager

FROM: W. Clay Campbell

Administrative Services Director

DATE: March 18, 2016

RE: Progress Report – February, 2016

ADMINISTRATIVE

Personnel

We filled our part-time secretary position in the office. Karen Vana started with the District on Thursday, March 10. Beverlee Fleming's last official day with the District is March 31, 2016 with her last day in the office being March 24, 2016.

Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages

I have updated the summary sheet included with my report this month to keep you apprised of any open claims. A mainline blockage occurred on February 16 at 4032 Longmeadow Road, Downers Grove with minimal damage reported. Payments were made to 4821 Bryan Place, Downers Grove and 3719 Downers Drive, Downers Grove closing those claims.

Safety Committee

The Safety Committee met on Tuesday, February 23 with a new set of representatives from the various departments. We reviewed the previous Safety Committee's progress to date. We identified several new safety hazards that should be addressed, reviewed the use and implementation of a crane by sewer system personnel for replacing manhole covers and identified potential expenditures for the remaining IPRF safety grant money. Safety Coordinator Bill Smith provided the Committee with an update on the District's efforts to implement our Hazard Communication Program. We will be evaluating the costs of having a third party provider perform Hazard Communication Training for District staff versus it being done in-house.

OSHA Log

As required by the Illinois Department of Labor, the OSHA Form 300A for 2015 has been completed and will be posted from February 1 to April 30.

Social Media/Public Outreach Progress

As of March 18, the District's Facebook page has received 777 likes. On March 4, Information Coordinator Alyssa Cherwak and Laboratory Supervisor Reese Berry met with 7th and 8th Grade teachers from O'Neill and Herrick Middle Schools to discuss planning for future educational outreach opportunities between the District and District 58. Information Coordinator Alyssa Cherwak, Laboratory Supervisor Reese Berry and

Laboratory Analyst Malwina Serpa are planning on presenting to the O'Neill Middle School 7th Grade classes focusing on microorganisms present in wastewater and how the science behind our treatment process complements District 58 teaching Next Generation Science Standards.

Alyssa has prepared a separate memo for the Board meeting this month regarding the revamping of the District's website. Launch of the website is anticipated to take place on Wednesday, March 23.

Technology Update

The District's Online Billing Portal was launched on February 25, 2015. All of the District's accounts have invoices uploaded to the Online Billing Portal which enables those customers to register an account and/or process a one-time pay transaction. We are continuing to identify and implement various improvements to the system for efficiency and accuracy. The following is a brief summary of the portal's utilization in the last month and since the portal's launch through the end of last month:

# of Customers registered in the last month:	90
# of Customers paying their bills online in the last month:	415
Amount of Money processed through the Portal in the last month:	\$20,838.72
# of Customers signing up for Autopay through the Portal in the last month:	22
# of Customers enrolled in paperless billing in the last month:	24
# of Customers registered from launch through last month:	1193
# of Customers paying their bills online from launch through last month:	4691
Amount of Money processed through the Portal from launch through last month:	\$255,430.01
# of Customers signing up for Autopay through the Portal from launch through last month:	203
# of Customers enrolled in paperless billing from launch through last month:	361

Staff has prepared an operations report for this month's Board meeting summarizing the performance of the District's billing portal over the last year and how that relates to other forms of customer payments received by the District. Staff has presented this data with a historical perspective to fully evaluate the cost and effectiveness of various payment options.

FINANCIAL

Economic Interest Statements

The list of employees and officers required to file Economic Interest Statements in 2016 was provided to the County Clerk as required by statute. The Statements will be sent directly to each individual's email address in early March. Please note that this filing is now administered through an online process. A copy of the Receipt that is furnished to the individual from the County must be provided to me for purposes of the annual audit. An email copy will suffice. At this point, 7 out of 13 individuals have filed. The deadline for filing is May 2, 2016.

Treasurer's Report

The February Treasurer's Report has been provided. The following items should be noted: For Y-T-D, user receipts are under budget by \$75,883 and monthly fees are under budget by \$39,824. Total revenues are under budget by \$61,614. The Actual Y-T-D expenses in Fund 01 are \$788,314 under the Budget Y-T-D resulting in a -11.8% variance. For Y-T-D, the total fund balance for Fund 01 increased by \$833,834.

Investments

Certificates of Deposit Accounts

Purchases: None

Maturities: None

Money Market Accounts

Opened: None

Closed None

Rate Checks: Stearns Bank NA (term ended 02/12/16). Initial rate of Money Market Account was 0.30% on February 12, 2013. Rate has held steady since that time. A partial withdrawal of \$150,000 was made from this account on February 11, 2014, to cover expenses for the Digester Gas Co-Generation Facility. On September 1, 2015, additional funds of \$149,512.30 were invested to bring this account back to the maximum balance of \$250,000. There are no fees for a partial or total withdrawal from this account. I will be reviewing this investment in detail with the Board in my August 2016 Progress Report (an appropriate window – 6 months – for evaluation).

> Lisle Savings Bank (term ends 03/05/16). Initial rate of Money Market Account was 0.40% on September 5, 2013. Rate has held steady since that time. A partial withdrawal of \$240,000 was made from this account on March 24, 2014, to cover expenses for the Digester Gas Co-Generation Facility. On September 2, 2015, additional funds of \$239,914.84 were invested to bring this account back to the maximum balance of \$250,000. There are no fees for a partial or total withdrawal from this account.

> PBI Bank (term ends 03/09/16). Initial rate of Money Market Account was 0.50% on September 9, 2013, dropped to 0.45% as of October 30, 2013, dropped to 0.40% as of May 13, 2014, dropped to 0.35% as of April 27, 2015, dropped to 0.32% as of October 25, 2015 and dropped to 0.30% as of February 11, 2016. Rate has held steady since that time. There are no fees for a total withdrawal from this account.

> BankFinancial (term ends 03/13/16). \$249,900 is in a Money Market Account and \$100 is in a Business Checking Account. Initial rate of Money Market Account was 0.40% on March 13, 2013, dropped to 0.35% as of May 9, 2013 and dropped to 0.34% as of May 18, 2015. Rate has held steady since that time. There are no fees for a total withdrawal from this account.

> CIT Bank, f/k/a OneWest Bank (term ends 03/23/16). Initial rate of Money Market Account was 0.349% on September 23, 2013, dropped to 0.30% as of November 12, 2013 and increased to 0.45% as of September 1, 2015. This rate is locked in for 12 months. A partial withdrawal of \$225,000 was made from this account on February 11, 2014, to cover expenses for the Digester Gas Co-Generation Facility. On September 1, 2015, additional funds of \$224,893.34 were invested to bring this account back to the maximum balance of \$250,000. There are no fees for a partial or total withdrawal from this account.

Luana Savings Bank (term ends 03/30/16). Initial rate of Money Market Account was 0.75% on March 30, 2012, dropped to 0.70% as of June 6, 2012, dropped to 0.65% as of August 1, 2013, dropped to 0.60% as of August 29, 2013, dropped to 0.55% as of October 10, 2013, increased to 0.65% as of September 3, 2014 and increased to 1.00% as of July 14, 2015. Rate has held steady since that time. There are no fees for a total withdrawal from this account.

Nationwide Bank (term ended 05/08/16). Initial rate of Money Market Account was 0.40% on May 8, 2012, dropped to 0.35% as of June 7, 2012 and dropped to 0.30% as of December 17, 2012. Rate has held steady since that time. A partial withdrawal of \$159,208.03 was made from this account on February 11, 2014, to cover expenses for the Digester Gas Co-Generation Facility. On October 8, 2015, additional funds of \$158,675.40 were invested to bring this account back to the maximum balance of \$250,000. There are no fees for a partial or total withdrawal from this account.

West Suburban Bank (term ended 05/20/16). Initial rate of Money Market Account was 0.45% on November 20, 2012. Rate has held steady since that time. There are no fees for a total withdrawal from this account.

Park Federal Savings Bank (term ended 06/04/16). Initial rate of Money Market Account was 0.40% on December 4, 2012 and dropped to 0.25% as of May 31, 2014. Rate has held steady since that time. There are no fees for a total withdrawal from this account.

TriState Capital Bank (term ended 06/20/16). Initial rate of Money Market Account was 0.55% on June 20, 2012, dropped to 0.45% as of November 15, 2012, dropped to 0.35% as of February 1, 2013, dropped to 0.30% as of June 7, 2013 and dropped to 0.25% as of August 1, 2014. Rate has held steady since that time. There are no fees for a total withdrawal from this account.

User Billing

Detailed billing information is attached to this report.

CODE ENFORCEMENT & UNSEWERED AREAS

Building Sanitary Service Repair Assistance Program; Infiltration and Inflow Removal Program; and Overhead Sewers and Backflow Prevention Devices Reimbursement Program

I have continued to perform the legal review of both Program Agreements and Access Agreements for all of the above programs as prepared by our office prior to execution by the parties.

Sewer Permitting Process

I have continued to perform the legal review of Access Agreements and Annexation Petitions prepared by our office as needed by sewer permit applicants.

cc: WDVB, ASK, DFP, KJR, RTJ, MJS, TTC, RPS, MRM, JPB, DRB, MGP

03/18/16

03/	STREET ADDRESS	СПҮ	NAME	DATE OF BACKUP	DATE CLAIM RECEIVED	AMOUNT OF CLAIM	ADJUSTER RECOMMENDATION	AMOUNT PAID	DATE PAID	ADJUSTEF FEE	R STATUS
	2020 PRAIRIE AVENUE	DOWNERS GROVE	CREWSE	8/26/2012	2/11/2013	96.00	DOCUMENTATION RECEIVED - \$96.00	96.00	2/13/2013	0.00	CLOSED
	1925 PRAIRIE AVENUE	DOWNERS GROVE	BOTTGER	8/26/2012	10/22/2012	200.00	DOCUMENTATION RECEIVED - \$200.00	200.00	2/11/2013	0.00	CLOSED
	1602 OGDEN AVENUE	DOWNERS GROVE	LEHOCKY (TENANT)	11/1/2012	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	1614 OGDEN AVENUE	DOWNERS GROVE	REALTY GRP (OWNER)	11/1/2012	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	943 59TH STREET	DOWNERS GROVE	STEINBERG (TENANT)	12/20/2012	TIME LIMIT	FOR CLAIM	I NO ADJUSTER - LIMITED DAMAGE			67.50	CLOSED
	943 59TH STREET	DOWNERS GROVE	CHEN (OWNER)	12/20/2012	TIME LIMIT	FOR CLAIM	NO ADJUSTER - LIMITED DAMAGE			67.50	CLOSED
	5914 WEBSTER STREET	DOWNERS GROVE	HOFMANN	12/20/2012	1/3/2013	1,200.00	PAYMENT SUGGESTED - 1,200.00	1,200.00	1/15/2013	436.80	CLOSED
	2230 MAPLE AVENUE	DOWNERS GROVE	MEGMIL INC (ANGELO'S)	1/19/2013	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	5509 HILLCREST ROAD	DOWNERS GROVE	KRAMER	1/25/2013	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	5300 WILLIAMS STREET	DOWNERS GROVE	GRIMSTAD	3/23/2013	6/5/2013	250.00	NO ADJUSTER - JUST CLEANUP COSTS	250.00	6/11/2013	0.00	CLOSED
	3725 DOWNERS DRIVE	DOWNERS GROVE	CORTESIO	1/15/2014	1/16/2014	415.00	NO ADJUSTER - RODDING BILL ONLY	415.00	2/12/2014	0.00	CLOSED
	1114 63RD STREET	DOWNERS GROVE	NELSON	2/14/2014	5/19/2014	454.00	NO ADJUSTER - PLUMBER COSTS ONLY	454.00	5/29/2014	0.00	CLOSED
	1122 63RD STREET	DOWNERS GROVE	LAMB	2/14/2014	2/24/2014	537.75	NO ADJUSTER - PLUMBER COSTS ONLY	537.75	2/25/2014	0.00	CLOSED
	766 72ND STREET	DOWNERS GROVE	FLOOD	3/7/2014	4/16/2014	375.00	NO ADJUSTER - PLUMBER COSTS ONLY	375.00	4/29/2014	0.00	CLOSED
	33 S. PARK STREET	WESTMONT	EUBANKS	4/3/2014			NO ADJUSTER - CLEANUP COSTS ONLY				CLOSED
	101 S. PARK STREET	WESTMONT	YOON	4/3/2014			NO ADJUSTER - CLEANUP COSTS ONLY				CLOSED
	750 61st STREET	DOWNERS GROVE	GALWAY	5/21/2014	5/27/2014	1200.00	PAYMENT SUGGESTED - 1,200.00	1,200.00	6/3/2014	415.05	CLOSED
	5148 GRAND	DOWNERS GROVE	GRAF	5/29/2014	6/12/2014	400.00	NO ADJUSTER-PLUMBER COSTS&MISC SUPP ON	400.00	6/17/2014	0.00	CLOSED
	5204 GRAND	DOWNERS GROVE	ECKDAHL	5/29/2014	11/28/2014	1200.00	NO ADJUSTER - WELL DOCUMENTED EXPENSES	1,200.00	12/16/2014	0.00	CLOSED
	1608 OGDEN	DOWNERS GROVE	SLIPETZ (TENANT)	7/2/2014			NO ADJUSTER - CLEANUP COSTS ONLY			0.00	CLOSED
	1608 OGDEN	DOWNERS GROVE	BALCIUNAS (LANDLORD)	7/2/2014			NO ADJUSTER - CLEANUP COSTS ONLY			0.00	CLOSED
	6213 MIDDAUGH	DOWNERS GROVE	VENA	8/11/2014			NO ADJUSTER - PLUMBER COSTS ONLY			0.00	CLOSED
	4129 WASHINGTON STREE	1 DOWNERS GROVE	BIANCO-SMITH	8/22/2014	2/2/2015	1200.00	PAYMENT SUGGESTED - 1,200.00	1,200.00	2/9/2015	786.25	CLOSED
	1230 75TH STREET	DOWNERS GROVE	TOTAL HOCKEY	11/28/2014	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	2230 OXNARD DRIVE	DOWNERS GROVE	DZAMBAZI	12/12/2014	12/26/2014	1200.00	NO ADJUSTER - WELL DOCUMENTED EXPENSES	1,200.00	1/12/2015	0.00	CLOSED
	2236 OXNARD DRIVE	DOWNERS GROVE	DAWSON	12/12/2014	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	4821 BRYAN PLACE	DOWNERS GROVE	HASAN (TENANT)	6/16/2015	TIME LIMIT	FOR CLAIM	EXPIRED.			0.00	CLOSED
	4821 BRYAN PLACE	DOWNERS GROVE	OWNER VIA PROP. MGMT	6/16/2015	11/30/2015	2171.98	ADJUSTER DESK REVIEW - \$2,171.98 SUGGESTEI	2,171.98	3/10/2016	157.25	CLOSED
	2006 OXNARD DRIVE	DOWNERS GROVE	MORRISON	8/10/2015	8/17/2015	130.00	NO ADJUSTER - WELL DOCUMENTED EXPENSES	130.00	8/19/2015	0.00	CLOSED
	3719 DOWNERS DRIVE	DOWNERS GROVE	LINDENBURGER	9/7/2015	3/4/2016	11000.00	PAYMENT SUGGESTED - 2,500.00	2,500.00	3/10/2016	544.00	CLOSED
	3725 DOWNERS DRIVE	DOWNERS GROVE	CORTESIO	9/7/2015	11/18/2015	80.00	NO ADJUSTER - CLEANUP COSTS ONLY	80.00	12/16/2015	0.00	CLOSED
	4064 STERLING ROAD	DOWNERS GROVE	KOEHLER	12/21/2015							OPEN
	4032 LONGMEADOW ROAD	DOWNERS GROVE	VICTOR	2/16/2016							OPEN

 TOTAL NUMBER OF BACKUPS
 214

 TOTAL NUMBER OF CLAIMS RECEIVED
 108

 TOTAL AMOUNT OF CLAIMS RECEIVED
 \$137,233.37

 TOTAL AMOUNT OF CLAIMS PAID
 TOTAL AMOUNT PAID TO ADJUSTER

\$67,708.35

\$14,258.00

\$118.91

AVERAGE AMOUNT OF CLAIM (MOST RECENT 24 MOS) \$1,895.70
AVERAGE AMOUNT OF PAYMENT (MOST RECENT 24 MOS)
AVERAGE AMOUNT PAID TO ADJUSTER PER CLAIM (MOST RECENT 24 MOS)

\$1,045.70

USER BILLING SUMMARY

User Charge System

Billings for February were as follows:

User	\$288,098.02
Surcharge	28,441.44
Monthly fees	266,959.05
Total	\$583,498.51
Summer Usage Adjustment	\$0.00
Billable Flow	174,604,861
Budgeted Billable Flow	168,616,547
% Actual/Budgeted Billable Flow	103.55%
YTD Billable Flow	1,867,591,430
YTD Budgeted Billable Flow	1,800,635,646
% Actual/Budgeted Billable Flow	103.72%

The user accounts receivable balance on 2/29/16 is \$595,792.09 which consists of:

Current charges due 3/15/16	\$472,426.93
Past due charges and penalty	123,365.16
Total	\$595,792,09

The past due charges represent:

Age	<u>User Charges</u>	<u>Penalty</u>	<u>Totals</u>
30 days past due	\$27,034.70	\$3,535.89	\$30,570.59
60 days past due	35,352.22 #	6,506.35	41,858.57
90 days & greater past due	45,137.96	5,798.04	50,936.00
Totals	\$107,524.88	\$15,840.28	\$123,365.16

Summary of Past Due Charges (90 Days and Over)

Five Year Comparison

February

<u>Year</u>	<u>User Charges</u>	<u>Penalty</u>	<u>Total</u>
2016	\$45,137.96	\$5,798.04	\$50,936.00 **
2015	44,665.07	4,614.75	\$49,279.82 **
2014	41,612.87	5,603.81	\$47,216.68 **
2013	37,663.73	4,115.72	\$41,779.45 **
2012	31,693.71	4,789.41	\$36,483.12

^{**}Includes \$21,981.72 in sewer disconnection costs on 3 accounts.

Twelve Months Ending February 2016

Month	<u>User Charges</u>	<u>Penalty</u>	<u>Total</u>
2/29/16	\$45,137.96	\$5,798.04	\$50,936.00
1/31/16	43,668.43	5,332.44	49,000.87
12/31/15	45,799.46	7,635.13	53,434.59
11/30/15	44,535.72	7,228.39	51,764.11
10/31/15	39,096.34	6,260.71	45,357.05
9/30/15	40,853.23	6,294.19	47,147.42
8/31/15	39,532.46	6,098.81	45,631.27
7/31/15	40,811.20	5,997.57	46,808.77
6/30/15	53,444.77	6,257.81	59,702.58
5/31/15	44,804.25	6,542.01	51,346.26
4/30/15	44,873.47	6,120.86	50,994.33
3/31/15	46,505.15	6,499.11	53,004.26
2/28/15	44,665.07	4,614.75	49,279.82

Seven of nineteen delinquent accounts that were scheduled for pre-enforcement conferences on February 15, 2016 have paid in full. Forty-one past due accounts were scheduled for water disconnection of which twenty-nine have paid in full, five were shut off and seven were already turned off by the respective Villages. Since 2012, three accounts remain disconnected from sewer service and one cannot be disconnected due to complications with the route of the sewer to the home.

To: Nick Menninga, General Manager

From: Marc Majewski, Operations Supervisor

Re: Month of February, 2016 WWTC Operations Report.

Date: March 9, 2016

Attached please find detailed operating data and our monthly report to Illinois EPA for February. We had no excursions over our permit limits in February, 2016.

Certain highlights of operational activities included:

- Monthly flow: Average daily flows to the plant were 10.54 MGD, total precipitation at the WWTC was 1.37". There was 1 excess event during the month of January. There were 7 days of discharge over 11 MGD.
- Activated sludge: Return activated sludge was chlorinated 4 days to help control a filamentous problem leading to foaming and reduced settleability of the sludge.
- Anaerobic Digesters: Pumped a total of 1,190,968 gallons of primary sludge, 601,913 gallons of WAS, and 292,840 gallons of waste grease for a total 2,085,721 gallons pumped to digesters. Total Volatile Solids destruction was calculated at 101%, an artifact of digester outages late last year that allow us to fill the tanks with minimal withdrawals.
- Digester gas: Total digester gas production was 7,991,253 cubic feet. CHP unit used 3,409,210 cubic feet during the month. 1,238,146 cubic feet of gas was used for anaerobic digestion heat. 2,347,584 cubic feet of flared gas was recorded during the month. Natural gas was used for hot water and building heat in the plant. The Munters dehumidifier used 996,313 cubic feet of gas.
- Bio-solids: No bio-solids have been distributed to the public in 2016. The bio-solids drying season has begun, and work continues daily on sludge stockpiling, relocation, drying, and hauling.
- Miscellaneous Items: Bio-mechanics and operators have continued with sludge hauling, stockpiling, and relocation of solids. Rehab and PM work on various Bio-solids drying equipment continued throughout the month. Operators met with several different vendors to review new polymer feed systems for the belt filter press.
- ComEd Electricity: Kilowatt-hours measured a total of 199,429 KW-hrs. CHP Electricity Generated: Total 162,031 KW-hrs.

C: WDVB, ASK, DFP, KJR, RTJ, MJS, WCC, MGP

Monthly Operations Reports Page 1

Report	iviontn:	2/2016	

Date	WWTC RAIN	Tertiary Flow Maximum MGD	Tertiary Flow Minimum MGD	Tertiary Flow Avg MGD	Excess Tanks Maximum MGD	Excess Tanks Avg MGD	Intermediate Clarifier 1 Maximum MGD	Intermediate Clarifier 1 Avg MGD	Outfall 003 Maximum MGD	Outfall 003 Avg MGD	Total Flow Maximum MGD	Total Flow Avg MGD	Outfall 002 Avg MGD
Mon, Feb 1	0.00	14.93	5.64	9.61	0.00	0.00	0.00	0.00	0.00	0.00	14.93	9.61	0.00
Tue, Feb 2	1.03	28.24	2.16	14.79	23.70	4.20	0.00	0.00	0.00	0.00	51.95	18.99	4.99
Wed, Feb 3	0.01	27.25	19.09	22.28	5.93	0.26	0.00	0.00	0.00	0.00	33.19	22.54	0.27
Thu, Feb 4	0.00	21.26	14.09	16.75	0.00	0.00	0.00	0.00	0.00	0.00	21.26	16.75	0.00
Fri, Feb 5	0.00	16.76	9.90	13.37	0.00	0.00	0.00	0.00	0.00	0.00	16.76	13.37	0.00
Sat, Feb 6	0.00	16.22	6.69	12.38	0.00	0.00	0.00	0.00	0.00	0.00	16.22	12.38	0.00
Sun, Feb 7	0.00	15.98	6.85	11.94	0.00	0.00	0.00	0.00	0.00	0.00	15.98	11.94	0.00
Mon, Feb 8	0.00	15.74	7.28	11.31	0.00	0.00	0.00	0.00	0.00	0.00	15.74	11.31	0.00
Tue, Feb 9	0.00	15.15	6.36	10.48	0.00	0.00	0.00	0.00	0.00	0.00	15.15	10.48	0.00
Wed, Feb 10	0.00	13.66	6.08	9.98	0.00	0.00	0.00	0.00	0.00	0.00	13.66	9.98	0.00
Thu, Feb 11	0.01	14.64	5.81	9.51	0.00	0.00	0.00	0.00	0.00	0.00	14.64	9.51	0.00
Fri, Feb 12	0.00	15.01	5.62	9.36	0.00	0.00	0.00	0.00	0.00	0.00	15.01	9.36	0.00
Sat, Feb 13	0.00	12.62	5.00	8.91	0.00	0.00	0.00	0.00	0.00	0.00	12.62	8.91	0.00
Sun, Feb 14	0.00	13.90	5.06	8.95	0.00	0.00	0.00	0.00	0.00	0.00	13.90	8.95	0.00
Mon, Feb 15	0.00	12.67	5.17	9.02	0.00	0.00	0.00	0.00	0.00	0.00	12.67	9.02	0.00
Tue, Feb 16	0.15	12.36	4.82	9.00	0.00	0.00	0.00	0.00	0.00	0.00	12.36	9.00	0.00
Wed, Feb 17	0.04	12.57	4.85	8.99	0.00	0.00	0.00	0.00	0.00	0.00	12.57	8.99	0.00
Thu, Feb 18	0.00	12.79	4.88	8.97	0.00	0.00	0.00	0.00	0.00	0.00	12.79	8.97	0.00
Fri, Feb 19	0.00	13.00	4.90	8.96	0.00	0.00	0.00	0.00	0.00	0.00	13.00	8.96	0.00
Sat, Feb 20	0.00	13.22	4.93	8.95	0.00	0.00	0.00	0.00	0.00	0.00	13.22	8.95	0.00
Sun, Feb 21	0.00	13.43	4.96	8.93	0.00	0.00	0.00	0.00	0.00	0.00	13.43	8.93	0.00
Mon, Feb 22	0.00	13.64	4.99	8.92	0.00	0.00	0.00	0.00	0.00	0.00	13.64	8.92	0.00
Tue, Feb 23	0.00	13.86	5.02	8.91	0.00	0.00	0.00	0.00	0.00	0.00	13.86	8.91	0.00
Wed, Feb 24	0.06	14.96	5.21	9.38	0.00	0.00	0.00	0.00	0.00	0.00	14.96	9.38	0.00
Thu, Feb 25	0.02	17.72	3.54	9.55	0.00	0.00	0.00	0.00	0.00	0.00	17.72	9.55	0.00
Fri, Feb 26	0.00	15.01	4.08	9.10	0.00	0.00	0.00	0.00	0.00	0.00	15.01	9.10	0.00
Sat, Feb 27	0.00	13.15	5.27	9.15	0.00	0.00	0.00	0.00	0.00	0.00	13.15	9.15	0.00
Sun, Feb 28	0.05	15.01	5.21	9.11	0.00	0.00	0.00	0.00	0.00	0.00	15.01	9.11	0.00
Mon, Feb 29	0.00	15.09	5.18	8.99	0.00	0.00	0.00	0.00	0.00	0.00	15.09	8.99	0.00
sum	1.37	449.85	178.64	305.53	29.63	4.47	0.00	0.00	0.00	0.00	479.48	310.00	5.27
avg	0.05	15.51	6.16	10.54	1.02	0.15	0.00	0.00	0.00	0.00	16.53	10.69	0.18
max	1.03	28.24	19.09	22.28	23.70	4.20	0.00	0.00	0.00	0.00	51.95	22.54	4.99
min	0.00	12.36	2.16	8.91	0.00	0.00	0.00	0.00	0.00	0.00	12.36	8.91	0.00

Monthly Operations Report Page 2

Date	Tertiary Flow	MLSS Avg Mg/L	Activated Sludge	Activated Sludge SRT	15 Mins Aeration	30 Mins Aeration	60 Mins Aeration	Sludge Volume	System 1 RAS SS	System 2 RAS SS	DuPage River
	MGD	9	Inventory	Days	Settling %	Settling %	Settling %	Index	Mg/L	Mg/L	Outfall
			Lbs MLSS	-					_	-	D.O. Mg/L
Mon, Feb 1	9.61	2996	95157	17.8	37	28	22	92		6032	9.2
Tue, Feb 2	14.79	2944	93506	16.7	31	25	21	86	7189		7.7
Wed, Feb 3	22.28	2092	66447	6.7	22	17	14	80		10691	7.5
Thu, Feb 4	16.75	2529	80326	8.9	31	22	18	87	6469		
Fri, Feb 5	13.37	2639	83811	11.6	33	24	19	92		9175	
Sat, Feb 6	12.38										
Sun, Feb 7	11.94										
Mon, Feb 8	11.31	2931	93093	17.3	43	30	24	102		6816	9.3
Tue, Feb 9	10.48	3042	96610	17.5	47	32	24	104	7175		9.5
Wed, Feb 10	9.98	2837	90099	16.1	41	30	24	104		6575	9.7
Thu, Feb 11	9.51	2942	93434	16.1	44	31	23	105	7317		
Fri, Feb 12	9.36	2920	92743	19.9	47	32	24	108		5121	
Sat, Feb 13	8.91										
Sun, Feb 14	8.95										
Mon, Feb 15	9.02	2969	94284	17.0	47	30	24	101		5937	9.8
Tue, Feb 16	9.00	2909	92370	17.1	39	29	23	98	6736		9.6
Wed, Feb 17	8.99	2909	92394	17.1	46	33	24	114		5950	9.6
Thu, Feb 18	8.97	2911	92458	17.1	46	32	24	107	7015		
Fri, Feb 19	8.96	3018	95832	16.8	42	30	23	97		6297	
Sat, Feb 20	8.95										
Sun, Feb 21	8.93										
Mon, Feb 22	8.92	2776	88162	19.1	45	31	23	110		5122	9.6
Tue, Feb 23	8.91	2794	88726	19.2	37	27	22	97	7074		9.5
Wed, Feb 24	9.38	2926	92934	20.2	35	26	21	89		5098	9.3
Thu, Feb 25	9.55	2936	93244	19.8	32	25	21	84	6495		
Fri, Feb 26	9.10	2963	94109	19.4	39	26	21	89		5327	
Sat, Feb 27	9.15										
Sun, Feb 28	9.11										
Mon, Feb 29	8.99	2858	90751	21.4	29	22	20	78		4646	9.5
sum	305.53	59842	1900489	353.0	809	579	458	2024	55470	82787	119.8
avg	10.54	2850	90499	16.8	39	28	22	96	6934	6368	9.2
max	22.28	3042	96610	21.4	47	33	24	114	7317	10691	9.8
min	8.91	2092	66447	6.7	22	17	14	78	6469	4646	7.5

Report Month: 2/2016

Monthly Operations Report Page 3

Date	Tertiary Flow MGD	Influent BOD5 mg/L	Primary Effluent BOD5, mg/L	Intermediate Effluent CBOD5, mg/L	Tertiary Effluent CBOD5, mg/L	Tertiary Effluent CBOD5, lbs/day	BOD Removal, %	Ambient Air Temp Max, Deg F	Ambient Air Temp Min, Deg F	Influent Flow Temp, Deg F
Mon, Feb 1	9.61		mg/L	mg/L	mg/ L	150/day		50.3	29.1	53.8
Tue, Feb 2	14.79	142	56	4.3	1.1	135.6	98.80	39.5	32.9	53.8
Wed, Feb 3	22.28	62	40	3.8	1.0	185.8	97.42	39.7	28.2	54.0
Thu, Feb 4	16.75	90	48	2.8	0.8	111.7	98.56	35.4	20.0	50.9
Fri, Feb 5	13.37						00100	36.4	26.5	
Sat, Feb 6	12.38							43.5	25.0	
Sun, Feb 7	11.94							45.9	31.8	
Mon, Feb 8	11.31							33.0	21.4	52.2
Tue, Feb 9	10.48	115	64	2.3	0.7	61.2	98.96	21.4	13.5	52.0
Wed, Feb 10	9.98	128	66	1.9	0.8	66.6	99.14	21.4	8.2	51.4
Thu, Feb 11	9.51	125	73	1.9	0.9	71.4	98.88	26.0	6.7	52.5
Fri, Feb 12	9.36							26.0	6.9	
Sat, Feb 13	8.91							20.6	2.5	
Sun, Feb 14	8.95							18.3	11.5	
Mon, Feb 15	9.02							29.7	17.9	52.8
Tue, Feb 16	9.00	260	84	1.9	1.0	75.1	99.46	40.1	24.9	52.9
Wed, Feb 17	8.99	228	80	1.7	1.0	75.0	99.47	38.2	23.6	52.5
Thu, Feb 18	8.97	280	82	1.9	1.0	74.8	99.50	41.9	26.0	53.4
Fri, Feb 19	8.96							65.0	42.0	
Sat, Feb 20	8.95							60.0	42.0	
Sun, Feb 21	8.93							44.0	35.0	
Mon, Feb 22	8.92							60.2	28.0	52.7
Tue, Feb 23	8.91	290	86	2.3	8.0	59.4	99.38	49.3	26.3	53.6
Wed, Feb 24	9.38	280	93	2.8	1.2	93.9	99.36	37.0	32.1	53.1
Thu, Feb 25	9.55	185	86	3.2	1.1	87.6	98.92	38.9	31.2	52.9
Fri, Feb 26	9.10							35.5	27.4	
Sat, Feb 27	9.15							56.7	27.4	
Sun, Feb 28	9.11							64.0	36.8	
Mon, Feb 29	8.99							57.7	29.1	53.2
sum	305.53	2185	858	30.8	11.4	1098.1	1187.85	1175.8	714.0	897.7
avg	10.54	182	72	2.6	1.0	91.5	98.99	40.5	24.6	52.8
max	22.28	290	93	4.3	1.2	185.8	99.50	65.0	42.0	54.0
min	8.91	62	40	1.7	0.7	59.4	97.42	18.3	2.5	50.9

Report Month: 2/2016

Monthly Operations Report Page 4

Date	Tertiary Flow MGD	Influent TSS mg/L	Primary Effluent TSS, mg/L	Intermediate Effluent TSS, mg/L	Tertiary Effluent TSS, mg/L	Tertiary Effluent TSS, lbs/day	TSS Removal, %	Influent pH, S.U.	Primary Effluent pH, S.U.	Tertiary Effluent pH, S.U.	Intermediate Effluent pH, S.U.
Mon, Feb 1	9.61	172	50	3.2	0.4	32	99.8	7.6	7.6	7.2	7.2
Tue, Feb 2	14.79	152	65	11.0	0.7	86	99.5	7.8	7.6	7.2	7.1
Wed, Feb 3	22.28	76	33	7.8	0.9	167	98.8	7.7	7.7	7.2	7.1
Thu, Feb 4	16.75	84	44	4.6	0.2	28	99.8	7.7	7.7	7.3	7.2
Fri, Feb 5	13.37	76			0.3	33	99.6	7.7	7.7	7.3	7.1
Sat, Feb 6	12.38				0.4	41					
Sun, Feb 7	11.94				0.2	20					
Mon, Feb 8	11.31	148	50	3.6	0.5	47	99.7	7.7	7.8	7.2	7.2
Tue, Feb 9	10.48	116	46	3.7	0.4	35	99.7	7.8	7.8	7.2	7.2
Wed, Feb 10	9.98	112	41	2.7	0.3	25	99.7	7.7	7.8	7.2	7.2
Thu, Feb 11	9.51	136	50	4.0	0.4	32	99.7	7.7	7.7	7.2	7.1
Fri, Feb 12	9.36	100			0.3	23	99.7	7.6	7.7	7.2	7.1
Sat, Feb 13	8.91	116			0.3	22	99.7				
Sun, Feb 14	8.95				0.4	30					
Mon, Feb 15	9.02	234	58	3.3	0.2	15	99.9	7.5	7.6	7.3	7.2
Tue, Feb 16	9.00	222	50	2.9	0.6	45	99.7	7.6	7.6	7.3	7.1
Wed, Feb 17	8.99	196	51	2.8	0.4	30	99.8	7.6	7.6	7.2	7.0
Thu, Feb 18	8.97	236	52	3.3	0.6	45	99.7	7.6	7.6	7.2	7.1
Fri, Feb 19	8.96	204			0.9	67	99.6	7.7	7.6	7.1	7.1
Sat, Feb 20	8.95	164			0.4	30	99.8				
Sun, Feb 21	8.93	122			0.6	45	99.5				
Mon, Feb 22	8.92	210	63	6.0	0.5	37	99.8	7.6	7.6	7.3	7.3
Tue, Feb 23	8.91	220	48	3.4	0.6	45	99.7	7.6	7.6	7.1	7.2
Wed, Feb 24	9.38	195	44	4.2	0.8	63	99.6	7.6	7.6	7.2	7.2
Thu, Feb 25	9.55	185	50	5.8	1.0	80	99.5	7.6	7.6	7.2	7.2
Fri, Feb 26	9.10	136			0.5	38	99.6	7.6	7.6	7.1	7.2
Sat, Feb 27	9.15	112			0.5	38	99.6				
Sun, Feb 28	9.11	108			0.4	30	99.6				
Mon, Feb 29		220	56	2.2	0.4	30	99.8	7.6	7.7	7.5	7.2
sum	305.53	4052	851	74.5	14.1	1260	2590.9	160.6	160.8	151.7	150.3
avg	10.54	156	50	4.4	0.5	43	99.6	7.6	7.7	7.2	7.2
max	22.28	236	65	11.0	1.0	167	99.9	7.8	7.8	7.5	7.3
min	8.91	76	33	2.2	0.2	15	98.8	7.5	7.6	7.1	7.0

Report Month: 2/2016

Downers Grove Sanitary District Report month: 2/2016

Monthly Operations Report Page 5

Date	Tertiary Flow MGD	Influent Amm-N Mg/L	Tertiary Effluent Amm-N Mg/L	Tertiary Effluent Amm-N Lbs/D	Residual Chlorine Mg/L	Fecal Coliform No/100ml
Mon, Feb 1	9.61	14.88	0.04	3.21		
Tue, Feb 2	14.79	14.56	0.46	56.72	0.05	
Wed, Feb 3	22.28	5.94	0.12	22.30	0.04	
Thu, Feb 4	16.75	7.56	0.06	8.38		
Fri, Feb 5	13.37					
Sat, Feb 6	12.38					
Sun, Feb 7	11.94		0.03	2.99		
Mon, Feb 8	11.31	13.60	0.05	4.71		
Tue, Feb 9	10.48	13.72	0.06	5.24		
Wed, Feb 10	9.98	14.20	0.07	5.82		
Thu, Feb 11	9.51					
Fri, Feb 12	9.36					
Sat, Feb 13	8.91					
Sun, Feb 14	8.95		0.06	4.48		
Mon, Feb 15	9.02	30.88	0.04	3.01		
Tue, Feb 16	9.00	18.00	0.08	6.01		
Wed, Feb 17	8.99	14.68	0.09	6.75		
Thu, Feb 18	8.97	16.72	0.04	2.99		
Fri, Feb 19	8.96					
Sat, Feb 20	8.95					
Sun, Feb 21	8.93	10.88	0.03	2.24		
Mon, Feb 22	8.92	17.26	0.04	2.98		
Tue, Feb 23	8.91	18.60	0.07	5.20		
Wed, Feb 24	9.38	15.88	0.08	6.26		
Thu, Feb 25	9.55	16.10	0.09	7.17		
Fri, Feb 26	9.10					
Sat, Feb 27	9.15					
Sun, Feb 28	9.11	11.80	0.04	3.04		
Mon, Feb 29	8.99	20.72	0.06	4.50		

sum	305.53	275.98	1.61	163.98	0.09
avg	10.54	15.33	0.08	8.20	0.05
max	22.28	30.88	0.46	56.72	0.05
min	8.91	5.94	0.03	2.24	0.04

SLUDGE DATA		
Primary Sludge TS 2	2.4% 1,190,968	Gallons
WAS to Dig #4/5 TS 3	3.0% 601,913	Gallons
Hauled Grease to Digs	292,840	Gallons
Anaerobically Digested Sludge Pumpir	ng	
Drying Beds TS 2	2.5% 46,128	Gallons
BFP TS 2	2.1% 402,219	Gallons
Lagoons TS 2	2.4% 72,666	Gallons
Total	521,013	Gallons
VS Destruction	101	%
Biosolids Disposal		
Pick-up Sta	ition - Feb	Cu. Yds.
Delive	ered - Feb	Cu. Yds.
Contractor Pick-up and District	Use - Feb	Cu. Yds.
Т	otal - Feb	Cu. Yds.
Pick-up Sta	ition - YTD	Cu. Yds.
Delive	ered - YTD	Cu. Yds.
Contractor Pick-up and District	Use - YTD	Cu. Yds.
Т	otal - YTD	Cu. Yds.
ENERGY DATA		
Total Digester Gas Production	7,991,253	Cu. Ft.
Gas Volume per Volatile Solids Load	17.69	Cu. Ft./Lb.
Digester Gas Utilization		
Heat Exchangers	1,238,146	
Dehumidification	996,313	Cu. Ft.
CHP	3,409,210	
Total	5,643,669	
Digester Gas Flared	2,347,584	Cu. Ft.
Natural Gas Consumed		
WWTC		Cu. Ft.
MSB		Cu. Ft.
Chemical Feed		Cu. Ft.
5006 Walnut		Cu. Ft.
Kilowatt-hours from ComEd		KW-Hrs
Kilowatt-hours Generated CHP	162,031	KW-Hrs
MISCELLANEOUS		
Grit Removal - Feb		Cu. Yds.
Grit Removal - YTD		Cu. Yds.
Anaerobic Supernate	1,720,366	
Waste Activated Sludge	0.1061	
City Water Consumed	63,954	Gallons

Dorrance Berry

rberry@dgsd.org

Name: E-Mail:

Permit Facility: Permit #: IL0028380 Permittee: DOWNERS GROVE SANITARY DISTRICT DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER Major: Yes Permittee Address: 2710 CURTISS STREET PO BOX 1412 Facility Location: **5003 WALNUT AVENUE** DOWNERS GROVE, IL 60515 DOWNERS GROVE, IL 60515 Discharge: 001 001-0 Permitted Feature: External Outfall COMBINED DISCHARGE FROM A01, B01, & C01 Report Dates & Status **DMR Due Date: Monitoring Period:** From 02/01/16 to 02/29/16 03/25/16 Status: **NetDMR Validated Considerations for Form Completion** NUMBER OF DAYS OF DISCHARGE.COMBINED OUTFALLS: A01-MIXING CHAMBER DISCHARGE TO E BR OF DUPAGE RIVER-EFFECTIVE WHEN FLOWS TO TRT PLT ARE GREATER THAN 22 MGD & EXCESS FLOW FAC IS IN OPERATION. 002 BECOMES OPERATIONAL WHEN 001, A01,& B01 EXCEED 30 MGD. Principal Executive Officer Nicholas Title: General Manager 630-969-0664 **First Name:** Telephone: Last Name: Menninga No Data Indicator (NODI) Form NODI: Parameter Monitoring Location Season # Param. NODI **Quantity or Loading Quality or Concentration** # of Ex. Frequency of Analysis Sample Type Code Qualifier 1 Value 1 Qualifier 2 Value 2 Units Qualifier 1 Value 1 Qualifier 2 Value 2 Qualifier 3 Value 3 Units 03/DW - 3 Days Every Week GR - GRAB Sample 9.2 8.1 7.5 19 - ma/L 00300 Oxygen, dissolved [DO] 1 - Effluent Gross Permit Req Reg Mon MO AV MN Reg Mon MN WK AV Reg Mon DAILY MN 19 - mg/L DL/DS - Daily When Discharging GR - GRAB Value NODI 03/DW - 3 Days Every Week GR - GRAB Sample 3.6 19 - mg/L 00310 BOD, 5-day, 20 deg. C 1 - Effluent Gross Permit Req 30 MO AVG 45 WKLY AVG 19 - mg/L DL/DS - Daily When Discharging GR - GRAB Value NODI Sample 7.3 12 - SU 05/DW - 5 Days Every Week GR - GRAB 00400 pH 1 - Effluent Gross Permit Rea 6 MINIMUM 9 MAXIMUM 12 - SU DL/DS - Daily When Discharging GR - GRAB Value NODI 05/DW - 5 Days Every Week GR - GRAB 0.7 19 - mg/L Sample 1.2 19 - mg/L 00530 Solids, total suspended 1 - Effluent Gross 0 Permit Reg. 30 MO AVG 45 WKLY AVG DL/DS - Daily When Discharging GR - GRAB <= <= Value NODI Sample 05/DW - 5 Days Every Week GR - GRAB 1.14 19 - ma/L 0.11 00610 Nitrogen, ammonia total [as N] 1 - Effluent Gross Permit Req Reg Mon MO AVG Reg Mon DAILY MX 19 - mg/L 0 DL/DS - Daily When Discharging GR - GRAB Value NODI Sample 2.62 19 - mg/L 06/30 - Six Per Month GR - GRAB 00665 Phosphorus, total [as P] 1 - Effluent Gross Permit Req Req Mon DAILY MX 19 - mg/L 0 DL/DS - Daily When Discharging GR - GRAB Value NODI GR - GRAB Sample 0.34 19 - mg/L 02/30 - Twice Per Month 50060 Chlorine, total residual 1 - Effluent Gross Permit Rea .75 MO AVG 19 - mg/L DL/DS - Daily When Discharging GR - GRAB Value NODI 13 - #/100mL GR - GRAB Sample 01/30 - Monthly 74055 Coliform, fecal general 1 - Effluent Gross Permit Reg. 400 DAILY MX 13 - #/100mL 0 DL/DS - Daily When Discharging GR - GRAB Value NODI 304.7337 80 - Mgal/mo 99/99 - Continuous Sample 82220 Flow, total 1 - Effluent Gross Permit Req Reg Mon MO TOTAL 80 - Mgal/mo 99/99 - Continuous Value NODI **Submission Note** If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. **Edit Check Errors** No errors. **Comments** 29 days of discharge, including 1 day combined discharge with A01. Attachments No attachments. Report Last Saved By **DOWNERS GROVE SANITARY DISTRICT** User: Date/Time: 2016-03-11 14:38 (Time Zone: -06:00) rberry@dgsd.org

Permit Permittee: DOWNERS GROVE SANITARY DISTRICT Permit #: IL0028380 Facility: DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER **Facility Location:** Major: Yes **Permittee Address:** 2710 CURTISS STREET PO BOX 1412 **5003 WALNUT AVENUE** DOWNERS GROVE, IL 60515 DOWNERS GROVE, IL 60515 002 Discharge: Permitted Feature: 002-0 External Outfall MIXING CHMBR OVERFLOW TO ST. JOSEPH CRK Report Dates & Status From 02/01/16 to 02/29/16 **DMR Due Date:** 03/25/16 Status: **Monitoring Period: NetDMR Validated Considerations for Form Completion** NUMBER OF DAYS OF DISCHARGE:CS **Principal Executive Officer First Name: Nicholas** Title: General Manager Telephone: 630-969-0664 Last Name: Menninga No Data Indicator (NODI) Form NODI: Monitoring Location Season # Param. NODI **Quantity or Loading Quality or Concentration** # of Ex. Frequency of Analysis Sample Type Qualifier 1 Value 1 Qualifier 2 Qualifier 1 Value 1 Qualifier 2 Value 2 Qualifier 3 Code Value 2 Value 3 Units Sample 19 - mg/L DL/DS - Daily When Discharging GR - GRAB 00300 Oxygen, dissolved [DO] DL/DS - Daily When Discharging GR - GRAB Req Mon DAILY MN 19 - mg/L 1 - Effluent Gross **Permit Rea** Value NOD Sample 19 - mg/L DL/DS - Daily When Discharging GR - GRAB 00310 BOD, 5-day, 20 deg. C 1 - Effluent Gross Permit Reg. 30 MO AVG <= 45 WKLY AVG 19 - mg/L 0 DL/DS - Daily When Discharging GR - GRAB Value NODI 12 - SU DL/DS - Daily When Discharging GR - GRAB Sample 7.1 7.1 00400 pH 1 - Effluent Gross Permit Req 6 MINIMUM 9 MAXIMUM 12 - SU DL/DS - Daily When Discharging GR - GRAB Value NODI DL/DS - Daily When Discharging GR - GRAB Sample 19 - mg/L DL/DS - Daily When Discharging GR - GRAB 00530 Solids, total suspended 1 - Effluent Gross Permit Req. 30 MO AVG <= 45 WKLY AVG 19 - mg/L Value NODI DL/DS - Daily When Discharging GR - GRAB Sample 1.14 19 - mg/L 00610 Nitrogen, ammonia total [as N] 1 - Effluent Gross 0 Permit Rea. Req Mon DAILY MX 19 - mg/L DL/DS - Daily When Discharging GR - GRAB Value NODI Sample 1.84 DL/DS - Daily When Discharging GR - GRAB 19 - mg/L 00665 Phosphorus, total [as P] 1 - Effluent Gross Permit Reg. Req Mon DAILY MX 19 - mg/L 0 DL/DS - Daily When Discharging GR - GRAB Value NODI Sample 0.64 19 - mg/L DL/DS - Daily When Discharging GR - GRAB 50060 Chlorine, total residual 1 - Effluent Gross Permit Req .75 MO AVG 19 - mg/L DL/DS - Daily When Discharging GR - GRAB Value NODI 13 - #/100mL DL/DS - Daily When Discharging GR - GRAB Sample 74055 Coliform, fecal general 400 DAILY MX 13 - #/100mL 0 DL/DS - Daily When Discharging GR - GRAB 1 - Effluent Gross **Permit Rea** Value NOD Sample 5.27 80 - Mgal/mo DL/DS - Daily When Discharging 82220 Flow, total 1 - Effluent Gross Permit Rea. Reg Mon MO TOTAL 80 - Mgal/mo DL/DS - Daily When Discharging 0 Value NODI **Submission Note** If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. **Edit Check Errors** No errors. Comments 1 day of discharge. Attachments No attachments. Report Last Saved By **DOWNERS GROVE SANITARY DISTRICT** User: rberry@dgsd.org Date/Time: 2016-03-11 14:38 (Time Zone: -06:00) Dorrance Berry Name: E-Mail: rberry@dgsd.org

Permit																		
Permit #:	IL0028380		Pe	ermittee:		DO	WNERS	GROVE SANITA	RY DISTRI	СТ	Facili	ity:	DO	WNERS G	ROVE S.D WA	STEWATER	R TREATMENT CENTER	
Major:	Yes		Pe	ermittee Ad	dress:			ISS STREET PO GROVE, IL 6051			Facili	ity Locat			T AVENUE GROVE, IL 60515			
	003 External Outfall		Di	scharge:		00 3		OW TO ST. JOSI	EPH CRK									
Report Dates & Status																		
Monitoring Period:	From 02/01/16 to 0	02/29/16	DI	MR Due Dat	e:	03/	25/16				Statu	s:	Net	DMR Vali	dated			
Considerations for Form	Completion																	
NUMBER OF DAYS OF DIS	SCHARGE:CS																	
Principal Executive Office	er																	
First Name:	Nicholas		Tit	tle:		Gei	neral Ma	nager			Telep	hone:	630	-969-0664	L			
Last Name:	Menninga										, ·							
No Data Indicator (NODI)																		
Form NODI:																		
Parameter	Monitoring Locati	on Season #	# Param. NO	DI			Quantity	y or Loading					Quality or Conce	entration			# of Ex. Frequency of Analysis	Sample Type
Code Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier '	1 Value 1	Qualifier	2 Value 2	Qualifier	3 Value 3	Units		
00000 Ourseas disamber d [DO]	4. 550			Sample											Dan Man DAII V MAN	40/1	DI (DO Deile Mises Diselegacione	OD ODAD
00300 Oxygen, dissolved [DO]	1 - Effluent Gross	0		Permit Req Value NOD											Req Mon DAILY MN C - No Discharge	19 - mg/L	DL/DS - Daily When Discharging	GR - GRAB
				Sample														
00310 BOD, 5-day, 20 deg. C	1 - Effluent Gross	0		Permit Req								<=	30 MO AVG	<=	45 WKLY AVG	19 - mg/L	DL/DS - Daily When Discharging	GR - GRAB
				Value NOD Sample									C - No Discharg	е	C - No Discharge			
00400 pH	1 - Effluent Gross	0		Permit Req						>=	6 MINIMUM			<=	9 MAXIMUM	12 - SU	DL/DS - Daily When Discharging	GR - GRAB
				Value NOD	ı						C - No Discharge	е			C - No Discharge			
00530 Calida total auganandad	1 - Effluent Gross	0		Sample Permit Req								<=	30 MO AVG	<=	45 WKLY AVG	10. mg/l	DI /DS Doily When Discharging	CD CDAD
00530 Solids, total suspended	1 - Liliuelli Gloss	U	_	Value NOD								\=	C - No Discharg		C - No Discharge	19 - mg/L	DL/DS - Daily When Discharging	GK - GKAD
				Sample														
00610 Nitrogen, ammonia total [as	N] 1 - Effluent Gross	0		Permit Req											Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Discharging	GR - GRAB
				Value NOD Sample											C - No Discharge			
00665 Phosphorus, total [as P]	1 - Effluent Gross	0		Permit Req											Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Discharging	GR - GRAB
				Value NOD	I										C - No Discharge			
50060 Chlorine, total residual	1 - Effluent Gross	0		Sample Permit Req								<=	.75 MO AVG			19 - mg/L	DL/DS - Daily When Discharging	GR - GRAB
				Value NOD									C - No Discharg	е				
				Sample														
74055 Coliform, fecal general	1 - Effluent Gross	0		Permit Req Value NOD										<=	400 DAILY MX C - No Discharge	13 - #/100mL	DL/DS - Daily When Discharging	GR - GRAB
				Sample											o no biconai ge			
82220 Flow, total	1 - Effluent Gross	0		Permit Req				Req Mon MO TOTAL	. 80 - Mgal/m	0							DL/DS - Daily When Discharging	
				Value NOD				C - No Discharge										
Submission Note				···· · - ·		•			1 10 14							_		
If a parameter row does not	t contain any values	for the Sa	imple nor E	tfluent I rad	ing, then n	one of t	he follow	ing fields will be s	submitted fo	or that row	: Units, Numbe	er of Excu	ırsıons, Frequei	ncy of Ana	lysis, and Sample	Type.		
Edit Check Errors																		
No errors.																		
Comments																		
Attachments																		
No attachments.																		
Report Last Saved By																		
DOWNERS GROVE SANIT																		
	dgsd.org							Da	te/Time:				2016-03-	11 14:38	(Time Zone: -06:	00)		
Name: Dorrance	e Berry																	
E-Mail: rberry@	dgsd.org																	

Permit																			
Permit #:	IL0	028380		Permittee:		DOWNE	ERS G	ROVE S	SANITARY DISTR	ICT		Facil	ity:	DOWN	IERS GROVE S.D) WAS	TEWA	TER TREATMENT CENTER	₹
Major:	Yes	•		Permittee /	Address:		-		ET PO BOX 1412 IL 60515			Facil	ity Location:		VALNUT AVENUE IERS GROVE, IL				
Permitted		ernal Outfall		Discharge:	:	A01-0 EXCES	S FLO	W FROI	M EXCESS FLOW	/ CLARIFIER	lS								
Report Date	tes & Status																		
Monitoring	g Period: Fro	m 02/01/16 to 02/29)/16	DMR Due I	Date:	03/25/1	6					Statu	ıs:	NetDM	IR Validated				
Considera	tions for Form C	Completion		,															
NUMBER (OF DAYS OF DIS	CHARGE:CS																	
Principal E	Executive Office	•																	
First Name	First Name: Nicholas Title:					General	l Mana	ager				Telep	phone:	630-96	9-0664				
Last Name	: Mei	nninga																	
No Data In	dicator (NODI)			'															
Form NOD)I:																		
F	Parameter	Monitoring Location	Season	# Param. NODI	l			Quanti	ty or Loading				Quality o	r Concentrat	tion		# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1 V	/alue 1	Qualifier 2	2 Value 2	Units	Qualifier 1	Value 1	Qualifier 2 Value			Units		DL/DO Daile When Disaberation	OD ODAD
00310 BOD, 5	i-day, 20 deg. C	1 - Effluent Gross	0		Sample Permit Req.									=	19 Reg Mon DAILY MX	19 - mg/L 19 - mg/L		DL/DS - Daily When Discharging DL/DS - Daily When Discharging	
					Value NODI														
00520 Calida	total avenandad	1 Effluent Cross	0		Sample Barreit Barr									=	12.8	19 - mg/L		DL/DS - Daily When Discharging	
00530 Solids,	total suspended	1 - Effluent Gross	U		Permit Req. Value NODI										Req Mon DAILY MX	19 - mg/L	U	DL/DS - Daily When Discharging	GR - GRAB
					Sample									-	2.47	19 - mg/L		DL/DS - Daily When Discharging	
00610 Nitrogei	n, ammonia total [as	N] 1 - Effluent Gross	0		Permit Req. Value NODI										Req Mon DAILY MX	19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
					Sample									=	1.78	19 - mg/L		DL/DS - Daily When Discharging	GR - GRAB
00665 Phosph	norus, total [as P]	1 - Effluent Gross	0		Permit Req.										Req Mon DAILY MX	19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
					Value NODI				4.4683	90 Maal/ma								DL/DS - Daily When Discharging	CNL CONTIN
82220 Flow, to	otal	1 - Effluent Gross	0		Sample Permit Req.			=	Req Mon MO TOTAL	80 - Mgal/mo _ 80 - Mgal/mo							0	DL/DS - Daily When Discharging	
					Value NODI				·										
Submissio	on Note																		
If a parame	eter row does not	contain any values fo	or the Sa	ample nor Eff	luent Tradir	ng, then no	ne of t	the follow	ving fields will be s	submitted for	that row: \	Units, N	lumber of Excu	ursions, Fre	equency of Analys	is, and S	Sample	Туре.	
Edit Check	k Errors																		
No errors.																			
Comments	s																		
1 day of dis	scharge. Event 1:	2/2 to 2/3, dischargi	ng 9.26 l	hrs. 1.04 inch	nes of rain o	over 10 hrs.	. B01 f	flow rate	at A01 start time:	15,790 gpm.									
Attachmen	nts																		
No attachment																			
	st Saved By																		
	S GROVE SANIT																		
User:	rberry@dg	_							Date/Time	e:			2016-	03-11 14:0	38 (Time Zone: -	06:00)			
Name:	Dorrance	•																	
E-Mail:	rberry@dg	sd.org																	

Permit Permit #:

Major:

IL0028380

Yes

Permittee:

DOWNERS GROVE SANITARY DISTRICT

Permittee Address:

2710 CURTISS STREET PO BOX 1412

DOWNERS GROVE, IL 60515

Facility Location:

Facility:

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

5003 WALNUT AVENUE DOWNERS GROVE, IL 60515

Permitted Feature:

B01 External Outfall Discharge: B01-0

INTERNAL MIXING CHMBR - E. BR. DUPAGE RVR

Report Dates & Status

Monitoring Period: From 02/01/16 to 02/29/16 **DMR Due Date:** 03/25/16

Status: **NetDMR Validated**

Considerations for Form Completion

DMF LOAD LIMITS DISPLAYED.

Principal Executive Officer

First Name: Nicholas Menninga Title: General Manager Telephone:

630-969-0664

No Data Indicator (NODI)

Form NODI:

Last Name:

	Parameter	Monitoring Location	Location Season # Param. NOD					uantity or Lo						ality or Conc			# of Ex	Sample Type	
Code	Name					Qualifier 1	Value 1	Qualifier 2	2 Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units		
					Sample										=	52	15 - deg F	01/30 - Monthly	GR - GRAB
00011 T	emperature, water deg. fahrenheit	1 - Effluent Gross	0		Permit Req.											Req Mon MO MAX	15 - deg F 0	01/30 - Monthly	GR - GRAB
					Value NODI														
					Sample						=	9.3	=	8.7	=	7.5	19 - mg/L	03/DW - 3 Days Every Week	GR - GRAB
00300 C	xygen, dissolved [DO]	1 - Effluent Gross	1		Permit Req.						>=	5.5 MO AV MN	V >=	4 MN WK AV	/ >=	3.5 DAILY MN	19 - mg/L 0	02/DA - 2 Days Every Week	GR - GRAB
					Value NODI														
					Sample						=	7			=	7.3	12 - SU	05/DW - 5 Days Every Week	GR - GRAB
00400 pl	Н	1 - Effluent Gross	0		Permit Reg.						>=	6 MINIMUM				9 MAXIMUM	12 - SU 0	02/DA - 2 Days Every Week	GR - GRAB
					Value NODI														
					Sample										=	168	19 - mg/L	01/30 - Monthly	CP - COMPO
00410 A	Ikalinity, total [as CaCO3]	1 - Effluent Gross	0		Permit Reg.											Reg Mon DAILY MX		01/30 - Monthly	CP - COMPO
, , , , , ,	ay, total [ao oaooo]				Value NODI											rtoq mon 27 ii27 iii		e i, ee memmy	0. 00
					Sample		43.4	_	167.2	26 - lb/d			=	0.5	_	1	19 - mg/L	05/DW - 5 Days Every Week	CP - COMPO
00530 5	olids, total suspended	1 - Effluent Gross	0	<u></u>	Permit Req.		2202 MO AVG	<=	4404 DAILY MX	26 - lb/d			<=	12 MO AVG		24 DAILY MX	19 - mg/L 0	02/DA - 2 Days Every Week	CP - COMPO
,00000	ondo, total suspended	Lindon O1033			Value NODI		LLUZ IVIO AVO		TIOT DAILT WA	_0 ib/u				IZ WIO AVO	\ <u>-</u>	E I DAILI WA	15 Hig/L 0	OZ, D. N. Z Dayo Lvory Week	Si COMI O
					Sample										_	17.3	19 - mg/L	01/30 - Monthly	CP - COMPO
00600 N	itragen total [as NI]	1 - Effluent Gross	0		Permit Reg.											Reg Mon DAILY MX		01/30 - Monthly	
JUGUU IN	itrogen, total [as N]	1 - Elliuelli Gioss	U													Red MOII DAILT MY	(19 - 111g/L 0	01/30 - Moritrily	CP - COMPO
					Value NODI		0.0		50.70	00 11-7-1				0.08		0.40	40	05/DW 5 Davis 5 Wash	OD OOMBO
00040	itas anno anno anio tatal fan NII	4 550			Sample		8.2	=	56.72	26 - lb/d			=			0.46	19 - mg/L	05/DW - 5 Days Every Week	CP - COMPO
J0610 N	itrogen, ammonia total [as N]	1 - Effluent Gross	1		Permit Req.		734 MO AVG	<=	1376 DAILY MX	26 - lb/d			<=	4 MO AVG	<=	7.5 DAILY MX	19 - mg/L 0	02/DA - 2 Days Every Week	CP - COMPO
					Value NODI														
/					Sample											0.5	19 - mg/L	01/30 - Monthly	CP - COMPO
J0625 N	itrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L 0	01/30 - Monthly	CP - COMPO
					Value NODI														
					Sample											17.3	19 - mg/L	01/30 - Monthly	CA - CALCTD
)0630 N	itrite + Nitrate total [as N]	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L 0	01/30 - Monthly	CA - CALCTD
					Value NODI														
					Sample										-	2.62	19 - mg/L	01/30 - Monthly	CP - COMPO
00665 P	hosphorus, total [as P]	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L 0	01/30 - Monthly	CP - COMPO
					Value NODI														
					Sample										=	2.34	19 - mg/L	01/30 - Monthly	CP - COMPO
00666 P	hosphorus, dissolved	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L 0	01/30 - Monthly	CP - COMPO
					Value NODI														
					Sample										=	244	19 - mg/L	01/30 - Monthly	GR - GRAB
00940 C	hloride [as Cl]	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L 0	01/30 - Monthly	GR - GRAB
					Value NODI														
					Sample	=	10.54	=	22.28	03 - MGI)							99/99 - Continuous	
50050 F	low, in conduit or thru treatment plant	1 - Effluent Gross	0		Permit Req.		Req Mon MO AV	'G	Req Mon DAILY MX	03 - MGI	וֹ						0	99/99 - Continuous	
	·				Value NODI				i i										
					Sample										=	0.05	19 - mg/L	CL/OC - Chlorination/Occurance	es GR - GRAB
50060 C	hlorine, total residual	1 - Effluent Gross	1		Permit Req.											.05 DAILY MX	19 - mg/L 0	CL/OC - Chlorination/Occurance	
	.,.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Value NODI														
					Sample		91.51	=	185.81	26 - lb/d			=	1	_	1.2	19 - mg/L	03/DW - 3 Days Every Week	CP - COMPO
	OD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0		Permit Req.		1835 MO AVG	<=	3670 DAILY MX	26 - lb/d			<=	10 MO AVG		20 DAILY MX	19 - mg/L 0	02/DA - 2 Days Every Week	CP - COMPO
30082 F								~-											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Erro	rs			
No errors.				
Comments				
Attachments				
No attachments.				
Report Last Sav	red By			
DOWNERS GRO	OVE SANITARY DISTRICT			
User:	rberry@dgsd.org	Date/Time:	2016-03-11 14:38 (Time Zone: -06:00)	
Name:	Dorrance Berry	'		
E-Mail:	rberry@dgsd.org			

DMR Copy of Record

Permit											_							
Permit:	#: I	IL0028380		Permitte	ee:	D	OWNER	RS GROV	E SANITARY DIS	TRICT	Facility	y :	DOWNERS	GROVE S.D V	WASTEV	VATER	TREATMENT CENTER	
Major:	,	Yes		Permitte	ee Address				REET PO BOX 14 E, IL 60515	412	Facility	/ Location:	5003 WALNI DOWNERS	JT AVENUE GROVE, IL 605	15			
Permitt		C01 External Outfall		Dischar	ge:		01-0 XCESS	FLOW FI	ROM CLARIFIER :	#1								
Report	Dates & Status																	
Monitor	ring Period:	From 02/01/16 to 02/	29/16	DMR Du	ue Date:	03	3/25/16				Status	:	NetDMR Val	idated				
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Princip	al Executive Offic	er																
First Na		Nicholas		Title:		G	eneral M	Manager			Teleph	one:	630-969-066	4				
Last Na		Menninga						ŭ										
	a Indicator (NODI)			l														
Form N																		
	Parameter	Monitoring Location	on Season #	Param. NOD	ı			Quantity	y or Loading			Qu	ality or Concentration	n		# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1 Valu	e 1 Qualifier 2	Value 2 Qualifier 3	Value 3	Units			
00310 BO	D, 5-day, 20 deg. C	1 - Effluent Gross	0		Sample Permit Req.								-	Req Mon DAILY MX	10 - mg/l	-	DL/DS - Daily When Discharging	GP - GPAR
00010 BO	D, 5 day, 20 dog. 0	I Ellidelit Gloss	O		Value NODI									: - No Discharge	15 1119/1		DE/DO Daily Which Discharging	g OIL OILLE
					Sample													
00530 Soli	ids, total suspended	1 - Effluent Gross	0		Permit Req. Value NODI									Req Mon DAILY MX C - No Discharge	19 - mg/L		DL/DS - Daily When Discharging	GR - GRAB
					Sample	1								140 Discharge				
00610 Nitr	ogen, ammonia total [a	s N] 1 - Effluent Gross	0		Permit Req.									Req Mon DAILY MX	19 - mg/L		DL/DS - Daily When Discharging	GR - GRAB
					Value NODI Sample								C	: - No Discharge				
00665 Pho	osphorus, total [as P]	1 - Effluent Gross	0		Permit Req.								F	Req Mon DAILY MX	19 - mg/L		DL/DS - Daily When Discharging	GR - GRAB
					Value NODI								C	- No Discharge				
82220 Flo	w total	1 - Effluent Gross	0		Sample Permit Req.				Req Mon MO TOTAL	80 - Mgal/mo						-	DL/DS - Daily When Discharging	CN - CONTIN
OZZZO I IO	w, total	I Emdon Cross	Ü		Value NODI				C - No Discharge	oo wigawiiio							Day whom bloominging	, or corrier
Submis	sion Note																	
If a para	meter row does no	ot contain any values	for the Sa	mple nor Eff	luent Tradii	ng, then n	one of t	the follow	ing fields will be su	ubmitted for	that row: Unit	s, Number o	f Excursions, Fred	uency of Analys	sis, and S	Sample	Туре.	
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DOWN	ERS GROVE SAN	ITARY DISTRICT																
User:	rberry@c	dgsd.org							Date/Time	:			2016-03-11 14:38	(Time Zone: -	06:00)			
Name:	Dorrance	e Berry																
E-Mail:	rberry@c	dgsd.org																

DMR Copy of Record

Permit																			
Permit #	:	IL002838	30		Permittee:		DO	WNERS GRO	VE SANITA	ARY DISTRICT		Facil	lity:	DOWNERS	S GROVE	S.D WASTE	WATER TREATM	ENT CENTER	
Major:		Yes			Permittee A	ddress:		0 CURTISS S WNERS GRO				Facil	lity Location:	5003 WALI DOWNERS	_	_			
Permitte	Permitted Feature: INF Influent Structure				INF-L INFLUENT MONITORING														
Report Dates & Status																			
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Conside	erations for Form	Completic	on	,								•							
CS	DS CONTRACTOR OF THE PROPERTY																		
Principa	I Executive Offic	er																	
First Na	me:	Nicholas			Title:		Gei	neral Manager				Tele	phone:	630-969-06	664				
Last Nar	ne:	Menninga	a									•							
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Form NO																			
	Parameter		Monitoring Location	Season a	# Param. NODI			Q	uantity or Lo	pading				Quality or Cond	entration		# of Ex	. Frequency of Analysis	Sample Type
Code	Name						Qualifier '	Value 1	Qualifier	2 Value 2	Units	Qualifier 1	Value 1 Qualifier		Qualifier 3	3 Value 3	Units		22 221222
00310 BOD), 5-day, 20 deg. C		G - Raw Sewage Influent	0		Sample Permit Req.							=	182 Req Mon MO AVG	ì		19 - mg/L 19 - mg/L 0	03/DW - 3 Days Every Week 09/99 - See Permit	CP - COMPOS
	, , ,					Value NODI											3		
						Sample							=	156			19 - mg/L	05/DW - 5 Days Every Week	
00530 Solid	ds, total suspended		G - Raw Sewage Influent	0		Permit Req. Value NODI								Req Mon MO AVG	i		19 - mg/L 0	09/99 - See Permit	CP - COMPOS
						Sample									=	40.4	19 - mg/L	01/30 - Monthly	CP - COMPOS
00600 Nitro	gen, total [as N]		G - Raw Sewage Influent	0		Permit Req.										Req Mon DAILY	MX 19 - mg/L 0	01/30 - Monthly	CP - COMPOS
						Value NODI Sample									=	6.58	19 - mg/L	05/30 - 5 Times Every Month	CP - COMPOS
00665 Phos	sphorus, total [as P]		G - Raw Sewage Influent	0		Permit Req.										Req Mon DAILY			CP - COMPOS
						Value NODI		10.01		00.00	00 1400							20/20 0 1	
50050 Flow	, in conduit or thru tre	atment plant	G - Raw Sewage Influent	0		Sample Permit Req.	-	10.84 Req Mon MO A\	= /G	23.62 Req Mon DAILY M	03 - MGD MX 03 - MGD						0	99/99 - Continuous 99/99 - Continuous	
	,					Value NODI													
Submiss	sion Note																		
If a parar	meter row does no	t contain a	ny values for the Sam	ple nor	Effluent Trac	ling, then n	one of th	e following fiel	ds will be s	ubmitted for that	t row: Units	, Number	of Excursions, F	requency of Ana	alysis, and	d Sample Type			
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User:	rberry@	dgsd.org							D	ate/Time:				2016-03-11 14:3	38 (Time	Zone: -06:00)			
Name:		ce Berry																	
E-Mail:		dgsd.org																	

DOWNERS GROVE SANITARY DISTRICT

MEMO

TO: Nicholas J. Menninga, General Manager

FROM: Jeff Barta, Maintenance Supervisor

DATE: March 15, 2016

SUBJECT: February 2016 Maintenance Report

Attached is a work order summary detailing equipment repair and preventive maintenance activities conducted by the maintenance/electrical department and operations during February 2016.

Special projects in February included:

Hypochlorite OSEC Generator Electrodes

To insure maximum operating efficiency, the electrodes on the hypochlorite generator require an annual cleaning and inspection. Without an annual thorough cleaning and inspection, the electrodes can become damaged by contaminants in the process water or the brine solution.

District maintenance and electrical staff removed the electrodes, disassembled, cleaned and inspected the several-hundred anode and cathodes plates. I am pleased to report that we have noticed a significant improvement in the condition of the plates after we switched from the bulk salt delivery to a bagged salt delivery. In 2013, the last year of bulk salt delivery, we had to replace a total of 358 anode and cathode plates due to the contaminants in the bulk salt. This year we only had to replace a total of 44 anode and cathode plates. The electrodes were reinstalled and the OSEC generator is ready for seasonal disinfection.

Venard Lift Station Pump no.1

The pump was removed from service by Xylem Water Solutions to replace the mechanical seal that failed. When the pump was disassembled and inspected, they discovered that the impeller was also severely worn out. I was surprised that after only 6 years of service the impeller was so deteriorated. It is likely that the deteriorated impeller caused abnormal vibration when the pump was operating and caused the mechanical seal to fail.

An impeller should normally last at least 10 years before it would need to be replaced. It is likely that the high head/discharge pressure on the force main was the cause of the premature wear. The original cast iron impeller was replaced with a hard chrome type impeller that is significantly more durable and should last at least twice as long as a standard cast iron impeller. The pump has been reinstalled and is operating as expected.

The impellers on pump nos. 2 and 3 will also get upgraded to the hard chrome type in the next few weeks. Pump no. 2 has already been removed from service for this upgrade. The goal is to address the impellers before they cause premature seal failures and additional repair expenses.

cc: WDVB, ASK, DFP, KJR, RTJ, MJS, WCC, MGP

Work Order Summary

Work Order Completion Dates from 2/1/2016 to 2/29/2016

Work Assignment	Completion Date	Equipment	NOTATIONS
Months Inspection on Electric Carts	2/1/2016	2007 CLUB CAR CARRYALL 2 No. 1	Cleaned all carts and all battery connections. Protective spray on all seals and connections. Added de-ionized water to all batterys.
		2013 Club Car Carryall #	
		2014 Club Car Carry-all #2	
Test for H2S at Unison Gas skid	2/11/2016	CHP Gas Cleaning System	
ix Month Oil Change Primaries 7- -9 Long & Cross Collector	2/1/2016	Primary Clarifier 7	
Ü		Primary Clarifier 8	
		Primary Clarifier 9	
lean Pump Seal Water Filters At ift Stations	2/19/2016	Butterfield Pump 1	Flush seal water lines, replace filters, verify seal water flow.
		Butterfield Pump 2	
		Centex Pump 1	
		Centex Pump 2	
		Earlston Pump 1	
		Earlston Pump 2	
		Hobson Pump 1	
		Hobson Pump 2	
		Hobson Pump 3	
		Hobson Pump 4	
		Liberty Park Pump 1	
		Liberty Park Pump 2	
		Wroble Pump 1	
		Wroble Pump 2	
0000 Hour Grease of the UNISON	2/11/2016	CHP Gas Cleaning System	
Annual Sensor Test to be performed in UST	2/4/2016	Emerg Gen Diesel Storage Tank	Accurate Tank Technologies performed the UST sensor testing on 2/4/2016.
Annual proof of Insurance to be sent o OSFM			· ·
Quartely Flow Test In Maintenance Garage	2/1/2016	Maintenance Services Building	Fire alarm flow test- Fire Dispatch received 2 flow activations and 1 trouble activation.
Vehicle #304, 6 Month Oil Change		2009 Ford F350 Truck New 304	
exercise Of EBARA and Excess dumps	2/25/2016	Excess Flow Pump 06	
		Excess Flow Pump 07	
		Excess Flow Pump 08	
		Excess Flow Pump 09	
		Excess Flow Pump 10	
		Excess Flow Pump 11	
		Excess Flow Pump 12	

Thursday, March 17, 2016 Page 1 of 5

Work Assignment	Completion Date	Equipment	NOTATIONS
Exercise Ratio Valve #2	2/4/2016	Tunnel - System 2 RAS	
EXCESS 003- Exercise 30" and 24" DEZURIK Valves		Excess Flow 003 Valves	
By-Weekly Fluid and Misc. Check of Generators	2/2/2016	Emergency Generator 1	
		Emergency Generator 2	
		Emergency Generator 3	
Plant Generators OSFM Quarterly Equipment Inspection Checklist	2/24/2016	Emerg Gen Diesel Storage Tank	
Run And Inspect Generators With The Load Of The Plant	2/17/2016	Emergency Generator 1	
		Emergency Generator 2	
		Emergency Generator 3	
Monthly Liquid Status of Under Ground Diesel Tank	2/4/2016	Emerg Gen Diesel Storage Tank	
Repair drivers side door on F-350	2/2/2016	2009 Ford F350 Truck New 304	Remove door panel and locate loose door latch arm support. Loosened from door support. Remount support.
11,035hrs. Replace spark plugs due to length of run time.		CHP Engine Genset	Remove old spark plugs and check for unusual wear patterns. Check gap of new spark plugs and torque to 25Nm.
Concrete repairs on driveway at the Grease tank & Grit tanks 1 & 2.		WWTC Roadways	ATP Enterprise Group resurfaced the driveway west of the grease receiving tank and repaired the west and north exterior faces of grit tanks 1 & 2.
Replace sidewalks between MSB & Microstrainer and west side access tanks			ATP Enterprise Group replaced the existing deteriorated and broken sidewalks from the MSB to the Microstrainer, and the walkway between the chlorine contact tank and to the west side of the excess flow clarifiers.
Remove pump from service & replace leaking seal.	2/9/2016	Raw Sewage Pump 5	Remove pump, disassemble and inspect. Send impeller to Jake's Machine to have new sleeve, was installed, machined and balanced. Overhaul included new bearings, grease seals, O-rings, and new mechanical seal. Re-install pump and test operation.
Paint as needed around new light fixtures	2/8/2016	Grit Building	Touch up paint as needed in upper and lower levels.
Replace worn lunchroom tables	2/5/2016	Maintenance Services Building	
Semi-Annual Greasing Of Various Equipment	2/25/2016	Chlorine Blding/System Garage	
		Digester 1 Sludge Recirc Pump	
		Digester 1 Sludge Trnsfr Pump	
		Digester 2 Sludge Recirc Pump	
		Digester 2 Sludge Trnsfr Pump	
		Excess Flow Pump Station	
		Operations Center	
		Primary Sludge Pump 2	
		Primary Sludge Pump 3	
		Primary Sludge Pump 5	
	.	Raw Sewage Pump Station	
Vehicle 352, 4 Month Oil Change-	2/11/2016	2011 Ford F-250	
TT 1 3 5 1 4 5 0 0 4 6			

Thursday, March 17, 2016 Page 2 of 5

	Completion Date	Equipment	NOTATIONS
(System/Ken/Dwayne)			
Repair leaking fule lines on Screener	2/8/2016	2006 TROMMEL SCREEN	
Drop off and pickup auger #4 from Sandblasting and Painting	2/10/2016	2009 AUGER-DAWG G30A 91093	Auger #4 backing plate and side brackets were dropped off for sandblasting and powder coating.
Exercise both 24" primary influent ratio valves	2/16/2016	Tunnel From PS to Grit	
		Tunnel/Chan Primary Clarifiers	
By-Weekly Fluid and Misc. Check of Generators	2/17/2016	Emergency Generator 1	
		Emergency Generator 2	
		Emergency Generator 3	
Operate Relief Valves On Heat Exchangers And Boilers	2/16/2016	Digester 1 Heat Exchanger Digester 2 Heat Exchanger Digester 3 Heat Exchanger	
		Digester 4 Heat Exchanger Digester 5 Heat Exchanger Excess Flow Pump Station	
3 Month Oil Change Blower #4	2/19/2016	Aeration Blower 04	
Repair/replace shocks, breaks, broken sway bar and clean	2/11/2016	2008 Ford Ranger Pick- up	Joe replaced the broken sway bar linkage, replaced front brake pads and rotors. Replaced shocks all around. Cleaned truck inside and out including engine compartment.
Troubleshoot Leak detectors on cooling water pumps	2/5/2016	Emergency Generator 1	Assist service tech from Xylem/Flight with the installation of the new style leak detectors on the cooling water pumps. Found new style not compatible with our older style pumps. Also send spare cooling water pump to be retrofitted for new style relays.
		Emergency Generator 2	
		Emergency Generator 3	
Check seal water feed.	2/17/2016	Belt Press Sludge Feed Pump 2	Found solenoid was bad, replaced solenoid, flush out water lines, test operation.
Replace motor starter that was worn out.	2/16/2016	Grit Classifier 1	Remove old Square D starter, replace with used Cutler-Hammer starter, test operation.
Repair spare DeMag motor for the bridge power reels.		Excess Flow Clarifier 1	Rainbow Electric repaired the spare power reel motor.
		Excess Flow Clarifier 2	
		Excess Flow Clarifier 3	
		Excess Flow Clarifier 4	
Check roof mounted exhaust fans. (Not working)		Belt Filter Press Building	Found all three fans with bad motors, replace motors on two units and install new complete fan on the north unit.
Replace bulbs as needed in upper evel.	2/12/2016	Hypochlorite Feed Blg	Replace bulbs as needed in upper level.
Troubleshoot Munters dehumidifier failure.		Filter Building	Found seals failed on desiccant wheel causing it to jam and break the drive belt. Remove wheel, replace seals and drive belt, reinstall wheel and test operation. Used parts from stock.
Annual electrode and inspection and		Hypochlorite OSEC	Shut down and drain OSEC generator, remove electrodes,
Thursday, March 17, 2016			Page 3

Work Assignment	Completion Date	Equipment	NOTATIONS
repairs.		Generator	disassemble, clean and inspect. Replaced 12 Anodes, 25 Cathodes, 7 Outer Cathodes. Also replace all 12 partition gaskets. All parts were from stock.
Replace 175 amp main breaker that won't reset.		Excess Flow Pump 06	Remove old breaker, install reconditioned breaker, test operation.
Replace 250 amp main breaker that failed.		Aeration Blower 08	Shut down power to the building, removed the old breaker and installed reconditioned replacement. Put blower on line and tested operation.
Check pump engine won't start.	2/11/2016	6 in JAEGER PUMP (FORD)	
Replace VFD that failed	2/10/2016	Conc Tank Moyno Sludge Pump 3	Remove old drive, install new and configure for application.
Restock air relief valve parts for P/M's	2/9/2016	Centex Lift Station	Purchase Orifice seats and buttons for the Val-Matic air relief valves from Porter Pipe.
		Hobson Lift Station	
		Venard Lift Station	
		Wroble Lift Station	
Add sludge drain lines for ODS #4	2/23/2016	Primary ODS Sludge Pump 4	Built 2 PVC drain lines of off ODS #4 compression tanks.
Belt press Effluent Booster Pump seal line repair	2/17/2016	Belt Press Washwater System	Removed all 1/4" piping to seals and replaced with clear plastic pipe and Removed and replaced all great fittings at bearings. Removed all stainless piping no longer needed for Vacumn system.
Rehab of 2009 G-30 Auger #4	2/12/2016	2009 AUGER-DAWG G30A 91093	Frank disassembled 2009 auger #4 and relocated auger to welding table. Removed old 1/2" rebar and weld on 25' of new rebar to auger. Back shield to Fox valley sandblasting for blasting and powder coating. Clean all reusable parts and paint in house. Reassemble complete unit and tested OK.
P/U replacement of drivers side door on Club Car	2/18/2016	2014 Club Car Carry-all #2	Pickup replacement drivers door from Nadler Carts and install and align on #2 club car.
Replace the hoses on both pumps		Hypochlorite Feed Pump 3	Remove old pump hoses adn install new hoses. Use spare hoses from stock. Refill each pump with 5 gallons of hose lub. Reorder lube from Drydon Equip.
		Hypochlorite Feed Pump 4	
Replace worn out hand tools		Maintenance Services Building	Purchase replacement diagnol cutters and wire strippers to replace worn out tools.
Check bar screen 1 failure	2/19/2016	Bar Screen 1	Found power cord hung up on lower guide rail and shorted. Repaired plastic chain and bracket that holds power cord, also replaced fuses. Then tested unit for proper
Check level transducer (west wet well)		Venard Lift Station	Found that bird cage level transducer was not responding correctly. Removed transducer and replaced. Made adjustments so that it indicated the same as East wet well.
Exercise Ratio Valve #2	2/29/2016	Tunnel - System 2 RAS	·
EXCESS 003- Exercise 30" and 24" DEZURIK Valves		Excess Flow 003 Valves	
Monthly Liquid Status of Under Ground Diesel Tank		Emerg Gen Diesel Storage Tank	
Repair bumper winch and Generator PM	2/24/2016	2003 Ford Truck E450/TV Unit	Generator 200 HR Full service Remove and replace all fluids and filters and plugs. Remove all terminal leads at folding hoist motor and solenoids. Clean terminals and reinstall all wiring and apply terminal protectant. Next service 2647 Hours.
Fire alarm system in trouble again.	2/29/2016	Maintenance Services Building	Contact Chicago Metrol Fire Prevention for service. Found shorted exterior alarm horn on west wall of the MSB. Replace the alarm horn, put system back in operation.

Thursday, March 17, 2016 Page 4 of 5

Work Assignment	Completion Date	Equipment	NOTATIONS
Check sand filter bridge for movement and noise from drive motor.	2/26/2016	Filter 5	
Remove abandoned piping and re- plumb effluent and carrier water piping.		Bisulfite Building	Remove all old abondoned effluent piping in the tank and control rooms. Re-plumb effluent and carrier water lines in the building. Paint all new piping with proper colors to identify materials in the pipe lines.
Call out for low level alarm, check wet well level detector.	2/24/2016	Butterfield Lift Station	Found level detector was bad. Temp install new unit overnight. Return in the morning to permanently install new level detector and set correct depth for operation.
Troubleshoot pump - Breaker tripped	2/26/2016	Excess Flow Pump 06	Found that breaker was tripping and that contacts on starter were chattering. Traced down source of problem to aux contact on secondary starter. Removed contact block and replaced with new. Tested.
Troubleshoot under voltage alarm shutdown.	2/25/2016	Earlston Stationary Generator	Patten Power Systems out, verify under voltage alarms in history. Run generator, test operation and record LRA when pumps start. No specific problems found, need to monitor and verify voltages if occurs again.
Restock air compressor supplies for the soda ash mixing.	2/19/2016	CHP Gas Cleaning System	Purchase air intake filters and a can of the flushing solvent from Gasvoda.
Fabricate new rake with extra long pole to clean screen.	2/24/2016	Grease Receiving Tank	Purchase materials and fabricate new manual rake for grease screen.
Due for quarterly PM.	2/23/2016	WWTC ODS Pump Air Compressor	Delta Industries performed the quarterly PM on the compressor.
Install new electronic igniter system	2/5/2016	Digester 3 Gas Flare	Purchase spark igniter components, build electrical control panel, fabricate mounting adaptor plate, and install new underground power feed to control panel. UNO Construction excavated for the underground power feed.
Troubleshoot low voltage alarms at start up.	2/25/2016	Earlston Stationary Generator	Patten Power System out, test run generator, check voltages and amp draw when pumps cycle. Found LRA at pump start up may be causing low voltage. Compare ComEd to Gen., inspect all electrical connections. Found some loose connections.
Due for engine oil analysis	2/2/2016	Emergency Generator 1	Patten Power Systems out, run each generator and take oil samples.
		Emergency Generator 2	
		Emergency Generator 3	
Install flushing lines on fire sprinkler system as requested by DGFD	2/26/2016	Maintenance Services Building	Install new drain/flushing lines on the basement sprinkler system. Also install new pressure gauge on supply line.
Upgrade PLC's and install new cellular communication equipment.	2/19/2016	Earlston Lift Station	
		Liberty Park Lift Station	
		Venard Lift Station	

Thursday, March 17, 2016 Page 5 of 5

DOWNERS GROVE SANITARY DISTRICT MEMO

DATE: March 2, 2016

Nicholas J. Menninga General Manager TO:

FROM: Robert Swirsky

Sewer System Maintenance Supervisor

Monthly Report – February, 2016 RE:

	WW.W.Y.'		T
1.	JULIE Line Markings:	Current	Year to Date
	Received	471	876
	In District	453	810
	Marked	232	389
	Man Hours	103	182
2.	Building Service:	Current	Year to Date
	a. BSSRAP TV Inspections	14	33
	b. Emergency BSSRAP Repairs	04	10
	c. Total BSSRAP Repairs	13	21
	d. I&I inspections	16	19
	e. I&I C.O. installation	00	00
	f. Replace broken cleanout caps	00	00
	g. OHSP TV Inspections	00	00
	h. Post Rodding TV	02	06
3.	Sewer backups:	Current	Year to Date
	a. Public sewer	1	1
	b. Private sewer	8	17
	c. Surcharged main	0	0
	d. Pump station	<u>0</u>	<u>0</u>
	Total	9	$1\overline{8}$
		Current	Year to Date
4.	Sewer Cleaning (DGSD personnel):	0	0 Ft.
	a. Sewer Cleaning (outside contractors):	0	0 Ft.
5.	Main Sewer Televising (DGSD personnel)	: 1229	1229 Ft.
	a. Sewer Televising (outside contractors):	0	0 Ft.
6.	LETS TV	0	0
7.	Manhole inspections	103	103

- 8. Sewer and manhole repairs and replacements by Uno Construction: Replace defective manhole frames, 1J-007 and W1-057-1
- 9. On March 2, Insituform began installing the liners on Cumnor Road between 6th & 8th Streets.
- 10. Miscellaneous: (sewer system personnel)
 - a. Install and upload flow-meters.
 - b. Assist with snow removal at the Office and WWTC.
 - c. Surface inspection of Butterfield, College and Hobson force main routes completing an internal inspection of the structures.

CC: WDVB, ASK, DFP, RTJ, KJR, MS, TTC, WCC, MCW

DOWNERS GROVE SANITARY DISTRICT M E M O

DATE: March 4, 2016

TO: Nicholas J. Menninga

General Manager

FROM: Ted Cherwak

Sewer Construction Supervisor

RE: Monthly Report: Construction \ Code Enforcement – February 2016

Permits issued:		Current	Year to Date		
a.	Single family	6	13		
b.	Multiple family	0	0		
c.	Commercial	1	3		
d.	Repair	1	2		
e.	Disconnection	<u>5</u>	$\frac{8}{26}$		
	Total	13	$2\overline{6}$		
Ins	pections made:	Current	Year to Date		
a.	Connections	9	15		
b.	Finals	5	9		
c.	Repairs	0	0		
d.	Disconnects	6	9		
e.	Groundwork	0	0		
f.	Walk-Thru	0	1		
g.	Pre-connections	0	1		
h.	Overhead Sewer Program	0	2		
i.	Code Enforcement	1	1		
j.	Lateral testing	<u>7</u>	<u>11</u>		
-	Total	$\overline{28}$	49		
	a. b. c. d. e. f. g. h. i.	 a. Single family b. Multiple family c. Commercial d. Repair e. Disconnection Total Inspections made: a. Connections b. Finals c. Repairs d. Disconnects e. Groundwork f. Walk-Thru g. Pre-connections h. Overhead Sewer Program i. Code Enforcement j. Lateral testing 	a. Single family b. Multiple family c. Commercial d. Repair e. Disconnection Total Inspections made: Current a. Connections b. Finals c. Repairs d. Disconnects e. Groundwork f. Walk-Thru g. Pre-connections h. Overhead Sewer Program i. Code Enforcement j. Lateral testing		

- 3. New Sewer Extension Construction:
 - a. None
- 4. New Sewer Extension Testing air, deflection, manhole, televising and lamping:
 - a. None
- 5. Code Enforcement:
 - a. Miscellaneous walk-thru inspections
 - b. Overhead Sewer Program
 - c. Grease Trap Inspections

6. Plan & Permit Reviews:

- a. 228 5th Street, single family review
- b. 4444 Wilson, single family review
- c. 4446 Wilson, single family review
- d. 5529 Middaugh, single family review
- e. 419 Wilson, single family review
- f. 5540 Main Street, single family review
- g. 4516 Cross, single family review (septic conversion)
- h. 5422 Fairmount, single family review
- i. 7211 Matthias, single family review (2nd review)
- j. 555 31st Street, Midwestern University Optometry Building site plan 3rd revision
- k. 715 Rogers, apartment buildings, preliminary site plan
- 1. 1815 Ogden, Packey Webb, preliminary site plan
- m. 25 W 63rd Street, Express Oil Change, site plan 2nd review

7. Building Sanitary Service Access Agreements:

- a. 4330 Lacey, Downers Grove
- b. 1940 Elmore, Downers Grove
- c. 228 5th Street, Downers Grove
- d. 4511 Stanley, Downers Grove
- e. 5422 Fairmount, Downers Grove
- f. 4641 Forest, Downers Grove
- g. 419 Wilson, Downers Grove

8. Illinois EPA Permits:

a. None

9. Miscellaneous:

a. National Power Rodding, pre-cleaning & televising for Insituform lining contract

CC: WDVB, ASK, DFP, KJR, RTJ, MJS, RPS, WCC & MGP

Permit Final Inspections: FEBRUARY 2016

 YEAR	PERMIT #	ADDRESS	STREET	CITY	<u>FINAL</u>
2014	132	619	AUSTIN	DG	2/8/2016
2015	30	4732	OAKWOOD	DG	2/10/2016
2013	3	3925	WASHINGTON	DG	2/11/2016
2015	38	3921	VENARD	DG	2/19/2016
2015	100	961	VALLEY VIEW	DG	2/24/2016

Permit Final Inspections: FEBRUARY 2016

 YEAR	PERMIT #	ADDRESS	STREET	CITY	FINAL
2015	23	4712	LINSCOTT	DG	1/11/2016
2015	96	1012	CURTISS	DG	1/14/2016
2015	119	4637	PRINCE	DG	1/21/2016
2015	51	4050	STERLING	DG	1/21/2016
2014	132	619	AUSTIN	DG	2/8/2016
2015	30	4732	OAKWOOD	DG	2/10/2016
2013	3	3925	WASHINGTON	DG	2/11/2016
2015	38	3921	VENARD	DG	2/19/2016
2015	100	961	VALLEY VIEW	DG	2/24/2016

Progress Report

To: Nick Menninga, General Manager From: Reese Berry, Laboratory Supervisor

Date: March 9, 2016

Re: February 2016 Laboratory Report

A summary report is attached for the laboratory activities initiated during February 2016. There was 1 excess flow sampling event in the month of February.

Excess Flow Event:

All samples collected had acceptable results for all the required parameters. The lab did incur some overtime due to this event. The excess flow event was on February 2, 2016.

Pretreatment:

We issued a letter to Valid USA informing them they were back in compliance with their DGSD issued pretreatment permit.

I attended a pretreatment event in Oak Brook during the month. US EPA Region V had a representative there discussing pretreatment updates and related topics for us to be aware of moving forward. I was able to gain some really good information from him along with others in attendance.

Laboratory:

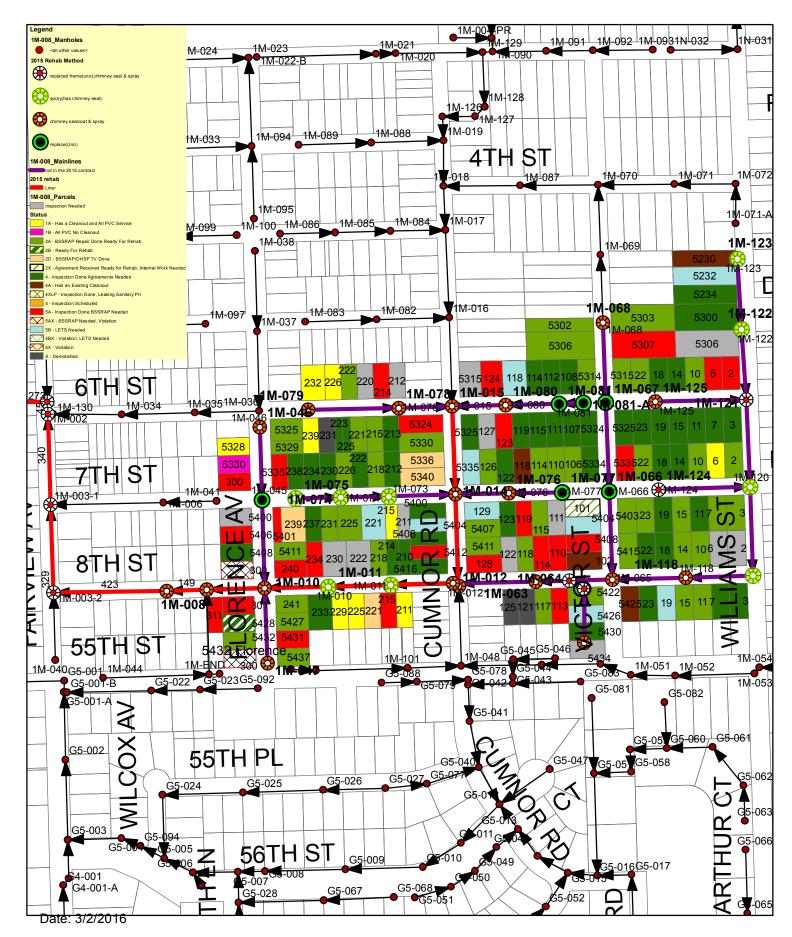
We have started performing test analysis for Total Chlorides and Nitrites in house. We currently send these tests out every month for our monthly NPDES requirements. We believe we should be ready to switch this testing back to our laboratory within the next 2-3 months.

We will have a day training session, in the next budget year, with a piece of equipment allowing us to analyze a variety of parameters. This piece of equipment is pretty versatile, so it will be an asset to completing some testing requirements we currently send to our contract laboratory.

C: WDVB, ASK, DFP, KJR, RTJ, MJS, WCC, MGP



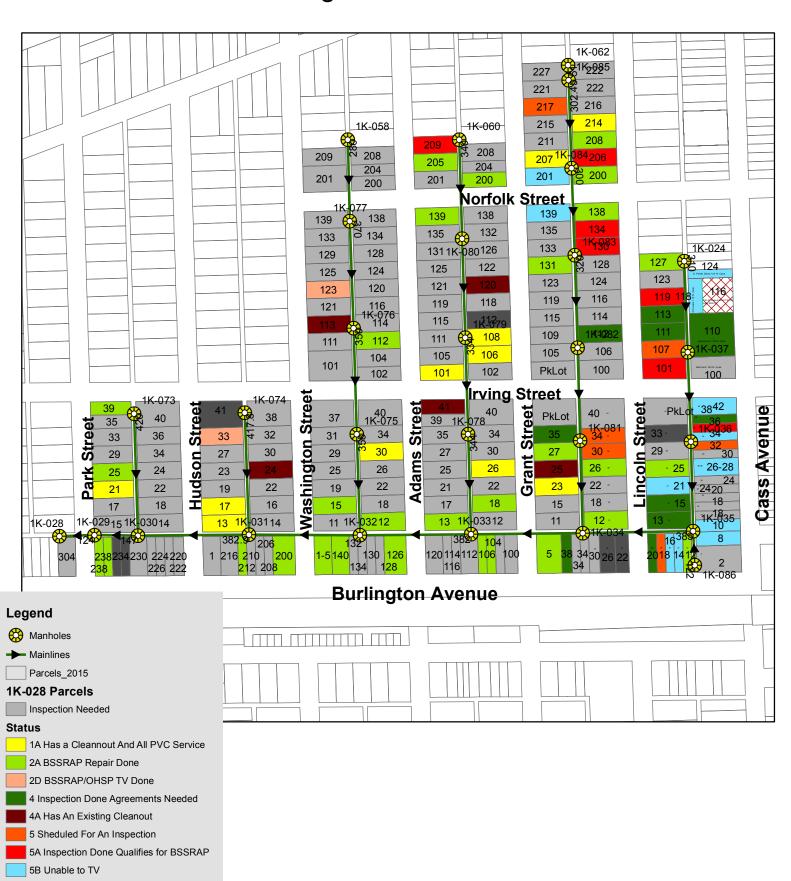
1M-008 Parcel Status And 2015 Sewer and Manhole Rehabilitation





5BX Unable to TV, Violation
X Demolished

Downers Grove Sanitary District Rehabilitation and I&I Removal Target Area1K-028



STATUS OF 1K-028 INSPECTIONS AND AGREEMENT ACQUISITIONS

Category	Inspections Scheduled	Inspections Completed	Application Received	Agreements Signed	Cleanout Installed	Service Rehab Done	Totals	Total as Percentage
1A	Υ	Υ	N	Y	Y	N/A	11	5%
1B	Υ	Υ	N	N	N	N/A	0	0%
2A	Υ	Υ	Υ	Υ	Υ	N	29	13%
2B	Υ	Υ	Υ	Υ	Υ	N	0	0%
2D	Υ	Υ	Υ	N	N	N	2	1%
2X	Υ	Υ	Υ	Υ	Υ		0	0%
4	Υ	Υ	N	N	N	N	10	4%
4A	N	N	N	N	N/A	N	5	2%
5	Υ	N	N	N	N	N	6	3%
5A	Υ	Υ	N	N	N	N	7	3%
5AX	Υ	Υ	N	N	N	N	0	0%
5B	Υ	N	N	N	N	N	12	5%
5BX	Υ	N	N	N	N	N	1	0%
0	N	N	N	N	N	N	143	62%
X	-	-	-	-	-	-	5	2%
5X	-	-	-	-	-	-	0	0%
<u>Ca</u>	tegory Descript	ion:					231	100%

1A - PVC service with cleanout(may need to be sealed at the main)

1B - All PVC no Cleanout

2A - BSSRAP repair done, ready for rehab

2B - Ready for rehab

2D - BSSRAP/OHSP TV done

4 - Inspection completed (Program application needed)

4A - Has an existing cleanout

5 - Inspections scheduled

5A - Inspection done - BSSRAP needed (qualifying defects or obstructions seen during TV)

5AX - Violation, BSSRAP needed

5B - LETS TV needed

5BX - Violation, LETS TV needed

0 - Inspection Needed

X - Demolished

5X - Inspection done - Violation not corrected

2015 Basin I&I Ranking = 1

Combined pit violations found and corrected to date - 0 Storm pit violations found and corrected to date - 0

7% Complete

DOWNERS GROVE SANITARY DISTRICT CASH BALANCES AND INVESTMENT SCHEDULE

DATE: 02/29/16

CASH BALANCES

BALANCE PER ACCOUNT NUMBER BANK STATEMENT ACCOUNT NAME DEPOSIT XXXXXXXXX1116 \$1,659,559.47 DISBURSEMENT XXXXXXXXXX1111 166,097.54 FLEXIBLE BENEFITS XXXXXXXXX6025 7,271.08 XXXXXXXXXX1117 215,270.23 PAYROLL PETTY CASH XXXXXXXXXX1112 2,949.28 USER REFUNDS XXXXXXXXXX1114 7.155.62 TOTAL - CASH AT BANK \$2,058,303.22

INVESTMENTS

					GENERAL			PUBLIC	SEWER	GENERAL	INTEREST
SECU				ANNUAL	CORPORATE	IMPROVEMENT	CONSTRUCTION	BENEFIT	EXTENSION	CORPORATE	EARNED
TYPE	TERM	MATURITY	COST	YIELD	FUND	FUND	FUND	FUND	FUND	EPAY	AT YIELD
CD	12 MOS ^E	5/13/2016	\$250,000.00	0.900%		\$250,000.00					\$2,250.00
CD	12 MOS ^C	5/23/2016	\$250,000.00	0.650%		\$250,000.00					\$1,625.00
CD	12 MOS ^K	1/15/2017	\$250,000.00	0.650%		\$207,719.45		\$35,260.73	\$7,019.82		\$1,625.00
TOTA	L CDs		\$750,000.00	0.733% *	\$0.00	\$707,719.45	\$0.00	\$35,260.73	\$7,019.82		\$5,500.00
MM	6 MOS ^B	3/5/2016	\$250,000.00	0.400%	\$250,000.00						\$500.00
MM	6 MOS ^I	3/9/2016	\$250,000.00	0.300%	\$250,000.00						\$375.00
MM	6 MOS [™]	3/13/2016	\$250,000.00	0.340%	\$250,000.00						\$425.00
MM	6 MOSD	3/23/2016	\$250,000.00	0.450%			\$250,000.00				\$562.50
MM	6 MOS ^A	3/30/2016	\$250,000.00	1.000%	\$250,000.00						\$1,250.00
MM	6 MOS ^J	5/8/2016	\$250,000.00	0.300%	\$250,000.00						\$375.00
MM	6 MOS ^G	5/20/2016	\$250,000.00	0.450%		\$250,000.00					\$562.50
MM	6 MOS ^H	6/4/2016	\$250,000.00	0.250%			\$250,000.00				\$312.50
MM	6 MOS ^F	6/20/2016	\$250,000.00	0.250%		\$250,000.00					\$312.50
MM	6 MOS ^L	8/12/2016	\$250,000.00	0.300%			\$250,000.00				\$375.00
TOTA	L MM ACCOUN	ITS	\$3,500,000.00	0.144% *	\$1,250,000.00	\$500,000.00	\$750,000.00	\$0.00	\$0.00	\$0.00	\$5,050.00
ILLING	DIS FUNDS - M	ONEY MARKET	\$1,884.90	0.239%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,884.90	\$4.50
SUBT	OTAL - CD'S, N	IM AND IL FUND	\$4,251,884.90	0.248% *	\$1,250,000.00	\$1,207,719.45	\$750,000.00	\$35,260.73	\$7,019.82	\$1,884.90	\$10,554.50
VOLIC	CHERS-SA53	01/02/16	5,946.44	5.500%	169.55	0.00	5,776.89				327.05
	CHERS-SA54	01/02/17	27,046.33	6.000%	839.32	0.00	26,207.01				1,622.78
VOUC	CHERS-SA55	01/02/17	37,885.74	6.000%	1,128.82	0.00	36,756.92				2,273.14
VOUC	CHERS-SA56	01/02/18	14,861.76	6.000%	1,038.46	0.00	13,823.30				891.71
	CHERS-SA57	01/02/18	38,786.26	6.000%	2,138.96	6,320.02	30,327.28				2,327.18
VOUC	CHERS-SA58	01/02/19	84,920.99	1.240%	4,748.25	80,172.74	0.00				1,053.02
TOTA	L VOUCHERS		\$209,447.52	4.056% *	\$10,063.36	\$86,492.76	\$112,891.40	\$0.00	\$0.00	\$0.00	\$8,494.88
TOTA	LS - ALL INVES	STMENTS	\$4,461,332.42	0.427% *	\$1,260,063.36	\$1,294,212.21	\$862,891.40	\$35,260.73	\$7,019.82	\$1,884.90	\$19,049.38

^{*} ALL SUBTOTAL AND TOTAL YIELD RATES ARE BASED ON ACTUAL INTEREST YIELD, NOT ANNUAL INTEREST YIELD

CDs AT BANKS - CTAB BANK EFIRST INTERNET BANK BRIDGEVIEW BANK

MONEY MARKET ACCTS AT BANKS ^ALUANA SAVINGS BANK FTRISTATE CAPITAL BANK PBI BANK MBANKFINANCIAL**

^BLISLE SAVINGS BANK ^GWEST SUBURBAN BANK ^JNATIONWIDE BANK ^DCIT BANK, FKA ONEWEST BANK ^HPARK FEDERAL SAVINGS BANK ^LSTEARNS BANK

TOTAL CASH AND INVESTMENTS \$6,519,635.64

^{**\$249,900} in a Money Market Account and \$100 in a Business Checking Account

Board of Trustees Wallace D. Van Buren. President Amy S. Kovacevic Vice President Donald F. Peters Clerk



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Downers Grove, IL 60515-0703

Legal Counsel Michael G. Philipp

General Manager W. Clay Campbell

Nicholas J. Menninga

Administrative Services

Staff

Director

Providing a Better Environment for South Central DuPage County

Memo

To: Board of Trustees

From: Nick Menninga, General Manager

Date: March 18, 2016

Subject: Treasurer's Report for February, 2016

Attached please find the subject report that tracks income and expenses for the first ten months of Fiscal Year 15-16.

Totals of expenses and income are shown on the following table:

Year-to-date	Income	Expense
General Fund	\$ 6,707,555.87 (page 1)	\$ 5,873,721.78 (page 6)
Improvement Fund	\$ 257,030.61 (page 7)	\$ 46,595.52 (page 7)
Construction Fund	\$ 604,264.57 (page 8)	\$ 474,090.76 (page 9)
Public Benefit Fund	\$ 27.94 (page 10)	\$ 0.00 (page 10)
TOTAL	\$ 7,568,878.99	\$ 6,394,408.06

C: BOLI, WCC, MGP

Downers Grove Sanitary District Date: 03/17/2016

Treasurer's Report Recap for Month Ending 02/29/16

Page: 1

Fund	nur	nbe	er & Description	Ending
				Fund Balance
Fund	01	:	GENERAL FUND	\$2,747,581.21
Fund	02	:	IMPROVEMENT FUND	\$1,499,838.45
Fund	03	:	CONSTRUCTION FUND	\$1,224,501.94
Fund	05	:	PUBLIC BENEFIT FUND	\$35,280.19
Recap	o To	ota	als	\$5,507,201.79

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 1 FUND 01 GENERAL FUND

	ACTUAL	BUDGET			ACTUAL-		
COST	CURRENT	CURRENT	ACTUAL	BUDGET	BUDGET	VAR	TOTAL
NUMBER DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	VARIANCE	%	BUDGET
			========		-========		
DEPT 05 REVENUES							
3000 PROPERTY TAXES	.00	0	1,105,160.68-	1,102,550-	2,610.68-	. 2	1,102,550-
3001 USER RECEIPTS	224,549.93-	216,000-	2,662,116.67-	2,738,000-	75,883.33	2.8-	3,237,900-
3002 SURCHARGES	19,443.70-	25,850-	287,341.39-	258,300-	29,041.39-	11.2	310,000-
3004 PLAN REVIEW FEES	.00	250-	642.00-	1,000-	358.00	35.8-	1,000-
3005 CONSTRUCTION INSPECTION FEES	.00	140-	462.00-	500-	38.00	7.6-	500-
3006 PERMIT INSPECTION FEES	1,417.00-	1,667-	19,826.00-	16,670-	3,156.00-	18.9	20,000-
3007 INTEREST ON INVESTMENTS	545.92-	604-	3,974.81-	7,840-	3,865.19	49.3-	9,050-
3013 SAMPLING & MONITORING	6,553.54-	5,417-	65,416.85-	54,170-	11,246.85-	20.8	65,000-
3014 REPLACEMENT TAXES	.00	0	63,262.63-	59,100-	4,162.63-	7.0	79,800-
3015 MISCELLANEOUS INCOME	1,146.67-	330-	5,342.58-	3,300-	2,042.58-	61.9	4,000-
3021 TELEVISION INSPECTION	.00	0	159.00-	150-	9.00-	6.0	150-
3023 PROPERTY LEASE PAYMENTS	2,757.08-	2,792-	27,581.85-	27,920-	338.15	1.2-	33,500-
3024 MONTHLY SERVICE FEES	240,749.94-	234,000-	2,343,175.66-	2,383,000-	39,824.34	1.7-	2,861,300-
3027 GREASE WASTE	15,273.05-	·	•	•	6,423.75-	5.5	140,000-
DEPT 05 TOTALS	512,436.83-	498,717-	6,707,555.87-	6,769,170-	61,614.13	.9- 7	7,864,750-
FUND REVENUE TOTAL	512,436.83-		6,707,555.87-		61,614.13		7,864,750-
DEPT 11 O & M EXPENSE - ADMINISTRATION SECT A SALARIES AND WAGES							
A001 TRUSTEES	4,500.00	4,500	18,000.00	18,000	.00	.0	18,000
A002 BOLI	.00	225	.00	900	900.00-	100.0-	900
A003 GENERAL MANAGEMENT	16,947.87	19,208	174,899.01	201,684	26,784.99-	13.3-	240,100
A004 FINANCIAL RECORDS	18,393.84	15,728	170,384.39	165,144	5,240.39	3.2	196,600
A005 ADMINISTRATIVE RECORDS	2,471.93	4,852	33,543.01	50,946	17,402.99-	34.2-	60,650
A007 CODE ENFORCEMENT	24,689.65	23,544	252,558.83	247,212	5,346.83	2.2	294,300
A008 SAFETY ACTIVITIES	258.87	192	1,488.54	2,016	527.46-	26.2-	2,400
A030 BUILDING & GROUNDS	970.00	12	4,532.62	125	4,407.62		150
1.050 ZOIZZING & GROONZO			•			•	
SECT A TOTALS	68,232.16	68,261	655,406.40	686,027	30,620.60-	4.5-	813,100
SECT B OPERATIONS AND MAINTENANCE	=	=	=	=======		=	======
B100 ELECTRICITY	261.90	250	3,190.19	4,000	809.81-	20.3-	4,400
B101 NATURAL GAS	161.20	350	390.58	2,450	2,059.42-	84.1-	3,000
B102 WATER, GARBAGE AND OTHER UTILITIES	.00	0	684.49	860	175.51-	20.4-	1,000
B110 BANK CHARGES	1,416.44	1,700	18,464.42	17,000	1,464.42	8.6	20,200
B112 COMMUNICATION	1,046.65	1,200	11,734.22	12,000	265.78-	2.2-	14,500
B115 EQUIPMENT/EQUIPMENT REPAIR	11,447.99	3,200	68,473.17	62,400	6,073.17	9.7	71,500
B116 SUPPLIES	451.88	865	2,811.23	8,650	5,838.77-	67.5-	10,400
B117 EMPLOYEE/DUTY COSTS	599.06	2,000	17,749.50	14,800	2,949.50	19.9	17,000
B118 BUILDING & GROUNDS	525.16	2,100	10,173.55	21,400	11,226.45-	52.5-	24,200
B119 POSTAGE	1,019.25	1,200	7,232.33	12,000	4,767.67-	39.7-	14,500
B120 PRINTING/PHOTOGRAPHY	191.79	400	10,248.84	10,650	401.16-	3.8-	11,150
B121 USER BILLING MATERIALS	926.29	6,000	51,520.25	60,000	8,479.75-	14.1-	72,000
B124 CONTRACT SERVICES	6,238.25	7,333	55,139.57	73,330	18,190.43-	24.8-	88,000
			•	•			,

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 2 FUND 01 GENERAL FUND

COST NUMBER DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	ACTUAL- BUDGET VARIANCE	VAR %	TOTAL BUDGET
B137 MEMBERSHIPS/SUBSCRIPTIONS	.00	400	10,949.96	11,250	300.04-	2.7-	12,000
SECT B TOTALS	24,285.86	26,998	268,762.30	310,790	42,027.70-	13.5-	363,850
SECT C VEHICLES							
C222 GAS/FUEL	55.01	250	814.51	2,100	1,285.49-	61.2-	2,600
C225 OPERATION/REPAIR	33.99	300	357.31	1,150	792.69-	68.9-	1,150
C226 VEHICLE PURCHASES	.00	0 ========	9,255.65 =======	12,000	2,744.35- ========	22.9- 	12,000
SECT C TOTALS	89.00	550	10,427.47	15,250	4,822.53-	31.6-	15,750
DEPT 11 TOTALS	92,607.02	95,809	934,596.17	1,012,067	77,470.83-	7.7- 1	1,192,700
DEPT 12 O & M EXPENSES - WWTC		========		========	========	:======	
SECT A SALARIES AND WAGES							
A009 OPERATIONS MANAGEMENT	9,930.85	1,624	97,102.97	17,052	80,050.97	469.5	20,300
A010 MAINTENANCE - BUDGET	.00	40,200	.00	422,100	44,412.57-	10.5-	502,500
A011 MAINTENANCE - WWTC	30,167.52	0	337,300.07	0	.00	.0	0
A012 MAINTENANCE - VEHICLES	395.36	0	1,873.85	0	.00	.0	0
A014 MAINTENANCE - ELECTRICAL	2,964.56	0	38,513.51	0	.00	.0	0
A020 WWTC - BUDGET	.00	42,632	.00	447,636	29,335.81-	6.6-	532,900
A021 WWTC OPERATIONS	22,765.88	0	258,265.64	0	.00	.0	0
A022 WWTC SLUDGE HANDLING	9,948.58	0	160,034.55	0	.00	.0	0
A030 BUILDING & GROUNDS	4,253.78	3,444	33,515.34	36,162	2,646.66-	7.3-	43,050
SECT A TOTALS	80,426.53	87,900	926,605.93	922,950	3,655.93	.4 1	1,098,750
SECT B OPERATIONS AND MAINTENANCE							
B100 ELECTRICITY	8,344.95	16,250	169,489.67	162,500	6,989.67	4.3	195,000
B101 NATURAL GAS	1,243.81	1,417	3,008.27	14,170	11,161.73-	78.8-	17,000
B102 WATER, GARBAGE AND OTHER UTILITIES	1,438.59	1,150	32,136.78	28,000	4,136.78	14.8	33,500
B103 ODOR CONTROL	.00	1,200	2,948.13	12,000	9,051.87-	75.4-	14,500
B104 FUEL - GENERATORS	323.43	3,750	7,343.27	15,300	7,956.73-	52.0-	15,300
B112 COMMUNICATION	1,075.43	1,100	8,750.96	11,950	3,199.04-	26.8-	14,150
B113 EMERGENCY/SAFETY EQUIPMENT	577.47	1,500	15,830.00	15,000	830.00	5.5	17,600
B116 SUPPLIES	2,047.38	3,258	34,209.21	32,580	1,629.21	5.0	39,100
B117 EMPLOYEE/DUTY COSTS	1,073.99	3,300	13,813.86	24,000	10,186.14-	42.4-	28,200
B124 CONTRACT SERVICES	.00	0	82,796.00	84,800	2,004.00-	2.4-	84,800
B130 NPDES PERMIT FEES	.00	0	53,000.00	53,000	.00	.0	53,000
B400 CHEMICALS - BUDGET B401 CHEMICALS - DISINFECTION	.00	5,550 0	.00 43,450.65	55,500 0	494.65	.0	66,600 0
B402 CHEMICALS - DISINFECTION B402 CHEMICALS - SLUDGE DEWATERING	1,890.00	0	9,450.00	0	.00	.0	0
B402 CHEMICALS - SLODGE DEWALERING B403 CHEMICALS - TERTIARY TREATMENT	.00	0	3,094.00	0	.00	.0	0
B501 EQPT/EQPT REPAIR - BIOSOLIDS AGING & DISPOS		5,750	171,276.06	169,320	1,956.06	1.2	180,959
B502 EQPT/EQPT REPAIR - DISINFECTION	1,895.16	1,451	29,082.33	14,510	14,572.33	100.4	17,414
B503 EQPT/EQPT REPAIR - EXCESS FLOW	127.18	1,874	17,609.98	18,740	1,130.02-	6.0-	22,487
B504 EQPT/EQPT REPAIR - GRIT REMOVAL	.00	2,061	8,152.16	20,610	12,457.84-	60.5-	24,731
B505 EQPT/EQPT REPAIR - INFLUENT PUMPING	4,203.62	6,557	39,696.03	65,570	25,873.97-	39.5-	78,686

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 3 FUND 01 GENERAL FUND

COST	ACTUAL CURRENT	BUDGET CURRENT	ACTUAL	BUDGET	ACTUAL- BUDGET	VAR	TOTAL
NUMBER DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	VARIANCE	8	BUDGET
B506 EOPT/EOPT REPAIR - PRIMARY TREATMENT	26,355.25	4,185	33,210.72	41,850	8,639.28-	======= 20.6-	50,218
B507 EQFT/EQFT REPAIR - FRIMARI TREATMENT B507 EQFT/EQFT REPAIR - SECONDARY TREATMENT	466.58	4,451	5,055.42	44,510	39,454.58-		53,414
B508 EQPT/EQPT REPAIR - SLUDGE CONCENTRATION	1,006.00	221	12,983.94	2,210	10,773.94	487.5	2,652
B509 EQPT/EQPT REPAIR - SLUDGE DEWATERING	.00	2,600	16,868.22	26,000	9,131.78-		31,200
B510 EOPT/EOPT REPAIR - SLUDGE DIGESTION	9,109.78	8,703	207,165.64	87,030	120,135.64	138.0	104,436
B511 EQPT/EQPT REPAIR - TERTIARY TREATMENT	.00	1,591	838.51	15,910	15,071.49-		19,096
B512 EOPT/EOPT REPAIR - WWTC GENERAL	1,721.52	2,652	36,163.12	26,520	9,643.12	36.4	31,827
B513 EQPT/EQPT REPAIR - WWTC UTILITIES	69.44	9,582	80,986.42	95,820	14,833.58-		114,980
B801 BLDG & GROUNDS - BIOSOLIDS AGING AND DISPOS	665.79	0,302	64,790.03	0 0	64,790.03	.0	0
B802 BLDG & GROUNDS - DISINFECTION	891.73	44	944.89	440	504.89	114.8	530
B803 BLDG & GROUNDS - EXCESS FLOW	.00	88	213.33	880	666.67-		1,061
B804 BLDG & GROUNDS - EACESS FLOW B804 BLDG & GROUNDS - GRIT REMOVAL	21.94	505	5,469.99	5,050	419.99	8.3	6,061
B805 BLDG & GROUNDS - INFLUENT PUMPING	.00	1,791	12,068.99	•	5,841.01-		•
	.00	750	.00	17,910 7,500	7,500.00-		21,487
B806 BLDG & GROUNDS - PRIMARY TREATMENT			17,243.37	·			9,000
B807 BLDG & GROUNDS - SECONDARY TREATMENT	.00	44	,	440	16,803.37		530
B809 BLDG & GROUNDS - SLUDGE DEWATERING	.00	44	3,965.49	440	3,525.49	801.3	530
B810 BLDG & GROUNDS - SLUDGE DIGESTION	.00	554	5,539.62	5,540	. 38-		6,652
B811 BLDG & GROUNDS - TERTIARY TREATMENT	.00	775	3,794.98	7,750	3,955.02-		9,305
B812 BLDG & GROUNDS - WWTC GENERAL	47,980.80	10,142	119,056.52	101,420	17,636.52	17.4	121,702
B813 BLDG & GROUNDS - WWTC UTILITIES	406.89	133	3,382.51	1,330	2,052.51	154.3	1,592
SECT B TOTALS	114,804.45	105,023	1,374,879.07	1,286,100	88,779.07	6.9	1,489,300
SECT C VEHICLES							
C222 GAS/FUEL	877.25	3,542	17,396.81	35,420	18,023.19-	50.9-	42,500
C225 OPERATION/REPAIR	114.34	542	8,955.34	5,420	3,535.34	65.2	6,500
C226 VEHICLE PURCHASES	.00	0	28,472.75	22,500	5,972.75	26.6	22,500
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SECT C TOTALS	991.59	4,084	54,824.90	63,340	8,515.10-	13.4-	71,500
DEPT 12 TOTALS	196,222.57		2,356,309.90		83,919.90		2,659,550
	:========		=========		========	======	
DEPT 13 O & M EXPENSES - LABORATORY							
SECT A SALARIES AND WAGES							
A009 OPERATIONS MANAGEMENT	6,159.09	4,272	53,203.33	44,856	8,347.33	18.6	53,400
A040 LABORATORY - BUDGET	.00	11,384	.00	119,532	11,910.06-	10.0-	142,300
A041 LAB - WWTC	8,751.44	0	92,975.75	0	.00	.0	0
A042 LAB - PRETREATMENT	978.50	0	6,128.91	0	.00	.0	0
A043 LAB - SURCHARGE PROGRAM	.00	0	6,035.17	0	.00	.0	0
A044 LAB - BOD	.00	0	961.15	0	.00	.0	0
A045 LAB - SOLIDS	60.07	0	605.14	0	.00	.0	0
A046 LAB - AMMONIA	59.70	0	880.44	0	.00	.0	0
A047 LAB - MICRO	.00	0	35.38	0	.00	.0	0
SECT A TOTALS			160,825.27		3,562.73-		
SECT B OPERATIONS AND MAINTENANCE							
B114 CHEMICALS	1,604.69	1,380	9,355.60	13,800	4,444.40-	32.2-	16,550

DATE 03/17/16 PAGE 4 MONTH ENDED 02/29/16 FUND 01 GENERAL FUND

ACTUAL BUDGET ACTUAL-	
COST CURRENT CURRENT ACTUAL BUDGET BUDGET VAR	TOTAL
NUMBER DESCRIPTION MONTH MONTH Y-T-D Y-T-D VARIANCE %	BUDGET
	5- 56,300
7	1- 19,500
	8- 6,500
B122 MONITORING EQUIPMENT .00 2,125 3,394.70 8,500 5,105.30- 60	1- 8,500
B123 OUTSIDE LAB SERVICES 1,346.24 1,200 11,143.00 13,350 2,207.00- 16	5- 15,600
	=========
SECT B TOTALS 5,104.29 11,572 41,459.38 104,320 62,860.62- 60.	122,950
	=========
SECT C VEHICLES	
	4- 1,000
C225 OPERATION/REPAIR 4.99 0 126.23 150 23.77- 15	
ORGIN G MONTAG 20.75 02 20.6 FF 0.00 F0.2 AF F0.	
SECT C TOTALS 30.75 83 396.55 980 583.45- 59.	,
DEPT 13 TOTALS 21,143.84 27,311 202,681.20 269,688 67,006.80- 24.	9- 319,850
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DEPT 14 O & M EXPENSES - SEWER SYSTEM	
SECT A SALARIES AND WAGES	
A050 SEWER MAINTENANCE - BUDGET .00 8,520 .00 89,460 36,058.49 40	3 106,500
A051 SEWER MAINTENANCE 4,280.65 0 110,443.24 0 .00	0 0
A054 SEWER MAINTENANCE - BACK-UPS & HIGH FLOWS 437.83 0 15,075.25 0 .00	0 0
A060 INSPECTION - BUDGET .00 26,380 .00 276,990 45,333.73- 16	
A061 INSPECTION - NEW CONSTRUCTION .00 0 1,974.89 0 .00	0 0
A062 INSPECTION - CONSTRUCTION OF DGSD PROJECTS 9,230.17 0 56,414.76 0 .00	0 0
A063 INSPECTION - PERMIT INSPECTIONS 2,240.70 0 20,565.80 0 .00	0 0
A064 INSPECTION - MISCELLANEOUS 4,832.30 0 50,498.91 0 .00 A065 INSPECTION-CONSTR BY VILLAGES. UTILITIES 4.780.12 0 56.370.75 0 .00	0 0
A065 INSPECTION-CONSTR BY VILLAGES, UTILITIES 4,780.12 0 56,370.75 0 .00 A066 INSPECTION - CODE ENFORCEMENT 5,837.58 0 45,831.16 0 .00	0 0
	4 10,200
	0 0
SECT A TOTALS 32,312.70 35,716 366,294.72 375,018 8,723.28- 2.	446,450
	=========
SECT B OPERATIONS AND MAINTENANCE	
B112 COMMUNICATION 579.74 0 6,108.66 7,375 1,266.34- 17	2- 8,850
	4- 7,700
B113 EMERGENCY/SAFETY EQUIPMENT 2,568.02 642 3,376.92 6,420 3,043.08- 47	
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12	
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52	3- 11,850
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49	3- 11,850 8- 15,500
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22	3- 11,850 8- 15,500 1 130,000
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22 B127 JULIE SYSTEM 3,986.41 1,083 12,106.36 10,830 1,276.36 11	3- 11,850 8- 15,500 1 130,000 8 13,000
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22 B127 JULIE SYSTEM 3,986.41 1,083 12,106.36 10,830 1,276.36 11 B128 OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM 5,137.50 3,750 18,901.00 19,000 99.00-	3- 11,850 8- 15,500 1 130,000 8 13,000 5- 27,000
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22 B127 JULIE SYSTEM 3,986.41 1,083 12,106.36 10,830 1,276.36 11 B128 OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM 5,137.50 3,750 18,901.00 19,000 99.00- B129 REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGE .00 3,000 911.25 12,000 11,088.75- 92	3- 11,850 8- 15,500 1 130,000 8 13,000 5- 27,000 4- 12,000
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22 B127 JULIE SYSTEM 3,986.41 1,083 12,106.36 10,830 1,276.36 11 B128 OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM 5,137.50 3,750 18,901.00 19,000 99.00- B129 REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGE .00 3,000 911.25 12,000 11,088.75- 92 B900 SEWER SYSTEM REPAIRS - BUDGET .00 54,300 .00 1,179,000 621,621.08- 52	3- 11,850 8- 15,500 1 130,000 8 13,000 5- 27,000 4- 12,000 7- 1,369,600
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22 B127 JULIE SYSTEM 3,986.41 1,083 12,106.36 10,830 1,276.36 11 B128 OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM 5,137.50 3,750 18,901.00 19,000 99.00- B129 REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGE .00 3,000 911.25 12,000 11,088.75- 92 B900 SEWER SYSTEM REPAIRS - BUDGET .00 54,300 .00 1,179,000 621,621.08- 52 B901 SEWER SYSTEM REPAIRS - I/I PROGRAM .00 0 5,322.50 0 .00	3- 11,850 8- 15,500 1 130,000 8 13,000 5- 27,000 4- 12,000 7- 1,369,600 0 0
B115 EQUIPMENT/EQUIPMENT REPAIR 5,211.14 3,950 54,896.65 48,900 5,996.65 12 B116 SUPPLIES 64.78 988 4,709.93 9,880 5,170.07- 52 B117 EMPLOYEE/DUTY COSTS 292.82 1,200 6,425.72 12,800 6,374.28- 49 B124 CONTRACT SERVICES 2,469.27 11,000 134,305.57 110,000 24,305.57 22 B127 JULIE SYSTEM 3,986.41 1,083 12,106.36 10,830 1,276.36 11 B128 OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM 5,137.50 3,750 18,901.00 19,000 99.00- B129 REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGE .00 3,000 911.25 12,000 11,088.75- 92 B900 SEWER SYSTEM REPAIRS - BUDGET .00 54,300 .00 1,179,000 621,621.08- 52	3- 11,850 8- 15,500 1 130,000 8 13,000 5- 27,000 4- 12,000 7- 1,369,600

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 5

FUND 01 GENERAL FUND

COST NUMBER DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	ACTUAL- BUDGET VARIANCE	VAR %	TOTAL BUDGET
B910 SEWER SYSTEM REPAIRS - BSSRAP PROGRAM	======== 26,958.98	0	420,565.21	0	.00	.0	0
B913 SEWER SYSTEM REPAIRS - BSSRAP-REPAIR/REPL/R	.00	0	15,404.53	0	.00	.0	0
B929 ARRA LOAN PRINCIPAL REPAYMENT	.00	0	90,795.59	0	.00	.0	0
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SECT B TOTALS	47,677.24	79,913	799,120.98	1,416,205	617,084.02-	43.6- 1	,652,300
		=======	=========	=======		=======	
SECT C VEHICLES	660.27	2 200	11 060 44	22 000	10 210 56	46.0	26 500
C222 GAS/FUEL C225 OPERATION/REPAIR	660.27 76.16	2,208 442	11,869.44 2,149.45	22,080 4,420	10,210.56- 2,270.55-	46.2- 51.4-	26,500 5,300
C226 VEHICLE PURCHASES	.00	0	10,633.00	18,000	7,367.00-	40.9-	18,000
0220 12312022 1330311020							•
SECT C TOTALS	736.43	2,650	24,651.89	44,500	19,848.11-	44.6-	49,800
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=	========	=======	========	========		======	
DEPT 14 TOTALS	80,726.37	118,279	1,190,067.59	1,835,723	645,655.41-	35.2- 2	2,148,550
DEPT 15 O & M EXPENSES - LIFT STATIONS	=======	:=======	========	=======		======	
SECT A SALARIES AND WAGES							
A009 OPERATIONS MANAGEMENT	.00	32	94.24	336	241.76-	72.0-	400
A030 BUILDING & GROUNDS	.00	0	560.16	0	560.16	.0	0
A080 LIFT STATION MAINTENANCE	2,255.26	4,664	35,328.04	48,972	13,643.96-	27.9-	58,300
	========	=======		=======		=======	
SECT A TOTALS	2,255.26	4,696	35,982.44	49,308	13,325.56-	27.0-	58,700
= SECT B OPERATIONS AND MAINTENANCE	========	=======	========	=======		=======	:=======
B100 ELECTRICITY	8,763.35	9,200	84,458.82	92,000	7,541.18-	8.2-	110,000
B104 FUEL - GENERATORS	.00	1,500	2,595.38	6,000	3,404.62-	56.7-	6,000
B112 COMMUNICATION	478.15	525	5,349.32	5,250	99.32	1.9	6,300
B113 EMERGENCY/SAFETY EQUIPMENT	.00	0	.00	250	250.00-	100.0-	250
B116 SUPPLIES	.00	0	167.27	225	57.73-	25.7-	250
B520 EQUIP/EQUIP REPAIR - BUTTERFIELD	.00	570	2,263.53	5,700	3,436.47-	60.3-	6,835
B521 EQUIP/EQUIP REPAIR - CENTEX	.00	419	5,898.97	4,190	1,708.97	40.8	5,025
B522 EQUIP/EQUIP REPAIR - COLLEGE	12.29	166	3,467.01	1,660	1,807.01	108.9	1,989
B523 EQUIP/EQUIP REPAIR - EARLSTON	.00	508	3,005.01	5,080	2,074.99-	40.9-	6,100
B524 EQUIP/EQUIP REPAIR - HOBSON	.00	294	9,049.34	2,940	6,109.34	207.8	3,527
DEAE DAVIED (DAVIED DEDICED TERREDIEVE DADVI	0.0	100	1 050 06	4 000	0 110 04		4,883
B525 EQUIP/EQUIP REPAIR - LIBERTY PARK	.00	407	1,950.06	4,070	2,119.94-	52.1-	
B526 EQUIP/EQUIP REPAIR - NORTHWEST	.00	197	13,221.25	1,970	11,251.25	571.1	2,361
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD	.00	197 339	13,221.25 1,684.55	1,970 3,390	11,251.25 1,705.45-	571.1 50.3-	2,361 4,064
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE	.00 .00 12.28	197 339 166	13,221.25 1,684.55 1,146.22	1,970 3,390 1,660	11,251.25 1,705.45- 513.78-	571.1 50.3- 31.0-	2,361 4,064 1,989
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD	.00	197 339	13,221.25 1,684.55	1,970 3,390	11,251.25 1,705.45-	571.1 50.3-	2,361 4,064
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL	.00 .00 12.28 6,785.04	197 339 166 7,185	13,221.25 1,684.55 1,146.22 62,515.18	1,970 3,390 1,660 71,850	11,251.25 1,705.45- 513.78- 9,334.82-	571.1 50.3- 31.0- 13.0-	2,361 4,064 1,989 86,227
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL B820 BUILDING/GROUNDS - BUTTERFIELD	.00 .00 12.28 6,785.04	197 339 166 7,185 375	13,221.25 1,684.55 1,146.22 62,515.18 984.81	1,970 3,390 1,660 71,850 3,750	11,251.25 1,705.45- 513.78- 9,334.82- 2,765.19-	571.1 50.3- 31.0- 13.0- 73.7-	2,361 4,064 1,989 86,227 4,500
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL B820 BUILDING/GROUNDS - BUTTERFIELD B821 BUILDING/GROUNDS - CENTEX	.00 .00 12.28 6,785.04 .00	197 339 166 7,185 375 0	13,221.25 1,684.55 1,146.22 62,515.18 984.81 1,278.17	1,970 3,390 1,660 71,850 3,750	11,251.25 1,705.45- 513.78- 9,334.82- 2,765.19- 1,278.17	571.1 50.3- 31.0- 13.0- 73.7-	2,361 4,064 1,989 86,227 4,500
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL B820 BUILDING/GROUNDS - BUTTERFIELD B821 BUILDING/GROUNDS - CENTEX B822 BUILDING/GROUNDS - COLLEGE	.00 .00 12.28 6,785.04 .00 .00	197 339 166 7,185 375 0	13,221.25 1,684.55 1,146.22 62,515.18 984.81 1,278.17 29.11	1,970 3,390 1,660 71,850 3,750 0	11,251.25 1,705.45- 513.78- 9,334.82- 2,765.19- 1,278.17 29.11	571.1 50.3- 31.0- 13.0- 73.7- .0	2,361 4,064 1,989 86,227 4,500 0
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL B820 BUILDING/GROUNDS - BUTTERFIELD B821 BUILDING/GROUNDS - CENTEX B822 BUILDING/GROUNDS - COLLEGE B823 BUILDING/GROUNDS - EARLSTON	.00 .00 12.28 6,785.04 .00 .00 .00	197 339 166 7,185 375 0 0 0	13,221.25 1,684.55 1,146.22 62,515.18 984.81 1,278.17 29.11 1,480.77 1,243.54 1,313.01	1,970 3,390 1,660 71,850 3,750 0 0	11,251.25 1,705.45- 513.78- 9,334.82- 2,765.19- 1,278.17 29.11 1,480.77	571.1 50.3- 31.0- 13.0- 73.7- .0 .0 .0	2,361 4,064 1,989 86,227 4,500 0
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL B820 BUILDING/GROUNDS - BUTTERFIELD B821 BUILDING/GROUNDS - CENTEX B822 BUILDING/GROUNDS - COLLEGE B823 BUILDING/GROUNDS - EARLSTON B824 BUILDING/GROUNDS - HOBSON B825 BUILDING/GROUNDS - LIBERTY PARK B826 BUILDING/GROUNDS - NORTHWEST	.00 .00 12.28 6,785.04 .00 .00 .00	197 339 166 7,185 375 0 0 0 0	13,221.25 1,684.55 1,146.22 62,515.18 984.81 1,278.17 29.11 1,480.77 1,243.54 1,313.01 9,624.62	1,970 3,390 1,660 71,850 3,750 0 0 0 0 6,670	11,251.25 1,705.45- 513.78- 9,334.82- 2,765.19- 1,278.17 29.11 1,480.77 1,243.54 1,313.01 2,954.62	571.1 50.3- 31.0- 13.0- 73.7- .0 .0 .0 .0	2,361 4,064 1,989 86,227 4,500 0 0 0
B526 EQUIP/EQUIP REPAIR - NORTHWEST B527 EQUIP/EQUIP REPAIR - VENARD B528 EQUIP/EQUIP REPAIR - WROBLE B529 EQUIP/EQUIP REPAIR - LIFT STATIONS GENERAL B820 BUILDING/GROUNDS - BUTTERFIELD B821 BUILDING/GROUNDS - CENTEX B822 BUILDING/GROUNDS - COLLEGE B823 BUILDING/GROUNDS - EARLSTON B824 BUILDINGS/GROUNDS - HOBSON B825 BUILDING/GROUNDS - LIBERTY PARK	.00 .00 12.28 6,785.04 .00 .00 .00	197 339 166 7,185 375 0 0 0	13,221.25 1,684.55 1,146.22 62,515.18 984.81 1,278.17 29.11 1,480.77 1,243.54 1,313.01	1,970 3,390 1,660 71,850 3,750 0 0 0 0	11,251.25 1,705.45- 513.78- 9,334.82- 2,765.19- 1,278.17 29.11 1,480.77 1,243.54 1,313.01	571.1 50.3- 31.0- 13.0- 73.7- .0 .0 .0	2,361 4,064 1,989 86,227 4,500 0 0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 6
FUND 01 GENERAL FUND

COST NUMBER DESCRIPTION		BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	ACTUAL- BUDGET VARIANCE	VAR %	TOTAL BUDGET
B829 BUILDING/GROUNDS - LIFT STATIONS GENERAL	.00	1,325	99.95	13,250	13,150.05-	99.3-	15,900
SECT B TOTALS	16,051.11	24,051 =======	215,251.80		16,733.20-		276,700
DEPT 15 TOTALS	18,306.37	28,747	251,234.24		30,058.76-		
DEPT 17 O&M EXPENSES - INSURANCE & EMPLOYE	EE BENEFITS						
SECT E INSURANCE AND EMPLOYEE BENEFITS							
E452 LIABILITY/PROPERTY	9,155.00	8,000	176,994.00	177,000	6.00-	.0	193,000
E455 EMPLOYEE GROUP HEALTH	34,397.14	38,700	338,416.75	387,000	48,583.25-	12.6-	464,250
E460 IMRF	23,506.75	23,000	263,799.06	262,000	1,799.06	.7	313,900
E461 SOCIAL SECURITY	14,992.96	15,075	159,622.87	164,875	5,252.13-	3.2-	196,950
SECT E TOTALS	82,051.85	84,775 	938,832.68	990,875	52,042.32-	5.3- 1	1,168,100
DEPT 17 TOTALS	82,051.85	84,775	938,832.68	990,875	52,042.32-	5.3- 1	,168,100
FUND EXPENSE TOTAL		551,928	5,873,721.78	6,662,036	788,314.22-	11.8- 7	7,824,150
FUND 01 TOTALS			833,834.09-				40,600-

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 7

FUND 02 IMPROVEMENT FUND

NUMBER	COST DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
========	DESCRIPTION	MONTH		1-1-D =========	:=======	.========	
DEPT 05	REVENUES						
3007 INTERE	ST ON INVESTMENTS	588.92-	471-	4,640.39-	4,710-	5,650-	
3010 TRUNK	SEWER SERVICE CHARGES	2,608.00-	2,500-	233,947.96-	25,000-	30,000-	
3019 LATERA	L SEWER CHARGE	3,304.26-	0	18,442.26-	0	0	
DEPT 0	= 5 TOTALS =	6,501.18-		257,030.61-		35,650-	
DEPT 30	CAPITAL EXP-ARRA-LOAN REPAYMENTS						
0500 PROJEC	T BUDGET	.00	0	.00	46,600	93,200	
0515 PAYMEN	T ON LOAN PRINCIPAL	.00	0	46,595.52	0	0	
	=				=======		
DEPT 3	0 TOTALS	.00	0	46,595.52	46,600	93,200	
DEPT 74	= CAPITAL EXP-SEWER-UNSEWERED AREAS						
0500 PROJEC		.00	0	.00	0	7,500	
DEPT 7	4 TOTALS	.00	0	.00	0	7,500	
FUND E	EXPENSE TOTAL	.00	0	46,595.52	46,600	100,700	
FUND 0	2 TOTALS	6,501.18-		210,435.09-		65,050	

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 8

DEPT 35 CAPITAL EXP - WWTC - CHP BIOGAS PHASE 2

FUND 03 CONSTRUCTION FUND

COST		ACTUAL	BUDGET				
DEFT 05 REVENUES 3007 INTEREST ON INVESTMENTS 3009 SERVE PERMIT FERS 1,620.00- 12,500- 377,644.00- 125,000- 150,000- 3009 SERVE PERMIT FERS 1,620.00- 12,500- 377,644.00- 125,000- 150,000- 3009 SERVE PERMIT FERS 1,620.00- 12,500- 377,644.00- 125,000- 150,000- 3009 SERVE PERMIT FERS 1,824.82- 12,838- 604,264.57- 310,380- \$70,050- DEFT 05 TOTALS 1,824.82- 12,838- 604,264.57- 310,380- \$70,050- DEFT 30 CAPITAL EXP-ARRA-LOAN REFAYMENTS 0500 PROJECT SUDGET 0,00 0 14,403.64 0 0 DEFT 31 CAPITAL EXP-AWTC-CHP BIOGAS DEFT 31 TOTALS 0,00 0 14,403.64 14,450 28,900 DEFT 32 CAPITAL EXP-AWTC-CHP BIOGAS DEFT 31 TOTALS 0,00 0 0 0 0 0 0 0 0 DEFT 32 CAPITAL EXP-AWTC-SECON TURBORLOWER 0500 PROJECT SUDGET 0,00 0 156,799.90 250,000 250,000 DEFT 32 TOTALS 0,00 0 157,379.90 250,000 250,000 DEFT 32 TOTALS 0,00 0 157,379.90 250,000 250,000 DEFT 33 CAPITAL EXP-DIGESTER MIXING & GAS PIPING DEFT 34 CAPITAL EXP-GREASE NASTE DELIVERY RIMP DEFT 34 CAPITAL EXP-GREASE NASTE DELIVERY RIMP DEFT 34 CAPITAL EXP-GREASE NASTE DELIVERY RIMP	COST	CURRENT	CURRENT	ACTUAL	BUDGET	TOTAL	
### DEPT 05 REVENUES 3007 INTEREST ON INVESTMENTS	NUMBER DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	BUDGET	
309 SEWER PERMIT FEES 1,620.00			=======	========		-======	
3030 ANNUAL REPAYMENTS	3007 INTEREST ON INVESTMENTS	204.8	2- 338-	1,620.57-	3,380-	4,050-	
1,824,82	3009 SEWER PERMIT FEES	1,620.0	0- 12,500-	377,644.00-	125,000-	150,000-	
DEPT 30 CAPITAL EXP-ARRA-LOAN REPAYMENTS 0500 PROJECT BUDGET	3030 ANNUAL REPAYMENTS	.0	0 0	.00	0	50,000-	
DEPT 05 TOTALS	3093 GRANT FUNDING	.0	0 0	225,000.00-	182,000-	366,000-	
DEPT 30 CAPITAL EXP-ARRA-LOAN REPAYMENTS 0500 PROJECT BUDGET	DEPT 05 TOTALS						
DEPT 30 TOTALS	DEPT 30 CAPITAL EXP-ARRA-		=======	========	=======		
DEPT 30 TOTALS	0500 PROJECT BUDGET	r	0 0	0.0	14 450	28 900	
DEPT 30 TOTALS							
DEPT 30 TOTALS .00 0 14,403.64 14,450 28,900 DEPT 31 CAPITAL EXP-WWTC-CHP BIOGAS DEPT 31 TOTALS .00 0 .00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2. , 2			•			
DEPT 31 CAPITAL EXP-WWTC-CHP BIOGAS DEPT 31 TOTALS .00 0 .00 0 0 0 DEPT 32 CAPITAL EXP-WWTC-SECON TURBOBLOWER 0500 PROJECT BUDGET .00 0 0 .00 250,000 250,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 0 156,719.90 0 0 0 DEPT 32 TOTALS .00 0 157,379.90 250,000 250,000 DEPT 33 CAPITAL EXP - DIGESTER MIXING & GAS PIPING 0500 PROJECT BUDGET .00 0 0 .00 300,000 300,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 0 .00 300,000 300,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 45,022.41 0 0 0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 87,347.40 0 0 DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 .00 80,000 80,000 80,000	DEPT 30 TOTALS	.0	0 0	14,403.64	14,450	28,900	
DEPT 31 TOTALS .00 0 .00 0 0 0 DEPT 32 CAPITAL EXP-WWTC-SECON TURBOBLOWER 0500 PROJECT BUDGET .00 0 0.00 250,000 250,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 660.00 0 0 DEPT 32 TOTALS .00 0 156,719.90 0 0 DEPT 33 CAPITAL EXP - DIGESTER MIXING & GAS PIPING 0500 PROJECT BUDGET .00 0 0.00 300,000 300,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 45,022.41 0 0 0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 87,347.40 0 0 0507 NOTICES/PUBLICATIONS .00 0 215.64 0 0 DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 0.00 80,000 80,000	DEPT 31 CAPITAL EXP-WWTC-						
0500 PROJECT BUDGET	DEPT 31 TOTALS	.0	0 0	.00	0	0	
0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 660.00 0 0 0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 156,719.90 0 0 DEPT 32 TOTALS .00 0 157,379.90 250,000 250,000 DEPT 33 CAPITAL EXP - DIGESTER MIXING & GAS PIPING 0500 PROJECT BUDGET .00 0 .00 300,000 300,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 45,022.41 0 0 0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 87,347.40 0 0 0507 NOTICES/PUBLICATIONS .00 0 215.64 0 0 DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP	DEPT 32 CAPITAL EXP-WWTC-						
DEPT 32 TOTALS .00 0 156,719.90 0 0 0 0 0 0 0 0 0	0500 PROJECT BUDGET	.0	0 0	.00	250,000	250,000	
DEPT 32 TOTALS .00 .00 .00 .00 .00 .00 .00 .	0502 DESIGN ENGINEERING/ARCHIT	ECTURAL .0	0 0	660.00	0	0	
DEPT 32 TOTALS .00 0 157,379.90 250,000 250,000 DEPT 33 CAPITAL EXP - DIGESTER MIXING & GAS PIPING 0500 PROJECT BUDGET .00 0 .00 300,000 300,000 0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 45,022.41 0 0 0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 87,347.40 0 0 0507 NOTICES/PUBLICATIONS .00 0 215.64 0 0 DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 .00 80,000 80,000	0506 CONSTRUCTION CONTRACTS/PU	RCHASES .0	0 0	156,719.90	0	0	
DEPT 33 CAPITAL EXP - DIGESTER MIXING & GAS PIPING 0500 PROJECT BUDGET	DEPT 32 TOTALS						
0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 45,022.41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DEPT 33 CAPITAL EXP - DIG		========	========	=======		
0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 45,022.41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0500 ppo pp				202 555	202 5	
0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 87,347.40 0 0 0507 NOTICES/PUBLICATIONS .00 0 215.64 0 0 DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 0 .00 80,000 80,000							
0507 NOTICES/PUBLICATIONS .00 0 215.64 0 0 DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 0.00 80,000 80,000							
DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 .00 80,000 80,000					0	0	
DEPT 33 TOTALS .00 0 132,585.45 300,000 300,000 DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 .00 80,000 80,000	0307 NOTICED/FUBLICATIONS				========	========	
DEPT 34 CAPITAL EXP - GREASE WASTE DELIVERY RAMP 0500 PROJECT BUDGET .00 0 .00 80,000 80,000	DEPT 33 TOTALS	.0	0 0	132,585.45	300,000	300,000	
	DEPT 34 CAPITAL EXP - GRE.		========	========		======	
0502 DESIGN ENGINEERING/ARCHITECTURAL .00 0 19,072.69 0 0	0500 PROJECT BUDGET	. 0	0 0	.00	80,000	80,000	
	0502 DESIGN ENGINEERING/ARCHIT	ECTURAL .0	0 0	19,072.69	0	0	
0504 CONSTRUCTION ADMIN/RESIDENT ENG/ARCH. SUPER 552.50 0 14,803.67 0 0	0504 CONSTRUCTION ADMIN/RESIDE	NT ENG/ARCH. SUPER 552.5	0 0	14,803.67	0	0	
0506 CONSTRUCTION CONTRACTS/PURCHASES .00 0 67,617.45 0 0	0506 CONSTRUCTION CONTRACTS/PU	RCHASES .0	0 0	67,617.45	0	0	
0507 NOTICES/PUBLICATIONS .00 0 383.76 0 0	0507 NOTICES/PUBLICATIONS	.0	0 0	383.76	0	0	
DEPT 34 TOTALS 552.50 0 101,877.57 80,000 80,000	DEPT 34 TOTALS	552.5	0 0	101,877.57	80,000	80,000	

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 9

FUND 03 CONSTRUCTION FUND

DEPT 40 TOTALS

FUND 03 TOTALS

FUND EXPENSE TOTAL

NUMBER	COST	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
0500 PROJECT BUDGET 0502 DESIGN ENGINEERING/ARCHITECTURAL		.00	20,000	.00 67,844.20	55,000 0	200,000	
DEPT 38	35 TOTALS CAPITAL EXP-WWTC-PROPERTY ACQUISITI	.00 ======	20,000	67,844.20	55,000	200,000	
DEPT 3	38 TOTALS	.00	0	.00	0	0	
DEPT 40	CAPITAL EXP-WWTC-LOAN REPAYMENT						

0

.00 0 .00 0

552.50 20,000 474,090.76 699,450 858,900

1,272.32- 7,162 130,173.81- 389,070 288,850

TREASURER'S REPORT

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 10

FUND 05 PUBLIC BENEFIT FUND

DEPT 65 TOTALS

FUND 05 TOTALS

FUND EXPENSE TOTAL

NUMBER	COST DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
DEPT 05	REVENUES						
3007 INTERE	EST ON INVESTMENTS	19.46	- 40-	27.94-	130-	200-	
DEPT (05 TOTALS	19.46	- 40-	27.94-	130-	200-	
DEPT 59	CAPITAL EXP - SEWER - SEWER EXTENSI	ONS	=======		=======		
		=========	========	========	=======		=======================================
DEPT 5	59 TOTALS	.00	0	.00	0	0	
DEPT 65	CAPITAL EXP-SEWER-REIMB FOR ADDED S	EWER DEPTHS	========	=======		-=======	
		==========	========		=======		

.00 0 .00 0

19.46- 40- 27.94- 130- 200-

.00 0 .00

0

0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 11

FUND 52 SPECIAL ASSESSMENT NO. 52

FUND 52 TOTALS

		ACTUAL	BUDGET					
	COST	CURRENT	CURRENT	ACTUAL	BUDGET	TOTAL		
NUMBER DESCRI	IPTION	MONTH	MONTH	Y-T-D	Y-T-D	BUDGET		
		========	========	========		=======	==========	
DEPT 05 REVEN	NUES							
		==========	==========	========		========	=======================================	====
DEPT 05 TOTAL	LS	.00	0	.00	0	0		
		=========		========		========	==========	
DEPT 91 SA EX	XPENSE							
DEPT 91 TOTAL	LS	.00	0	.00	0	0		
			=========	========		========	=========	=====
FUND EXPENSE	TOTAL	.00	0	.00	0	0		
				========				====

.00 0 .00 0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 12

FUND 53 SPECIAL ASSESSMENT NO. 53

FUND 53 TOTALS

		ACTUAL	BUDGET				
	COST	CURRENT	CURRENT	ACTUAL	BUDGET	TOTAL	
NUMBER	DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	BUDGET	
DEPT 05	REVENUES	========					
3008 INTERES	ET ON ASSESSMENTS	.00	0	279.86-	0	0	
DEPT 05	5 TOTALS	.00	0	279.86-	0	0	
DEPT 91	SA EXPENSE						
		=========	.=======	:========	:=======	:=======:	=======================================
DEPT 91	TOTALS	.00	0	.00	0	0	
FUND EX	KPENSE TOTAL	.00	0	.00	0	0	
		========			========	========	

.00 0 279.86- 0 0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 13

FUND 54 SPECIAL ASSESSMENT NO. 54

NUMBER	COST DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
DEPT 05	REVENUES						
3008 INTERE	ST ON ASSESSMENTS	12.09-	- 0 ========	2,571.21-	0	0	=========
DEPT 0	5 TOTALS	12.09-	- 0 ========	2,571.21-	0	0	=========
DEPT 91	SA EXPENSE						
DEPT 9	1 TOTALS	.00	0	.00	0	0	
FUND E	XPENSE TOTAL	.00	0	.00	0	0	
FUND 5	4 TOTALS	12.09-	- 0	2,571.21-	0	0	

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 14

FUND 55 SPECIAL ASSESSMENT NO. 55

FUND 55 TOTALS

NUMBER DESCRI	COST PTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
DEPT 05 REVEN	UES						
3008 INTEREST ON A	SSESSMENTS	458.48-	0	3,435.35-	0	0	
DEPT 05 TOTAL	 S	458.48-	0	3,435.35-	0	0	
DEPT 91 SA EX	PENSE		=======	=======	=======	=======	
DEPT 91 TOTAL	== S	.00	0	.00	0	0	
FUND EXPENSE	TOTAL ==	.00	0	.00	0 ======	0	

458.48- 0 3,435.35- 0 0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 15

FUND 56 SPECIAL ASSESSMENT NO. 56

FUND 56 TOTALS

	COST	ACTUAL CURRENT	BUDGET CURRENT	ACTUAL	BUDGET	TOTAL	
NUMBER	DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	BUDGET	
DEPT 05	REVENUES	========	========		=======	=======	:=========
3008 INTERE	ST ON ASSESSMENTS	21.40-	0	2,120.31-	0	0	
DEPT 0	5 TOTALS	21.40-	· 0	2,120.31-	0	0	
DEPT 91	SA EXPENSE						
DEPT 9	1 TOTALS	.00	0	.00	0	0	
FUND E	XPENSE TOTAL	.00	0	.00	0	0	

21.40- 0 2,120.31- 0 0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 16
FUND 57 SPECIAL ASSESSMENT NO. 57

ACTUAL BUDGET COST CURRENT CURRENT ACTUAL BUDGET TOTAL Y-T-D Y-T-D BUDGET NUMBER DESCRIPTION MONTH MONTH ------.00 0 2,957.97- 0 0 3008 INTEREST ON ASSESSMENTS 0 DEPT 05 TOTALS .00 0 2,957.97-0 ______ DEPT 91 SA EXPENSE ______ DEPT 91 TOTALS ______ FUND EXPENSE TOTAL .00 ______ FUND 57 TOTALS .00 0 0 2,957.97-0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 17

FUND 58 SPECIAL ASSESSMENT NO. 58

FUND 58 TOTALS

NUMBER	COST DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
DEPT 05	REVENUES						
3008 INTERE	ST ON ASSESSMENTS	82.04-	- 0 =========	2,350.11-	0	0	==========
DEPT 0	5 TOTALS	82.04-	- 0 =======	2,350.11-	0	0	=========
DEPT 91	SA EXPENSE						
DEPT 9	1 TOTALS	.00	0	.00	0	0	
FUND E	XPENSE TOTAL	.00	0	.00	0	0	

82.04- 0 2,350.11- 0 0

DATE 03/17/16 MONTH ENDED 02/29/16 PAGE 18
FUND 71 SEWER EXTENSIONS ESCROW

FUND 71 TOTALS

ACTUAL BUDGET COST CURRENT CURRENT ACTUAL BUDGET TOTAL Y-T-D Y-T-D BUDGET NUMBER DESCRIPTION MONTH MONTH ------3007 INTEREST ON INVESTMENTS 3.86- 0 3.86- 0 0 DEPT 05 TOTALS 3.86- 0 3.86-0 ______ DEPT 92 SEWER EXPENSE ______ DEPT 92 TOTALS ______ FUND EXPENSE TOTAL .00 ______

3.86- 0

0

0

3.86-



Agenda

- 1 Defining the problem
- 2 Opportunity with biodigesters
- 3 Biodigester investment vehicle BioREIT
- 4 Risks



The US wastes \$150 billion of food each year, equivalent to...

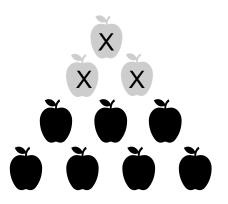


700 filled football stadiums/year



20 pounds/person every month





31% of total production being wasted

~40% of total food produced is sent to landfills



Source: Waste-to-Energy Research and Technology Council



Landfills generate nearly \$6B in negative environmental impact annually

Annually the US sends > 33 million metric tons of food to landfills, which represent:



687 calories/ capita/ day – equivalent to 1/3 of daily food intake of an average adult



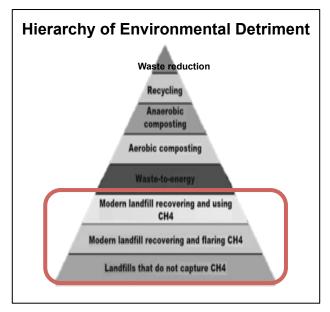
14% of US farming freshwater consumption



165mn barrels of oil consumption per year



3.6 billion metric tons of methane emissions, which is 25x more GHG potent than carbon dioxide



There are more sustainable alternatives to landfills



Source: EPA, Environmental and Energy Study Institute, NPR, Co.Exist, team analysis



There are many solutions to reduce food waste sent to landfills

Edible waste

Inedible waste

% of total waste

41.25%

51.75%

Potential solutions

- Food donation
- Resale of excess food at belowmarket rate (e.g. The Daily Table, Leloca)
- Optimize operations to minimize excess

- Composting
- Biodigestion
- Extraction of chemicals
- Other means of converting waste into useful products (e.g. black soldier flies)

Agenda

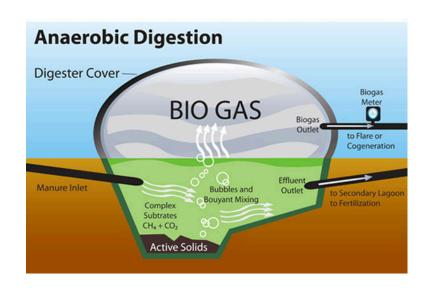
- Defining the problem
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Biodigesters are an alternative solution to waste management

Environmental benefits include:

- Reduction of fossil fuel derived energy
- Diverted waste from landfills
- Around-the-clock availability of biogas reduces need for back-up power plants
- Production of fertilizer products that recycle nutrients into the environment





Biodigester: what is it all about?

- Uses bacteria to break down organic matter and capture methane released by the bacteria in a process called anaerobic fermentation.
- Anaerobic means the micro-organisms digest the food in the absence of oxygen.







Biodigester in Downers Grove, IL



Case Study: Downer's Grove Municipal Biodigester

- Sewage waste plant with 5 biodigesters which produce ~\$150K/year in electricity saving to run the plant
- Received approval to receive PA renewable energy credit of \$15/kwh ~\$20k/year









Source: Team site visit



Case Study: Biodigester Success for Kroger





- Opened a 55,000 ton per year anaerobic biodigester at its distribution center in Compton, CA
- Transforms food waste that cannot be donated or sold into energy to power 650,000 square feet at the facility (20% of the energy needs)
- Avoid landfill trips reducing hauling costs and truck trips by 500,000 miles per year

Source: Kroger



Biodigesters: why are they not more prevalent?

2,000 sites
across the United States that produce biogas,

and there is potential for an additional 11,000 biogas systems.

If fully realized, these biogas systems could produce enough energy to power more than

3 million American homes



and reduce methane emissions equivalent to up to



of greenhouse gas emissions in 2030, the annual emissions of up to

11 million

passenger vehicles.

K

Source: Harvest Power



The US is not very attractive for biodigesters, as compared to Europe





Electricity price

- Average price at 12.12 cents/ kWh (2013)
- 17% increase from 2006 prices

- Average price at 26.57 cents/ kWh (2013) – 119% higher than the US
- 43% increase from 2006 prices

Tipping fees

• ~\$20 (rural) – 50 (urban) per ton

• \$60 – 170 per ton depending on countries

Policies

 Only several places (incl. California, NYC) provide policies to redirect organic waste from landfills EU-wide laws - The Landfill Directive obliges Member States to reduce amount of biodegradable municipal waste landfilled to 35% of 1995 levels by 2016

Result: municipal waste treatment

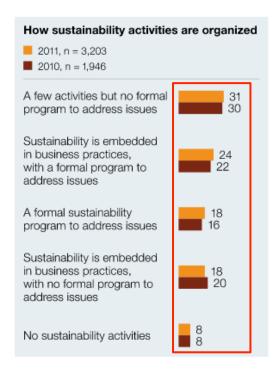
- 28.9% of waste is recycled/ composted
- 7.6% to waste-to-energy facilities
- 63.5% to landfill

- 42% recycled/ composted
- 24% to waste-to-energy facilities
- 34% to landfill

Source: Recycling Today, European Commission, team analysis



As such, many corporations are not making the investment in environmental sustainability initiatives



Barriers to entry include:

- **Financing**. Initial investment can be up to \$30m
- Economics. Sources of revenues are not priced attractively at the moment (electricity, tipping fees from waste sources)
- Regulation. Limited regulations on diversion of waste in the US
- Priorities. There are competing uses of operating capital

"Competing resources with other projects is the primary challenge for investing in sustainability initiatives."

Source: McKinsey

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Agenda

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BioREIT will enable corporations to reduce costs while removing capital allocation decisions

Example: reducing capital outlay for corporations

Scenario 1: 0	Scenario 1: Corporate Capital Investment (Creating Energy Savings) (\$MM)														
Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>					
(\$10,000)	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883					
<u>IRR</u>	<u>-6.0%</u>														
Scenario 2: E	BioREIT Partn	ership (Cre	eating Energ	y Savings) (\$MM)										
Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>					
(\$1)	\$133	\$133	\$133	\$133	\$133	\$133	\$133	\$133	\$133	\$133					
<u>IRR</u>	13250.0%														

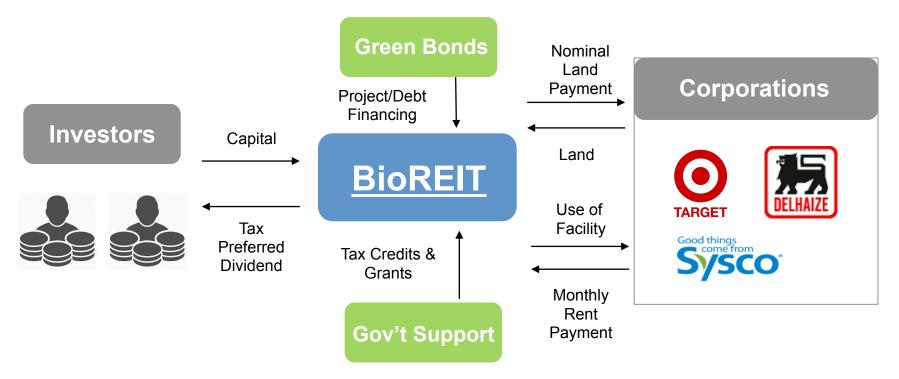
Based upon capacity of \$10M biodigester – includes energy and waste management cost savings Source: Renewable Waste Intelligence – March 2013

If there was a way to reduce the capital outlay for corporations on projects and meet target IRR thresholds, we could create greater adoption of clean energy.





Solution: BioREIT - Real Estate Investment Trust



A REIT can solve the capital expenditure issues for corporations while providing steady dividend payments to investors from high-quality tenants



Potential corporate partners include food distributors and supermarkets









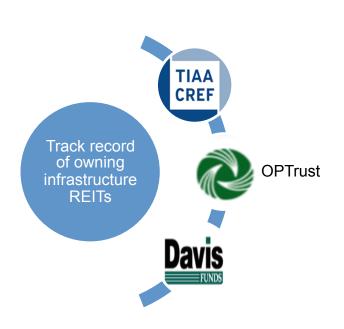


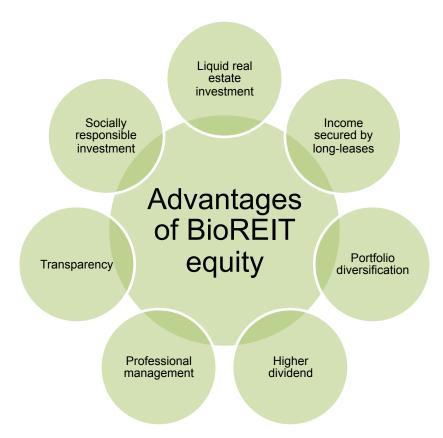
- Landfilled food waste from groceries alone in the US is valued at \$10.3bn currently
- Partner corporations seek to:
 - Reduce energy costs
 - Reduce landfill and associated transportation costs
 - Create positive impact on the environment
 - Comply with state/ city regulations on waste diversion before stated time horizon
- Necessary characteristics for partnership:
 - Land availability (¼ acre)
 - Steady cash flow to repay the lease
 - Food waste generation
- Ideal characteristics:
 - Locations that bans food waste from landfills (e.g. VT, CT, CA, MA, NYC, Seattle)





BioREIT Investor Profile







Green Bond Investor Profile

Tax-exempt income Secured by Socially lease responsible payments of investment highly rates corporations Advantages of BioREIT Enabling Additional renewable bonds security energy interest in a project at real asset lower cost Well-defined Portfolio use of diversification proceeds



High Net Worth Retail





Institutional Asset Managers



Municipal green bonds have been leveraged for biodigesters



Minnesota Municipal Power Agency

Hometown BioEnergy

Issue size: \$45 million

Rating: A3 by Moodys & A by Fitch

Yield at Issue: 2.23%

Developed by:



NEW ISSUE - BOOK-ENTRY ONLY

NOT RATED

Due: December 1, 2036

In the opinion of Bond Counsel, based on statutes, regulations, published rulings and court decisions, existing on the date of such opinion, and assuming compliance with certain covenants, interest on the Bonds will be excludable from gross income for purposes of federal income taxation and will be an item of tax preference for purposes of calculating the alternative minimum tax imposed on individuals and corporations. See "TAX MATTERS" herein.

\$60,000,000 GULF COAST INDUSTRIAL DEVELOPMENT AUTHORITY Environmental Facilities Revenue Bonds

(Microgy Holdings Project)
Series 2006

Dated: Date of Initial Issuance

The Bonds will be special and limited obligations of the Gulf Coast Industrial Development Authority (the "Issuer"). The Bonds will be payable solely from and secured by a pledge of revenues derived by the Issuer pursuant to a Loan Agreement between the Issuer and

MICROGY HOLDINGS, LLC

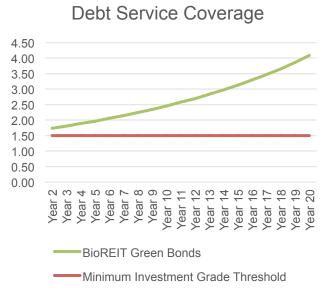




Financial Projections – Strong Credit Quality

Corporate partners rated Double A to Triple B that will be the driving force of BioREIT Municipal Green Bonds high credit quality





BioREIT's associated green bond issuance will have a steady stream of payments enhancing the security of the bonds while offering tax-exempt interest to investors.



Financial Highlights

Sources/Uses

Sources of Funding - Run Rate (\$MM)										
Equity Investment	\$	5,000								
Green Project Bonds (4% Interest)*	\$	4,490								
DOE Grant	\$	500								
USDA Grant	\$	500								
Total Sources	\$	10,490								

^{*}Green bonds include \$630K of defferred interest costs

Sources of Funding - Construc	Sources of Funding - Construction (\$MM)										
Equity Investment	\$	2,000									
Green Project Bonds (7%)*	\$	7,000									
DOE Grant	\$	500									
USDA Grant	\$	500									
Total Sources	\$	10,000									

^{*}Green bonds will be refinanced to 4% upon completion of construction

Uses of Funding	
Cost to Build	\$ 10,000,000
Capital Cost (Per Ton)	\$ 600
Total Capacity (Per Ton)	 16.667

Unit Economics

n	
	16,667
	500
	8,333,333
\$	0.09
\$	750,000
\$	8
\$	133,333
¢	883,333
¢	750,833
	\$ \$

Run-Rate Economics - BioREIT	
Total Rent Payments	\$ 3,754,167
Total Tax Credits	\$ 332,619
Total Revenue	\$ 4,086,786
Maintence Costs	\$ 208,333
Management Fee (@ 10% of Rent)	\$ 375,417
Principal Payments	\$ 1,000,000
Interest Costs	\$ 898,000
Adusted Net Operating Income	\$ 1,605,036
FFO (~90% of ANOI)	\$ 1,444,532
Total Equity	\$ 25,000,000
Implied Dividend Yield	5.8%

Project Economics

Run-Rate Economics Year 1 - BioRl	BT (5 Facilities)
Total Rent Payments	\$	3,754,167
Total Tax Credits	\$	332,619
Total Revenue	\$	4,086,786
Maintence Costs	\$	208,333
Management Fee (@ 10% of Rent)	\$	375,417
Interest Costs	\$	898,000
Principal (20 Years)	\$ 1	1,122,500.00
Adusted Net Operating Income	\$	1,482,536
FFO (~90% of ANOI)	\$	1,334,282
Total Equity	\$	25,000,000
Implied Dividend Yield		5.3%

Run-Rate Economics Year 10 - BioREIT (5 Facilities)											
Total Rent Payments	\$ 4,398,604.59										
Total Tax Credits	\$	332,619									
Total Revenue	\$	4,731,224									
Maintence Costs	\$	208,333									
Management Fee (@ 10% of Rent)	\$	439,860									
Interest Costs	\$	538,800									
Principal (20 Years)	\$ 1	1,122,500.00									
Adusted Net Operating Income	\$	2,421,730									
FFO (~90% of ANOI)	\$	2,179,557									
Total Equity	\$	25,000,000									
Implied Dividend Yield		8.7%									

BioREIT will provide a higher than average dividend (based upon NAREIT data) that will consistently grow over time. There is a favorable value proposition for all parties.





Financial Projections – Constant Dividend Increases

Dividend Projectio	ns_																		
	<u> </u>	∕ear 0	<u>Y</u>	ear 1		Year 2	Year 3	 Year 4	Year 5	Year 6	,	Year 7	Year 8	`	Year 9	<u>Y</u>	'ear 10)	Year 20
Rent Payments	\$	-		\$0		\$3,754	\$3,829	\$3,906	\$3,984	\$4,064		\$4,145	\$4,228		\$4,312		\$4,399		\$5,362
Tax Credits	\$	-		\$0	_	\$333	\$333	\$333	\$333	\$333		\$333	\$333		\$333		\$333		\$333
Total Revenue	\$	-	\$	-	\$	4,087	\$ 4,162	\$ 4,238	\$ 4,317	\$ 4,396	\$	4,478	\$ 4,560	\$	4,645	\$	4,731	\$	5,694
Maintence Costs	\$	-	\$	-	\$	(208)	\$ (208)	\$ (208)	\$ (208)	\$ (208)	\$	(208)	\$ (208)	\$	(208)	\$	(208)	\$	(208)
Management Fee	\$	-	\$	-	\$	(375)	\$ (383)	\$ (391)	\$ (398)	\$ (406)	\$	(414)	\$ (423)	\$	(431)	\$	(440)	\$	(536)
Interest Costs	\$	-	\$	-	\$	(898)	\$ (853)	\$ (808)	\$ (763)	\$ (718)	\$	(674)	\$ (629)	\$	(584)	\$	(539)	\$	(90)
Principal Payment	\$	-	\$	-	\$	(1,123)	\$ (1,123)	\$ (1,123)	\$ (1,123)	\$ (1,123)	\$	(1,123)	\$ (1,123)	\$	(1,123)	\$	(1,123)	\$	(1,123)
ANOI					\$	1,483	\$ 1,595	\$ 1,709	\$ 1,824	\$ 1,941	\$	2,059	\$ 2,178	\$	2,299	\$	2,422	\$	3,738
FFO					\$	1,334	\$ 1,436	\$ 1,538	\$ 1,642	\$ 1,747	\$	1,853	\$ 1,960	\$	2,069	\$	2,180	\$	3,364
Dividend Yield						5.3%	5.7%	6.2%	6.6%	7.0%		7.4%	7.8%		8.3%		8.7%		13.5%

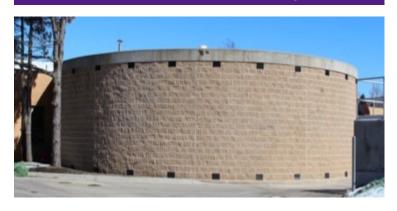
BioREIT is forecasted to initially yield >5% dividend, with steady increases up to 13.5% in Year 20. Dividend will grow faster than the rate of inflation.



23

REIT vehicle is scalable

Current Opportunity



Target Opportunity = >\$500MM

Future Opportunity







Target Opportunity = >\$1 Billion

BioREIT will use follow-on offerings to scale and diversify investment vehicle until cash balances can self-fund expansion. Dividend yield still forecasted to rise over time.

Substantial stakeholder value will be realized

To corporates

- Reduced initial capital outlay
- Reduced landfill waste
- Reduced waste treatment and logistics-associated cost
- Potential sale of digestates
- Positive company goodwill

To investors

- 5%+ dividend yield for equity investors
- Inflation hedge
- Asset returns with relatively low sensitivity to economic shocks

To environment

- Better treatment of polluted water, avoided water consumption through better water cycle retention
- Lower GHG emissions from avoided electricity generation and landfills

To community

- Better water quality in neighborhood
- Potential digestate application on farms in the community

To local government

- Reduced pressure on landfill capacity
- Develop best practice in local food waste management

Agenda

- Defining the problem
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- 4 Risks



There are some risks to our financial projections

- The plant could run below full capacity, lowering output
- Ongoing maintenance and repair may be more than anticipated
- Access to co-digesters to boost methane production
- Continued low natural gas prices makes our product less competitive



- Inability to refinance green bonds at a reduced interest rate
- Construction risks resulting in delays of rental payments

BioREIT will pass the majority of these risks to the partner corporations since they are associated with the operation of the biodigester and not the investment vehicle.

Why BioREIT is different from previous biodigester projects?

There have been failed cases before ...

- According to the USDA, 54 farm-based projects have been shut down
- May 2015 Fremont Community
 Digester in Michigan faced ownership struggles and unpaid electric bills
- Microgy Inc filed for bankruptcy in July 2010 when they were unable to secure financing
- An uncompleted biogas plant in Hull, IA went bankrupt in 2011 after developer Bison Renewable Energy ran out of money

... but we believe BioREIT will not be one

- Financing will be secured prior to construction
- Model does not rely on subsidies
- Partnering with large corporations
- Focus on politically hospitable regions



Continuous monitoring measures will be employed to keep track of impact generated

Companies benefited from the biodigester system will be bound to produce an annual report which includes the following metrics:

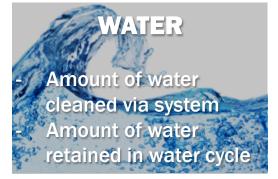












29



Our hypothesis is backed by evidence from the following interviews

Kellogg Knowledge Network

- Prof. Mitchell Petersen on tax
- Prof. Klaus Weber on sustainability

Restaurants

- Mr. Merlo-Ruiz, Tomate
- Nate Cooper, Lyfe Kitchen
- Representatives from Soulwich
- Representatives from Kafe Kellogg

Food Banks

- Shelia Creghin, VP Operations at Greater Chicago Food Depository
- Scott Jewitt, Director of Network Partnerships, Northern Illinois Food Bank
- Sach Preet, BCG Consultant who worked with Feeding America previously

Regulatory Experts

- Dr. Elise Golan, USDA Director for Sustainable Development
- Jennifer Zimmerman, Tax attorney

Biodigester Experts

- Ben Vitale, Equilibrium Capital
- David Krems, Grind2Energy
- Nick Menninga, GM at Downers Grove Sanitary District
- Caleb Adams, VP R&D at CleanWorld
- Meredith Cummings, Application Engineer, BIOFerm Energy Systems

Waste Treatment Experts

- Raj Karmani, CEO of Zero Percent
- Nick Sikich, COO at Atlas Disposal

Grocery Stores

- Jessy Ortiz, Sustainability
 Manager, Outpost Natural Foods
- Preeti Shekar (Kellogg '17), Site Merchandising, Wal-Mart
- Troy Vernon (Kellogg '16), Target

Project Finance Experts

- Justin Yeung, Project Finance Associate, Standard Chartered Bank
- Brent Sprunger, William Blair
- Kathryn Liao, Allstate



Questions?



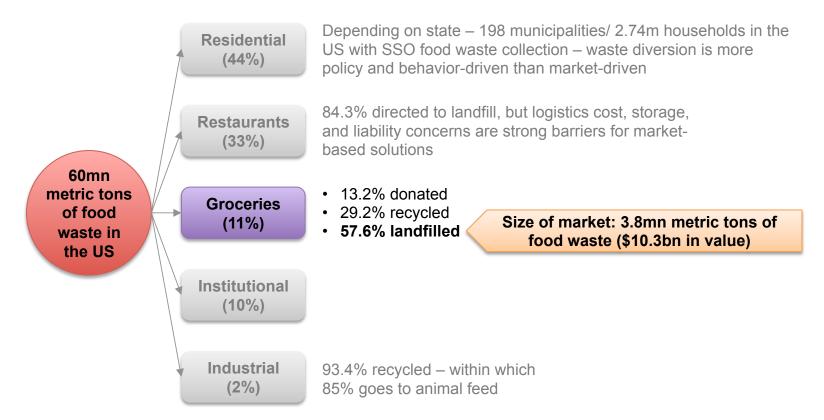
Appendix



Appendix – Index

- The market size of grocery food waste
- Wet vs dry biodigesters
- Location selection criteria
- Regulations related to biodigesters
- Alternative solutions for food waste treatment

The market size of grocery food waste



Source: USDA, Food Waste Alliance, BioCycle, Environmental Recovery Corporation, team analysis

KELLOGG SCHOOL OF MANAGEMENT AT NORTHWESTERN UNIVERSITY

Appendix – Index

- The market size of grocery food waste
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Wet vs dry biodigester processes

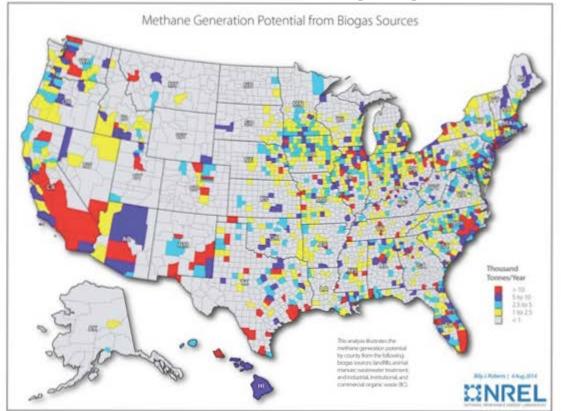
Comparison of Wet AD and Dry AD treatment of solid organic waste		
	Wet AD	Dry AD
Feedstock	Clean organic waste fractions that can be made pumpable	Any kind of solid organic waste
Flexibility in processing capacity	Low	High
Tolerance to impurities	Low	High
Full internal recirculation of liquid digestate at plant	Not possible	Possible (only Aikan does this)
CAPEX and OPEX per tonnes of solid waste	Higher	Lower
Possible end products	Biogas, sludge, digestate	Biogas, compost, digestate
Typical use	Farm biogas plants	Plants that treat segreated or non-segretaged Municipal Solid Waste (MSW)

Source: Aikan Technology

Appendix – Index

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High concentration areas of landfills, agricultural sources, and organic waste that can be used for biogas generation



Source: National Renewable Energy Laboratory

State/city selection criteria

The ideal state/ city would include multiple of the following characteristics:

- High utilization of landfills with limited landfill expansion potential
- Progressive legislations/ regulations on waste diversion
- High electricity price
- High waste tipping fee
- High logistics cost to send waste to landfills

Appendix – Index

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There are federal and state incentives that could support BioREIT

- To build a biodigester, there are federal and state regulations on **permits**, **air**, **solid waste** and water. While these require planning, regulation is not a major concern.
- There are various incentives that could support our project:
 - Obama's Clean Power Plan (2015) established USDA Regional Climate Hubs which provide resources for agricultural regions and could serve as a potential partner. (<u>link</u>)
 - The Production Tax Credit provides a \$0.023/kWh rebate for closed-loop biomass for the first 10 years of production (biomass is eligible for this credit indefinitely) (<u>link</u>)
 - Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement Loans & Grants (<u>link</u>) could **provide grants** (up to 500K)
- Extensive state level incentives listed by state (<u>link</u>)

There are four relevant legislative categories

Category	Relevance
Air	 Combustion devices may require state air permits if the devices are operating over federal thresholds. These federal requirements are administered through state agencies. Some states have additional state-specific thresholds that require state air permits.
Solid waste	 Waste processing facilities are required to meet Resource Conservation and Recovery Act (RCRA) Subtitle D requirements—which covers non-hazardous solid wastes—and 40 CFR Part 258—which covers landfills. These federal requirements are administered through state agencies. If codigestion is planned for an anaerobic digester or a facility accepts offsite waste, additional state permits may be required. In many cases, manure-only anaerobic digesters are exempt from solid waste permitting requirements.
Water	 If an anaerobic digester or Concentrated Animal Feeding Operation (CAFO) directly discharges to U.S. waters, a National Pollutant Discharge Elimination System (NPDES) permit is required. This is a federal requirement administered through state agencies. NPDES Implementation Information Large CAFOs that discharge must be permitted and develop and maintain Nutrient Management Plans to ensure appropriate land application of manure. Smaller farms also may be required to comply with the rule if they discharge to waters of the United States through a manmade device or through direct contact of the animals with waters of the United States. Certain states may also include smaller farms in their animal feeding operations programs.
Cap and trade/Other Credits	Incentivize alternative energy

Federal legislations (1/3)

Category	Relevant Regulation
Air	 State air permits may be required if on-site combustion devices trigger federal emissions thresholds and other federal regulatory permitting requirements. Combustion devices with air emissions below federal thresholds may avoid permitting requirements.
Solid waste	 Managing Non-Hazardous Municipal and Solid Waste, Resource Conservation and Recovery Act (RCRA) Subtitle D Criteria for Municipal Solid Waste Landfills, 40 CFR Part 258
Water	 A National Pollutant Discharge Elimination System (NPDES) permit (PDF) is required for Concentrated Animal Feeding Operations (CAFOs) that discharge or propose to discharge to U.S. waters including: Inappropriate land application of manure Discharge to waters of the United States through a manmade device or through direct contact of the animals with waters of the United States.

Federal legislations (2/3)

Category	Initiative	Relevant Regulation	Link
Other Incentives under Obama's Clean Power Plan (2015)	Better Building Initiative	 Better Buildings is an initiative of the U.S. Department of Energy (DOE) designed to improve the lives of the American people by driving leadership in energy innovation. 	http:// betterbuildingssolutioncenter.energy. gov/
	USDA Climate Hubs	 The mission of the Climate Hubs is to develop and deliver science-based, region-specific information and technologies, with USDA agencies and partners, to agricultural and natural resource managers that enable climate-informed decision-making, and to provide access to assistance to implement those decisions. 	http:// www.climatehubs.oce.usda.gov/ content/mission-and-vision
	Emissions of methane-rich gas from municipal solid waste landfills	 On Aug. 14, the U.S. EPA issued two proposals to further reduce emissions of methane-rich gas from municipal solid waste (MSW) landfills. Under the proposals, new, modified and existing landfills would begin collecting and controlling landfill gas at emission levels nearly a third lower than current requirements. 	http://biomassmagazine.com/articles/ 12322/epa-issues-2-proposals-to- reduce-landfill-gas-emissions
	State, Local and Tribal Leaders Task Force on Climate Preparedness and Resilience	President Obama signed an Executive Order on November 1st, 2013 establishing a Task Force on Climate Preparedness and Resilience to advise the Administration on how the Federal Government can respond to the needs of communities nationwide that are dealing with the impacts of climate change.	https://www.whitehouse.gov/ administration/eop/ceq/initiatives/ resilience/taskforce

Federal legislations (3/3)

Category	Initiative	Relevant Regulation	Link
	Production Tax Credit (PTC)	 Federal incentive that provides financial support for the development of renewable energy facilities. \$0.023/kWh for wind, geothermal, closed-loop biomass Applies to first 10 years of operation The bill preserves biomass eligibility for the credit indefinitely. 	http://energy.gov/savings/ renewable-electricity- production-tax-credit-ptc
Other	Special Depreciation Allowance for Cellulosic Biofuel Plant Property	 The allowance applies only for the first year you place the property in service. For qualified property placed in service in 2015, you can take an additional 50% special allowance 	https://www.irs.gov/ publications/p946/ch03.html
Incentives	Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program	This program assists in the development, construction, and retrofitting of new and emerging technologies for the development of Advanced Biofuels, Renewable Chemicals, and Biobased Product Manufacturing by providing loan guarantees for up to \$250 million	http://www.rd.usda.gov/ programs-services/biorefinery- renewable-chemical-and- biobased-product- manufacturing-assistance
	Bioenergy Program for Advanced Biofuels (BPAB)	Bioenergy Program for Advanced Biofuels (BPAB) is intended to pay advanced biofuels producers to expand their production levels	http://www.taxpayer.net/library/ article/bioenergy-program-for- advanced-biofuels-fact-sheet
	Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement Loans & Grants	 Grants of \$20,000 or less: November 2, 2015 and May 2, 2016; Unrestricted Grants (up to \$500,000): May 2, 2016; Loan Guarantees are competed continuously throughout the year. 	http://www.rd.usda.gov/ programs-services/rural- energy-america-program- renewable-energy-systems- energy-efficiency

State legislations – California

- Highest composting tonnage across all states
- More incentives around composting due to regulations: example is Jerry Brown and California Air Resources Board pushing to stop disposal of all organic waste by 2025. Businesses will have to start recycling food waste by end of April 2016
- Current issue is limited capacity of compost facilities around the state. often time, waste needs to be transported far distances to facilities that can take it, and that transportation leads to pollution from trucking. Facilities around the state can only absorb up to half of food matter that eventually ends up in landfills
- Some of the funding could come from California's cap-and-trade program, which requires
 businesses to purchase carbon emissions permits and then allocates the proceeds to emissioncurbing products. Legislators submitted a raft of proposals for carving up that pot this year,
 requesting funds for everything from port improvements to clean trucks, and \$30 million has been
 allocated to CalRecyle.
- Hilton Hotel in San Diego sends food waste to local composting facility, saving \$10k as compared to sending to landfills
- Read more here: <u>http://www.sacbee.com/news/politics-government/capitol-alert/article38764776.html#storylink=cpy</u>

State/city legislations – New York / New Jersey

- OneNYC Initiative -- to send zero waste to landfills by 2030
- NYC pays over \$100M a year to send food waste to landfills
- Up to \$80/ton for waste hauling services
- Max that companies can charge for picking up waste in NYC is \$208/ton
- Largest compost facility in Northeast (Peninsula Compost Facility) can handle 550 tons of food waste per day. Currently gets 400 tons daily
- Read more here: http://www.dec.ny.gov/chemical/98112.html

State legislations – Washington

- Costs \$35-50 per ton to compost food waste (at industrial scale)
- Seattle law makes it illegal to throw food/food waste in trash
- Commercial composting rates < regular garbage service

State legislations – Oregon

- Oregon has laws mandating food composting for families and commercial businesses
- Food recycling companies set composting rates, government doesn't regulate this (this is a challenge no uniform standards)
- Hard to find data on costs have contacted Cloudburst Recycling to get idea of rates in Oregon

State legislations – Massachusetts

- As of 2014, illegal for commercial institutions to throw away food waste
- Less than 10% of food waste diverted for recycling today
- Composting and biodigesting facilities in MA can today accept 150 tons of material per year
- State of MA does provide targeted grants and loans to build composting facilities
- Read more here: http://www.mass.gov/eea/agencies/massdep/recycle/reduce/food-waste-ban.html

Appendix – Index

- The market size of grocery food waste
- Wet vs dry biodigesters
- Location selection criteria
- Regulations related to biodigesters
- Alternative solutions for food waste treatment



Through our research we have discovered innovative alternative models for food waste treatment

Still-edible waste



 Daily Table: nonprofit grocery store that sells excess/imperfect stock of manufacturers and other grocery stores at affordable price in lowincome communities



Leloca: app that helps to minimize restaurant waste by offering dining deals to consumers when food would otherwise be wasted

Inedible waste



Black Solider Flies: fly that reduces volume of waste weight and volume by 95% by digesting waste



Grind2Energy: company that transforms waste into a liquid that can be efficiently transformed into energy via an anaerobic digester

Typical alternative food treatment options for inedible food waste

Turning food waste into animal feed:

- Food scraps as animal feed saves money for farmers, as well as for companies, as it is cheaper to have food scraps sent to animals than sent to a landfill
- Food doesn't just have to go to farms -- can go to organizations that work with animals, such as zoos or shelters, or can even go to companies that make animal or pet food
- Legal restrictions: Swine Health Protection Act regulates food waste containing meat products that is fed to swine
- Regulations and restrictions vary by state -some states don't allow food donation for animal feed
- Examples: Organix Recycling, Organic Matters Inc.

Turning food waste into compost:

- Composting reduces methane emissions, reduces need for chemical fertilizers, and promotes higher crop yields
- Composting can capture and destroy 99% of industrial volatile organic chemicals in the air
- There are different types of composting options available, depending on what type of business you are and how much waste you generate
- Examples: The Compost Company LLC, EnviRelation

53

GENERAL MANAGER'S REPORT TO EMPLOYEES

WWTC Operations Data – January

The DMR for January indicates that the final effluent averaged 0.8 mg/l CBOD, 0.4 mg/l suspended solids and 0.12 mg/l ammonia nitrogen over a daily average flow of 12.48 MGD. There were no permit excursions in January.

Financial Data – January

In January, the District received \$547,548 in the General fund, including \$256,823 in user charges, \$26,986 in surcharges and \$228,562 in monthly fees. General fund expenses totaled \$450,094. The Improvement fund had revenues of \$478 and expenses of \$0. The Construction fund had revenues of \$13,172 and expenses of \$87,347.

Sewer Permits – January

There were 13 sewer permits issued in January – 7 single family, 2 commercial, 1 repair and 3 disconnections.

Personnel

The District is in the process of finalizing interviewing for the open part-time secretary position in the office.

Retirement Dinner

Bev Fleming's official last day of employment with the District will be March 31. In recognition of her 28 years of service with the District, we will be providing a dinner at the Suparossa Restaurant, Woodridge, on Friday, March 11th, at 5:30 p.m. (food served at 6:00 p.m.). Sign-up sheets for your participation will be provided next week.

Five Year Financial Plan and Appropriation Ordinance

At the February 16 meeting, the Board reviewed the Five Year Financial Plan for Fiscal Years 2016-17 to 2020-21. There is no increase anticipated in the FY 16-17 budget for the user fee, but it is anticipated that the monthly service fee will increase by \$1.50 to \$13.50 per month. The FY 16-17 budget and the Appropriation Ordinance which sets spending limits for budget categories will be presented for Board approval at the March 22 Board meeting.

This can also be emailed to you!

Property and Liability Insurance Renewals

The Board approved renewals for the District's liability insurance policies effective April 14. The liability insurance includes Property, General Liability, Automobile, Public Officials Liability, Crime, Umbrella Liability and Tank Storage Pollution Liability. Total annual premiums (including Workers Compensation Insurance approved by the Board in December of each year) are \$197,050.

Group Health Insurance

We are currently soliciting proposals for renewal of our group health, dental and vision insurance.

Sewer Rehabilitation/Infiltration and Inflow Removal

We are targeting the 1-K-028 area for private property inspections and I/I removal. Regular flow monitoring continues.

Status of Projects

1) Technology Plan

We are continuing to investigate and assess ways to boost cell phone signals in the tunnels at the plant.

2) Digester Gas Co-Generation Facility

We have applied for grant funding to add a second engine genset to our CHP system, taking advantage of the oversized gas cleaning equipment. A grant agreement has been received from the Illinois DCEO for \$49,000 towards construction of another CHP unit. Final design work is being completed by Baxter & Woodman.

3) Grease Delivery Road

ATP Enterprise Group has nearly completed construction of this newly paved area south of the grease receiving station. Some punchlist work is needed in the spring.

4) Sewer Rehab

We have awarded contracts for sewer rehab projects for I/I removal and de-bottlenecking in the 1-M-008 area, and for structural rehabilitation for the sewer along Debolt in Downers Grove. Insituform Technologies will be doing this work, and is coordinating its schedule with the Village's needs, with some work scheduled around spring break. Their subcopntractor, National Power Rodding, has begun preparatory cleaning.

This can also be emailed to you!

5) Digester Mixing and Cleaning

We have ordered a replacement for the Digester 4 Pearth mixing equipment and housing located on the Digester 4 cover. Other cleaning and piping for Digesters 3 and 4 is now complete. The FY 16-17 budget includes money for mixing and piping improvements in Digester 1.

This can also be emailed to you!

GENERAL MANAGER'S REPORT TO EMPLOYEES

Personnel

The District is in the process of finalizing interviewing for the open part-time secretary position in the office.

Employee Benefit Statement

A memo and statement regarding the value of the benefits you received in 2015 as an employee of the District will be provided to full-time employees next week.

Retirement Dinner

Bev Fleming's official last day of employment with the District will be March 31. In recognition of her 28 years of service with the District, we will be providing a dinner at the Suparossa Restaurant, Woodridge, on Friday, March 11th, at 5:30 p.m. (food served at 6:00 p.m.). This is a reminder to turn in your sign-up sheet by March 8.

Time Change - Spring Ahead

Please note that Daylight Saving Time begins on Sunday, March 13 and that clocks should be turned forward one hour.

Anti-Harassment Training

This training is being performed by Clark Baird Smith LLP and has been scheduled for Monday, March 21 and Tuesday, March 22. A sign-up sheet has already been circulated.

Five Year Financial Plan and Appropriation Ordinance

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DuPage County River Sweep

DuPage County River Sweep 2015 is scheduled for Saturday, May 21 from 9:00 a.m. to noon. River Sweep is a countywide stream clean-up on an annual basis. The purpose of River Sweep is to encourage citizens and volunteer groups to help "sweep our rivers clean" by picking up debris

This can also be emailed to you!

in and along our waterways. Please let Clay know if you would like to join us for this important volunteer effort. Your family members are also welcome. There will be additional sign-up information in the next month.

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We have ordered a replacement for the Digester 4 Pearth mixing equipment and housing located on the Digester 4 cover. Other cleaning and piping for Digesters 3 and 4 is now complete. The FY 16-17 budget includes money for mixing and piping improvements in Digester 1.

6) Westmont Alley Sewer Replacement

In conjunction with I/I removal in the 1-K-028 area, sewer main replacements in the area will begin starting in FY 16-17. Baxter & Woodman is currently designing the replacement of the alley sewer between Cass and Lincoln, north of Burlington.

This can also be emailed to you!

GENERAL MANAGER'S REPORT TO EMPLOYEES

WWTC Operations Data – February

The DMR for February indicates that the final effluent averaged 1.2 mg/l CBOD, 0.5 mg/l suspended solids and 0.08 mg/l ammonia nitrogen over a daily average flow of 10.54 MGD. There were no permit excursions in February.

Sewer Permits – February

There were 13 sewer permits issued in February – 6 single family, 1 commercial, 1 repair and 5 disconnections.

Financial Data - February

In February, the District received \$512,437 in the General fund, including \$224,550 in user charges, \$19,444 in surcharges and \$240,750 in monthly fees. General fund expenses totaled \$491,058. The Improvement fund had revenues of \$6,501 and expenses of \$0. The Construction fund had revenues of \$1,825 and expenses of \$553.

Personnel

Karen Vana, the District's new part-time secretary started on Thursday, March 10.

Anti-Harassment Training

This training is being performed by Clark Baird Smith LLP and has been scheduled for Monday, March 21 and Tuesday, March 22. The schedule for training is posted at each of the time clocks.

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in and along our waterways. Please let Clay know if you would like to join us for this important volunteer effort. Your family members are also welcome. There will be additional sign-up information in the next month.

TopHealth

The April issue of TopHealth is enclosed.

Group Health Insurance

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This can also be emailed to you!

February 23, 2016

RECEIVED

FEB 2 9 2016

DOWNERS GROVE SANITARY DISTRICT

Mr. Wallace Van Buren, President Downers Grove Sanitary District P.O. Box 1412 Downers Grove, IL 60515

Dear Mr. Van Buren,

We, members of the board and owners of Acadia on the Green Building III condominiums, at 935 Burlington Ave., Downers Grove, 60515, based on our experience with the Lemon Tree Grocer(LT)/Zest Bistro and its business and property owners, have the following concerns as they propose to change the use from grocery store/cafe to full scale restaurant, with a reduced "grab 'n go" grocery area. While supportive of a potentially thriving community business, we are asking review by all appropriate agencies to assess the impact this change will have on neighborhood residents and our property, to which this business is attached. Our concerns are based on continuing issues that have been problematic since the opening of Lemon Tree, more than five years ago, and have yet to be resolved. They are as follows:

- Sanitary/Sewer/Grease waste triple basin.
 - o Inadequate capacity and maintenance has led to backup and overflow of sewage on numerous occasions in the basement garage common to buildings III and II.
 - Potentially increased sewage and grease waste requires reassessment of need
- Kitchen exhaust fan/roof safety
 - Historically the kitchen exhaust fan and the grease trap basin (located on the roof of building III) have not been maintained as required by Downers Grove Sanitary District.
 In addition, there is concern that they are not designed to handle the increased use by a full scale restaurant.
- Plumbing leakage
 - Waste water pipes not properly pitched
 - Proper insulation of refrigerant pipes to prevent condensation from dripping on to vehicles in basement garage
 - Removal of plumbing, waste, and refrigerant pipes that will no longer be used, and plug all holes from basement garage ceiling
- Freezers inadequately insulated causing leakage in garage
 - Cooler/freezer rooms floors need to be insulated to prevent condensation dripping from basement garage ceiling on to vehicles
 - Condensation within the concrete ceiling is also quite possibly causing mold to grow and rebar to rust

- Outside storage
 - Historically LT has used the area outside their back door for additional storage and it
 has been unsightly for residents in building II, that face them directly. A larger corral
 and an overhead trellis are suggested.
- Dumpster/Trash Area/Increase in amount of garbage and upkeep
 - The existing trash area is inadequate and also unsightly to residents living on the south side of building III. In addition, when the weather is warmer the odor emitted is restrictive to residents' use of balconies and opening of their windows. Roll away dumpsters and an enclosed dumpster bin are suggested.
- Business hours of operation
 - Are hours of operation allowed to extend beyond 10:00 P.M.?
- Noise
 - 10:00 P.M. outdoor service curfew not always enforced in the past. Residents' bedrooms are directly above
- Smoking
 - o Employees of LT smoke in non-smoking area after hours, which affects residents
- Litter
 - Increased traffic = increased litter on the grounds

In closing, Lemon Tree promotes itself as a "good neighbor" however, in the past unfortunately that has not always been the case. So that we may continue to support them, we request your review of our concerns in earnest, and ask that they be addressed prior to the issuance of any permits associated with their expansion as a full-service restaurant.

Thank you for your consideration of our concerns and if you have questions or require additional information, please contact any of the Acadia on the Green III board members.

Respectfully Submitted,

Acadia on the Green III Condominium Board

O maeand

Sam Macauda, President sam.mac@comcast.net 630-768-6979

Louise Robson, Secretary weezabee@hotmail.com 630-408-8646

Louise J. Rog son

Jonathan White, Treasurer

Werner Weiss Don Mullen

Acadia on the Green III Owners

Unit #	Printed Name	Signature .
103		
104		
105	Steve Northpup Jill Worthrup	D. Northnep W
106		
107	(unis Greeny	(a4) (a)
108	Lydia Han	Lydie Hom
109	Jesty Generali	Mount
110	Joe Cerda	Hoon

Unit#	Printed Name	Signature
201	Wolfer BLAZE,	1) Blogg
202	Sandy Mc Comas	Sandy Mc Comas
203	Alex Munsuz Amber Murusurz	diex A A
204	James starya	JAMES STELLA
205	Geoff Eccles.	Stoff Eccles in
206	Due Macaude	Zusu Macauda
207	Dan Gorsky	Dush
208	Ken miller	Ken milen
209	Painel SHuzman	Pamela SHusman
210	Don Mullen	Don Mullen
211	Robert Amble	Restoc
212	Eleanore Brescia	Eleanore Brascia

Unit #	Printed Name	Signature
301	Carol Meilahn	Caro Mailela
302	Stan Welli	Stan Wille
303	Stophanie Vinda	Slephanie My Vi
304	Constance BLACK	Ima Weis
305	TINA WEISS WERNER WEISS	Ima Weiso
306	Richard Citro	Richard Cotro Mi
307	Jim Barron	
308	Lisa Linelt	Lisa Linds
309	MAUREEN NELSON	Maureen Nelson
310	MICHAEL GINGE	MA M.
311	Ryan McCrone	DE MCL
312	:Margaret Kunkel	Margaret Karke

Unit #	Printed Name	Signature
401	Chestar Popos	Christ L
402	Thomas Curatolo	Thoo al
403	JII L ALEANDE 12	THE MA
404		
405	MARILTON CROSSMAN	MS-k-
406	MAUREEN PERRI	7 - 5
407	EARL C. CLARK.	- Emfly
408	Solange Mentzer	Silange Mentzer
409	Lindsay Campbell	Jam
410	-eunine Elkin	Duanere Elken
411	Mark DiPasquale	and Ital
412	Carol Onen	Carl Chen

Board of Trustees
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Nicholas J. Menninga
General Manager
W. Clay Campbell
Administrative Services
Director
Legal Counsel

Michael G. Philipp

Providing a Better Environment for South Central DuPage County

MEMO

TO: Board of Trustees

FROM: Nick Menninga, General Manager

DATE: March 18, 2016

SUBJECT: Proposal for Solar Power Supply

Last month, DGSD participated in a group Request for Proposals (RFP) with other IAWA and CSWEA members to solicit proposals for solar power for a number of wastewater treatment facilities in Illinois. The RFP was prepared by The Power Bureau, whose services were funded under contract with the Midwest Renewable Energy Association.

A single proposal was received for supplying electricity at DGSD's facilities. The proposal from Convergence Energy LLC of Lake Geneva Wisconsin is attached.

The proposal includes 2 options: supply of solar photovoltaic (PV) generated electricity at the WWTC and the Northwest Lift Station (NWLS), vs. supply of solar PV-generated electricity at the WWTC only. The proposed facilities are high-grade ground-mounted PV panels on available space at the two locations. The facility at the NWLS is sized to supply roughly 60% of the electricity used at the site by the lift station. The facility at the WWTC is sized to supply roughly 25% of the electricity currently supplied by ComEd.

The proposal is financially structured to maximize available incentives, which results in a unit price proposal per kwh supplied in the form of a Power Purchase Agreement (PPA). Other financial arrangements result in significant increases in per kwh costs associated with solar PV. The most economical option would provide solar-powered electricity at a cost of 4.9 cents per kwh over a 20 year period for both sites. The executive summary of the proposal suggests that this would create a cost savings for the District, but that suggestion is based on the assumption that all electric charges are paid on a per kwh unit price basis, which is not the case.

The current cost of electricity is divided into two components, a unit price and a peak demand charge. Solar power would off-set the current unit pricing (4.05 cents per kwh), but would not off-set the peak demand charge, since the peak demand across the meter would be expected to remain the same as current levels. Peak demands are incurred during storm events, with significant cloud cover, and independent of day or night light conditions. The proposed battery storage (less than 1 hour at the WWTC, and roughly 5 hours at NWLS) appears insufficient to create a consistent reduction in peak demand needs from ComEd.

The CHP phase 2 project can also be compared by combining the annual depreciation, maintenance costs and expected REC sales of the equipment to derive a unit price cost. Expected operation of the CHP

March 18, 2016 Page 2 of 2

equipment can be estimated and projections of expected cost savings in electric purchasing can be estimated, as well. With a 20-year depreciation schedule, the CHP is expected to make electricity at a cost of about 3.5 cents per kwh.

Unlike the solar PV equipment, this equipment is expected to off-set a portion of the peak demand charge, because it is operated continuously, regardless of weather or daylight conditions. If operated concurrently, the solar PV system would result in reduced use of the CHP equipment, including flaring of excess digester gas.

The proposal did not include an option for only the NWLS. It appears that such an installation would have a significantly higher unit price cost, making it less attractive. In addition, the facility alone is likely too small to attract this type of investment.

The following table summarizes the components and overall cost of electricity calculated on a per kwh basis, comparing continuing with existing conditions (assuming 1% escalation of electric supply costs), the best solar pricing as a stand-alone project, the CHP project, and the solar PV and CHP projects operated together.

Option	Overall Unit Cost, cents per kwh	Overall Demand Cost, cents per kwh	All-in cost, cents per kwh
Continue Existing	4.4	3.4	7.8
Solar PV	4.6	3.4	8.0
CHP alone	3.7	1.7	5.4
CHP and PV	3.9	1.7	5.6

The premium for solar PV would be about 0.2 cents per kwh, which represents about \$7,000 in additional cost per year. I have also assessed the sensitivity of the project to the possible range of sREC prices expected from the pending auction being held by the Illinois Power Agency later this month. The offered price is based on an assumed price of \$100. An overly optimistic prediction of \$200, well outside the range of historic auction prices, would make the solar option slightly better, with a rough annual savings of \$3,000. This does not appear to be enough savings to off-set the cost of accommodating the vendor on our property, and the value of occupying land that may be needed for future process improvements at the WWTC.

At this time, it appears that there is no financial incentive to further pursue solar PV as proposed.

I am including this memo as an informational item in the March, 2016 Board packet.

C: BOLI, WCC, MGP



Solar PV System PPA Proposal

New Solar Generating Facility for

Downers Grove Sanitary District

Submitted: 3/2/2016



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Table of Contents

1) EXECUTIVE SUMMARY:	3
2) GENERAL TEAM INFORMATION & FIRMS DATA	4
3) TECHNICAL QUALIFICATIONS	5
4) PROJECT PROPOSALS	6
A. Project Approach	6
B. TECHNICAL PROPOSAL	10
C. FINANCIAL PROPOSAL	16
5) FORM OF OFFER LETTER	19
6) DISCLOSURE FORM	2
7) APPENDIX:	2
A. Project Timeline	2
B. SITE PLAN	2
C. PRODUCT CUT-SHEETS	



1) Executive Summary:

Convergence Energy LLC in conjunction with Continental Electrical Construction Company and Solar Power & Light LLC are pleased to offer the Downers Grove Sanitation District an Intelligent Solar Power Purchase Agreement (PPA). In addition to the solar array, the Intelligent Solar platform provides an Energy Storage System (ESS) or battery that helps drive down the overall cost of the electricity that is in turn passed on to the District in the form of lower cost electricity. We propose to design, engineer construct, finance, and maintain/operate the system for a period of 20-years at which time the PPA can be renegotiated, purchased or removed at the discretion of the District. As with any distributed solar project, the Intelligent Solar system will be integrated into and back-feed the facility load.

Intelligent Solar projects generate significantly higher revenue by being part of a network of Distributed Solar and Energy Storage Systems across a broad geographic area. Intelligent Generation LLC, our software partner, bids these networked storage assets into wholesale power markets (PJM) and earns revenues for investor/owners through fast response frequency regulation as well as other services, which in turn benefits the host, in this case the DeKalb Sanitation District. Facilities with solar arrays generate energy that partially offsets electricity expenses, additionally, Intelligent Solar augments solar savings by optimizing the ESS that can reduce both demand and capacity charges, again, providing a lower PPA rate to the District.

Although not widely known, conventional solar generation is disabled during electrical outages (for safety considerations) requiring costly diesel generators for back-up power. Intelligent Solar can provide an additional benefit of back-up power to protect critical loads. Critical load examples include IT, security, or communication infrastructure and would be identified at the time a detailed engineering plan is generated.

The team has over 30+ years of combined solar experience and Continental Electric is one of the largest electrical contractors in the Midwest serving its customers for over 104-years. The team was recently awarded the Illinois Municipal Electric Agency (IMEA) PPA Intelligent Solar Project, consisting of a 584kW array and 880kW ESS, installation will commence in the spring of 2016. Depending on the type and size of a project, the team has access to financing from multiple sources providing a competitive bidding process among potential investors helping drive lower PPA rates for our clients.

After carefully reviewing each of the locations, our proposal provides the District with two options. Option 1 combines the Walnut Avenue and the NW Lift Station under one PPA. Option 2 is for the Walnut Avenue location only. Based on our assumptions, which are listed below, we estimate our system proposals would save



the District somewhere between \$843,000-\$997,000 over the 20-year term with PPAs ranging from \$0.059kWh - \$0.0636kWh.

The time allotted for responding to the RFP did not allow for a site assessment and thus certain assumptions were made in our proposal. It is our professional opinion that most issues will not cause any significant deviation from our proposal.

The following assumptions were made and will need to be confirmed should the District consider our proposal as an option for further consideration:

- There is sufficient infrastructure to accommodate the system size
- Soil conditions are favorable for a ground installation as proposed
- Assumes \$0.717kWh all-in current cost of electricity (cost was not included in RFP documentation, we estimated based on load information and tariff)
- Utilizing existing facility fencing (assumes 8' to conform with NEC)
- Utilize approximately 25 SF of NW Lift Station utility room space for location of batteries and inverter.
- 3.5% electricity inflation of grid power (historical average)

2) General Team Information & Firms Data

Convergence Energy, LLC is a Wisconsin-based solar developer with expertise in design, construction, finance and administration, with deployments in government, commercial, residential and solar farms. Examples include a 660kW solar farm in Delavan, WI and the 100kW façade of the Milwaukee Public Museum. Depending on the scope of the project Convergence will bring in partners to meet or exceed the demands of any given project, regardless of size.

Continental Electrical Construction Company is the number-one electrical construction company in Chicago as well as one of the largest in the Midwest. Continental's safety experience modification rate (EMR) consistently is among the lowest in the industry. They have significant labor agreement experience and are signatories on twelve Midwest union locals. Included in their project portfolio are 1MW and 750kW IKEA roof-tops in Chicagoland. They are a NABCEP certified contractor.

Solar Power & Light LLC is an integrated energy management company with specialization in project finance and development. SP&L has focused on the public entity sectors such as schools, colleges, and municipalities assisting them in cutting costs, hedging risk, and meeting their sustainability goals. SP&L currently has10MW of distributed solar under management including 500kW with the city of Cincinnati and 488kW at Ansonia School District, both in Ohio.

Intelligent Generation LLC is a Chicago-based software company. Its patented algorithms optimize a "virtual power plant" of Networked Generation and Energy



Storage Systems to provide superior returns for owners through revenues generated in the wholesale power markets. IG's first projects were installed in 2008 with ComEd's Smart Home Showcase residential pilot. These were followed by commercial installations at S&C Electric and Continental Electric Construction Company in 2014/15. As noted above, the first utility scale project includes a 584kW solar array and 880kW ESS which will go online in mid-2016. IG has over 50 MW in its pipeline, consisting of commercial, industrial and municipal projects across the mid-central United States.

Team Members and Contact Information:

- 1) John Kivlin, Convergence Energy:
 - a) Address: N1595 Hardwood Drive, Lake Geneva, WI 53147
 - b) Design/Engineering/Project Manager
 - c) Founded in 2008, 1.4MW of installed solar
- 2) Steve Johnson, Convergence Energy:
 - a) Address: N1595 Hardwood Drive, Lake Geneva, WI 53147
 - b) Single Point of Contact/Project Administration
 - c) Founded in 2008, 1.4MW of installed solar
- 3) Brian Haug, Continental Electric
 - a) 815 Commerce Drive, Oak Brook, IL 60523
 - b) Installation/Construction
 - c) Founded in 1912, 2.1MW of installed solar
- 4) Brent Boyd, Solar Power & Light:
 - a) Address: 2411 Crosspointe Drive, Miamisburg, 45342
 - b) Project Financing & Administration
 - c) Founded in 2010, 10MW of installed solar
- 5) Marc Thrum, Intelligent Generation LLC
 - a) Address: 100 N. Riverside Plaza, Boeing building, Suite 1670, Chicago, IL 60606
 - b) Software Services
 - c) Founded in 2009

3) Technical Qualifications

In addition to the portfolio of projects described in the document, the following describes a recently completed Intelligent Solar installation at Continental's corporate headquarters in Oak Brook, IL. Additionally, as noted, our team will begin construction of the St. Charles Intelligent Solar project this spring. Materials for the project, including the PV modules and ESS, wear procured from a variety of product suppliers through distributors in the Chicagoland area.



The overall project consists of a 55kW PV DC photovoltaic rooftop system, coinstalled with an 114kWh Lithium ion Energy Storage System (ESS). During power outage situations, the system will island itself from the grid and allow both the PV plant and the ESS to provide backup power to critical loads. During normal grid-tied operation, the ESS will be actively and remotely managed in order to augment the project's economic benefits.

The most frequent use of the ESS is fast response frequency regulation in PJM. Other uses such as capacity or demand reduction will only generate about 100 deep cycles per year, down to the lowest cut-off State of Charge (SOC) % recommended by the ESS supplier. When performing regulation, about 7500 hours per year, the battery can be expected to be centered daily around 70% SOC with energy swings that will be keep the battery within 60-80% SOC. A documentation package is included in the Appendix.

4) Project Proposals

A. Project Approach:

Design

Design and engineering tasks will be completed by in-house designers and Professional Engineers licensed in the State of Illinois in accordance to the National Electrical Code (NEC) and local ordinances. Permit drawings will be submitted to the District for review and approval. Product cut sheets including but not limited to PV modules, inverters, racking systems, and Energy Storage Systems (ESS) will also be submitted for approval. The design of the PV systems will be for 1,000V systems in accordance with the 2014 NEC.

Quality Policy Objective:

The objective is to ensure that each employee understands that he or she is accountable and responsible for quality and empowered to ensure that customers' needs and expectations, as expressed in the contract documents, are met.

Quality Policy Dissemination:

The quality policy is posted in conspicuous places throughout the home office and at all job sites. This policy is reinforced verbally at all company and job site meetings that deal with quality and



continuous improvement. A copy of our QAQC manual is given to each member of the Project Team.

Corporate-Level Responsibility:

The primary responsibility for quality is the Quality Steering Committee which consists of the following members of senior management:

- Director of Electrical Services Rick Marder
- Director of Field Operations Brian Swaitek

The Corporate Quality Steering Committee is responsible for ensuring that the organization adopts and adheres to the quality policy of the District's project. The Corporate Quality Steering Committee is also responsible for getting feedback from customers and ensuring that Continental Electrical Construction Company is a quality organization committed to customer satisfaction and continuous improvement.

Project-Level Responsibility:

The Project Manager and Field Site Supervisor assist the Corporate Steering Committee. The Project Manager and Field Site Supervisor are responsible for overseeing quality in the field and customer satisfaction. Some of the functions that they will be responsible for are: overseeing work force and installation, determining the "right size work crews", work sequence, photographs (specifically for underground runs), verify underground conduit runs before backfill, identify and manage the requirements for "winter conditions" installations, verifying that the installation matches the coordination drawings, provide certified installers where required, prepare MOP's, oversee mock-ups, and general oversight of project installation including special provisions below.

Individual Responsibility:

The key to the successful implementation of any quality assurance program is the individual employee. The employee performing the work is the only person who can truly control quality during the construction process. Continental empowers employees to control quality through its quality policy and encourages open



communications between employees and management about quality improvement.

Quality System Objectives:

The objectives of the quality system are fourfold:

- Provide a safe and productive work environment for employees.
- Provide a quality electrical installation that meets the customer's needs and expectations as expressed in the contract documents.
- Avoid rework and delays during construction through early detection and correction of problems.
- Support the achievement of the corporate mission and strategic objectives.

The quality program consists of the control of the following QA processes:

- Contract Document Review
- Procurement & Expediting
- Tool & Equipment Maintenance, Calibration, & Testing
- Materials & Installed Equipment Management
- Construction Management
- Special provisions specific to this project
- Inspection, Pre-Startup, and Startup, Testing, & Commissioning Assistance

We encourage the local electrical inspectors and fire officials to visit each site regularly. It is our practice to work hand-in-hand with the local authorities to educate where necessary and to ensure these authorities are comfortable with and agree with our installation practices. Additionally, our field foreman, project manager, and our Director of Field Operations ensure compliance with our formal QA/QC Plan (available on request).

Corporate Safety & Loss Control Program:

Individual and site specific safety procedures will be created for each project site. These procedures will identify the closest medical clinic, special precautions for the site, and required training such as fall protection as applicable. Weekly safety talks will be conducted for



our electricians on site. Barriers, harnesses, and retractable lanyards are used for fall prevention. All employees are required to read and understand our safety manual (attached) and to follow the practices within. Continental Electric is a 100% hardhat, eye protection, and hand protection company.

Continental Electric is a subscriber to ISN and has a passing grade. Continental Electric implements a formal accident prevention plan for every job site to promote and ensure worker safety. Our experience modification rate (EMR) currently is .58, among the lowest in the industry. We have identified that safety has to be ingrained in our culture. To that end, we have established a safety committee that consists of representatives from all facets of our company. Ownership, management, supervisors and project managers, along with advisors from our insurance broker and carrier meet on a regularly scheduled basis.

In addition to numerous safety commendations from customers, Continental has received the Lake County Illinois Contractors Association Award for best safety record for six consecutive years.

We require that a 30 hour OSHA trained supervisor be on site at all times when we have electricians working at a site. Hard hats, glasses, and gloves are to be worn by each individual while on site. Weekly toolbox talks are conducted covering a multitude of topics including lockout/tag out, arc flash, CPR, GHS/MSDS, and others. A copy of the Safety Handbook is available upon request.

Construction Management & Communication:

One of our experienced project managers from our Energy Solutions Division will be responsible for the management and execution of these projects. In conjunction with the field general foreman assigned to this project, they will be in charge of day-to-day operations. The project manager will handle all correspondence with the owner's office including but not limited to contract management, submittals, RFI's, billing, and general correspondence. The field general foreman will handle all field coordination issues, material handling, labor relations, inspector relations, and project installation oversight.



B. Technical Proposal

All Systems proposed under this RFP conform to industry best practices and the requirements.

1. Proposed System Overview:

As described previously in the Executive Summary, the proposed system includes both a Solar Array and Energy Storage System. We have provided two options for the District's consideration.

Option 1 combines the Walnut Avenue and the NW Lift Station under one project with a Solar Array and Energy Storage System at each location under one PPA. This option provides the greatest overall savings, \$997,316, although the PPA rate is slightly higher (\$0.0636kWh) over the 20-year term. This is due to the fact the fixed costs associated with the NW Lift Station are very high while the physical plant is very small which is just the opposite for Walnut Avenue location. The following table provides a high level overview.

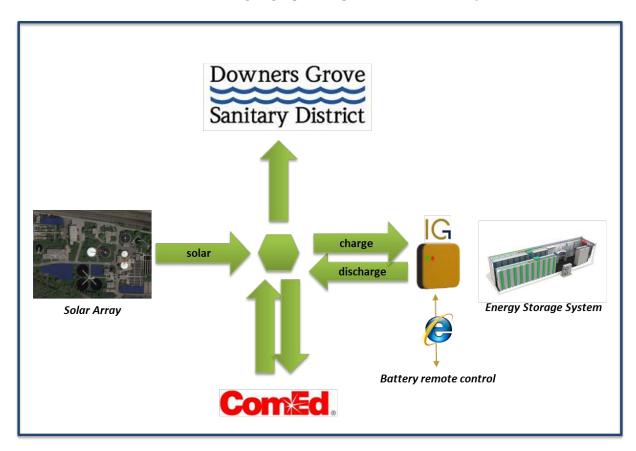
Option 1: Walnut Avenue & NW Lift Station		
kW DC Capacity	720.72	
kWh AC Output Year 1	950,327	
kWh AC Output 20-Years	18,103,729	
Mounting Ground Fixe		
Total Area Requires sq/ft	112,080	

Option 2 is for the Walnut Avenue location only and provides the best overall PPA rate, \$0.059kWh, with savings of \$843,676 over the 20-year PPA. Again, this is a result of spreading the fixed costs over a much larger Solar Array and Energy Storage System.



Option 2: Walnut Avenue	
kW DC Capacity	564.48
kWh AC Output Year 1	739,638
kWh AC Output 20-Years	14,090,107
Mounting	Ground Fixed
Total Area Requires sq/ft	88,080

The following is graphic depiction of how the system works.



2. Proposed Equipment List:

All components supplied are high quality Tier-1 products and available per the project schedule included in the proposal. Cut sheets provided in Appendix as a separate file.



Site Name	Option 1: Walnut Avenue & NW Lift Station
System Size (kW DC)	720.72
Year 1 Production (kWh)	950,327
Yield (kWh/kW DC)	1,319
Annual Site Usage (kWh)	4,430,417
Load Offset (%)	21%
PV Modules	UpSolar
Model	UP-M315P
Nameplate (Watts DC)	315 ea
Quantity	2,288
Inverters	Ingeteam
Model	Ingecon Sun 3Play 40 TL U 480VAC
Nameplate (kW)	40 ea. 600kW total
Quantity	15
Mounting System	AP Alternatives
Model	ReadyRack
Monitoring System	Also Energy
Model	Deck All-in-one DAS
Quantity	1
Model	PVMet-200 Weather Station
Quantity	1
Model	WattsOn-Mark II Revenue Grade Power Meter
Quantity	1
Battery (Walnut Avenue)	Johnson Controls Inc.
Model	L2000 (455 kWh)
Quantity	1
Inverter	Ingeteam
Model	Sun Storage 880
Quantity	2
Battery (NW Lift Station)	Johnson Controls Inc.
Model	L1000 (130 kWh)
Quantity	2
Inverter	Ingeteam
Model	Sun Storage 250
Quantity	1

Site Name	Option 2: Walnut Avenue Only
System Size (kW DC)	564.48
Year 1 Production (kWh)	739,638
Yield (kWh/kW DC)	1,310

N1595 HARDWOOD DRIVE	LAKE GENEVA. WISCONSIN 53147-3914	T: 262.997.6363



Annual Site Usage (kWh)	4,151,754
Load Offset (%)	18%
PV Modules	UpSolar
Model	UP-M315P
Nameplate (Watts DC)	315 ea
Quantity	1,792
Inverters	Ingeteam
Model	Ingecon Sun 3Play 40 TL U 480VAC
Nameplate (kW)	40 ea. 480kW total
Quantity	12
Mounting System	AP Alternatives
Model	ReadyRack
Monitoring System	Also Energy
Model	Deck All-in-one DAS
Quantity	1
Model	PVMet-200 Weather Station
Quantity	1
Model	WattsOn-Mark II Revenue Grade Power Meter
Quantity	1
Battery	Johnson Controls Inc.
Model	L2000 (455 kWh)
Quantity	1
Inverter	Ingeteam
Model	Sun Storage 880
Quantity	1

3. Monitoring System Preliminary Design:

The Ingeteam inverters utilize Modbus over RS485 and are interconnected to one inverter with an Ethernet card. This configuration allows for an effective, reliable to aggregation pertinent performance data from each sub-array. Also connected to the LAN is the Deck Monitoring All-In-One Box the revenue grade power meter and a weather station including wind speed, wind direction, air temperature, cell temperature, irradiance POA (Plane of Array) and irradiance GH (Global Horizontal).





The Deck All-In-One Box connects to the Cellular modem or facility LAN for access to the internet.

4. Monitoring / Data presentation Information:

DECK Monitoring provides a user-friendly software layer with PV monitoring toolkit of analytics, alarms, and reports that meet or exceed the RFP requirements. Examples include: Instantaneous AC system output, PV System production (kWh) over configurable pre-defined times, detailed individual inverter performance, and system availability. It comes standard with customizable displays for kiosks and other public-facing "dashboard" applications (live example: http://live.deckmonitoring.com/?id=milwaukee_public_museum) It has customizable graphing/reporting tool to analyze any of data from the sensors or inverters. These can be pre-set for monthly reports or frequent ad-hoc queries. The Dashboard Editor can be configured to create custom invoices for monthly power production. Finally, customized alarms will be configured to alert the designated users any time that there is a performance issue. (refer to cut sheets for detail)

5. Supporting Data:

Equipment list and detail included in section B2. Following are the production estimates created using NREL SAM modeling tools.

Bidder: Convergence Energy	Option 1: Walnut & NW Lift	
	Guaranteed	Estimated
	Annual kWh	Annual kWh
Year 1	855,294	950,327
Year 2	851,018	945,575
Year 3	846,741	940,824
Year 4	842,465	936,072
Year 5	838,188	931,320
Year 6	833,912	926,569
Year 7	829,635	921,817
Year 8	825,359	917,066
Year 9	821,083	912,314



Year 10	816,806	907,562
Year 11	812,530	902,811
Year 12	808,253	898,059
Year 13	803,977	893,307
Year 14	799,700	888,556
Year 15	795,424	883,804
Year 16	791,147	879,052
Year 17	786,871	874,301
Year 18	782,594	869,549
Year 19	778,318	864,798
Year 20	774,041	860,046

Bidder: Convergence Energy	Option 2: Walnut Avenue Only	
	Guaranteed	Estimated
	Annual kWh	Annual kWh
Year 1	665,674	739,638
Year 2	662,346	735,940
Year 3	659,018	732,242
Year 4	655,689	728,544
Year 5	652,361	724,845
Year 6	649,032	721,147
Year 7	645,704	717,449
Year 8	642,376	713,751
Year 9	639,047	710,053
Year 10	635,719	706,354
Year 11	632,391	702,656
Year 12	629,062	698,958
Year 13	625,734	695,260
Year 14	622,405	691,562
Year 15	619,077	687,863
Year 16	615,749	684,165
Year 17	612,420	680,467
Year 18	609,092	676,769
Year 19	605,764	673,071
Year 20	602,435	669,373



C. Financial Proposal:

We are pleased to provide the following team projects that support our ability to build, own, finance, and operate the Downers Grove Sanitary District's Proposed Solar Power Generation Systems. In addition to having the relationships to fund solar projects, our technology offering provides our investment partners with higher rates of return than standard solar offerings. Our proposal methodology is in the form of a PPA and does not include a cash purchase option (we can provide that option if desired but the returns are not attractive based on the tax credits and depreciation the district cannot monetize as a non-profit entity).

The following portfolio of projects completed by the team members demonstrates that we have access to capital on terms and conditions that will provide the District with significant savings. They are as follows:

LOCATION	# Projects	kW-DC	Financing Type
Union City, OH	1	625	PPA
Cincinnati, OH	1	500	PPA
Delavan, WI	1	660	Direct Purchase
Schaumburg, IL	1	750	PPA
Bolingbrook, IL	1	1,000	PPA
TOTAL	5	3,535	

Project Experience Detail:

Project 1 (Solar Power and Light)

Location: Union City, OH

Size (kW-DC): 625kW

Client: Mississinawa Valley School District

Client Type (Comm./Gov.): Gov. Project Finance Type: PPA

Project Contact Name: Brent Boyd

Project Contact Email: bboyd@splsolar.com Project Contact Phone: (937) 247-9194

Partner Firms and Roles: Solar City Corporation, Financing Partner

N1595 HARDWOOD DRIVE

LAKE GENEVA, WISCONSIN 53147-3914

T: 262.997.6363



Project 2 (Solar Power and Light)

Location: Cincinnati, OH

Size (kW-DC): 500kW

Client: City of Cincinnati

Client Type (Comm./Gov.): Gov. Project Finance Type: PPA

Project Contact Name: Brent Boyd

Project Contact Email: bboyd@splsolar.com Project Contact Phone: (937) 247-9194

Partner Firms and Roles: N/A

Project 3 (Convergence Energy)

Location: Delavan, WI Size (kW-DC): 660kW

Client: Multiple Private Investors

Client Type (Comm./Gov.): Commercial
Project Finance Type: Direct Purchase
Project Contact Name: Thomas B. Martin

Project Contact Email: tmartin@nextscreen.com

Project Contact Phone: (512) 663-3994

Partner Firms and Roles: N/A

Project 4 (Continental Electrical Construction Company)

Location: Schaumburg, IL

Size (kW-DC): 750kW Client: IKEA

Client Type (Comm./Gov.): Commercial

Project Finance Type: PPA

Project Contact Name: Greg Palmer

Project Contact Email: gregory.palmer@ikea.com

Project Contact Phone: 630/972-9170

Partner Firms and Roles: SoCore, Project Developer

Project 5 (Continental Electrical Construction Company)

Location: Bolingbrook, IL

Size (kW-DC): 1,000kW Client: IKEA

Client Type (Comm./Gov.): Commercial

Project Finance Type: PPA

Project Contact Name: Greg Palmer

Project Contact Email: gregory.palmer@ikea.com

Project Contact Phone: 630/972-9170

Partner Firms and Roles: SoCore, Project Developer



Project Number: TBD

Project Name: Option 1: Walnut Avenue & NW Lift

Project Location: 5003 Walnut Avenue & 21W042 W Finley Road

Power Purchase Agreement (covers all Project costs including scheduled inverter replacement)								
Offer	Term	SREC Revenue	Annual Escalation Rate	PPA Rate (\$/kWh)				
A.	20 Years	All Project SRECs sold for five years at \$100/SREC	0%	\$0.049				
NOTES:								
B.	20 Years	No Project SRECs sold	0%	\$0.059				
NOTES:			•					

Project Number: TBD

Project Name: Option 2: Walnut Avenue Only

Project Location: 5003 Walnut Avenue

	Power Purchase Agreement (covers all Project costs including scheduled inverter replacement)								
Offer	Term	SREC Revenue	Annual Escalation Rate	PPA Rate (\$/kWh)					
A.	20 Years	All Project SRECs sold for five years at \$100/SREC	0%	\$0.0536					
NOTES:									
B.	20 Years	No Project SRECs sold	0%	\$0.0636					
NOTES:									



March 1, 2016

Downers Grove Sanitary District 2710 Curtiss Street Downers Grove, IL 60515-0703

Attn: Mr. Wallace D. Van Buren Reference: Request for Proposals

On-Site Solar Power Purchasing Agreement at District Facilities

Dear Mr. Van Buren:

On behalf of Convergence Energy (the "Offeror"), I am pleased to submit this proposal in response to the above-referenced Request for Proposals (the "RFP") issued by the Downers Grove Sanitary District (the "District"). The Offeror has reviewed the RFP and the attachments thereto, and any addenda thereto (collectively, the "Bid Documents") and has conducted such due diligence and analysis as the Offeror, in its sole judgment, has deemed necessary in order to submit its proposal in response to the RFP.

The Offeror's proposal and the cost components set forth on the attached spreadsheet are based on the Bid Documents as issued and assume no material alteration of the terms of the Bid Documents. (Collectively, the proposal and the cost components on the attached spreadsheet are referred to as the "Offeror's Bid".)

The Offeror's Bid is based on and subject to the following conditions:

- 1. The Offeror agrees to hold its proposal open for a period of at least one hundred twenty (120) days after the close of Phase 2 of this solicitation.
- 2. The Offeror represents that, based on the information set forth in the Bid Documents, the prices set forth in the Offeror's Bid represent prices at which the Offeror would be willing to enter into a transaction with the District. The Offeror acknowledges that the Offeror's Bid is one of the factors the District will use to shortlist bidders for Phase 2 of this Solicitation.
- 3. Both the Offeror and the undersigned represent and warrant that the undersigned has the full legal authority to submit this bid form and bind the Offeror to the terms of the Offeror's Bid. The Offeror further represents and warrants that no further action or approval must be obtained by the Offeror in order to authorize the terms of the Offeror's Bid.
- 4. The Offeror and its principal team members hereby represent and warrant that they have not: (i) colluded with any other group or person that is submitting a proposal in response to the

Page 2

RFP in order to fix or set prices; (ii) acted in such a manner so as to discourage any other group or person from submitting a proposal in response to the RFP; or (iii) otherwise engaged in conduct that would violate applicable anti-trust law.

- 5. The Offeror represents that its pricing proposals are based on full compliance with all applicable provisions of the Illinois Prevailing Wage Act and all attachments <u>as noted</u> in this RFP in Sec B.2.4.
- 6. This bid form and the Offeror's Bid are being submitted on behalf of Convergence Energy LLC, a Delaware Limited Liability Company.

Sincerely,

By:

Name: Steve Johnson

Its: Vice President

The Offeror and each of its principal team members, if any, must submit a statement that discloses any past or present business, familiar or personal relationship with any of the following individuals (please complete a separate Disclosure Form for each Districts to which the Offeror is submitting a response to the RFP):

A. <u>Districts</u> . Please identify any past or present business, familiar, or personal relationship in the space below.
Use extra sheets if necessary.
<u>NONE</u>
B. <u>Districts Board</u> . Please identify any past or present business, familiar, or personal relationship in the space below.
Use extra sheets if necessary.
NONE
This is to certify that, to the best of my knowledge and belief and after making reasonable inquiry, the above represents a full and accurate disclosure of any past or present business, familiar, or personal relationship with any of the individuals listed above. The undersigned acknowledges and understands that this Disclosure Statement is being submitted to the False Claims Act and that failure to disclose a material relationship(s) may constitute sufficient grounds to disqualify the Offeror.
OFFEROR:
Qt 11

Name: ___Steven J. Johnson

Title: ____Vice President

Date: ____March 2, 2016

PRIME CONTRACTOR CERTIFICATION FORM

The undersigned hereby certifies that _	Convergence Energy LLC
	Name of Bidder
Is not barred from contracting with any unit of Section 710 ILCS 5/33 E-3 or 720 ILCS 5/33 E-4 o	State or local government as a result of a violation of either of the Criminal Code of 1961.
Steven J. Johnson	Vice President
Name of Bidder	Title
St./h.	March 2, 2016
Signature	Date
Note: A person who makes a false certificate co	ommits a Class 3 Felony.
Sections 33E-3 and 33E-4 provide as follows:	

33E-3. Bid-rigging. A person commits the offense of bid-rigging when he knowingly agrees with any person who is, or but for such agreement would be, a competitor of such person concerning any bid submitted or not submitted by such person or another to a unit of State or local government when with the intent that the bid submitted or not submitted will result in the award of a contract to such person or another and he either (1) provides such person or receives from another information concerning the price or other material term or terms of the bid which would otherwise not be disclosed to a competitor in an independent non-collusive submission of bids or (2) submits a bid that is of such a price or other material term or terms that he does not intend the bid to be accepted.

Bid rigging is a Class 3 felony. Any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No

corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation as provided in paragraph (2) of subsection (a) of Section 5-4 of this Code.

33E-4 Bid rotating. A person commits the offense of bid rotating when, pursuant to any collusive scheme or agreement with another, he engages in a pattern over time (which, for the purposes of this Section, shall include at least 3 contract bids within a period of 10 years, the most recent of which occurs after the effective date of this amendatory Act of 1988) of submitting sealed bids to units of State or local government with the intent that the award of such bids rotates, or is distributed among, persons or business entities which submit bids on a substantial number of the same contracts. Bid rotating is a Class 2 felony. Any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation as provided in paragraph (2) of subsection (a) of Section 5-4 of this Code.

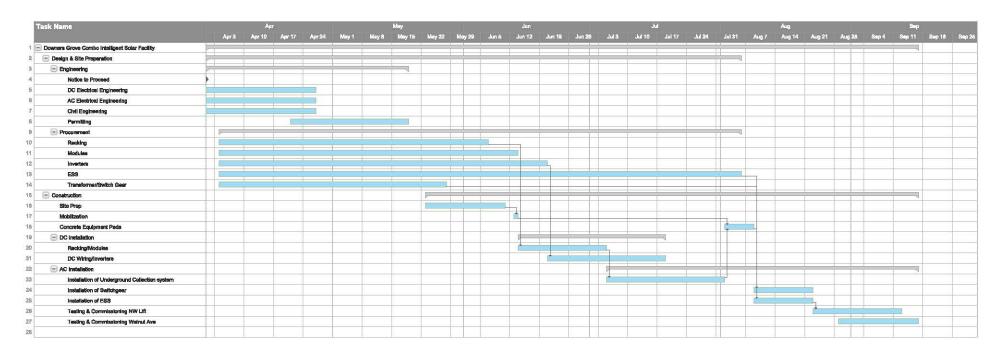


7) Appendix:

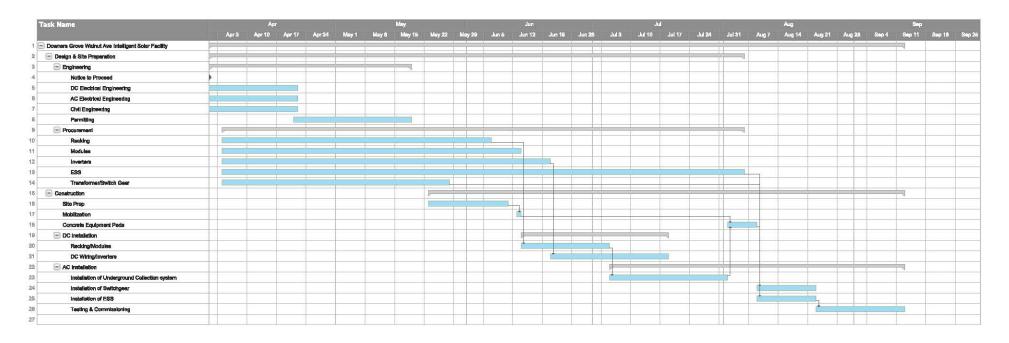
The following support documentation includes:

Project Timeline Site Plan Product cut-sheets

Downers Grove Combo Intelligent Solar Plan



Downers Grove Walnut Ave Intelligent Solar Plan



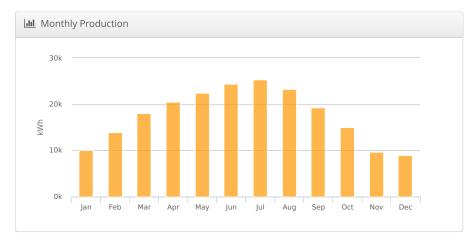


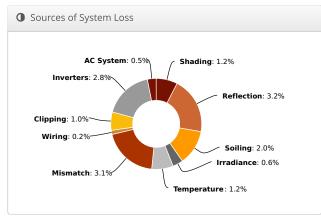
$Design \ 1 \ {\tt Downers \ Grove \ NW \ Lift \ Stat, 21W042 \ W, \ Finley \ Road, \ Lisle \ Township, \ IL}$

№ Report					
Project Name	Downers Grove NW Lift Stat				
Project Address	21W042 W, Finley Road, Lisle Township, IL				
Prepared By	John Kivlin john.kivlin@gmail.com				

Lill System Metrics					
Design	Design 1				
Module DC Nameplate	156.2 kW				
Inverter AC Nameplate	120.0 kW Load Ratio: 1.30				
Annual Production	210.7 MWh				
Performance Ratio	85.1%				
kWh/kWp	1,348.5				
Weather Dataset	TMY, 10km grid (41.85,-88.05), NREL (prospector)				
Simulator Version	153 (443094f0ad-ea93f843ef-fce6caf820- 00aa14f623)				







	Description	Output	% Delta		
	Annual Global Horizontal Irradiance	1,426.9			
Irradiance	POA Irradiance	1,585.0	11.19		
	Shaded Irradiance	1,565.7	-1.29		
(kWh/m ²)	Irradiance after Reflection	1,515.2	-3.29		
	Irradiance after Soiling	1,484.9	-2.09		
	Total Collector Irradiance	1,484.9	0.0%		
	Nameplate	232,087.9			
	Output at Irradiance Levels	230,711.0	-0.69		
	Output at Cell Temperature Derate	227,883.4	-1.29		
Energy	Output After Mismatch	220,720.3	-3.19		
(kWh)	Optimal DC Output	220,198.6	-0.29		
	Constrained DC Output	217,906.3	-1.09		
	Inverter Output	211,749.0	-2.89		
	Energy to Grid	210,690.0	-0.5%		
Temperature	Metrics				
	Avg. Operating Ambient Temp		12.3 °C		
Avg. Operating Cell Temp					
Simulation M	etrics				
Operating Hours					
		Solved Hours	4690		

Condition Set													
Description	Condition Set 1												
Weather Dataset	TMY	, 10k	m grid	(41	.85	5,-88.	05), N	REL (orosp	ector)		
Solar Angle Location	Met	eo La	t/Lng										
Transposition Model	Pere	z Mo	del										
Temperature Model	Sand	dia M	odel										
	Rac	k Typ	e	1	a		b		Te	mper	ature	Delta	
Temperature Model Parameters	Fixe	d Tilt			-3.5	56	-0.0	75	3°	3°C			
	Flus	h Mo	ount		-2.8	81	-0.0	0.0455		0°C			
Soiling (%)	J	F	М	Α		M	J	J	Α	S	0	N	D
	2	2	2	2		2	2	2	2	2	2	2	2
Irradiation Variance	5%												
Cell Temperature Spread	4° C												
Module Binning Range	-2.5% to 2.5%												
AC System Derate	0.50%												
Module Characterizations		Module					Characterization						
		UP-M315M (Upsolar) UP-M315M.PAN, PAN											
Component Characterizations													
Device						Characterization							
Ingecon Sun 40TL (Ingeteam Energy)	Default Characterization												



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☐ Components					
Component	Name	Count			
Inverter	Ingecon Sun 40TL (Ingeteam Energy)	3 (120.0 kW)			
Combiner	1 pole Combiner	3			
Combiner	10 pole Combiner	2			
Combiner	11 pole Combiner	1			
Strings	10 AWG (Copper)	31 (3,170.0 ft)			
Module	UP-M315M (Upsolar)	496			

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	16	Along Racking

₩ Field Segments								
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules
Field Segment 1	Fixed Tilt	Horizontal (Landscape)	15°	180°	8.8 ft	4x1	124	496

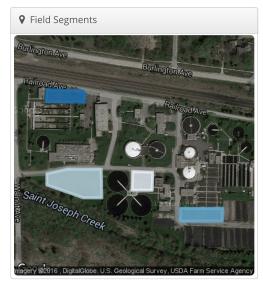


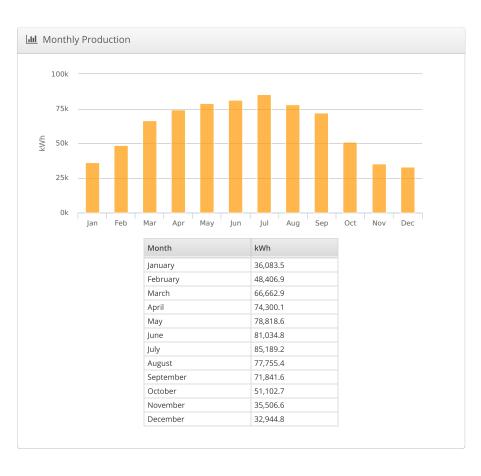


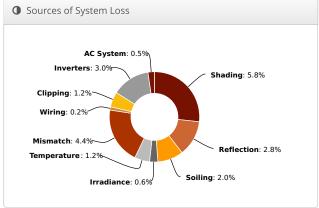
Design 1 Downers Grove Sanitary District, 5003 Walnut Avenue, Downers Grove, IL 60515

№ Report					
Project Name	Downers Grove Sanitary District				
Project Address	5003 Walnut Avenue, Downers Grove, IL 60515				
Prepared By	John Kivlin john.kivlin@gmail.com				

<u>IIII</u> System Metr	rics
Design	Design 1
Module DC Nameplate	564.5 kW
Inverter AC Nameplate	480.0 kW Load Ratio: 1.18
Annual Production	739.6 MWh
Performance Ratio	80.2%
kWh/kWp	1,310.3
Weather Dataset	TMY, 10km grid (41.75,-88.05), NREL (prospector)
Simulator Version	153 (443094f0ad-ea93f843ef-fce6caf820- 00aa14f623)







Annual Production Report produced by John Kivlin

7 Annual Production							
	Description	Output	% Delta				
	Annual Global Horizontal Irradiance	1,410.8					
	POA Irradiance	1,634.4	15.9%				
Irradiance	Shaded Irradiance	1,539.4	-5.8%				
(kWh/m ²)	Irradiance after Reflection	1,496.4	-2.8%				
	Irradiance after Soiling	1,466.5	-2.0%				
	Total Collector Irradiance	1,466.5	0.0%				
	Nameplate	828,148.7					
	Output at Irradiance Levels	822,796.0	-0.6%				
	Output at Cell Temperature Derate	813,124.8	-1.2%				
Energy	Output After Mismatch	777,237.1	-4.4%				
(kWh)	Optimal DC Output	775,315.1	-0.2%				
	Constrained DC Output	766,111.2	-1.2%				
	Inverter Output	743,364.0	-3.0%				
	Energy to Grid	739,647.0	-0.5%				
Temperature	Metrics						
	Avg. Operating Ambient Temp						
	Avg. Operating Cell Temp						
Simulation M	etrics						
		Operating Hours	4687				
		Solved Hours	4687				

Description	Con	Condition Set 1										
Weather Dataset	TMY	TMY, 10km grid (41.75,-88.05), NREL (prospector)										
Solar Angle Location	Met	Meteo Lat/Lng										
Transposition Model	Pere	ez Mo	del									
Temperature Model	San	dia M	lodel									
	Rac	Rack Type				b		Temperature Delta				
Temperature Model Parameters	Fixe	Fixed Tilt			.56	-0.075		3°C				
	Flus	sh Mo	ount	-2	.81	-0.0455		0°	С			
Soiling (%)	J	F	М	Α	М	J	J	Α	s	0	N	0
	2	2	2	2	2	2	2	2	2	2	2	2
Irradiation Variance	5%	5%										
Cell Temperature Spread	4° C	4° C										
Module Binning Range	-2.5	-2.5% to 2.5%										
AC System Derate	0.50	0.50%										
Module Characterizations	Мо	Module					Characterization					
Module Characterizations		UP-M315M (Upsolar)				UP-M315M.PAN, PAN						
omponent Characterizations												
Device			Characterization									
Ingecon Sun 40TL (Ingeteam Energy)			Default Characterization									

☐ Components						
Component	Name	Count				
Inverter	Ingecon Sun 40TL (Ingeteam Energy)	12 (480.0 kW)				
Combiner	1 pole Combiner	12				
Combiner	7 pole Combiner	1				
Combiner	8 pole Combiner	2				
Combiner	9 pole Combiner	5				
Combiner	10 pole Combiner	1				
Combiner	11 pole Combiner	2				
Combiner	12 pole Combiner	1				
Strings	10 AWG (Copper)	112 (11,996.1 ft)				
Module	UP-M315M (Upsolar)	1,792				

♣ Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone G	12	16	Along Racking
Wiring Zone H	12	16	Along Racking
Wiring Zone D	12	16	Along Racking
Wiring Zone I	12	16	Along Racking
Wiring Zone I	12	16	Along Racking

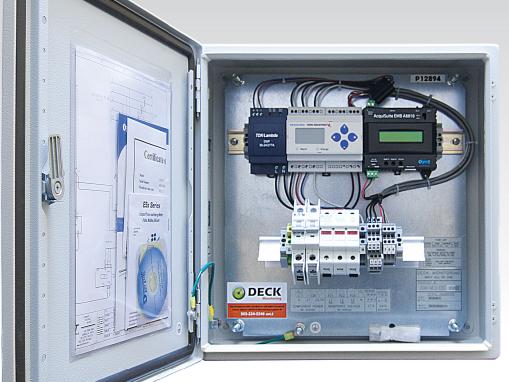
Ⅲ Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	
Field Segment G	Fixed Tilt	Horizontal (Landscape)	30°	180°	8.8 ft	4x1	212	848	
Field Segment H	Fixed Tilt	Horizontal (Landscape)	30°	180°	8.8 ft	4x1	92	368	
Field Segment D	Fixed Tilt	Horizontal (Landscape)	30°	180.895°	8.8 ft	4x1	84	336	
Field Segment I	Fixed Tilt	Horizontal (Landscape)	30°	180.895°	8.8 ft	4x1	60	240	





Convenient All-In-One Box Options

Get your monitoring hardware pre-wired and pre-configured in one weatherproof ready-to-install enclosure.



STANDARD MODEL

- UL-listed
- NEMA type 4 enclosure
- 90VAC-304VAC to 24VDC power supply included (2-wire with no ground)
- Fused & standard terminal blocks for power and CTs

- 15.75" (W) x 15.75" (H) x 8" (D)
- Quick connects for easy external connections
- Miscellaneous mounting hardware, wire, and DIN rail
- Includes core package hardware mounted and pre-wired inside: revenue grade e51 Power Meter from Veris; AcquiSuite A8810 gateway

ADDITIONAL OPTIONS

- Including CDMA cellular modem for web communications
 (For project sites without access to wired web network. CDMA service provider is Verizon.)
- Including GSM cellular modem for web communications
 (For project sites without access to wired web network. GSM service providers include AT&T and T-Mobile.)
- Higher Voltage Power Supply 200VAC-500VAC (3-wire including ground)



PVMET Weather Station

Solar Energy Efficiency Monitor

The **PVMET** series of weather stations were designed to meet the needs of alternative energy power generation, specifically solar generation. These station feature sensors and communication options that provide a power add-on to any solar power plant.

The **PVMET-200** is the intermediate level station option. It features sensors specific to PV and wind power generation. This low cost station is compact and simple to install.

As with all **PVMET** stations it includes a RS-485 Mobus interface.

Features

- Global Solar Irradiance Sensor
- Plane of Array Irradiance Sensor
- 2 x Back-of-PV Panel Temp Sensors
- Ambient Air Temperature Sensor
- Wind Speed Sensor
- Wind Direction Sensor
- Modbus RS-485 Communication
- Sunspec Ver. 1.1 Compliant

Sensors & Options

- * Ambient Air Temperature. Housed in a passive shield
- * Global Irradiance

The irradiance sensor is mounted to the system on an extension pracket to provide global irradiance

* Plane-of-Array Irradiance

A separate plane-of-array sensor is supplied with a mounting bracket to attach to the side of a PV panel.

* Back-of-Module Temperature.

These sensors are attached to the back of the PV panel using thermal conductive adhesive tape. They provide accurate panel temperatures, an important parameter for efficiency monitoring. One sensor is shipped with each system. The **PVMET-200** supports two sensors.

* Wind Speed and Direction

A mini-aevane anemometer provides both wind speed and direction information.



RainWise, Inc 2

* Back-of-Module Temperature.

These sensors are attached to the back of the PV panel using thermal conductive adhesive tape. They provide accurate panel temperatures, an important parameter for efficiency monitoring. One sensor is shipped with each system. The **PVMET-200** supports two sensors.

* Wind Speed and Direction

A mini-aevane anemometer provides both wind speed and direction information.



Communications

The **PVMET-200** has a single, 2-wire, half duplex, RS-485 port. Termination can be enabled or disabled using a jumper located near the RS-485 screw terminals.

By default the **PVMET-200** is configured to operate as a Modbus slave at address 60. The Modbus register layout is compatible with SunSpec Ver 1.1. A simplified register set is located at address 200 for those that do not wish to use the SunSpec data format.

For users that wish to change settings, a configuration mode is provided. A simple terminal emulator application such as HyperTerminal is required to make changes.

Installation

The **PVMET-200** 's compact light weight design make installation quick and easy. Various mounting options are available, including the Rainwise 3-foot tripod and Mono mount. The **PVMET-200** is supplied with a detachable mast section that can bolted to an existing structure.

All electrical connections are made using screw terminals. Standard sensors are factory installed. As a user/installer the only connections required are power and communications. Connections are accessed by removing the front cover. The cover is attached with 4 screws.

For OEM customers the **PVMET-200** can be supplied with factor installed power and communication cable. This completely eliminates the need for installer to remove the cover.

Customization

The firmware in the **PVMET-200** can be updated through the RS-485 port using a simple PC application. This feature ensure that the **PVMET-200** can be kept up to date with the latest available firmware. In addition Rainwise can provide certain OEM firmware customization. This can include register configuration, specific defaults and protocols.

The **PVMET-200** can also be customized to support customer specific sensors. This service is only available to volume OEM customers.



PRECISION ENERGY METER

The WattsOn-Mark II Precision Energy Meter uses cutting-edge metering technology to provide unprecedented accuracy, resolution and metering performance for any electrical installation. WattsOn monitors each phase individually and incorporates the functions of single-phase, split-phase, and three-phase meters.

FEATURES:

- ♦ ANSI C12.20 Class 0.2 Accuracy Compliant, Four-Quadrant
- ♦ California CSI PBI Eligible
- ♦ High-Resolution Power and Energy measurements
- Fast update (100ms) for all power readings
- Per phase instantaneous and accumulated data
- ♦ Ultra-High Dynamic Range simplifies CT options
- ♦ Compatible with mV, mA, 5A and Rogowski Coil Inputs
- ◆ Digital communication via RS-485 (Modbus/RTU)
- ♦ Customizable Modbus Register Map
- ♦ Compatible with common Solar Industry Modbus Specifications
- ♦ Alarm / Pulse Outputs
- ♦ DIN and wall-mount enclosure
- Optional Display with Datalogging and Real-Time Clock
- Optional Ethernet with Modbus/TCP, BACnet/IP or web server with user configurable POST capability



PRODUCT DESCRIPTION:

The WattsOn-Mark II Precision Energy Meter utilizes advanced metering technology to implement a multi-function power and energy meter into a small, cost-effective package. WattsOn-Mark II provides a unique solution for monitoring virtually any wiring installation including single phase, split phase and three phase loads. It accepts up to 600V (line-to-line) directly, without the need for potential transformers. It may be configured for use with industry standard 5A CTs, 333mV CTs, mA CTs (such as Elkor's line of "safe" mA split and solid core CTs) or Rogowski Coil flexible CTs.

The WattsOn-Mark II offers full four-quadrant metering. All parameters are metered and accumulated on a per-phase basis. Instantaneous power (W, VA, VAR) feature a high update rate (100ms), other parameters are updated every 500ms. The high sampling rate, true-RMS inputs may be used even with distorted waveforms, such as those generated by variable frequency drives and SCR loads, up to the 30th harmonic.

The meter provides comprehensive per phase data, including Volts, Amps, Real Power, Reactive Power, Apparent Power, Voltage Angle, Power Factor and Frequency, Quadrant, Import/Export/Net Wh/VAh and per Quadrant VARh.

All models include Ultra-High Resolution and Dynamic Range. This feature allows mA input meters to be user configured and no longer requires the CT model and ratio to be specified at the time of ordering, simplifying meter and CT selection. The wide dynamic range of the current inputs ensures high accuracy and resolution even at very low measurements. Precise CT ratios and phase compensation may be field programmed for ultimate accuracy. Additionally, the meter may be configured with individual CT ratios per-phase, allowing for metering asymmetrical loads such as individual building branch circuits.

Measurements are available via the RS-485 output port (Modbus/RTU). In addition, two solid-state relay outputs are provided and may be software configured for pulse, status or alarm triggers, on any measured parameter. An on-board graphic LCD display, real-time clock and data logging are available as an option.

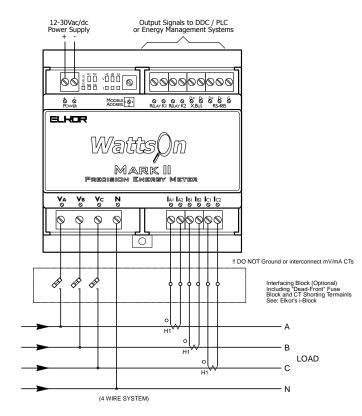
The meter may be equipped (option) with an integrated BACnet/IP gateway, or an ETnet (Ethernet module providing Modbus/TCP, web server, as well as HTTP post capability).



WATTSON®-MARK II

SPECIFICATIONS	i:				
		INPL			
Power Supply		C or 24 VAC	•		
Supported	Up to 347/600V Delta, Wye				
Wiring Types	Single-phase installations up to 347V RMS Split-phase (two phase) installations				
_			•		
Frequency		•	0-300 Hz max)		
Voltage			(600Vac L-L),		
Current	(450Vac L-N, 780V L-L absolute max.) -5A Model -mA Model -mV Model				
Input Rating			200mA via mA CTs	333mV output CTs	
iliput Katilig	The state of the s			(400mV max)	
	max) mA output CTs)			(100111V IIIux)	
Input	0.05	Ω max	1.5Ω typ	800kΩ min,	
Impedance				1.2MΩ typical	
Wire Size	Voltage:	Δ\/\G 30-12	l	mended)	
WII C SIZC	_		, (AWG 10 22 recomi		
Overload			tage & current) main		
			mentary current over	•	
	·	OUTP			
Serial	RS-485 2	-wire Modb	us RTU, 9600 (defaul	t) to 230400 baud	
	Elkor Exp	ansion Bus	Port		
Relay		•	Outputs (100 mA @ !	•	
	User Pro	grammable	for alarm, status or p	oulse output	
Indicators			ltage, Current, Powe	r, Output relay	
		tus, Comm			
Display (Option)			Display 128x32 (–DL		
Ethernet (Option)		er, HTTP PC	rated) featuring Mod	bus/TCP,	
BACnet (Option)			grated) featuring BAC	`net/ID connectivity	
DACHEL (Option)	LIBACIII	oddie (iiite	grated) reaturing bac	inet/ii connectivity	
ACCURACY					
Standards ANSI C12.20 Class 0.2 Accuracy Certified					
Cupports FN F0470 1 FN F0470 2 IFC 620F2 21					
Supports EN 50470-1, EN 50470-3, IEC 62053-21, IEC 62053-22, and IEC 62053-23 standards.					
Current (A)			15% typ	0.1% max	
Voltage, L-N (V)			1% typ		
Voltage, L-L (V)			2% typ	U.7% max	
Power (W, VA, VAR)	1	U.,		0.2% max 0.3% max	
Energy				0.2% max 0.3% max	
		0.3	1% typ 1% typ	0.3% max	
Power Factor	-	0.3	1% typ	0.3% max 0.2% max	
Power Factor Frequency		0.3	1% typ 1% typ	0.3% max 0.2% max	
		0.: 0.: 2 kHz	1% typ 1% typ 0.2% max 0.01% max	0.3% max 0.2% max 0.2% max	
Frequency		0.: 0.: 2 kHz (33rd Harn	1% typ 1% typ 0.2% max 0.01% max	0.3% max 0.2% max 0.2% max	
Frequency		0.: 0.: 2 kHz (33rd Harn 10Hz (ever	1% typ 1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth		0.: 0.: 2 kHz (33rd Harn 10Hz (ever	1% typ 1% typ 0.2% max 0.01% max	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth		0.: 0.: 2 kHz (33rd Harn 10Hz (every 2Hz (every	1% typ 1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque		0.: 0.: 2 kHz (33rd Harn 10Hz (ever 2Hz (every	1% typ 1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th H y 100ms) for instanta 500ms) for all other	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque Dimensions		0.: 0.: 2 kHz (33rd Harn 10Hz (ever 2Hz (every MECHA 4.2" x 4.3"	1% typ 1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th H y 100ms) for instanta 500ms) for all other NICAL x 2.4" W x L x H	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque		0.: 0.: 2 kHz (33rd Harn 10Hz (ever 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m	1% typ 1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other NICAL x 2.4" W x L x H A and -mV models)	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque Dimensions Mass		0.: 0.: 2 kHz (33rd Harn 10Hz (ever 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5.0)	1% typ 0.2% max 0.01% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H nA and -mV models) A-DL model)	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque Dimensions		0.: 0.: 2 kHz (33rd Harn 10Hz (every 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5)	1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque Dimensions Mass Mounting	ency	0.: 0.: 2 kHz (33rd Harn 10Hz (every 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5) DIN Rail Ma 3-point scr	1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount ew wall mount	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Frequence Dimensions Mass Mounting	ency	2 kHz (33rd Harn 10Hz (every 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5) DIN Rail Mo 3-point scr	1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount ew wall mount otected Installation)	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque Dimensions Mass Mounting Operating Tempera	ency ENVIRONI ture	0.: 0.: 0.: 2 kHz (33rd Harn 10Hz (every Hz (every 0.15 kg (-m 0.23 kg (-5) DIN Rail Mo 3-point scr MENTAL (Pr -40°C to +7	1% typ 0.2% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount ew wall mount otected Installation) 70°C	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Frequency Dimensions Mass Mounting Operating Temperatus	ency ENVIRONI ture	2 kHz (33rd Harn 10Hz (every 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5. DIN Rail Mo 3-point scr MENTAL (Pr -40°C to +7 -40°C to +7	1% typ 0.2% max 0.01% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount ew wall mount otected Installation) 70°C	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Freque Dimensions Mass Mounting Operating Tempera	ency ENVIRONI ture	2 kHz (33rd Harn 10Hz (every 2Hz (every MECHA 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5. DIN Rail Mo 3-point scr MENTAL (Pr -40°C to +7 -40°C to +7	1% typ 0.2% max 0.01% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H nA and -mV models) A-DL model) ount ew wall mount otected Installation) 10°C 10°C non-condensing	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Frequency Dimensions Mass Mounting Operating Temperature Storage Temperature Humidity	ency ENVIRONI ture	0.: 0.: 0.: 2 kHz (33rd Harn 10Hz (every Hz (every 0.15 kg (-m 0.23 kg (-5) DIN Rail Mo 3-point scr MENTAL (Pr -40°C to +7 -40°C to +7 10 to 90% COMPL	1% typ 0.2% max 0.01% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H nA and -mV models) A-DL model) ount ew wall mount otected Installation) 70°C 70°C non-condensing IANCE	0.3% max 0.2% max 0.2% max larmonic @ 50Hz)	
Frequency Input Bandwidth Data Update Frequence Dimensions Mass Mounting Operating Temperatus	ency ENVIRONI ture	2 kHz (33rd Harn 10Hz (every Hz (every 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5. DIN Rail Mo 3-point scr MENTAL (Pr -40°C to +7 -40°C to +7 10 to 90% COMPL UL Listed (#	1% typ 0.2% max 0.01% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount ew wall mount otected Installation) 70°C 70°C non-condensing IANCE #E250395)	0.3% max 0.2% max 0.2% max O.2% max Iarmonic @ 50Hz) Ineous W, VA, VAR Iparameters	
Frequency Input Bandwidth Data Update Frequency Dimensions Mass Mounting Operating Temperature Humidity Safety	ency ENVIRONI ture	2 kHz (33rd Harn 10Hz (every Hz (every 4.2" x 4.3" 0.15 kg (-m 0.23 kg (-5. DIN Rail Mo 3-point scr MENTAL (Pr -40°C to +7 -40°C to +7 10 to 90% COMPL UL Listed (#	1% typ 1% typ 0.2% max 0.01% max 0.01% max nonic @ 60Hz, 40th Hy 100ms) for instanta 500ms) for all other INICAL x 2.4" W x L x H A and -mV models) A-DL model) ount ew wall mount otected Installation) 10°C 10°C 10°C 10no-condensing IANCE #E250395) [min) input-to-output	0.3% max 0.2% max 0.2% max O.2% max Iarmonic @ 50Hz) Ineous W, VA, VAR Iparameters	

TYPICAL WIRING:



MEASURED PARAMETERS (available via Modbus) Voltage [V] (A, B, C, Avg, AB, AC, BC, Avg)

Current [A] (A, B, C, Avg)
Active Power [W] (A, B, C, Total) – Bi-directional
Apparent Power [VA] (A, B, C, Total)
Reactive Power [VAR] (A, B, C, Total) — Bi-directional
Power Factor (A, B, C, System) — Bi-directional
Active Quadrant
Voltage Phase Angle [°] (AB, AC, BC)
Frequency [Hz]
Import/Export/Net Real Energy [Wh] (A, B, C, Total)
Import/Export/Net Apparent Energy [VAh] (A, B, C, Total)
Q1/Q2/Q3/Q4 Reactive Energy [VARh] (A, B, C, Total)
Total Demand Power (Sliding Window) [W]

All parameters are available in integer and floating point format.

ORDERING INFORMATION

W2-[1]-[2]-[3]
Where:

[1] Specifies Model:
 M1 = RS-485 + 2 x Pulse (Modbus/RTU)
 E2 = BACnet/IP module + 2 x Pulse
 E3 = Ethernet (ETnet) + 2 x Pulse

[2] Specifies CT Input Type:

5A = Inputs for 5A CTs
 mA = Inputs for mA output CTs (up to 200mA)
 333mV = Inputs for 333mV output CTs

[3] Specifies Display/Logging Module (optional):
 DL = Integrated Display AND Logging Module

Examples:

W2-M1-ma: RS-485, mA inputs, no logging or display
W2-M1-mA-DL: RS-485, mA inputs, Logging/Display module
W2-E3-mA-DL: Integrated ETnet, mA inputs, Logging/Display module

INGECON SUN 3Play

TL U M



18TL U M480 / 24TL U M480 / 40TL U M480

Maximum efficiency with Multi-MPPT three-phase technology

A three-phase inverter family for residential, commercial and large-scale PV plants. It integrates an arc fault circuit interruption system (AFCI).

Maximum efficiency with two independent MPPT inputs

A single DC-to-AC power conversion stage with an advanced maximum power point tracking system (MPPT), making it possible to harness the maximum energy from the PV array at all times, including difficult situations such as scattered clouds and partial shading. Great flexibility for configuring the solar array, thanks to the two independent MPPT trackers with a wide input voltage range. Possibility of asymmetrical configurations.

Plug & Play technology

Extremely easy to install. The inverter connection is fast and simple. The coun-

try-specific configuration and language can be easily selected from the inverter screen

Rugged design

Steel casing, especially designed for indoor and outdoor applications (NEMA 4). It with-stands extreme temperatures. The 3Play inverters have been designed to guarantee a service life of more than 20 years, as demonstrated by the stress tests they are subjected to.

Ease of maintenance

Internal datalogger for up to 3 months data storage. Control either from a remote PC or on-site from the inverter front keypad. Status and alarm LED indicators. LCD screen. Integrated DC arc-fault circuit interruption system.

Easy to operate

The INGECON® SUN 3Play TL U M inverters feature a LCD screen for the

simple and convenient monitoring of the inverter status and a range of internal variables. The display also includes three LEDs to show the inverter operating status. All this helps to simplify and facilitate maintenance tasks.

Software included

Included at no extra cost are the INGE-CON® SUN Manager, INGECON® SUN Monitor and its smartphone version iSun Monitor for monitoring and recording the inverter data over the internet. In addition, users can download the latest version of the firmware from the Ingeteam website www.ingeteam.com, and update it using a simple SD memory card. RS-485 communications are supplied as standard.

Standard 10 year warranty, extendable for up to 20 years

INGECON SUN 3Play

TL U M

A versatile equipment

The INGECON® SUN 3Play TL U M inverters integrate an arc-fault circuit interruption system.

The standard inverter features a double MPPT input with terminal blocks. Optionally, it can be supplied with DC and AC surge arresters, type 2.

Easy rooftop installation

Vertical or horizontal mounting, enabling the location of the inverter next to the PV modules and avoiding the installation of any additional rapid shutdown device.

MAIN FEATURES

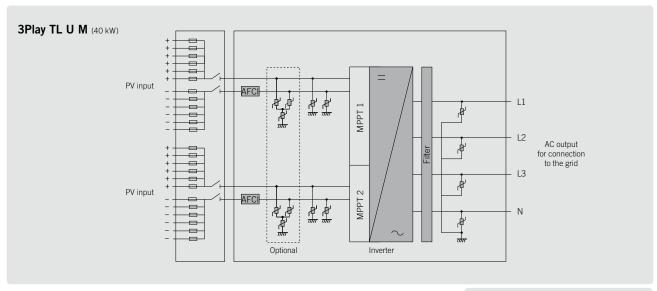
- AFCI (Arc Fault Circuit Interrupt).
- Double-MPPT System.
- Easy rooftop installation.
- 98.5% maximum efficiency.
- Inverter firmware updating by the user through a SD memory card.
- Software INGECON® SUN Manager for PV plant access and data registration.
- Software INGECON® SUN Monitor for PV plant monitoring.
- LCD display.
- RS-485 communications supplied as standard
- Display-configurable potential-free contact, to indicate insulation fault or grid connection.
- Plug & Play technology.
- Suitable for indoor and outdoor installations (NEMA 4).
- High temperature performance. Rated power up to 131 °F (55 °C) for the 18 kW and 24 kW inverters.
- Language, rated voltage and Country Code configurable by display.

PROTECTIONS

- Reverse polarity.
- DC arc-fault circuit interruption.
- Shortcircuits and overloads at the output.
- Anti-islanding with automatic disconnection.
- Insulation faults.

OPTIONAL ACCESSORIES

- Inter-inverter communication via Ethernet, Bluetooth, GSM / GPRS or Wi-Fi.
- Combiner Box with DC fuses and DC switch.
- DC surge arresters, type 2.



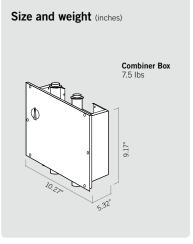
Combiner Box

The Combiner Box is supplied with four or six inputs per MPPT with fuses on each pole and a DC switch. It can be located immediately under the PV inverter or in a different place.

COMBINER BOX MAIN FEATURES

- DC switch.
- 2 MPPTs (4 inputs / MPPT for the 18 kW and 24 kW models, and 6 inputs / MPPT for the 40 kW model).
- 4 fuses per pole for the 18 kW and 24 kW models and 6 fuses per pole for the 40 kW model.
- Maximum current per input: 12 A.



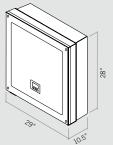


	18TL U M480	24TL U M480	40TL U M480
Input (DC)			
Recommended PV array power range ⁽¹⁾	18.6 - 24.1 kW	24.7 - 32.2 kW	41.2 - 53.6 kW
Voltage range MPP1(2)	200 - 820 V	200 - 820 V	200 - 820 V
Voltage range MPP2(2)	200 - 820 V	200 - 820 V	200 - 820 V
Min. voltage for Pnom with parallel inputs	375 V	460 V	520 V
Maximum voltage ⁽³⁾	1,000 V	1,000 V	1,000 V
Maximum current (Input 1 / Input 2)	30 / 20 A	27 / 27 A	40 / 40 A
Inputs (Input 1 / Input 2)	1/1	1/1	1/1
MPPT	2	2	2
Output (AC)			
Rated power	18 kW	24 kW	40 kW
Temperature at rated power ⁽⁴⁾	131 °F	131 °F	113 °F
Maximum current	22 A	29 A	48 A
Rated voltage	480 V	480 V	480 V
Frequency	60 Hz	60 Hz	60 Hz
Phi Cosine ⁽⁵⁾	1	1	1
Phi Cosine adjustable	Yes. Smax=18 kVA	Yes. Smax=24 kVA	Yes. Smax=40 kVA
THD	<3%	<3%	<3%
Efficiency			
Maximum efficiency	98.5%	98.5%	98.5%
CEC - Weighted efficiency	98%	98%	98%
General Information			
Refrigeration system		Forced ventilation	
Air flow	200 m³/h	200 m³/h	400 m³/h
Stand-by consumption ⁽⁶⁾	10 W	10 W	20 W
Consumption at night	1 W	1 W	1 W
Ambient temperature	-13 °F to 149 °F	-13 °F to 149 °F	-13 °F to 149 °F
Relative humidity (non-condensing)	0 - 95%	0 - 95%	0 - 95%
Protection class	NEMA 4	NEMA 4	NEMA 4
DC AFCI	✓	√	✓
Marking		CE, ETL	
EMC and security standards		UL1741, FCC Part 15, IEEE C37.90.1, IEEE C37.90	.2
Grid connection standards	IE	EC 62116, UL1741, IEEE1547, IEEE1547.1, NEC CC	DDE

Notes: ⁽¹⁾ Depending on the type of installation and geographical location ⁽²⁾ The output power will be conditioned by the voltage and current configuration selected at each input ⁽³⁾ Must not be exceeded under any circumstances. Consider the voltage increase of the 'Voc' at low temperatures ⁽⁴⁾ The output power will be reduced at the rate of 1% for each 1 °F of increase ⁽⁵⁾ For Pout>25% of the rated power ⁽⁶⁾ Consumption from PV field.



Size and weight (inches)



18TL U M / 24TL U M / 40TL U M 127.4 / 129 / 137.8 lbs

INGECON

EMS

PV PLANT CONTROL SYSTEM

The INGECON® EMS Plant Controller helps the grid operator to predict the PV plant performance and to guarantee the quality and stability of the electricity supply.

Maximum PV plant control

An advanced control algorithm combined with a fast and efficient communications system, with response times of less than one second, permit precise control of the active and reactive power delivered by the plant to the grid.

The INGECON® EMS Plant Controller controls the PV inverters, ensuring compliance with the grid operator's requirements at the PV plant connection point. It is also possible to manage energy storage systems and other devices such as diesel generators, through the use of INGECON® EMS Plants inverters.

This is a flexible system that can easily be adapted to the needs and configurations of each particular plant, whilst complying with the country-specific standards and regulations.



Description of the complete system

A PV plant with plant controller typically consists of:

- INGECON® EMS Plant Controller: comprising two basic systems: measurement and control. It can additionally incorporate a communication channel with the grid operator in order to receive the operating setpoints.
- INGECON® SUN PV inverters connected to the PV array.
- INGECON® EMS Plants battery inverters connected to the energy storage system. Only when energy storage systems are required to cover situations in which the solar radiation is too low or to provide energy for night-time use.
- SCADA, plant monitoring system.
- Communications network: Connecting the INGECON® EMS Plant Controller with the different inverters, transmitting the operating setpoints and monitoring the status of the equipment.

Continuous communication with all devices

The INGECON® EMS Plant Controller permits the dynamic modification of the grid operator setpoints. For this purpose, a number of communication protocols are incorporated such as Modbus TCP / RTU, IEC 61850, IEC 60870-5-101 and IEC 60870-5-104. Likewise, it is also possible to add digital and analogue I / O modules in order to extend the communication capabilities with third-party devices.

Furthermore, the INGECON® EMS Plant Controller permits communication with the plant SCADA to transmit the connection point data.





Operating mode

For the control, the INGECON® EMS Plant Controller takes the following data:

- Active power, reactive power, voltage and frequency at the connection point, provided by the integrated measurement unit.
- Grid operator requirements. To establish references for parameters such as voltage at the point of connection, active and reactive power, power ramps, active power reserve, etc. These requirements can be predetermined either by the grid operator or by the plant operator or dynamically modified through an external setpoint.
- Instantaneous active and reactive power values from the various inverters.
- With all this data, the control unit can determine the operating setpoints for each inverter integrated into the system and transmit the setpoints through the communications network.

Active power control

Some of the active power control functions that can be implemented in the INGECON® EMS Plant Controller are:

- Continuous control of the power at the output. To control the PV plant power output, limiting it to the desired value.
- Regulation of the active power variation rate. To control the power generated by the inverters, ensuring that the variation

in the plant power output conforms to the established setpoint. So as to control variations in power shortfalls, it is necessary to add energy storage systems and INGECON® EMS Plants inverters to the plant in order to deliver energy to the system when no PV resources are available.

- Power regulation in the event of a frequency variation.
- Active power reserve. The INGECON®EMS
 Plant Controller incorporates a patented innovative control strategy (PCT/ES 2008/000560) to guarantee an active power reserve with no need to include storage systems (depending on the availability of the PV resource).

Reactive power control

Some of the reactive power control functions that can be implemented in the INGECON® EMS Plant Controller are:

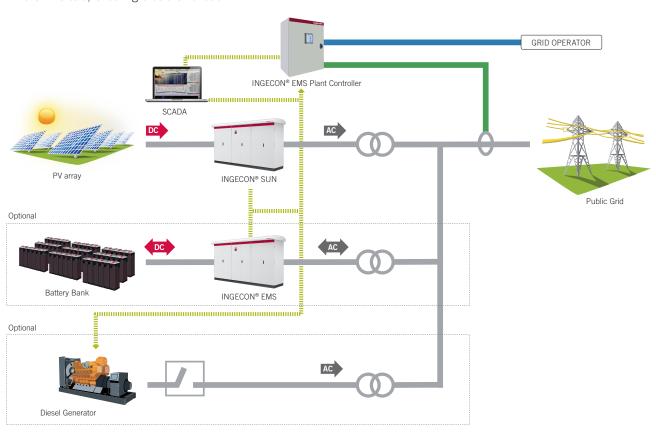
- Regulation of the reactive power output.
 To control the plant reactive power output, adjusting it to a given reference, including the possibility of providing reactive power at night time.
- Regulation of the power factor at the connection point.
- Voltage control The INGECON® EMS Plant Controller controller makes it possible to regulate the plant voltage at the connection point.

ITEMS INCLUDED

- PLC.
- Power meter.
- Communications switch.
- Power supply.
- Protections.

SYSTEM HIGHLIGHTS

- Frequency regulation.
- Active power reserve regulation.
- Constant active power level at the output.
- Active power ramp regulation.
- Reactive power control.
- Power factor control.
- Voltage control.



INGECON

SUN

TRANSFORMERLESS
CENTRAL
INVERTERS
WITH A SINGLE
POWER BLOCK

JL 1741

1000TL U B360 Outdoor

Maximum power density

These PV central inverters feature more power per cubic foot. Thanks to the use of highquality components, this inverter series performs at the highest possible level.

Latest generation electronics

The B Series inverters integrate an innovative control unit that runs faster and performs a more efficient and sophisticated inverter control, as it uses a last-generation digital signal processor. Furthermore, the hardware of the control unit allows some more accurate measurements and very reliable protections.

These inverters feature a low voltage ridethrough capability and also a lower power consumption thanks to a more efficient power supply electronic board.

Integrated DC and AC connections

The input and output connections are integrated into the same cabinet, facilitating connection, maintenance and repair work.



Maximum protection

These three phase inverters are equipped with a motorized DC switch to decouple the PV generator from the inverter.

These inverters are supplied with an AC circuit breaker. Optionally, they can be supplied with DC fuses, grounding kit and input current monitoring.

Maximum efficiency values

Through the use of innovative electronic conversion topologies, efficiency values of up to 99% can be achieved.

A complete range of equipment for all types of projects

Versions available:

- Indoor inverters.
- Outdoor inverters.
- Symmetrical inverters, with the connection cabinet on the opposite side, to make it possible to install two inverters facing each other, with a common power supply point.

Enhanced functionality

This new INGECON® SUN PowerMax range features a revamped, improved enclosure which, together with its innovative air cooling system, makes it possible to increase the ambient operating temperature.



1000TL U B360 Outdoor

Long-lasting design

These inverters have been designed to guarantee a service life of more than 20 years, as demonstrated by the stress tests they are subjected to. Standard 5 year warranty, extendable for up to 25 years.

Grid support

The INGECON® SUN PowerMax B Series has been designed to comply with the grid connection requirements UL1741, IEEE1547 and RULE21, contributing to the quality and stability of the electric system. These inverters therefore feature a low voltage ride-through capability, and can deliver reactive power and control the active power delivered to the grid.

PROTECTIONS

- DC Reverse polarity.
- Short-circuits and overloads at the output.
- Anti-islanding with automatic disconnection.
- Insulation failure DC.
- 5 pairs of fuse-holders (extendable up to 15).
- Lightning induced DC and AC surge arrestors, type 2 (type 1 also available).
- Motorized DC switch to automatically disconnect the inverter from the PV array.
- Low voltage ride-through capability.
- AC circuit breaker.
- Hardware protection via firmware.

Ease of maintenance

All the elements can be removed or replaced directly from the inverter's front side, thanks to its new design.

Easy to operate

The INGECON® SUN PowerMax inverters feature an LCD screen for the simple and convenient monitoring of the inverter status and a range of internal variables. The display also includes a number of LEDs to show the inverter operating status with warning lights to indicate any incidents. All this helps to simplify and facilitate maintenance tasks.

OPTIONAL ACCESSORIES

- Motorization kit for the AC circuit breaker.
- Insulation failure AC.
- Grounding kit.
- Heating kit, for operating at an ambient temperature of down to -22 °F.
- DC fuses
- Monitoring of the group currents at the DC input.
- Remote tripping of the AC circuit breaker.
- Wattmeter on the AC side.
- Extendable up to 15 fuse holders per inverter.
- PID prevention kit (PID: Potential Induced Degradation).
- Night time reactive power injection.

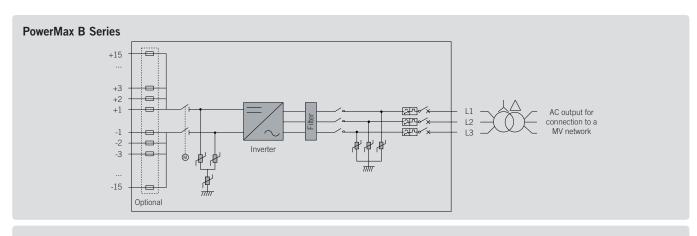
Monitoring and communication

Ethernet and RS-485 communications supplied as standard. The following applications are included at no extra cost: INGECON® SUN Manager, INGECON® SUN Monitor and its Smartphone version iSun Monitor, available on the App Store. These applications are used for monitoring and recording the inverter's internal operating variables through the Internet (alarms, real time production, etc.), in addition to the historical production data.

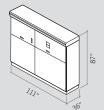
Two communication ports available (one for monitoring and one for plant controlling), allowing fast and simultaneous plant control.

ADVANTAGES OF THE MONOBLOCK VERSION

- Higher power density.
- Latest generation electronics.
- More efficient electronic protection.
- Night time supply to communicate with the inverter at night.
- Enhanced performance.
- Easier maintenance thanks to its new design and enclosure.
- Lightweight spares.
- It allows to ground the PV array.
- Components easily replaceable.



Size and weight (inches and lbs)

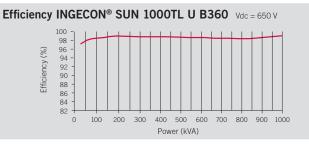


1000TL U B360 Outdoor 4.232 pounds



	1000TL U B360 Outdoor
Input (DC)	
Recommended PV array power range ⁽¹⁾	1,011.9 - 1,297 kWp
Voltage Range MPP	580 - 820 V
Maximum voltage(2)	1,050 V
Maximum current	2,000 A
N° inputs with fuse-holders	5 up to 15
Fuse dimensions	63 A / 1,000 V to 630 A / 1,000 V fuses
Type of connection	Connection to copper bars
Power blocks	1
MPPT	1
Input protections	
Overvoltage protections	Type 1-2 surge arresters
DC switch	Motorized DC switch
Other protections	Reverse polarity, insulation failure monitoring, anti-islanding protection
Output (AC)	
Power @86 °F / @122 °F ⁽³⁾	997.7 kVA / 917.8 kVA
Current @86 °F / @122 °F	1,600 A / 1,472 A
Rated voltage	360 V IT System
Frequency	50 / 60 Hz
Phi Cosine ⁽⁴⁾	1
Phi Cosine adjustable	Yes. Smax=997.7 kVA
THD (Total Harmonic Distortion) ⁽⁵⁾	<3%
The Crotal Harmonic Bistortion,	
Output protections	
Overvoltage protections	Type 1-2 surge arresters
AC breaker	AC circuit breaker with door control, remote trip or motorized
Anti-islanding protection	Yes, with automatic disconnection
Other protections	AC short-circuits and overloads
Features	
Maximum efficiency	98.9%
CEC	98.5%
Stand-by consumption ⁽⁶⁾	60 W
Consumption at night	60 W
General Information Ambient temperature	-4 °F to +149 °F
Relative humidity (non-condensing)	0 - 95%
Protection class	NEMA 3
Max. altitude ⁽⁷⁾	9,842 ft
Cooling system	Air forced with temperature control (230 V phase+ neutral power supply)
Air flow	22 m ³ /s (7,200 m ³ /h)
Acoustic emission	<67 dB
Marking	CE, ETL
EMC and security standards	UL1741, FCC Part 15, IEEE C37.90.1, IEEE C37.90.2
Grid connection standards	IEC 62116, UL1741, IEEE 1547, IEEE 1547.1, NEC CODE
GING CONNECTION STANDARDS	1L0 02110, 0L1741, 1LLL1047, 1LLL1047.1, INEC CODE

Notes: (1) Depending on the type of installation and geographical location. Data for STC conditions (2) Consider the voltage increase of the 'Voc' at low temperatures (3) For each °F of increase between 86 °F and 122 °F, the output power will be reduced at the rate of 0.22%. Over 122 °F, the output power will be reduced at the rate of 1% for each 1°F of increase (4) For Dowl>25% of the rated power (5) For Powl>25% of the rated power and voltage in accordance with IEC 61000-3-4 (6) Consumption from PV field (7) Over 3,300 ft, temperature for rated power is reduced at the rate of 2.42 °F for each 3,300 ft.







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Ingeteam

BATTERY INVERTERS WITH A DCAC CABINET

660TL U X360 Outdoor / 880TL U X360 Outdoor

Integration of batteries into PV plants

The use of energy storage systems at PV plants helps to improve the integration of solar energy into the electricity grid, particularly in the case of a weak grid or one with a high solar energy penetration.

The INGECON® SUN STORAGE PowerMax inverters are compatible with the range of battery technologies currently available, such as Lead, Ni-Cd, Redox and Lithium, ensuring that the most suitable technology can be used for each specific application.

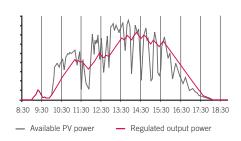
The use of energy storage systems makes it possible to implement different plant operating strategies, such as the control of the plant power output variability or the generation of a constant power output.

Control of the power output variability

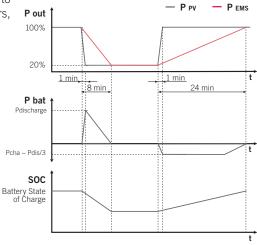
The variation in irradiance caused by passing clouds produces power output variations that can be as great as 80% of the rated power of the plant per minute, depending on the size of the plant and the weather conditions at the site.

The use of INGECON® SUN STORAGE Power-Max inverters, together with their corresponding batteries, makes it possible to reduce the dynamics of these variations and to adapt to the requirements imposed by grid operators, improving the quality of supply and ensuring the high integration of solar energy into the electricity system.

An energy storage system makes it possible to control the plant power output ramps, based on pre-established values. Whenever a cloud passes over, with the subsequent loss of irradiance, the storage system provides the energy required to offset the energy shortfall, whilst the power output is progressively reduced until it is equal to the PV power. Once the cloud has gone, the available power increases sharply and this is used to charge the batteries whilst smoothly increasing the power output.



Output power at an actual 1 MW PV plant on a day with scattered clouds, with and without energy storage systems, implementing constant power control.



Example of the system performance in the face of an 80%/min fluctuation in irradiance (up and down), in accordance with the 10%/min output power variation requirement.

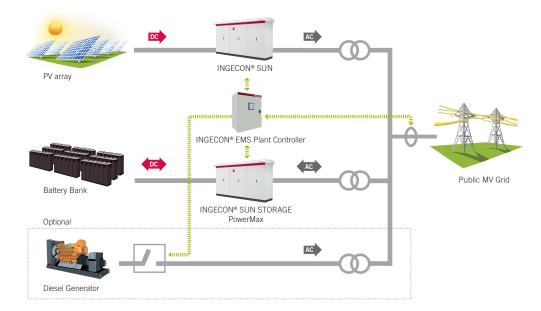


UL 9540

UL 1741

660TL U X360 Outdoor / 880TL U X360 Outdoor

This option is based on conventional gridconnected inverters for the PV generation and dedicated inverters to connect the batteries to the electricity grid. This option can be installed in PV plants that are already operating. It offers the possibility of providing reactive energy with the battery inverters, thereby avoiding the need to over-size the PV inverters should there be strict reactive power delivery requirements. For this topology, a plant controller manages the energy flow between the grid and the batteries, adjusting the plant generation to a pre-established pattern.



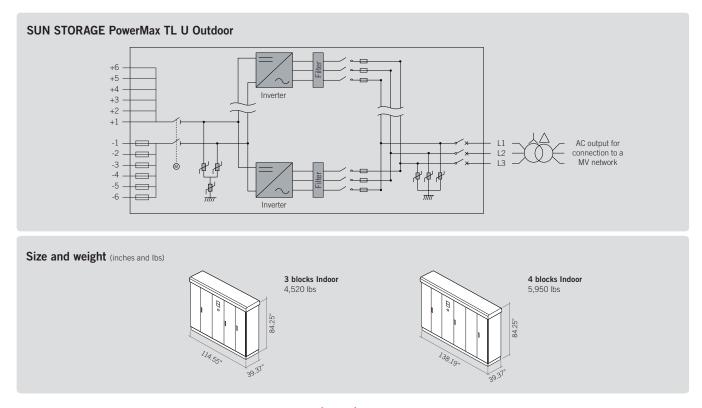
PROTECTIONS

Short-circuits and overloads at the output.

- Anti-islanding with automatic disconnection.
- Insulation failure.
- Motorized DC switch for the automatic disconnection of the inverter.
- Lightning induced DC and AC surge arresters, type 2.

OPTIONAL ACCESSORIES

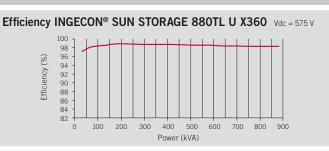
- GSM / GPRS remote communication.
- Inter-inverter communication via Ethernet or Bluetooth.
- Kit for operating at an ambient temperature of -22 °F (-30 °C).
- Monitoring of the input DC currents.
- Wattmeter on the AC side.
- Low voltage ride-through capability.
- Auxiliary services kit.





	660TL U X360 Outdoor	880TL U X360 Outdoor	
Input (DC) (Battery)			
Battery voltage range	575 - 864 V	572 - 864 V	
Maximum current	1,170 A	1,560 A	
Type of battery	Li-ion, lead, N	li-Cd	
Connection type	Cable entry from the bottom through D40 cable	glands (max. cable diameter: 40 mm)	
Power Blocks	3	4	
Input protections			
Overvoltage protections	Type 2 DC surge arresters (fo	r each power stage)	
DC switch	Motorized DC switch wi	th door control	
Other protections	DC insulation monitor with alarm. Door	control. DC fuses are optional	
Output (AC)			
Rated power ⁽¹⁾	660 kVA	880 kVA	
Maximum current	1,050 A	1,400 A	
Rated voltage	360 V IT System	360 V IT System	
Frequency	50 / 60 Hz	50 / 60 Hz	
Phi Cosine ⁽²⁾	1	1	
Phi Cosine adjustable	Yes. Smax=660 kVA	1 Yes. Smax=880 kVA	
THD (Total Harmonic Distortion)(3)		<3%	
THE (Total Harmonic Distortion)			
Connection type	Connection to fuse holder copper bars, cable entry from the bottom	n through D40 cable glands (max. cable diameter: 40 mm)	
Output protections			
	Connection to fuse holder copper bars, cable entry from the bottom Type 2 AC surge a	arresters	
Output protections Overvoltage protections	Type 2 AC surge a	arresters a door control	
Output protections Overvoltage protections AC switch	Type 2 AC surge a AC circuit breaker with	arresters I door control In (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection	arresters I door control In (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection	arresters I door control In (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection	arresters I door control In (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overl	arresters a door control n (for each power stage) pads (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla	arresters I door control In (for each power stage) Doads (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla	arresters I door control In (for each power stage) Doads (for each power stage)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla 98.5% 90 W	parresters In door control In (for each power stage) In (for each powe	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information Ambient temperature	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C)	arresters a door control n (for each power stage) bads (for each power stage) 98.6% 120 W -4 °F to 149 °F (-20 °C to 65 °C)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption(4) General Information Ambient temperature Relative humidity (non-condensing)	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95%	arresters a door control n (for each power stage) pads (for each power stage) 98.6% 120 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95%	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information Ambient temperature Relative humidity (non-condensing) Protection class	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overle 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R	arresters In door control In (for each power stage) In (for each power	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information Ambient temperature Relative humidity (non-condensing) Protection class Maximum altitude ⁽⁵⁾	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overle 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R 9,842 ft (3,000 m)	arresters In door control In (for each power stage) In (for each power	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information Ambient temperature Relative humidity (non-condensing) Protection class Maximum altitude ⁽⁵⁾ Cooling system	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overle 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R 9,842 ft (3,000 m) Forced air with temperature control (230)	arresters a door control n (for each power stage) bads (for each power stage) 98.6% 120 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R 9,842 ft (3,000 m) V phase + neutral power supply) 45.56 ft³/s (fans: 1,500 VA)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information Ambient temperature Relative humidity (non-condensing) Protection class Maximum altitude ⁽⁵⁾ Cooling system Air volume	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R 9,842 ft (3,000 m) Forced air with temperature control (230) 37.96 ft³/s (fans: 1,300 VA)	arresters a door control n (for each power stage) bads (for each power stage) 98.6% 120 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R 9,842 ft (3,000 m) V phase + neutral power supply) 45.56 ft³/s (fans: 1,500 VA)	
Output protections Overvoltage protections AC switch Anti-islanding protection Other protections Features Maximum efficiency Stand-by consumption ⁽⁴⁾ General Information Ambient temperature Relative humidity (non-condensing) Protection class Maximum altitude ⁽⁵⁾ Cooling system Air volume Noise emission	Type 2 AC surge a AC circuit breaker with Yes, with automatic disconnection AC fuses, AC short circuits and overla 98.5% 90 W -4 °F to 149 °F (-20 °C to 65 °C) 0 - 95% NEMA 3R 9,842 ft (3,000 m) Forced air with temperature control (230 °C to 37.96 ft³/s (fans: 1,300 VA) <55 dB(A) at 4 m and <67 dB(A) at 1 m with temperature control (230 °C to 45 °C) 37.96 ft³/s (fans: 1,300 VA)	arresters a door control n (for each power stage) pads (for each power stage) 98.6% 120 W -4 °F to 149 °F (-20 °C to 65 °C) 0 -95% NEMA 3R 9,842 ft (3,000 m) V phase + neutral power supply) 45.56 ft³/s (fans: 1,500 VA)	

Notes: ⁽¹⁾ AC power for 122 °F (50 °C) ambient temperature. The output will be reduced at the rate of 1% for each 1 °F (0.56 °C) of increase. ⁽²⁾ For $P_{out>2}25\%$ of the rated power (3) For $P_{out>2}25\%$ of the rated power and voltage in accordance with IEC 61000-3-4 ⁽⁴⁾ Consumption from the battery ⁽⁵⁾ Over 3,300 ft temperature for rated power 122 °F (50 °C) is reduced 2.42 °F for each 1,000 ft.







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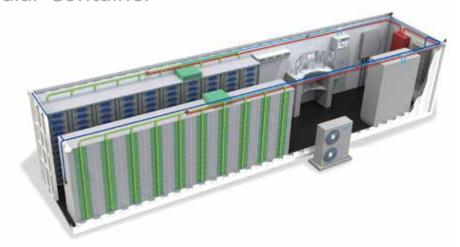
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Ingeteam Power Technology, S.A.

Ingeteam

L2000 Modular Container



Discover state-of-the-art distributed energy storage for utilities and large commercial customers. The L2000 Modular Container Stationary Energy Storage System from Johnson Controls draws on our world-class battery technology, facilities expertise and intelligent controls to handle multiple, concurrent applications. This scalable system can provide hours of high-energy output within a proven modular design, drawing on our decades of experience in modular data centers and chiller plants.

The result: an efficient, cost-effective solution that can be integrated into the energy control system of a utility, regional transmission organization or facility, at the lowest total lifecycle cost. As a global multi-industrial leader, we have the manufacturing excellence, innovation focus and customer insight to deliver leading-edge distributed energy storage products. Learn how the L2000 modular system brings new opportunities to regulate, store and distribute power.

Multiple Application Support

The system can be programmed to perform multiple concurrent applications including transmission and distribution deferral, capacity, frequency regulation, voltage support, renewable integration, or other ancillary services.

Multiple Power Options

The system output can be configured based upon customer needs from 500kW up to 2MW.

Multiple Power Capacity Options

System capacity can be configured based upon customer needs in 500kWh increments.

Utility and Building Compatible

The system integrates seamlessly into the utility or building energy management system using standard protocols.

Remote System Monitoring

Provides local and remote real-time monitoring, diagnostics and control of the energy storage system.

Separable Power Conversion

For customers having their own power conversion system, the battery units can be ordered separately.

Modular Footprint

Batteries are housed in custom 20ft or 40ft containers to ISO shipping container dimensions.



L2000 Modular Container

Product Specifications

Minimum Storage Capacity	500 kWh
Storage Capacity Increment	500 kWh
Power Rating	Dependent upon PCS
Applications	Transmission and Distribution deferral, Capacity, Frequency Regulation, Voltage Support, Renewable Integration, or other Ancillary Services
DC Voltage	778 VDC (nominal)
AC Voltage	Dependent upon PCS
Seismic	Zone 4 (California)
Market Interface	JCI Grid Connect
Utility Interface	DNP3
Building Interface	JCI Metasys, ASHRAE BACnet
Monitoring	Local and Remote
Fire Alarm Detection	Potter
Fire Suppression	Strat-X Aersol
HVAC	18,000 BTU York
Network Security	SSL/X509
Battery Cells	VL41M, 41Ah Li-ion Large Format Cylindrical
Certification	KEMA, UL 1741
Expected Life	15 years
Dimensions (W x D x H)	8 feet (2.438 m) x 20-foot (6.95 m) x 8 feet (2.438 m) 8 feet (2.438 m) x 40-foot (12.19 m) x 8 feet (2.438 m)
Weight (lbs)	PCS-500 = 3500 lbs, PCS-2000 = 7000 lbs, BU-1000 = 50,000 lbs

Ordering Information

Power Conditioning Systems	
PCS-500	500 KW Inverter
PCS-1000	1 MW Inverter
PCS-2000	2 MW Inverter
Battery Units	
BU-500	500 kWh Li-ion battery storage with DNP3 / BACnet interface
BU-1000	1000 kWh Li-ion battery storage with DNP3 / BACnet interface
BU-1500	1500 kWh Li-ion battery storage with DNP3 / BACnet interface
Remote Monitoring Units	
RMU-CELL	4G LTE Remote Monitoring interface
RMU-WIFI	Wireless internet monitoring interface
RMU-ETH	1G Ethernet interface

L1000 In-Building

Manage energy use, cut costs and provide backup power for a building, campus or enterprise with the L1000 In-Building Distributed Energy Storage System from Johnson Controls. We combine world-class battery technology, in-depth buildings expertise and intelligent controls to deliver the solution that performs best with your specific building systems.

Controls go beyond the battery to optimize whole-building performance and simplify participation in energy markets. Adaptive algorithms and premium battery composition help you realize the lowest total lifecycle cost.

As a global multi-industrial leader emphasizing manufacturing excellence, Johnson Controls is perfectly positioned to partner with you on state-of-the-art energy storage. Learn how you can store and distribute power off the grid with the L1000 small container solution.



Direct Energy Savings

The system monitors facility energy consumption and reduces peak consumption, lowering demand charges.

Short Term Energy Backup

The system can be configured to provide short term electrical backup to the facility while a UPS is ramping.

Multiple Power Options

The system output can be configured based upon customer needs from 50kW up to 250kW.

Multiple Power Capacity Options

The system capacity can be configured based upon customer needs from 40kWh up to 500kWh of storage.

Metasys Compatible

The system integrates seamlessly into the Metasys building automation system for local monitoring and control.

Remote System Monitoring

Provides local and remote real-time monitoring, diagnostics and control of the energy storage system.

Small Footprint

System can be installed in any electrical room connected to the facility grid.



L1000 In-Building

Product Specifications

	BU-43	BU-65	BU-85	
Minimum Storage Capacity	43 kWh	65 kWh	85 kWh	
Storage Capacity Increment	43 kWh	65 kWh	85 kWh	
Power Rating	Dependent upon PCS			
Applications	Frequency Regulation, Peak Shaving, Load Shifting, Backup, Volt/Var Support			
DC Voltage	522 VDC	778 VDC	525 VDC	
AC Voltage		240 or 480 VAC		
Seismic	Zone 4 (California)			
Market Interface	JCI Grid Connect			
Building Interface	JCI Metasys / BACnet ASHRAE			
Monitoring	Local and Remote			
Battery Cells	VL41M 41Ah Li-ion Cylindrical Battery			
Certification	Pending	Pending	UL 1741	
Expected Life	15 years			
Dimensions (W x D x H)	37 x 23 x 74 in.	37 x 23 x 74 in.	95 x 15 x 96 in.	
Weight	1950 lbs.	2600 lbs.	2315 lbs.	

Ordering Information

Power Conditioning Systems	
PCS-050	50 KW Inverter with BACnet interface
PCS-125	125 KW Inverter with BACnet interface
PCS-250	250 KW Inverter with BACnet interface
Battery Units	
BU-43	43 kWh Li-ion battery storage
BU-65	65 kWh Li-ion battery storage
BU-85	85 kWh Li-ion battery storage
Remote Monitoring Units	
RMU-CELL	4G LTE Remote Monitoring interface
RMU-WIFI	Wireless internet monitoring interface
RMU-ETH	1G Ethernet interface





READY RACK

The **Ready Rack** mounting hardware is designed for both large utility scale projects and small commercial projects. The hardware design is a simple configuration that allows contractors to install at lighting fast speed with integrated adjustability features for challenging sites. The small helical anchors and quick install cross bracing make the simple system extremely robust even for high wind zones.









POST HEIGHT ADJUSTABILITY

The mini-tilt brackets are adjustable and allow for quick field alignment of the post height. This allows the anchor posts to be installed rapidly and any terrain variation can be accounted for by simply adjusting the tilt bracket up or down. This allows the installer to easily achieve the best possible visual aesthetics on an ungraded site.

APA QUICK INSTALL CLIPS

AP Alternatives has designed and manufactured a unique module specific clip that is user friendly and cost effective for installers. The clip allows for a rapid installation while providing a firm grip on the module for long term and trustworthy support. The clips is the only component installers need to lock modules in place.

EASY INSTALL HELICAL ANCHORS

The AP Alternatives helical anchor can be installed with our fully automated duel anchor drivers for large projects or our single point units for small projects. With APA's anchoring system, we are able to install at shallow depths of 36 inches, depending on soils and frost. This technology allows for a fast, low cost installation.







SYSTEM ADVANTAGES

Quick Install: Simple design that is quickly mastered!

Shallow Helical Anchors: Driven 36 inches in ground rapidly with our automated dual anchor drivers.

High Ground Clearance: 31 inch standard front lip height for low maintenance.

APA Quick Clips: The New APA Quick Clips are designed for quick module installation.

Quick Bracing: APA uses stainless steel aircraft cabling to provide rock solid rigidity to our 4-post

design hardware

Foundation Options: Helical Anchors can be used on larger projects and post can be installed with concrete for small projects.

Installer Friendly: The APA Rail-to-Rail design accommodates post location variability. The Cross bracing clamp easily accommodates all variability. Small tilt bracket accommodates +/- 1-inch for post heights.

Racking Grounding: Racking is all self grounded. Lugs provided for end of row.

Interlocking: Rows can be constructed to any desired length.

SPECIFICATIONS

Racking Material: High Strength Steel

Corrosion Resistance: G90 Galvanized. Higher coating options are available if required.

Snow Load: Opsf to 35psf (higher load options available) **Wind Load:** Up to 150mph (standard design 105mph)

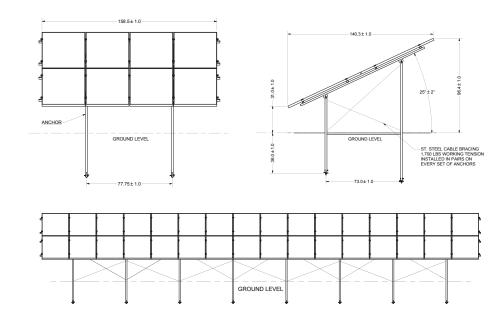
Tilt Angle: Customer Specified (5-30 Degrees)

Anchor Depth: Design based on soil type and frost line. Testing performed by APA before installation

to confirm soil bearing loads.

Building Code Compliant: ASCE7-05 and ASCE7-10

PE Stamped Drawings: APA drawings can be PE stamped for all 50 states and territories.





" Polycrystalline PV module 72 cells

Key Features



Flexible Production*



UL 1000V Rated



Reinforced Module Warranty



Reinforced Structure (thicker glass, stronger frame)



Ideal for ground mounted systems



Salt Mist and Ammonia Resistant



















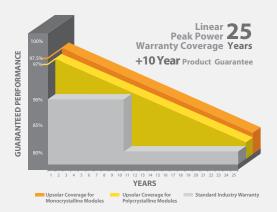




Secure Investment

Upsolar provides industry-leading product coverage for all our modules to ensure our customers achieve superior long-term value from their solar installations. In addition to a 10-year product warranty, which covers unanticipated module damage, Upsolar implements a 25-year performance guarantee known as the Reinforced Module Warranty.

Whereas traditional warranties feature a singular trigger point that results in drastic coverage reductions after just 10 years, our Linear Peak Power Warranty offers a gradual ramp that more accurately corresponds to system performance over 25 years.



Upsolar has teamed up with AIG Energy Warranty, a division of AIG, to provide system owners with a second layer of warranty protection through a deductible-free protection plan** that insures up to 90 percent of equipment costs and delivers peace of mind for years to come.

^{*}Upsolar has expanded its manufacturing operations in Asia, Europe and North America to meet the needs of a global customer base. Please contact your sales representative to learn more about our BAA and TAA -compliant module offerings. **Coverage may not be available in all jurisdictions and is subject to actual policy language. Insurance and services provided by member companies of American International Group, Inc.

Flectrical Characteristics @ STC*

MODEL	UP-M295P	UP-M300P	UP-M305P	UP-M310P	UP-M315P	
Max Power Pm (Wp)	295	300	305	310	315	
Max Power Voltage Vm (V)	35.7	35.9	36.1	36.3	36.5	
Max Power Current Im (A)	8.26	8.36	8.45	8.54	8.63	
Open-Circuit Voltage Voc (V)	45.4	45.6	45.8	46.0	46.2	
Short-Circuit Current Isc (A)	8.58	8.66	8.74	8.82	8.90	
Module Efficiency	15.2%	15.5%	15.70%	16.0%	16.2%	
Maximum System Voltage (V)			1000(IEC)/1000(UL	_)		
Power Tolerance			0/+3%			
Series Fuse Rating (A)			20A			

^{*}STC: Irradiance 1000 W/m², Module temperature 25°C, AM=1.5

Components & Mechanical Data

Front Glass	High Transparency Tempered Glass 0.157" // 4.0 mm
Junction Box	IP 65 or above
Bypass Diode	3 diodes
Output Cables	1.0 m // IEC, UL approved (4 mm², 12AWG) (PV Wire Type)
Connectors	MC4 compatible (IP67, IEC and UL approved)
Frame	Anodized aluminium alloy type 6063-T5
Encapsulation Material	EVA (0.018" // 0.45 mm \pm 0.001" // 0.03 mm thickness)
Back Sheet	White multilayer polymer film
Temperature Range	-40°F to +194°F // -40°C to +90°C
Max Load	75 lbs / ft² (UL Standard) // 5400 Pa (IEC Standards)
Impact Resistance	Steel ball - 1.18 lbs // 535 g dropped from 51" // 1.3 m high

Specifications

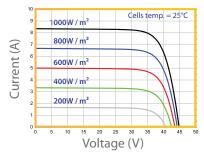
Cells	Polycrystalline silicon solar cells 6" x 6" // 156 mm x 156 mm
Number of Cells	72 (6 x 12)
Dimensions (in // mm)	77.01 x 39.06 x 1.57 // 1956 x 992 x 40

Weight (lb // kg) 58.4 // 26.5

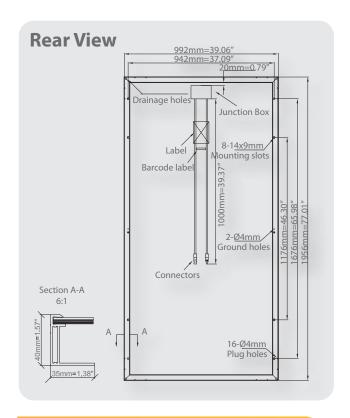
Temperature Coefficients

NOCT (°C)	45 ± 2
Temperature Coefficients of Isc (% / °C)	0.05 ± 0.01
Temperature Coefficients of Voc (% / $^{\circ}$ C)	-0.30 ± 0.02
Temperature Coefficients of Im (% / °C)	-0.02 ± 0.02
Temperature Coefficients of Vm (% / °C)	-0.42 ± 0.03
Temperature Coefficients of Pm (% / °C)	-0.43 + 0.05

IV Curves



• Deviation of Vm (V), Im (A), Voc (V) and Isc (A) of ±2.5%



Options Available

SolarEdge Integrated Tigo Integrated

UP-EN-US-072015-V

Downers Grove Sanitary District

2016 REEVALUATION

INDUSTRIAL WASTEWATER DISCHARGE LIMITS

April 1, 2016

Background

The NPDES permit of the Downers Grove Sanitary District requires that a technical reevaluation of the Permittee's pretreatment program local limits be conducted. Special Condition 9.A.8. of the permit effective August 1, 2015 requires that the permittee shall within twelve months of the effective date of the permit submit to USEPA and IEPA a report containing technical justification for retaining existing local limits or any proposed revisions to its local limits.

The local limits that are currently in effect were last evaluated or revised in 2007. Some of the conditions surrounding the 2007 local limit evaluation have changed, although the existing limits appear to be adequately protective when incorporating those changes into local limit calculations.

Summary

This report is formatted according to the specific itemized list of required information identified in the NPDES permit, and is numbered consistent with the numbering in the permit. Data from the period from 2011 to 2015 is used to complete the evaluation.

Appendix A is the completed spreadsheet entitled Locallmt.xls, obtained from EPA's web site as directed from the NPDES permit.

The limits currently in effect, last evaluated and modified in 2007, are considered adequately protective. No changes to the local limits are recommended at this time.

a. Total Plant Flow

WASTEWATER TREATMENT CENTER FLOWS

YEAR	AVERAGE FLOW, MGD
2011	11.05
2012	8.94
2013	10.44
2014	11.17
2015	10.93
AVG	10.5
2007 AVG	10.1

b. Domestic/Commercial Pollutant Concentrations of Pollutants of Concern

For this evaluation, plant influent results are used to characterize background pollutant concentrations, which is more protective than sampling at locations with only domestic/commercial flows. For averaging purposes, method detection levels were used when results were reported below detection limits.

Background Concentration,

Parameter	ug/l
Arsenic (T)	3.3
Cadmium (T)	0.57
Chromium (T)	2.8
Chromium, hexavalent	14
Copper (T)	61
Cyanide (T)	12
Lead (T)	2.6
Mercury (T)	0.25
Nickel (T)	3.7
Selenium (T)	1.1
Silver (T)	1.4
Zinc (T)	83
Antimony (T)	0.76
Manganese (T)	56.4
Molybdenum (T)	7.2

c. Industrial pollutant contributions and flows

INDUSTRIAL USER PERMIT FLOWS AND LIMITS FOR PARAMETERS OF CONCERN

IU	Permitted Flow, gpd	Permit Limits, mg/l
Rexnord	41,000	Cd-0.28; Cr-27; Cu-2.54; CN-1.34;
		Ni-4.27; Zn-2.61
Bales	300	Zero-discharge, sanitary only
Valid USA	3,710	Hg-0.0005
Good Samaritan Hospital *	124,045	Ag-0.57; Hg-0.0005
Marcor	7,040	pH only
Total (silver and mercury)	176,095	
Total (all other parameters)	52,050	

^{*} The hospital is only considered an industrial user for those pollutant parameters it is likely to have in its wastewater, silver and mercury.

d. POTW Pollutant Loads

Conventional parameters are averages of regular NPDES monitoring results over the 5 year period. Pollutants of concern are background concentrations from Section b. applied to average flows.

Parameter	5 Yr Avg Influent Load, lbs/day
BOD	11,562
TSS	13,579
Amm-N	1,303
Arsenic (T)	0.29

Cadmium (T)	0.050
Chromium (T)	0.25
Chromium, hexavalent	1.2
Copper (T)	5.3
Cyanide (T)	1.1
Lead (T)	0.23
Mercury (T)	0.022
Nickel (T)	0.32
Selenium (T)	0.10
Silver (T)	0.12
Zinc (T)	7.3
Antimony (T)	0.067
Manganese (T)	4.9
Molybdenum (T)	0.63

e. Removal Efficiencies

Actual removal efficiencies are only available using influent and effluent data, across the POTW. Efficiencies are calculated using influent and effluent data over the past 5 to 10 years, depending on the frequency of data above method detection levels. Removal efficiencies were compared with textbook values from the EPA 2004 guidance document for reasonableness. Primary removal efficiencies are based on textbook values taken from the EPA guidance document. Secondary removal efficiencies are not pertinent, because the plant uses single stage nitrification, applying only primary removal to parameters before assessing potential for interference with nitrification.

Parameter of Concern	Primary Removal	Overall Removal
	Efficiency	Efficiency
Arsenic (T)	0	11
Cadmium (T)	15	56
Chromium (T)	27	79
Chromium, hexavalent	27	69
Copper (T)	22	87
Cyanide (T)	27	58
Lead (T)	57	89
Mercury (T)	10	99
Nickel (T)	14	44
Selenium (T)	NA	22
Silver (T)	20	48
Zinc (T)	27	64
Antimony (T)	NA	19
Manganese (T)	NA	69
Molybdenum (T)	NA	34

f. Safety Factor

A safety factor of 20% is used in all calculations.

g. Identification of applicable criteria

There are no NPDES discharge limits for parameters of concern.

Water quality standards have been modified since the last evaluation of the local limits in 2007. Many of the standards are now expressed as chronic and acute limits, and vary with hardness in the receiving stream. Illinois EPA was contacted to ascertain the applicable concentration limits at the treatment plant outfall and upstream concentrations.

Whole effluent toxicity testing is conducted periodically per the NPDES permit. Historic testing has not revealed toxicity at levels requiring any action.

Sludge is processed into a Class A bio-solid product, regulated under the Federal 503 rules. There are Illinois rules that include a concentration limit for Cadmium, and site life application rates for other parameters of concern. Site life calculations are made assuming 10 dry tons per acre for 10 years.

Treatment plant inhibition thresholds are evaluated for activated sludge, nitrification, and anaerobic digestion. Textbook levels from the 2004 EPA guidance document are used for parameters of concern.

Collection system protection is primarily provided with the FOG limit of 100 mg/l, and the pH range limits between 5.5 and 9.0 SU. Both of these limits are sufficiently protective, and are not proposed to be changed. Further discussion about fume toxicity of volatile organics is in Section q. below.

The following table includes applicable standards for parameters of concern.

Parameter	Acute	Chronic	Federal	State	Act. Sl.	Nitr. Inh.	An. Dig.
	WQS,	WQS,	Sludge	Sludge	Inh.	Thresh,	Inh.
	mg/l	mg/l	Std,	Std,	Thresh,	mg/l	Thresh,
			mg/kg	mg/kg	mg/l		mg/l
Arsenic (T)	0.36	0.19	41	500	0.1	1.5	1.6
Cadmium (T)	0.0286	0.0024	39	25	1	5.2	20
Chromium (T)	3.7979	0.4527		17,500	1	0.25	110
Chromium,	0.016	0.011		2,200	1	1	110
hexavalent							
Copper (T)	0.0436	0.0268	1,500	1,250	1	0.1	40
Cyanide (T)	*	*			0.1	0.34	4
Lead (T)	0.323	0.0677	300	5,000	1	0.5	340
Mercury (T)	0.000012	0.0013	17	350	0.1	0.1	
Nickel (T)	0.1852	0.0112	420	500	1	0.25	10

Selenium (T)	1		100	40			
Silver (T)	0.005			890	5		13
Zinc (T)	0.2745	0.0712	2800	2,500	0.3	0.1	400
Antimony (T)				3,500			
Manganese (T)				4,500			
Molybdenum (T)			80				

^{*} WQS for Cyanide is for weak acid dissociable fraction (WAD), 0.0220 Acute, 0.0052 Chronic.

h. Sludge Disposal Methods

All sludge is treated to Class A levels, then given away for land application.

i. Sludge flow to Digestion

Sludge flow is averaged over the 5 year period from 2011 to 2015 in the following table.

Year	Annual Average Flow to Digesters, MGD
2011	0.0582
2012	0.0553
2013	0.0542
2014	0.0601
2015	0.0635
Average	0.058

j. Sludge flow to Disposal

Sludge flow to disposal is averaged over the 5 year period from 2011 to 2015 in the following table.

Year	Annual Average to Disposal, MGD
2011	0.00182
2012	0.00301
2013	0.00168
2014	0.00191
2015	0.00201
Average	0.0021

k. Sludge % solids to Disposal

Sludge solids % to disposal is averaged over the 5 year period from 2011 to 2015 in the following table.

Year	Annual Average Sludge to Disposal % Solids
2011	58.4

⁵ Years of historic plant influent and effluent data has been below test detection limit.

2012	68.8
2013	70.1
2014	74.7
2015	66.6
Average	68

l. Sludge % solids to Digestion

Sludge solids % to digestion is averaged over the 5 year period from 2011 to 2015 in the following table.

Year	Annual Average Sludge to Digesters % Solids
2011	2.86
2012	3.13
2013	3.40
2014	3.42
2015	3.15
Average	3.2

m. Plant Removal Efficiencies of Conventional Pollutants

Plant removal efficiencies for BOD, TSS and Amm-N are averaged over the 5 year period from 2011 to 2015 in the following table. BOD percent removals are calculated using BOD influent results and CBOD effluent results.

Year	BOD	TSS	Amm-N
2011	99.0	99.3	97.4
2012	98.9	99.7	99.3
2013	99.2	99.6	99.2
2014	99.2	99.5	98.2
2015	99.0	99.5	98.4
Average	99	100	99

n. Allocation Methodology

No changes in local limits are proposed. Calculations allocate pollutant loads using a single concentration limit for applicable IUs for parameters of concern.

o. MAHL Comparison

Maximum allowable headworks loadings are compared in the following table. MAHLs are taken from the Locallmt spreadsheet calculations.

Parameter	Acute	Chronic	Federal	State	Act. Sl. Inh.	Nitr. Inh.	An. Dig.
	WQS,	WQS,	Sludge	Sludge	Thresh,	Thresh,	Inh.
	lbs/d	lbs/d	Std,	Std,	lbs/d	lbs/d	Thresh,
			lbs/d	lbs/d			lbs/d
Arsenic (T)	65	34	4.4	54	8.8	131	7.0
Cadmium (T)	10	0.83	0.83	0.53	103	536	17
Chromium (T)	2910	346		264	120	30	67
Chromium,	7.5	4.9		38	120	120	77
hexavalent							
Copper (T)	51	30	21	17	112	11	22
Cyanide (T)					12	41	3.3
Lead (T)	470	97	4.0	67	204	102	185
Mercury (T)	0.19	21	0.20	4.2	9.7	9.7	
Nickel (T)	53	3.0	11	14	102	25	11
Selenium (T)	206		5.4	2.2			
Silver (T)	1.4			22	547		13
Zinc (T)	118	27	52	47	36	12	302
Antimony (T)				230			
Manganese (T)				81			
Molybdenum (T)			2.8				

p. Pollutants that have caused problems

There have been two historic problems. The first is occasional sewer system blockages from restaurant grease. Enforcement of the existing 100 mg/l FOG standard is adequate to control this problem.

The second problem has been occasional episodes of pass-through of food-safe colorants, causing unnatural color in the WWTP effluent. Enforcement of the general prohibition against colors is adequate to control this problem.

q. Pollutants designated as 'monitoring only'

All parameters of concern plus the 110 organic priority pollutants are monitored periodically in the plant influent, effluent, and sludge.

In the 5-year period 2011-2015, the District has detected the following parameters in its sludge during its annual priority pollutant screening. These parameters are not currently regulated under the existing sludge disposal rules. However, the State of Illinois has codified its risk-based cleanup objectives for contaminated sites, including background levels of parameters in soils in metropolitan areas and clean-up objectives for residential property (35 IAC 742). The concentrations of these parameters in the District's biosolids have been compared with these published standards, and are below background or target concentrations contained in these rules, with the exception of methylene chloride, which appeared in a single sample very near the minimum cleanup objective, and well below any level where a local limit might approach the

level of detection for the test procedure. These parameters are not present in sufficient quantities to warrant consideration as pollutants of concern in local limits development.

				TACO*
	Max	Number of	TACO*	Most
	Measured in	Occurrences	Metropolitan	Stringent
	Biosolids	in Biosolids	Background,	Objective,
PARAMETER	mg/kg	in 5 years	mg/kg	mg/kg
Anthracene	0.372	1	0.4	
Chloroform	0.0193	1		0.3
Ethylbenzene	0.004	1		13
Methylene chloride	0.0336	1		0.02
Trichloroethylene	0.005	1		0.06
1,1,1-Trichloroethane	0.0043	1		2
Benzo(a)anthracene	0.857	2	1.8	
Bis(2-ethylhexyl)phthalate	7.27	3		46
Benzo(a)pyrene	0.768	3	2.1	
1,4-Dichlorobenzene	0.0126	2		2
Benzo(b)fluoranthene	1.13	4	2.1	
Benzo(k)fluoranthene	0.0604	1	1.7	
Chrysene	0.911	2	2.7	
Fluoranthene	2.4	4	4.1	
Phenanthrene	1.8	3	2.5	
Pyrene	1.93	4	3	
4,4 -DDT	0.0058	1		2
4,4 -DDE	0.0054	1		2
Toluene	0.0153	2		12

^{*}Illinois Administrative Code Title 35, Part 742: Tiered Approach to Corrective Action Objectives

In the 5-year period 2011-2015, the District has detected the following parameters in its influent or effluent during its annual priority pollutant screening. These parameters were detected at or near the method detection limit in all cases, with all parameters appearing at a concentration of less than 10 parts per billion. Only chloroform appears in the influent on a regular basis. Neither parameter appears in the effluent. Quantities present in the sludge are not sufficient to derive or establish a local limit. Neither constituent is present in sufficient quantities to meet the screening criteria for fume toxicity contained in EPA's Local Limits Guidance of 2004. These parameters are not considered as pollutants of concern for local limits development.

	Max	Number of	Fume
	Measured in	Occurrences	Toxicity
	Influent,	in Influent	Screening
PARAMETER	mg/l	in 5 years	Levels*
Chloroform	0.0027	5	0.06
Toluene	0.0044	1	2.075

*From USEPA Local Limits Development Guidance Appendices, July 2004

r. Supporting information

Much of the supporting data has been previously submitted as required under NPDES and sludge permit requirements. Calculation methodologies are described in the text.

Cyanide water quality standards have been modified to limiting the weak acid dissociable (WAD) form only. Monitoring for cyanide (WAD) since the 2007 evaluation has consistently shown the absence of this parameter in the influent or effluent, so no limit is recommended at this time. The limit for total cyanide is recommended to be retained, which could be partly responsible for effectively limiting cyanide (WAD).

The following table compares the existing local limits with the lowest calculated local limit from the tables in the Locallmt spreadsheet. The existing local limits are all lower than the calculated local limits derived in this updated analysis. The existing local limits are therefore considered to be adequately protective, and are not recommended to be changed.

Parameter	Existing Local Limit, mg/l	Calculated Local Limit, mg/l
Arsenic (T)	0.52	7.6
Cadmium (T)	0.28	0.87
Chromium (T)	27.0	55
Chromium, hexavalent	0.81	6.3
Copper (T)	2.54	8.5
Cyanide (T)	1.34	3.7
Lead (T)	2.15	6.9
Mercury (T)	0.0005	0.091
Nickel (T)	4.27	4.7
Selenium (T)		3.8
Silver (T)	0.57	0.69
Zinc (T)	2.61	5.45
Antimony (T)		424
Manganese (T)		139
Molybdenum (T)		3.7

Influent loads for selenium, antimony, manganese and molybdenum continue to be significantly lower that the MAHLs. No limits for these parameters are proposed at this time.

APPENDIX A

TABLES 1-9 FROM

Locallmt.xlsx

						TABLE	1					
		Local Limits [Determination B	ased on NPDES Dai	ly Effluent Limits							
	ENVIRON	MENTAL CR	ITERIA AND PR	OCESS DATA BASI	<u> </u>		MAXIMUM LC	DADING	INDUSTRIAL			
	IU Pollut.	POTW	Removal	NPDES	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety	
Pollutant	Flow	Flow	Efficiency	Daily Limit	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor	
	(MGD)	(MGD)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)	
	(Qind)	(Qpotw)	(Rpotw)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)	
Arsenic	0.052	10.5	11	, ,	0.003	10.448	-	0.26140896	-	- `		20
Cadmium	0.052	10.5	56		0.00057	10.448	-	0.0496677	-	-		20
Chromium	0.052	10.5	79		0.00275	10.448	-	0.23962488	-	-		20
Hex. Chrom.	0.052	10.5	69		0.0137	10.448	-	1.19376758	-	-		20
Copper	0.052	10.5	87		0.061	10.448	-	5.31531552	-	-		20
Cyanide	0.052	10.5	58		0.012	10.448	-	1.04563584	-	-		20
Iron						0	-	0	-	-		
Lead	0.052	10.5	89		0.0026	10.448	-	0.22655443	-	-		20
Mercury	0.176	10.5	99		0.00025	10.324	-	0.02152554	-	-		20
Molybdenum	0.052	10.5	34		0.00715	10.448	-	0.62302469	-	-		20
Nickel	0.052	10.5	44		0.00372	10.448	-	0.32414711	-	-		20
Selenium	0.052	10.5	22		0.0011	10.448	-	0.09584995	-	-		20
Silver	0.176	10.5	48		0.0014	10.324	-	0.12054302	-	-		20
Zinc	0.052	10.5	64		0.083	10.448	-	7.23231456	-	-		20
(Qind)	Industrial Use	er total plant d	lischarge flow in	Million Gallons per D	ay (MGD) that contains	a particular polluta	ınt.					
(Qpotw)	POTW's ave	rage influent f	low in MGD.									
(Rpotw)	Removal effi	ciency across	POTW as perc	ent.								
(Ccrit)	NPDES daily	y maximum pe	ermit limit for a p	articular pollutant in r	ng/l.							
(Qdom)	Domestic/co	mmercial bac	kground flow in	MGD.								
(Cdom)	Domestic/co	mmercial bac	kground concer	ntration for a particula	r pollutant in mg/l.							
(Lhw)	Maximum all	owable heady	works pollutant k	pading to the POTW i	n pounds per day (lbs/da	ay).						
(Ldom)	Domestic/co	mmercial bac	kground loading	to the POTW for a p	articular pollutant in pour	nds per day (lbs/da	ay).					
(Lind)	Maximum all	owable indust	trial loading to th	e POTW in pounds p	er day.							
(Cind)	Industrial allo	wable local lin	mit for a given p	ollutant in mg/l.								
(SF)	Safety factor	as a percent.										
8.34	Unit conversi	on factor										
Lhw =	8.34 * Ccrit *	Qpotw										
	1 - Rpotw											

						TABLE	2					
		Local Limits	Determination B	ased on NPDES Moi	nthly Effluent Limits	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_					
	ENVIR	RONMENTAL	CRITERIA AND	PROCESS DATA E	BASE		MAXIMUM LC	ADING	INDUSTRIAL			
	IU Pollut.	POTW	Removal	NPDES	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety	
Pollutant	Flow	Flow	Efficiency	Monthly Limit	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor	
	(MGD)	(MGD)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)	
	(Qind)	(Qpotw)	(Rpotw)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)	
Arsenic	0.052	10.5	11		0.003	10.448	-	0.26140896	-	-		20
Cadmium	0.052	10.5	56		0.00057	10.448	-	0.0496677	-	-		20
Chromium	0.052	10.5	79		0.00275	10.448	-	0.23962488	-	-		20
Hex. Chrom.	0.052	10.5	69		0.0137	10.448	-	1.19376758	-	-		20
Copper	0.052	10.5	87		0.061	10.448	-	5.31531552	-	-		20
Cyanide	0.052	10.5	58		0.012	10.448	-	1.04563584	-	-		20
Iron	0	0	0		0	0	-	0	-	-		0
Lead	0.052	10.5	89		0.0026	10.448	-	0.22655443	-	-		20
Mercury	0.176	10.5	99		0.00025	10.324	-	0.02152554	-	-		20
Molybdenum	0.052	10.5	34		0.00715	10.448	-	0.62302469	-	-		20
Nickel	0.052	10.5	44		0.00372	10.448	-	0.32414711	-	-		20
Selenium	0.052	10.5	22		0.0011	10.448	-	0.09584995	-	-		20
Silver	0.176	10.5	48		0.0014	10.324	-	0.12054302	-	-		20
Zinc	0.052	10.5	64		0.083	10.448	-	7.23231456	-	-		20
(Qind)	Industrial Use	er total plant o	discharge flow in	Million Gallons per D	ay (MGD) that contains a	a particular polluta	ınt.					
(Qpotw)	POTW's ave	rage influent t	flow in MGD.									
(Rpotw)	Removal effic	ciency across	POTW as perce	ent.								
(Ccrit)	NPDES mor	nthly maximun	n permit limit for	a particular pollutant i	in mg/l.							
(Qdom)	Domestic/co	mmercial bad	ckground flow in	MGD.								
(Cdom)	Domestic/co	mmercial bad	ckground concer	tration for a particula	r pollutant in mg/l.							
(Lhw)	Maximum all	owable head	works pollutant lo	ading to the POTW i	n pounds per day (lbs/da	ay).						
(Ldom)	Domestic/co	mmercial bad	ckground loading	to the POTW for a p	articular pollutant in pour	nds per day (lbs/d	ay).					
(Lind)	Maximum all	owable indus	trial loading to th	e POTW in pounds p								
(Cind)	Industrial allo	wable local li	mit for a given po	ollutant in mg/l.								
(SF)	Safety factor	as a percent										
8.34	Unit conversi	on factor										
Lhw =	8.34 * Ccrit *	Qpotw										
	1 - Rpotw											

						TABLE	3					
	Local Lir	nits Determina	ation Based on	Activated Sludge Inhib	oition Level							
	ENVI	RONMENTAL	CRITERIA AND	PROCESS DATA B	ASE		MAXIMUM LO	ADING	INDUSTRIAL			
	IU Pollut.	POTW		Activated Sludge	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety	
Pollutant	Flow	Flow		Inhibition Level	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor	
	(MGD)	(MGD)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)	
		(Qpotw)	(Rprim)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)	
Arsenic	0.052	10.5	0	0.1	0.003			0.26140896	6.74419104	15.551077		20
Cadmium	0.052	10.5	15	1	0.00057		103.0235294	0.0496677	82.36915583	189.93072		20
Chromium	0.052	10.5	27	1	0.00275			0.23962488	95.72749841	220.73303		20
Hex. Chrom.	0.052	10.5	27	1	0.0137	10.448	119.9589041	1.19376758	94.7733557	218.53292		20
Copper	0.052	10.5	22	1	0.061	10.448	112.2692308	5.31531552	84.5000691	194.84428		20
Cyanide	0.052	10.5	27	0.1	0.012	10.448	11.99589041	1.04563584	8.551076489	19.717479		20
Iron	0	0			0	0	-	0	-	-		0
Lead	0.052	10.5	57	1	0.0026	10.448	203.6511628	0.22655443	162.6943758	375.14844		20
Mercury	0.176	10.5	10	0.1	0.00025	10.324	9.73	0.02152554	7.76247446	5.2883655		20
Molybdenum	0.052	10.5			0.00715	10.448	-	0.62302469	-	-		20
Nickel	0.052	10.5	14	1	0.00372	10.448	101.8255814	0.32414711	81.13631801	187.08799		20
Selenium	0.052	10.5	0		0.0011	10.448	-	0.09584995	-	-		20
Silver	0.176	10.5	20	5	0.0014	10.324	547.3125	0.12054302	437.729457	298.21333		20
Zinc	0.052	10.5	27	0.3	0.083	10.448	35.98767123	7.23231456	21.55782243	49.709054		20
(Qind)	Industrial Us	er total plant d	ischarge flow ir	n Million Gallons per D	ay (MGD) that contains a	a particular pollut	ant.					
(Qpotw)	POTW's ave	erage influent f	low in MGD.									
(Rprim)	Removal eff	iciency across	across primary	treatment as percent								
(Ccrit)	Activated slu	udge threshold	I inhibition level	, mg/l.								
(Qdom)	Domestic/co	mmercial bac	kground flow in	MGD.								
(Cdom)	Domestic/co	mmercial bac	kground conce	ntration for a particular	r pollutant in mg/l.							
(Lhw)	Maximum al	lowable headv	vorks pollutant l	oading to the POTW in	n pounds per day (lbs/da	ay).						
(Ldom)	Domestic/co	mmercial bac	kground loadin	g to the POTW for a pa	articular pollutant in pour	nds per day (lbs/c	lay).					
(Lind)	Maximum al	lowable indust	trial loading to th	ne POTW in pounds p	er day.							
(Cind)	Industrial allo	owable local lin	mit for a given p	ollutant in mg/l.								
(SF)	Safety facto	r as a percent.										
8.34	Unit convers	ion factor										
Lhw =	8.34 * Ccrit	* Qpotw										
	1 - Rprim											

						TABLE	4					
	Local L	imits Determ	ination Based o	n Nitrification Inhibitio	n Level							
	E N //E	ONINAENITAL	ODITEDIA AND	, DD00500 D 4 T 4 D	105		NAAN/INALINALIO		NIDLIGTOIAL			
	ENVIR	KONMENTAL	CRITERIA ANL	PROCESS DATA B	ASE		MAXIMUM LOA	ADING	INDUSTRIAL			
	IU Pollut.	POTW	Removal	Nitrification	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety	
Pollutant	Flow	Flow	Efficiency	Inhibition Level	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor	
	(MGD)	(MGD)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)	
	(Qind)	(Qpotw)	(Rsec)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)	
Arsenic	0.052	10.5	0	1.5	0.003	10.448	131.355	0.26140896	104.822591	241.70492		20
Cadmium	0.052	10.5	15	5.2	0.00057	10.448	535.7223529	0.0496677	428.5282147	988.12077		20
Chromium	0.052	10.5	27	0.25	0.00275	10.448	29.98972603	0.23962488	23.75215594	54.768852		20
Hex. Chrom.	0.052	10.5	27	1	0.0137	10.448	119.9589041	1.19376758	94.7733557	218.53292		20
Copper	0.052	10.5	22	0.1	0.061	10.448	11.22692308	5.31531552	3.666222942	8.4537515		20
Cyanide	0.052	10.5	27	0.34	0.012	10.448	40.7860274	1.04563584	31.58318608	72.826015		20
Iron	0	0	0		0	0	-	0	-	-		0
Lead	0.052	10.5	57	0.5	0.0026	10.448	101.8255814	0.22655443	81.23391068	187.31302		20
Mercury	0.176	10.5	10	0.1	0.00025	10.324	9.73	0.02152554	7.76247446	5.2883655		20
Molybdenum	0.052	10.5	0		0.00715	10.448	-	0.62302469	-	-		20
Nickel	0.052	10.5	14	0.25	0.00372	10.448	25.45639535	0.32414711	20.04096917	46.211421		20
Selenium	0.052	10.5	0		0.0011	10.448	-	0.09584995	-	-		20
Silver	0.176	10.5	20		0.0014	10.324	-	0.12054302	-	-		20
Zinc	0.052	10.5	27	0.1	0.083	10.448	11.99589041	7.23231456	2.364397769	5.451941		20
(Qind)	Industrial Use	er total plant o	discharge flow in	Million Gallons per Da	ay (MGD) that contains a	a particular pollut	ant.					
(Qpotw)		rage influent f										
(Rsec)	Removal effic	ciency across	s primary treatm	ent and secodary treat	tment as percent.							
(Ccrit)	Nitrification t	hreshold inhib	oition level, mg/l.									
(Qdom)	Domestic/co	mmercial bad	ckground flow in	MGD.								
(Cdom)	Domestic/co	mmercial bad	ckground conce	ntration for a particular	r pollutant in mg/l.							
(Lhw)	Maximum all	owable head	works pollutant l	pading to the POTW in	n pounds per day (lbs/da	ay).						
(Ldom)	Domestic/co	mmercial bad	ckground loading	g to the POTW for a pa	articular pollutant in pour	nds per day (lbs/d	day).					
(Lind)	Maximum all	owable indus	trial loading to th	ne POTW in pounds pe	er day.							
(Cind)	Industrial allo	wable local li	mit for a given p	ollutant in mg/l.								
(SF)	Safety factor	as a percent										
8.34	Unit conversi	on factor										
Lhw =	8.34 * Ccrit *	Qpotw										
	1 - Rsec											

						TABLE	5						
		Local Limits	Determination Ba	ased on USEPA 503 S	ludge Regulations								
	ENVIR			PROCESS DATA BAS					MAXIMUM LOAD	DING	INDUSTRIAL		
	IU Pollut.	POTW	Sludge	Percent	Removal	503 Sludge	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Solids	Efficiency	Criteria	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(%)	(%)	(mg/kg)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qsldg)	(PS)	(Rpotw)	(Cslcrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Arsenic	0.052	10.5	0.0021	68	11	41	0.003	10.448	4.439002909	0.261409	3.289793367	7.585762238	20
Cadmium	0.052	10.5	0.0021	68	56	39	0.00057	10.448	0.829413	0.0496677	0.613862698	1.415473846	
Chromium	0.052	10.5	0.0021	68	79		0.00275	10.448	-	0.2396249	-	-	20
Hex. Chrom.	0.052	10.5	0.0021	68	69		0.0137	10.448	-	1.1937676	-	-	20
Copper	0.052	10.5	0.0021	68	87	1500	0.061	10.448	20.53365517	5.3153155	11.11160862	25.62167639	20
Cyanide	0.052	10.5	0.0021	68	58		0.012	10.448	-	1.0456358	-	-	20
Iron	0	0			0		0	0	-	0	-	-	0
Lead	0.052	10.5	0.0021	68	89			10.448	4.014444944	0.2265544	2.985001523	6.882958686	20
Mercury	0.176	10.5	0.0021	68	99				0.204506909	0.0215255	0.142079987	0.096795282	
Molybdenum	0.052	10.5	0.0021	68	34			10.448	2.80224	0.6230247	1.618767312	3.732630769	20
Nickel	0.052	10.5	0.0021	68	44				11.36817818	0.3241471	8.770395435	20.22319552	20
Selenium	0.052	10.5	0.0021	68	22				5.413418182	0.09585	4.234884593	9.764998601	20
Silver	0.176	10.5	0.0021	68	48		0.0014		-	0.120543	-	-	20
Zinc	0.052	10.5	0.0021	68	64			10.448	52.10415	7.2323146	34.45100544	79.43876923	20
(Qind)				Million Gallons per Day	(MGD) that contains a	a particular pollut	ant.						
(Qpotw)		rage influent fl											
(Qsldg)		o disposal in l											
(PS)		ls of sludge to											
(Rpotw)			POTW as a perc	cent.									
(Cslcrit)		riteria in mg/k											
(Qdom)			kground flow in M										
(Cdom)				ration for a particular p									
(Lhw)				ading to the POTW in p									
(Ldom)				to the POTW for a part		nds per day (lbs/d	day).						
(Lind)				POTW in pounds per	day.								
(Cind)			nit for a given pol	llutant in mg/l.									
(SF)		as a percent.											
8.34	Unit conversi												
Lhw =		* (PS/100) *	Qsldg										
	Rpot	N											

						TABLE	6						
		Local	Limits Determina	tion Based on State SI	udge Criteria								
	ENVI			PROCESS DATA BAS					MAXIMUM LOAD	DING	INDUSTRIAL		
	IU Pollut.	POTW	Sludge	Percent	Removal	State Sludge	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Solids	Efficiency	Criteria	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(%)	(%)	(mg/kg)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qsldg)	(PS)	(Rpotw)	(Cslcrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Arsenic	0.052	10.5	0.0021	68	11	500	0.003		54.13418182	0.261409	43.04593649	99.25737063	20
Cadmium	0.052	10.5	0.0021	68	56	25	0.00057	10.448	0.531675	0.0496677	0.375672298	0.866243077	20
Chromium	0.052	10.5	0.0021	68	79	17500	0.00275	10.448	263.818481	0.2396249	210.8151599	486.1076368	20
Hex. Chrom.	0.052	10.5	0.0021	68	69	2200	0.0137	10.448	37.97238261	1.1937676	29.1841385	67.29417659	20
Copper	0.052	10.5	0.0021	68	87	1250	0.061	10.448	17.11137931	5.3153155	8.373787928	19.30867905	20
Cyanide	0.052	10.5	0.0021	68	58	В	0.012	10.448	-	1.0456358	-	-	20
Iron	0	0	0	0	C		0	0	-	0	-	-	0
Lead	0.052	10.5	0.0021	68	89	5000	0.0026	10.448	66.90741573	0.2265544	53.29937815	122.9002448	20
Mercury	0.176	10.5	0.0021	68	99	350	0.00025	10.324	4.210436364	0.0215255	3.346823551	2.280101067	20
Molybdenum	0.052	10.5	0.0021	68	34		0.00715	10.448	-	0.6230247	-	-	20
Nickel	0.052	10.5	0.0021	68	44	500	0.00372	10.448	13.53354545	0.3241471	10.50268925	24.21760112	20
Selenium	0.052	10.5	0.0021	68	22	. 40	0.0011	10.448	2.165367273	0.09585	1.636443866	3.77339021	20
Silver	0.176	10.5	0.0021	68	48	890	0.0014	10.324	22.082235	0.120543	17.54524498	11.95310455	20
Zinc	0.052	10.5	0.0021	68	64	2500	0.083	10.448	46.5215625	7.2323146	29.98493544	69.14069231	20
Manganese	0.052	10.5	0.0022	68	69	4500	0.0564	10.448	81.3693913	4.9144884	60.1810246	138.7682729	20
Antimony	0.052	10.5	0.0022	68	19	3500	0.00076	10.448	229.8328421	0.0662236	183.8000501	423.8149098	20
(Qind)	Industrial Use	er total plant d	ischarge flow in N	Million Gallons per Day	(MGD) that contains	a particular pollut	ant.						
(Qpotw)	POTW's aver	rage influent fl	ow in MGD.										
(Qsldg)	Sludge flow t	o disposal in l	MGD.										
(PS)	Percent solid	s of sludge to	disposal.										
(Rpotw)	Removal effic	ciency across	POTW as a perc	cent.									
(Cslcrit)	State sludge	criteria in mg	kg dry sludge.										
(Qdom)	Domestic/co	mmercial bac	kground flow in M	MGD.									
(Cdom)	Domestic/co	mmercial bac	kground concenti	ration for a particular po	ollutant in mg/l.								
(Lhw)	Maximum allo	owable heady	vorks pollutant loa	ading to the POTW in po	ounds per day (lbs/da	ay).							
(Ldom)	Domestic/co	mmercial bac	kground loading	to the POTW for a parti	cular pollutant in pou	nds per day (lbs/d	day).						
(Lind)	Maximum allo	owable indust	rial loading to the	POTW in pounds per o	day.								
(Cind)	Industrial allo	wable local lir	nit for a given pol	llutant in mg/l.									
(SF)	Safety factor	as a percent.											
8.34	Unit conversi	on factor											
Lhw =	8.34 * Cslcrit	* (PS/100) * (Qsldg										
	Rpoty	v											

						TABLE	7						
		Local Limits I	Determination Bas	sed on Chronic Wate	r Quality Standards								
				CESS DATA BASE					MAXIMUM LOA	DING	INDUSTRIAL		
	IU Pollut.	POTW	Upstream	Upstream	Removal	Chronic	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Conc.	Efficiency	WQS	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(mg/l)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qstr)	(Cstr)	(Rpotw)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Arsenic	0.052	10.5	8.8	0.00196	1	0.19	0.003	10.448	34.20104683	0.261409	27.09942851	62.48715298	20
Cadmium	0.052	10.5	8.8	0.000282	56	0.0024	0.00057	10.448	0.830936945	0.0496677	0.615081854	1.418285035	20
Chromium	0.052	10.5	8.8	0.00347	79	9 0.4527	0.00275	10.448	345.7753674	0.2396249	276.3806691	637.2917106	20
Hex. Chrom.	0.052	10.5	8.8	0.00347	69	9 0.011	0.0137	10.448	4.890037935	1.1937676	2.718262764	6.267899752	20
Copper	0.052	10.5	8.8	0.005586	8	7 0.0268	0.061	10.448	30.0293376	5.3153155	18.70815456	43.13815385	20
Cyanide	0.052	10.5	8.8	0	58	3	0.012	10.448	-	1.0456358	-	-	20
Iron	0	0		0	()	0	0	-	0	-	-	0
Lead	0.052	10.5	8.8	0.00365	88	9 0.0677	0.0026	10.448	96.62951455	0.2265544	77.0770572	177.7279497	20
Mercury	0.176	10.5	8.8	0	99	0.0013	0.00025	10.324	20.92506	0.0215255	16.71852246	11.38988068	20
Molybdenum	0.052	10.5	8.8	0	34	4	0.00715	10.448	-	0.6230247	-	-	20
Nickel	0.052	10.5	8.8	0.00192	44	4 0.0112	0.00372	10.448	2.967610286	0.3241471	2.049941118	4.726851868	20
Selenium	0.052	10.5	8.8	0.00262	2:	2	0.0011	10.448	-	0.09585	-	-	20
Silver	0.176	10.5	8.8	0.00097	48	3	0.0014	10.324	-	0.120543	-	-	20
Zinc	0.052	10.5	8.8	0.0238	64	4 0.0712	0.083	10.448	26.98268	7.2323146	14.35382944	33.09774359	20
(Qind)	Industrial Use	er total plant o	discharge flow in M	fillion Gallons per Da	y (MGD) that contains	a particular pollut	ant.						
(Qpotw)	POTW's ave	rage influent f	flow in MGD.										
(Qstr)	Receiving str	eam (upstrea	am) 7Q10 flow in N	MGD.									
(Cstr)	Receiving str	eam backgro	ound level in mg/l.										
(Rpotw)	Removal effic	ciency across	s POTW as percer	nt.									
(Ccrit)	State chronic	water quality	standard for a pa	ırticular pollutant in m	ıg/l.								
(Qdom)	Domestic/co	mmercial bad	ckground flow in M	GD.									
(Cdom)	Domestic/co	mmercial bad	ckground concentr	ation for a particular	pollutant in mg/l.								
(Lhw)	Maximum alle	owable head	works pollutant loa	ding to the POTW in	pounds per day (lbs/d	ay).							
(Ldom)	Domestic/co	mmercial bad	ckground loading t	to the POTW for a pa	irticular pollutant in pou	ınds per day (lbs/d	day).						
(Lind)	Maximum alle	owable indus	trial loading to the	POTW in pounds pe	er day.								
(Cind)	Industrial allo	wable local li	mit for a given poll	lutant in mg/l.									
(SF)	Safety factor	as a percent											
8.34	Unit conversi	on factor											
Lhw =	8.34 * (Ccrit	(Qstr + Qpo	tw) - (Cstr * Qstr))										
	1 -	Rpotw											

						TABLE	8						
		Loca	I Limits Determina	tion Based on Acute \	Nater Quality Standar								
	ENV			PROCESS DATA BA					MAXIMUM LOA	DING	INDUSTRIAL		
	IU Pollut.	POTW	Upstream	Upstream	Removal	Acute	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Conc.	Efficiency	WQS	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(mg/l)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qstr)	(Cstr)	(Rpotw)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Arsenic	0.052	10.5	8.8	0.00196	11	0.36	0.003	10.448	64.94659739	0.261409	51.69586895	119.2027969	20
Cadmium	0.052	10.5	8.8	0.000282	56	0.0286	0.00057	10.448	10.4154924	0.0496677	8.282726218	19.09870462	20
Chromium	0.052	10.5	8.8	0.00347	79	3.7979	0.00275	10.448	2909.823379	0.2396249	2327.619078	5367.134934	20
Hex. Chrom.	0.052	10.5	8.8	0.00347	69	0.016	0.0137	10.448	7.486199226	1.1937676	4.795191797	11.05698164	20
Copper	0.052	10.5	8.8	0.005586	87	0.0436	0.061	10.448	50.83058068	5.3153155	35.34914902	81.50975148	20
Cyanide	0.052	10.5	8.8	0	58		0.012	10.448	-	1.0456358	-	-	20
Iron	0	0		0	0		0	0	-	0	-	-	0
Lead	0.052	10.5	8.8	0.00365	89	0.323	0.0026	10.448	470.2076836	0.2265544	375.9395925	866.8594182	20
Mercury	0.176	10.5	8.8	0	99		0.00025	10.324	0.1931544	0.0215255	0.13299798	0.090607955	20
Molybdenum	0.052	10.5	8.8	0	34		0.00715	10.448	-	0.6230247	-	-	20
Nickel	0.052	10.5	8.8	0.00192	44	0.1852	0.00372	10.448	52.98080314	0.3241471	42.0604954	96.98509363	20
Selenium	0.052	10.5	8.8	0.00262	22	1	0.0011	10.448	206.1150166	0.09585	164.7961633	379.9948426	20
Silver	0.176	10.5	8.8	0.00097	48	0.005	0.0014	10.324	1.410807231	0.120543	1.008102761	0.686793357	20
Zinc	0.052	10.5	8.8	0.0238	64			10.448	117.8814983	7.2323146	87.07288411	200.7768034	20
(Qind)				illion Gallons per Day	(MGD) that contains a	a particular pollut	ant.						
(Qpotw)	POTW's ave												
(Qstr)			ım) 1Q10 flow in M	IGD.									
(Cstr)			und level in mg/l.										
(Rpotw)			POTW as percen										
(Ccrit)				cular pollutant in mg/l.									
(Qdom)			kground flow in Mo										
(Cdom)				ation for a particular p									
(Lhw)				ding to the POTW in p									
(Ldom)				o the POTW for a part		nds per day (lbs/d	lay).						
(Lind)				POTW in pounds per	day.								
(Cind)			mit for a given poll	utant in mg/l.									
(SF)	Safety factor												
8.34	Unit conversi												
Lhw =			tw) - (Cstr * Qstr))										
	1 -	Rpotw											

						TABLE	9						
		Local I	imits Determinat	tion Based on Anaero	bic Digester Inhibition L		3						
		Locari	inino Dotomina	aon Baooa on maon	bio Digodor III II billori E								
	FNVIRON	MENTAL CE	RITERIA AND PRO	OCESS DATA BASE				MAXIMUM L	OADING	INDUSTRIA	AI.		
				00200 271171 27102					07.12 10				
	IU Pollut.	POTW	Sludge Flow	Removal	Anaerobic Digester	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety	
Pollutant	Flow	Flow	to Digester	Efficiency	Inhibition Level	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor	
	(MGD)	(MGD)	(MGD)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)	
	(Qind)	(Qpotw)	(Qdig)	(Rpotw)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)	
Arsenic	0.052	10.5	0.058	11	1.6	0.003	10.448	7.03592727	0.26140896	5.3673329	12.37625175		20
Cadmium	0.052	10.5	0.058	56	20	0.00057	10.448	17.2757143	0.049667702	13.770904	31.75360571		20
Chromium	0.052	10.5	0.058	79	110	0.00275	10.448	67.3534177	0.23962488	53.643109	123.6928364		20
Hex. Chrom.	0.052	10.5	0.058	69	110	0.0137	10.448	77.1147826	1.193767584	60.498059	139.4993048		20
Copper	0.052	10.5	0.058	87	40	0.061	10.448	22.24	5.31531552	12.476684	28.76933333		20
Cyanide	0.052	10.5	0.058	58	4	0.012	10.448	3.336	1.04563584	1.6231642	3.742769231		20
Iron	0	0	0.058	0		0	0	-	0	-	-		0
Lead	0.052	10.5	0.058	89	340	0.0026	10.448	184.79191	0.226554432	147.60697	340.3591903		20
Mercury	0.176	10.5	0.058	99		0.00025	10.324	-	0.02152554	-	-		20
Molybdenum	0.052	10.5	0.058	34		0.00715	10.448	-	0.623024688	-	-		20
Nickel	0.052	10.5	0.058	44	10	0.00372	10.448	10.9936364	0.32414711	8.470762	19.53228643		20
Selenium	0.052	10.5	0.058	22		0.0011	10.448	-	0.095849952	-	-		20
Silver	0.176	10.5	0.058	48	13	0.0014	10.324	13.10075	0.120543024	10.360057	7.058028788		20
Zinc	0.052	10.5	0.058	64	400	0.083	10.448	302.325	7.23231456	234.62769	541.0156923		20
(Qind)	Industrial Use	er total plant	discharge flow in	Million Gallons per Da	ay (MGD) that contains a	a particular pollut	ant.						
(Qpotw)	POTW's ave	rage influent	flow in MGD.										
(Qdig)	Sludge flow t	o digester in	MGD.										
(Rpotw)	Removal effi	ciency acros	s POTW as perce	ent.									
(Ccrit)	Anaerobic di	gester thresh	nold inhibition leve	el in mg/l.									
(Qdom)	Domestic/co	mmercial ba	ckground flow in I	MGD.									
(Cdom)	Domestic/co	mmercial ba	ckground concen	tration for a particular	pollutant in mg/l.								
(Lhw)	Maximum all	owable head	works pollutant lo	ading to the POTW ir	n pounds per day (lbs/da	ay).							
(Ldom)	Domestic/co	mmercial ba	ckground loading	to the POTW for a pa	articular pollutant in pour	nds per day (lbs/d	day).						
(Lind)	Maximum all	owable indus	strial loading to the	e POTW in pounds pe	er day.								
(Cind)	Industrial allo	wable local I	imit for a given po	ollutant in mg/l.									
(SF)	Safety factor	as a percen	t.										
8.34	Unit conversi	on factor											
Lhw =	8.34 * Ccrit *	Qdig											
	Rpotw												



Illinois Association of Wastewater Agencies

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March 10, 2016

Amy Walkenbach, Section Manager
Watershed Management Section, Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P. O. Box 19276
Springfield, IL 62794-9276

Via E-mail: epa.publichearingcom@illinois.gov

Re: 2016 Integrated Report

Dear Ms. Walkenbach:

The Illinois Association of Wastewater Agencies has served as the voice of wastewater treatment in the State of Illinois since 1924. The Association represents over 50 publicly owned wastewater treatment providers serving over 8.5 million people in the State of Illinois and treating in excess of 75% of the total wastewater flow in the state.

IAWA continues to believe that including phosphorus, sedimentation/siltation, and sediment as causes of aquatic life use impairment in Illinois streams should not be made by IEPA because the threshold values used are arbitrary and not scientifically correlated with stream health. These parameters should be removed from the listing until such time as the IPCB water pollution control regulations more clearly define standards for these parameters, or a vetted, published methodology is used to identify and establish cause and response stressor analysis using multiple lines of evidence. The IAWA does not support maintaining previous listings which were generated by the use of simply taking an 85th percentile of data that existed over a decade ago, and using that value as a threshold to determine impairment causes. IEPA should end the practice of this arbitrary misapplication which leads to unnecessary regulatory efforts such as the development of TMDLs that can't be conducted because of the lack of an appropriate regulatory goal.

There is no scientific validity to the assertion that these constituents at these levels are negatively impacting aquatic life use in streams in Illinois. Numerous studies conducted in Illinois for the Illinois EPA (various CFAR Studies of 2000s) and USEPA (Tetra Tech, Inc., 2008) for the purpose of determining defensible nutrient standards have failed to show any correlation between total phosphorus (TP) and algae, dissolved oxygen, or biota in Illinois streams. Continuing to define stream segments as impaired for TP is contrary to the best and only directly pertinent scientific information on the topic. Continuing this

President
MARK EDDINGTON
DeKalb Sanitary District
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Ex-Officio
GREGG HUMPHREY
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incorrect listing mis-informs the public and stakeholders, and can lead to irretrievable, expensive and damaging regulatory decisions. These listings are not based on any violations of any Illinois Pollution Control Board water quality standard, and the Agency has no direct or indirect evidence linking these specific levels to aquatic life impairment in streams.

IAWA does not agree with the universal identification of phosphorus as a default contributing cause to any algae or aquatic plant aesthetic use impairment in Illinois streams. IEPA has not produced any evidence supporting the assertion that water column phosphorus has any causative role in excessive macrophyte growth in Illinois streams. Any such characterization should be rigorously supported with a vetted, published methodology used to identify and establish cause and response stressor analysis using multiple lines of evidence. Scientifically valid threshold levels should be established before identifying any parameter as a causative agent, for either excessive macrophyte or algal growth.

The report text states that any aesthetic use impairment identification for algae or plant growth results in listing TP as a contributing cause, which implies that supporting chemistry data is not needed for this characterization. Any such listing should, as a minimum, be accompanied by corroborating stream chemistry data before including phosphorus as a contributing cause.

Since the preponderance of evidence suggests physical habitat drives primary productivity in Illinois streams, IEPA should consider listing this as the cause of algae-related impairment rather than total phosphorus. Such a step might encourage resources to be spent on habitat improvements, which clearly have a better chance of addressing such impairments.

Thank you for the opportunity to submit these comments. If you have questions regarding them, please feel free to contact me.

Very truly yours,

Mark Eddington

President

Illinois Association of Wastewater Agencies

DeKalb Sanitary District

DOWNERS GROVE SANITARY DISTRICT

Sanitary Sewer Collection System Capacity, Management, Operation and Maintenance (CMOM) Plan April 2016

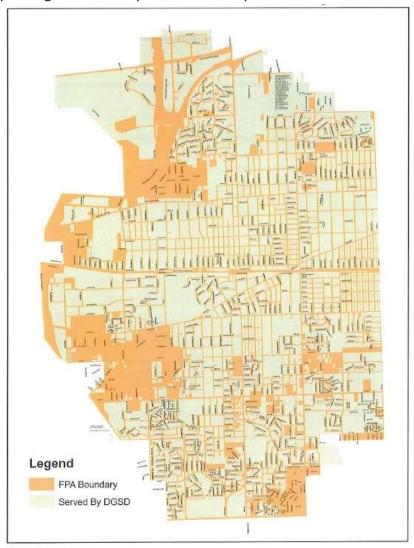
Table of contents

Introduction	3
A. Measures and Activities	3
B. Design and Performance	14
C. Overflow Response Plan	15
D. System Evaluation Plan	17
E. Reporting and Monitoring	19
F. Thrid Party Notice Plan	19
Appendix A GIS System Maps	23
Appendix B Job Descriptions	26
Appendix C Five Year Financial Plan	43
Appendix D Sewer Use and Pretreatment Ordinances	83
Appendix E 2016 Sewer System Work Plan	152
Appendix F Ordinance 01-02 and I/I Program Documents	155
Appendix G Ordinance 02-04 and BSSRAP Program Documents	175
Appendix H Ordinance 97-03 and Overhead Sewer Program Documents	189
Appendix I Remaining WWTC Capacity Calculations	205
Appendix J 2015 System Operations Report	207
Appendix K September 2013 System Asset Report	235
Appendix L Backup Handbook	261
Appendix M Backup Reimbursement Program Documents	281
Appendix N Historic Backup Maps	289

Introduction

NPDES Permit IL0028380 issued July 31, 2015 includes the requirement that the Downers Grove Sanitary District (District) develop, implement and submit to IEPA a CMOM plan by July 31, 2016. This report is intended to satisfy the submittal requirement of the permit condition. The plan documented here is fully implemented by the District.

The Downers Grove Sanitary District covers a 20 square mile service area and serves approximately 62,000 people. The system includes 9 lift stations and 250 miles of separate sanitary sewer with an average age of 51 years. There are no combined or storm sewers in the system. A map of the facility planning area boundary where service is provided is included here.



A. Measures and Activities

1. Mapping and Inventory

All District sewers are recorded in a Geographic Information System (GIS) database, which is supported by and linked to a Computerized Maintenance Management System (CMMS).

The GIS is developed in esri's ArcGIS® system. Basemap information from DuPage County's parcel and surface feature mapping is overlaid with detailed pipe segment and GPS-located manhole data that includes physical attributes such as size, material, age, depth and slope.

The CMMS is developed in Lucity_{TM}'s CMMS suite for sewer systems. The CMMS ties complete maintenance information to each feature, including work order history, inspection, condition assessment, video, construction documents, field notes, and preventive maintenance scheduling.

Work reports are submitted in the form of completed work orders that show the day or days that the work took place, the type of work done and the asset that was worked on. Additional comments are added by the technician who did the job and these comments are recorded on the work order in the CMMS when the work order is closed. Work includes regular maintenance work, as well as overflow and backup response activities.

The CMMS also provides the ability to edit and view physical attribute data. The attributes of sewer system features and building connections are edited in the geodatabase when as-built drawings are received for new sewers. When field crews find inaccuracies they submit their findings and the asset information is edited as appropriate.

The GIS and the CMMS are linked by a geodatabase so that a mapped representation of the sewer system can be shown using any of the attribute information contained in the geodatabase.

All field crews have access to the maps and information. A GIS-generated paper sewer atlas book is issued to sewer system personnel. Tablet computers are also issued that contain digital copies of the atlas and feature files so that the sewer system and parcels in the District's service area can be shown as layers on Google Earth Pro.

Appendix A includes a plot showing location of manholes and pipe segments overlaid on basic surface features, as well as a plot showing the upstream areas served by each of the nine lift station.

2. Organization

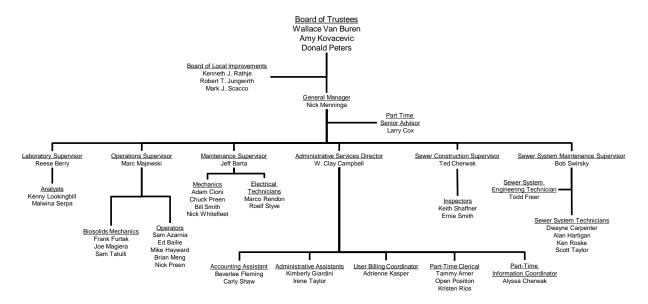
a. Structure

This organization chart shows District personnel, their job titles, and lines of responsibility. Sewer system operation and maintenance is conducted under the supervision of the Sewer System Maintenance and Construction Supervisors. Lift station and forcemain operation and maintenance is conducted under the supervision of the Maintenance Supervisor. Administrative support is provided by administrative personnel.

All sewer system technicians are cross trained and have the same job responsibilities. The sewer system engineering technician has additional office and data collection responsibilities. Job descriptions that delineate responsibilities and authority for sewer system and maintenance positions are included in Appendix B. Appropriate commercial drivers' licenses are required of personnel with emergency responsibilities.

DOWNERS GROVE SANITARY DISTRICT ORGANIZATION CHART

January 18, 2016



At the time this chart was generated all available positions were filled. Open positions are filled within 3 to 6 months.

b. Budgeting

The District generates detailed line-item budgets on an annual basis. The budget is contained in a five-year financial plan which includes projected expenses and revenues for a 5-year period. The fiscal year starts May 1 of each year.

Sewer system expenses are divided among the General fund, the Improvement fund, and the Public Benefit fund. The General fund identifies general operating expenses and revenues for operation, maintenance, and replacement. The Improvement and Public Benefit funds identify capital expenses and revenues (primarily from connection fees), for trunkline expansion to the sewer system to accommodate new/future customers, or upgrades to improve the system. Sewer connections and extensions are not paid for using District revenues, but are funded by property owners served by the new construction. The Public Benefit fund can be used to up-size or modify certain sewer extensions in order to serve properties beyond an immediate project need.

The budget is prepared each year by staff identification of specific expenses for the pending 5 year period. General fund expenses are tabulated in order to identify revenue requirements. A cost of service model is used to allocate General fund revenue requirements among various revenue means, primarily user charges, monthly service fees, and property taxes. The user charge, monthly service fee, and property tax rates are then established to meet the revenue requirements. Capital fund balances

are sufficient to directly fund expenses identified in the current 5-year plan. Connection fee rates are based on the cost of District assets, divided among all customers.

Appendix C is the 5-year financial plan for the District for the period from FY15-16 to FY19-20.

c. Training

On the job training is supplemented with certain specific training opportunities.

Fundamental mission, goals and policies of the District are given to new employees in the form of an employee handbook. This handbook is reviewed and revised on a periodic basis.

Confined space entry training is provided to all system employees, and there are written procedures for the confined spaces permit program.

IDOT's traffic safety manual is available to employees and is periodically reviewed.

New collection system employees are asked to complete the Sewer System Operator Correspondence Course from the California State University. This course teaches standard operation and maintenance procedures for the operation of sewer systems.

Training on new equipment is done by requiring manufacturers to supply a specified amount of training when the equipment is purchased.

Employees periodically attend professional conferences, seminars and workshops that cover sewer system management issues.

d. Legal Authority

The District was formed under the Illinois Sanitary District Act of 1917. The District has a duly enacted Sewer Use Ordinance (SUO) that regulates all aspects of the entire collection system tributary to the District's treatment plant. There are no satellite communities or other tributary sub-systems.

The SUO includes provisions that regulate sewer construction, connections, operation and maintenance, inspection, rates and fees, discharges into the sewer including a complete Industrial Pretreatment Program, and enforcement measures.

The SUO provides sufficient legal authority to protect the collection system from improper uses. Prohibitions against clear water sources (infiltration and inflow, or I/I) and any materials or substances that impact sewer operation and maintenance are comprehensive and sufficiently enforceable.

Enforcement of the SUO is conducted under the supervision of the Sewer Construction Supervisor and the Lab Supervisor. The Lab Supervisor acts as the Pretreatment Coordinator for the District, implementing and enforcing provisions of the Industrial Pretreatment Program, including routine inspections of permitted industrial users, permit issuance, compliance monitoring, and enforcement. The Sewer Construction Supervisor reviews all plans for new sewer construction and connections, and supervises the inspection of new construction. Inspection of grease separators, collection of grease hauling manifests, and enforcement of grease control provisions of the SUO are conducted under the supervision of the Sewer Construction Supervisor.

Appendix D contains the current Sewer Use Ordinance and Pretreatment Ordinance.

e. Maintenance scheduling, cleaning, and preventive rehabilitation

Regularly scheduled maintenance activities include cleaning, televising, inspections, and flow metering. Preventive rehabilitation and sewer replacements are prioritized and planned on an annual basis by applying asset management principals to monitoring and operational data.

Each year a sewer system work plan is developed, identifying quantities and locations of scheduled maintenance and rehabilitation activities for the calendar year. The 2016 work plan is shown in Appendix E.

Cleaning The District owns a combination jetting and vacuum truck, a jetting truck, and an easement machine for remote areas with limited vehicle access. In-house regular cleaning of 1/4 of the system and all siphons is done annually. Known problem areas are cleaned every 6 months or every 3 months, depending on the character of the area. Issues encountered while cleaning are noted and these mainlines are then televised in order to assess them for possible defects.

The system is broken into four areas, and one of the four areas is cleaned each year, on a regular rotation. During 2015, 26.7% of the system was cleaned.

Televising The district owns a TV truck equipped with a crawler-type television camera rig, and a main-launched service lateral camera system. The District also owns hand-pushed cameras suitable for service lateral inspections from service clean-outs. The annual goal for televising to determine the condition of mainline pipes is typically around 10% of the collection system. Outside contractors are also employed to help meet production goals. Video is evaluated to develop condition assessment data using the NASSCO PACP scoring system to create likelihood of failure scores for each pipe segment. Video and condition assessment scoring is electronically stored and available for review via the Lucity geodatabase.

Inspections Numerous types of inspections are conducted on a routine basis. Manhole inspections are conducted on a schedule intended to inspect every structure for structural integrity and leakage on a 20-year cycle. Manholes with known overflow history are observed during significant rainfall events. Remote sewers and forcemains are surface-inspected by 'walking' them on an annual basis. Buildings and/or services are inspected under the private property I/I program, the building sanitary service repair assistance program, the overhead sewer program, and the backup reimbursement program. These programs generate roughly 500 building inspections per year. Inspection data is stored in the Lucity geodatabase.

Flow metering A regular flow metering program has been in place since 1996. There are roughly 150 flow monitoring locations in the system identified dividing the system into discrete monitoring subsystems (each with roughly 8,000 linear feet of sewer) for detailed evaluation. The District employs roughly 20 portable flow meters, moving most on a 2-month rotating basis, with the goal of monitoring each location for 2 months every 3 years. Additional monitoring locations are used to characterize performance of specific locations of interest.

This program monitors the flows in all District sewers in order to evaluate the capacity and performance of the sewers, help prioritize areas for rehabilitation and I/I removal, and evaluate effectiveness of previous rehabilitation and I&I removal. The key metric is evaluation of an I/I number, a derivation based on the peak observed flow, normalized for rainfall, tributary pipe length, and antecedent

conditions. Flow data is also used to calibrate and verify computer models used to evaluate specific issues. Level and velocity data is useful in evaluating causes of problems, such as backwater effects vs. heavy tributary flows.

Private Property I&I Removal Program This is an ongoing program established by ordinance that allows the District to devote resources to correct private sources of infiltration and inflow. This program is further discussed below in Section D. System Evaluation Plan. I/I removal is conducted on an annual basis as identified and prioritized in ongoing evaluations of system performance. Ordinance 01-02 and Private Property I&I Removal Program documents are included as Appendix F.

f. Equipment Preventive Maintenance

Lift stations and force mains are operated and maintained under the supervision of the Maintenance Supervisor, who also has WWTC maintenance responsibilities. Sewer maintenance equipment and vehicles are maintained under the supervision of the Sewer Maintenance Supervisor.

Equipment, vehicles and pump station/forcemains are tracked for maintenance using a separate maintenance database, MP2. Each major asset is designated as an equipment item. When a new equipment item is purchased, the purchase cost, start date and expected service life are recorded in the database, along with identification of preventive maintenance tasks and schedules unique to that equipment. Preventive maintenance work orders are generated automatically and assigned to appropriate staff, and can be done in-house or with contractors, as appropriate. Completed work orders are recorded in the database for future reference and evaluation of effectiveness. Unplanned repairs are also recorded as work orders. The database provides many of the tools needed to support effective asset management.

Lift stations are operated with a computerized control and alarm system, with reserve pumping capacity and each equipped with a stationary emergency power generator and bypass pumping manifold. Portable generators are also available. Each station is visited by staff on a weekly basis for routine testing, exercising, pump rotations, forcemain flushing, and general cleaning and evaluation. Preventive maintenance, such as pump seal filter cartridge and uninterruptible power supply replacements, motor and electrical panel testing, and forcemain air/vacuum relief valve cleaning and conditioning, is done periodically under the MP2 task manager, at frequencies established by the maintenance supervisor. Pumps are equipped with varying instrumentation needed for corrective maintenance or protective operation, such as moisture sensors, motor overload detectors, and vibration sensing equipment. Lift station and equipment manuals, cut sheets and shop drawings are maintained in paper files.

Spare parts are identified and purchased when new equipment is purchased. As parts are replaced, spare parts inventories are maintained and tailored to specific equipment needs based on historical outages, criticality, and availability from vendors.

3. Unplanned Maintenance

Unplanned maintenance, or repairs, in the collection system are documented as work orders, either in the Lucity geodatabase, or in MP2.

Gravity sewer and manhole repairs are initiated when the operation of the system is disrupted by a defect. Monitoring activities, such as routine inspections, cleaning and televising, can identify such

defects. Many defects are identified by reported operational problems such as sink-holes, sinking structures, manhole overflows, or backups. All disruptive defects are immediately ameliorated once identified by staff (i.e., temporary pumping, erecting barriers, etc.), and repairs are initiated as soon as practical to eliminate the defect and return to normal operation.

Subsurface repairs are conducted by contractors with active point-repair contracts with the District, which include emergency provisions. The contract terms include response-time provisions that allow the contractor to plan spare parts inventories and personnel readiness to meet expectations for response times. The contractors have a designated staging area within the treatment plant to store equipment and parts.

The District also maintains a small inventory of sewer parts. These parts are located in the sewer system garage or on service vehicles.

Lift station defects are generally detected by District personnel, either through the automated alarming system, or during routine inspections. Defects are immediately ameliorated (i.e., removing pumps from service rotation, temporary pumping arrangements, etc.), and repairs are initiated as soon as practical. Equipment maintenance staff has mechanical and electrical skills needed to manage lift station repairs. Coordination with equipment and repair vendors is sometimes needed, and staff is trained to utilize resources as necessary to affect timely and efficient repairs.

Forcemain repairs are generally conducted by underground contractors, coordinated by maintenance staff.

The District also has certain programs developed specifically to address unplanned maintenance of building services and certain internal plumbing. The programs provide valuable services to customers. In exchange for these services, the customer is subject to inspection and correction of any improper I/I connections or problematic conditions on their property.

The Building Sanitary Sewer Repair Assistance Program The most common cause of backups in the collection system are service line blockages. Building services are owned by property owners, and the District's SUO delineates expectations for adequate operation, maintenance and connections. This program is designed to allow the District to conduct repairs to defective service lines. Customers with defective services are eligible for the program. The program includes internal inspection of the building service along with complete home inspection for possible I/I sources. All defects are repaired at the District's expense, or required to be corrected by the property owner. The program typically serves 200-300 customers each year. This program is enabled by ordinance. Ordinance 02-04 and program documents are included as Appendix G.

The Cost Reimbursement Program for the Installation of Overhead Sewers and Backflow Prevention Devices The SUO requires that all new construction include overhead sewers or other backflow prevention to protect the property from catastrophic surcharging in the sewer. There is a significant number of buildings constructed before this requirement was in place. This program allows the District to share in the cost of retro-fitting houses with overhead sewers or backflow prevention devices to prevent backups in the future. The program includes internal inspection of the building service along with complete home inspection for possible I/I sources. All defects are repaired at the District's expense, or required to be corrected by the property owner. The District reimburses a portion of the

cost of the overhead sewer installation. The program typically serves 5-10 customers each year. This program is enabled by ordinance. Ordinance 97-03 and program documents are included as Appendix H.

4. Capacity Assessment

The flow monitoring program provides ongoing assessment of the adequacy of system capacity at all key locations in the collection system on a regular routine basis. As field data is collected and evaluated, velocities and surcharging are evaluated to identify capacity constraints.

When flow monitoring reveals potential capacity limitations or bottlenecks, the local sewer system is subjected to a specific study to evaluate various corrective actions and develop a corrective action plan. One option that is put under consideration is improving downstream capacity, or de-bottlenecking a constraint in the system. In the past, this has included expanding pump station capacity, re-routing flows to lower the operating hydraulic grade line, improving cleaning schedules to address areas with chronic sedimentation, or lining sewers to reduce dynamic flow resistance from pipe roughness. These options are considered along with I/I removal options.

Capacity is evaluated at certain key locations of concern using computerized modeling techniques. The District's consultant uses XP SWMM to model specific areas of concern, including areas with expected increased development, areas where manhole overflows or basement backups occur, or areas where rehabilitation impacts need to be predicted.

All sewer extensions and connections are reviewed against available downstream capacity prior to permitting.

The treatment plant capacity is reviewed annually using IEPA's criteria for reserve capacity. The three low-flow months are averaged, and the previous 2 years of permitted connections are added to determine the current flow. The 2015 evaluation showed that of the 11 MGD of permitted plant capacity, there remains capacity for 2.4 MGD, or an additional 24,000 PE. Appendix I is Table 5 from the 2015 annual WWTC operations report detailing this calculation.

5. Structural Deficiency Identification and Prioritization

Portions of the collection system date as far back as 1904. The District uses a 100 year depreciation schedule for this type of asset, so each year there is an increasing number of fully depreciated sewer assets. While age provides some indication of the timing and magnitude of potential replacements, the District uses condition assessment rather than age as the driver for replacements.

Structural deficiencies are identified in two ways. The primary method for identifying structural deficiencies is routine system monitoring, including inspections, sewer televising, and cleaning. Deficiencies are also identified when responding to operational problems such as overflows, backups, sinkholes or sinking structures. Deficiencies that are creating operating disruptions are immediately ameliorated and repaired as soon as practical.

Routine monitoring includes identification of all defects. Defects are tabulated using the NASSCO PACP scoring system, with the resulting pipe segment scores available in the Lucity geodatabase for evaluation and prioritization. Condition scoring characterizes the likelihood of failure, a key metric in

prioritization of structural deficiency correction. A map of PACP scores in the system at the end of 2015 is included in Appendix J.

Prioritization is evaluated annually, and includes various considerations. The key metrics are consequence of failure and likelihood of failure. Consequence of failure generally correlates with pipe size, with larger pipes carrying more flow, serving more upstream customers, and potentially resulting in larger overflows or more widespread backups. Other considerations include the types of upstream customers (i.e. hospitals, schools) or areas where overflows might discharge to areas with greater public contact such as parks or other recreation areas. Area streams generally have similar stream use characteristics, so there are no streams with extraordinary features such as water supplies or swimming areas.

The other prioritization consideration is opportunity. The District tracks other infrastructure work in our service area, seeking opportunities when other large projects such as road reconstruction work provide an opportunity to economically replace sewers and minimize social and environmental impacts of multiple construction projects. All infrastructure projects are monitored to ensure proper restoration of District structures.

Structural deficiency correction can include various means of replacement or rehabilitation, depending on local circumstances. The District has used open-cut replacement, pipe-bursting (to replace a main in a cemetery), various lining techniques (for instance, inversion-lining concrete sewers subject to hydrogen sulfide corrosion downstream of long forcemains), and grouting (where gasket material is deteriorated) as ways to eliminate or control structural defects.

6. Operational controls

Collection system operation is generally passive, being comprised of mostly gravity sewers. There are no locations where temporary pumping of other diversions are used to improve system performance during normal operations.

The nine lift stations are control points in the collection system. All lift stations operate automatically with a local computer control system programmed to start and stop pumps. Some lift stations also include electronic variable speed drives, which are also computer-controlled. The control system includes central monitoring, alarming and supervisory control, where operating set-points can be adjusted by operators. Each controller system is capable of independent operation with or without power.

Lift station controls are set to hold the level of wastewater in the lift station wet well below the elevation of the incoming sewer invert. Pumps either operate on a fill-and-draw basis, or pump speed is modulated to maintain a wet-well level set-point. When flows rise, additional pumps are started as wet-well levels rise. All system storage is thereby sustained and maximized, always available prior to any wet weather event.

Lift station flows, pump run times and start counts are recorded automatically from the control system into the plant operations database for routine evaluation and trouble-shooting.

The Hobson Lift Station and the Earlston Lift Station are equipped with odor control facilities to address historic odor complaints at those locations. Odor complaints are no longer received at these locations

since the installation of these facilities. The only other known odor complaints in the collection system were associated with spills into the collection system, which were investigated and remedied through enforcement of the pretreatment ordinance.

On-call personnel are required to live within a 30 minute drive of the facility. Three lift station maintenance employees are on call at all times, with primary on-call, secondary on-call, and the Maintenance Supervisor available at all times to respond to emergencies. Primary and secondary on-call assignments are rotated among maintenance staff. Two collection system employees are on call at all times to respond to emergency calls. The District's phone number is rolled to the Village of Downers Grove's emergency dispatch center after normal business hours. All emergencies are referred to the collection system on-call cell number. This on-call assignment is rotated among collection system employees. The Collection System Maintenance supervisor is also available for emergencies. On-call personnel are required to investigate alarms or emergencies and provide or arrange for needed corrective action as quickly as practical.

7. Asset Management Strategy

The District is accustomed to employing asset management principals to manage its operations. All sewerage utilities have the bulk of their value as fixed assets, making asset management a natural focus of the operation.

The District's asset management strategy is comprised of the development and use of tools needed to ensure the long term sustainability of the enterprise, including the collection system. Many of the tools and principals of asset management are discussed in other sections of this report.

a. Inventory/State of Assets

All system assets are inventoried in one of two databases, the Lucity geodatabase for sewer assets, or in MP2 for equipment, lift stations and forcemains. Each fiscal year, the fixed asset inventory is tabulated for valuation, including depreciation. New assets, replacements, and asset upgrades that extend service life are added to the inventory, while annual depreciation and removed assets are subtracted from the inventory valuation. The overall health of the utility is measured by changes in the value of fixed assets, with increasing value an indicator of financial sustainability.

Condition assessments in the Lucity geodatabase are based on PACP scores developed in the sewer televising program or post-construction inspections.

Equipment condition assessments in the MP2 database are made on an annual basis, and are used to identify and prioritize needed upgrades and replacements. Specific equipment upgrades and replacements are either identified for implementation in pending budget preparation, or for further detailed engineering study in cases of more complex projects such as a complete lift station upgrade.

While age and depreciation status can provide general guidance and ways to tabulate and benchmark overall financial health, condition assessment, effectiveness, criticality, and life cycle cost are more important considerations for identification and implementation of upgrades and replacements.

b. Level of Service

Level of service metrics are measured and tabulated annually to evaluate effectiveness of asset management efforts. Two key operational metrics are basement backups and manhole overflows. Another key metric is the amount of I/I received at the plant as measured by subtracting billed water use from total flows measured at the treatment plant.

These level of service metrics are recorded in annual operations reports. The 2015 annual system operations report is included here as Appendix J, and is supplemented with historic trend analysis charts of total system I/I quantities.

c. Critical Asset Identification

Criticality of equipment assets is developed somewhat differently than sewer system assets.

In general, equipment such as lift station pumps have redundancies designed into the system, with each station sized to handle design flows with the largest pump out of service. Power redundancy is provided at all lift stations with stationary generators, along with bypass pumping connections and other backup systems to allow operational continuity with major unit outages. Certain central items such as controllers and alarm systems are given greater criticality because the entire operation is reliant on single-service devices with less robust backup. Equipment criticality is not formally assigned in the asset database, but is understood and utilized by operation and maintenance personnel.

Sewer pipelines and most forcemains are not designed with the same redundancies. The system is a single pipeline system. Criticality is therefore generally assigned according to pipe size and other considerations, as previously described as consequence of failure in Section A.5. above.

d. Life Cycle Cost

Life cycle cost includes capital costs plus costs to operate and maintain any asset. Rehabilitation can incur costs that can extend service life, which may or may not prove to be cost-effective. Life cycle costs can be expressed as present worth costs over a common time period, or normalized as an annual cost of ownership.

Vehicle and large equipment life cycle costs are critically evaluated to optimize the normalized annual cost of ownership. In general, vehicle resale values and increasing maintenance costs and reduced reliability with age tend to make short replacement cycles attractive. Vehicles and large equipment are reviewed annually for life cycle costs to determine pending replacements with an overall goal of minimizing cost of ownership.

Improved efficiency with available technology, such as more fuel-efficient vehicles or efficient lift station control systems, can also drive upgrades or replacements. Energy audits at lift stations have driven upgrades of flow control systems and pump equipment selection.

Life cycle costs are considered as 20-year present worth costs when upgrades or replacements are subjected to engineering study. As lift station structures and equipment reach the end of useful service life, engineering studies are conducted, including an evaluation of options and equipment selection that focuses on the lowest present worth cost.

Sewer pipeline and structure assets are expected to have significantly longer service life than equipment. Varying cost of ownership is reflected by the need for more frequent cleaning. In general, it is more cost-effective to conduct more frequent cleaning than to prematurely replace sewer lines. Replacements of these sorts of defects are driven by level of service rather than life cycle cost.

I/I incurs certain costs. The District conducted a compete I/I and SSES program project under the EPA construction grants program, culminating in major construction in the late 1980s that included a cost-effective combination of I/I removal measures and sewer system and treatment plant capacity expansions to transport and treat remaining flows. The project delineated a threshold for excessive I/I based on cost-effectiveness, and eliminated identified excessive I/I. The system continues to age and deteriorate, available rehabilitation technologies continue to improve, and level of service expectations adjust over time, creating the need to periodically re-evaluate that threshold.

Transporting and treating extraneous flows incurs downstream operating and maintenance costs. When peak I/I becomes disruptive, there are potential capital costs associated with expanding downstream facilities to accommodate peak flows. These costs are weighed against rehabilitation or replacement costs when considering I/I removal measures. In general, O&M cost to transport and treat flows does not create sufficient motivation to remove I/I, with the exception of occasional point sources where significant flows can be removed at minor cost. The cost of downstream expansion is generally greater than I/I removal measures, and therefore creates the cost-driver for I/I removal measures.

I/I control rehabilitation methods are evaluated for cost and expected performance improvements. When subsystems are targeted for I/I removal, rehabilitation goals are identified, and can vary depending on specific operating metrics and condition assessments in the local system. Various alternatives, including lining, grouting, open cut or no-dig replacement, and various private property measures are evaluated. Life cycle cost evaluation includes the up-front project cost as well as the expected resulting service life of the sewers, structures, and/or the rehabilitation measure put in place.

Sewer rehabilitation projects are typically depreciated independent of the original sewers, and do not affect the depreciation schedule of the host sewers.

e. Long Term Funding

The five year financial plan identifies a goal of funding sewer replacement and rehabilitation at a level of 0.75% of the replacement value of these assets. This level is established taking into account asset conditions, age, criticality, expected service life, life cycle costs, and level of service. This funding level is expected to ensure long-term sustainability of this infrastructure. This determination needs to be revisited periodically as additional data is collected, tabulated and evaluated.

Appendix K contains a 2013 report from staff to the Board of Trustees documenting this evaluation.

B. Design and Performance

a. CMOM Effectiveness

The effectiveness of sewer system management activities are reflected using a number of metrics. Key metrics that are considered at the District include cost of service to customers, level of service as measured by overflow and backup quantities and severity, and the ability to accommodate development within the planning area.

All program participation is accompanied with survey questionnaires providing opportunity to comment or recommend improvements to programs. The District has also periodically direct-mailed surveys to customers to elicit opinions on pending policy decisions and general satisfaction with services provided by the District. All survey responses are reviewed and used to assess effectiveness of District programs and services.

b. CMOM Updates

The preparation of a CMOM report is expected to be required on a 5-year cycle, as part of future NPDES permit renewals. Updates will be conducted as required in future permits.

c. Tracking/Summary of CMOM Activities

CMOM activities are summarized each year in the annual collection system operations report. Each year this report is published and reported to the Board of Trustees. The 2015 report is included in Appendix J.

C. Overflow Response Plan

1. Locating Backups and Overflows

Backups are reported to the District by the public. Customers are encouraged to notify the District of any backup in all correspondence distributed to the public, including bills, newsletters, the District's web site and social media, and at the annual open house. Location information is obtained as part of the initial contact, in order to dispatch personnel to take corrective action.

Overflow locations are generally first discovered when observed and reported by the public, although routine inspections are conducted in areas where an overflow could go unreported. Newly discovered overflows are evaluated and, if appropriate based on the circumstances, added to the list of manholes to be observed during large storm events. Chronic overflows are thereby identified, characterized by repeated overflows. All chronic overflows are then subjected to evaluation and corrective action. Regular observations or temporary flow metering is utilized to support the evaluation and monitor effectiveness of corrective actions. Once the chronic nature of the overflow is corrected, monitoring is curtailed.

There are currently two chronic SSO locations in the collection system where regular observations are currently made during large storms: manhole 1-M-049, and manhole 2-D-001. If overflows are observed at these locations, additional surveillance is conducted at other manholes with historic overflow potential in order to characterize performance of the system during the storm event.

2. Evaluation and Response

The response to all backups and overflows is to eliminate the backup or overflow. Each backup and overflow is a unique circumstance that requires investigation and corrective action.

Most backups are the result of service line blockages. Once a report is received from the public, a technician is immediately dispatched to help diagnose the cause of the backup, within a 30 minute response time for emergencies. Information on cleanup procedures after basement backups is provided to customers in the form of a sewer backup handbook (Appendix L). If a service line blockage is diagnosed, customers are advised that service line blockages are the responsibility of property owners

to correct. Service line rodding corrects many blockages, and is conducted by contractors working for property owners. Customers with service line blockages can become eligible to participate in the Building Sewer Service Repair Assistance Program detailed in Appendix G. Program applicants are visited by a District technician who provides a televised inspection of the service. Needed service line point repairs and outside cleanouts are provided by the District under the program.

The simplest overflow event, which can also cause backups, is a mainline blockage. The technician can readily diagnose this situation and generally correct it immediately with the equipment at hand, the combination jetter/vacuum truck. The technician then clears the area of any puddled sewage or debris, minimizing any environmental impacts or public contact. After the mainline blockage is cleared the sewer is televised to determine the cause of the blockage. Potential sources of blockage materials, such as excessive rags or grease, are investigated and appropriate code enforcement measures are taken. Sewer sections that have had a blockage that reoccurs before the next regular cleaning cycle are added to a 6 month preventative maintenance cleaning list. There is also a 3 month preventive maintenance cleaning list for more chronic locations. Chronic blockage locations are considered for point repairs or main replacement to eliminate sags, offsets, or aggressive root intrusion that reduce effectiveness of high frequency cleaning.

Main breaks or collapses are similarly diagnosed, but technicians are not equipped to immediately repair or replace broken pipe or underground structures. Immediate activities to ameliorate the overflow or backup may include sandbagging, vacuum pumping using the combination truck, or portable pumping arrangements to eliminate any discharges or flooding. Emergency repair contractors are dispatched to repair or replace underground facilities, who are required to follow District construction standards under District inspection.

Backups resulting from mainline blockages are eligible for the District's Back-up Reimbursement Program. The program allows the District to reimburse clean-up costs to property owners or occupants, up to a program limit. Once the cause of a backup is established to verify eligibility, a program packet is issued to the property owner or occupant, and the application is processed when received. Appendix M includes the program information for the Back-up Reimbursement Program.

Forcemain breaks are ameliorated by de-pressurizing the forcemain which may include temporary pumping arrangements. The District owns portable pumps, and can also readily mobilize area contractors to set up temporary pumping for larger systems. All breaks are evaluated for cause during repair, and corrective actions such as routine flushing, improved air/vacuum relief valve maintenance, or altering forcemain connectivity are identified and implemented.

Wet weather overflows and backups can be more complex than mainline blockages or breaks. Generally there is no immediate action a technician can take to eliminate the overflow or backup. In situations with multiple manhole overflows, the event is accompanied with widespread surface flooding, and all manholes can't immediately be safely reached. If manhole covers create unsafe conditions, technicians can place barricades and/or grated covers to improve the immediate safety of vehicle traffic or passersby. Technicians are dispatched immediately following the event to clear the area of any puddled sewage or debris and restore manhole covers. Property owners with backups are provided with information on the District's Overhead Sewer Program detailed in Appendix H.

Further work associated with wet weather overflow and backup episodes is included in the System Evaluation Plan.

D. System Evaluation Plan

1. Summarize Problem Areas: Chronic Overflows, Backups, I/I Locations

Numerous chronic overflow locations have been controlled to the point where overflows have been either completely eliminated, or limited to catastrophic events where there is no feasible further corrective action.

The two manholes that continue to have chronic overflows are 1-M-049, and 2-D-001. Each of these locations has been subjected to extensive evaluation and corrective action work, including upstream I/I removal and downstream de-bottlenecking, resulting in significant reductions in the frequency, duration, and volume of overflows at these locations. Each location has unusual circumstances that make the manhole sensitive to flow conditions. The 1-M-049 manhole is very shallow, so that even minor surcharging in the vicinity can cause an overflow. The 2-D-001 manhole is located at a dramatic reduction in sewer grade, making the immediate downstream trunkline subject to accumulation of debris and sediment because of the local reduction in flow velocity, effectively acting like a grit removal channel. Further action is planned in each of these areas, including additional de-bottlenecking at both locations. Downstream of the 1-M-049 manhole, sewer lining is currently underway to eliminate tuberculation in the downstream sewers. Downstream of the 2-D-001 manhole, heavy cleaning is being reviewed periodically for impacts on flow and surcharging in the sewer.

The overall system does continue to deteriorate, and ongoing monitoring of the system is adequate to identify any areas where chronic overflows may develop in the future.

Backups are widely distributed, with no apparent areas with evidence of concentrated backups. The last catastrophic storm, in June of 2013, resulted in backup complaints from almost every area of the collection system. Appendix N includes a map showing the backups during that event. Another map showing historic backup frequencies is also shown in Appendix N. The first strategy for properties with repeated backups is to encourage participation in the overhead sewer program. These maps are used when prioritizing I/I removal efforts.

I/I is characterized each year in the flow monitoring program. The map in Appendix A shows a typical plot of the I/I scores throughout the system. The I/I number is a characterization of the peak observed flow, normalized for rainfall, upstream sewer length, and antecedent conditions.

2. Evaluate Plans to Eliminate SSO and Reduce I/I

Chronic wet weather overflows are subjected to study to diagnose causes and evaluate corrective actions. Evaluation may include flow monitoring, computer modeling, and alternative evaluation to determine the appropriate corrective action(s) to eliminate the overflow.

Corrective actions can require an extended schedule, which could include I/I removal on private and/or public property, de-bottlenecking projects such as relief sewers or pump station capacity expansions, identification of downstream high-maintenance areas of sedimentation or tuberculation, or some combination of these measures.

I/I is a chronic operational issue that is actively managed on a continuing basis. Flow monitoring provides the way to identify areas with higher I/I in the collection system. Flow monitoring, coupled with manhole overflow and backup data, is used to prioritize specific sub-systems where I/I removal efforts are to be concentrated. Targeted areas can be worked on concurrently, or can be the focus of all current I/I removal efforts, depending on the circumstances. I/I removal objectives are identified for any targeted area, and can vary depending on the operating conditions in the vicinity of the proposed I/I removal work.

I/I removal efforts can be conducted on both private property, as well as in the public right-of-way. Prior to removal work, conditions in the area are assessed to identify the sources of I/I and assess the efficacy of available I/I removal strategies. Assessments can include private property inspections in every building, including televising service laterals, as well as complete televising and inspections of sewer mains and manholes.

The private property I/I removal program allows the District to perform corrective work on private property, including installing storm sumps, correcting footing drain connections, area or step drain connections, or other difficult measures. Simple corrections such as downspout connections or improperly connected storm sumps are required to be corrected by property owners. Grouting, lining or replacing portions of the building service are measures that are also available as work the District can perform to meet I/I removal objectives.

Sewer main and manhole corrective measures can range from grouting and/or coating manholes and sewer pipes, lining using various methods, no-dig replacement techniques such as pipe-bursting, or open cut replacement. Historic uses of these measures are evaluated, and results are used to characterize the expected effectiveness when considering future I/I removal measures.

3. Lift Station Evaluations

Lift stations are evaluated for reliability and capacity. Manhole overflows or backups within the upstream area of influence of any lift station subjects the lift station to critical evaluation as an opportunity for expansion to alleviate any bottleneck created at that junction of the system. Forcemains with chronic breakage issues are subjected to evaluation to determine corrective measures to alleviate future breaks.

Currently pending lift station projects identified in the 5-year plan include renovation of the Liberty Park Lift Station, and subjecting the Butterfield and Centex Lift Stations to detailed engineering study for potential future renovation or replacement. The plan also includes budget to rehabilitate air/vacuum relief valves on the Northwest, Liberty Park and College Lift Station forcemains over the next 3 years.

4. Construction plans

Projects beyond the bid threshold of \$40,000 are bid out and awarded to contractors as a construction contract. Plans and specifications are prepared by the District's consulting engineer identifying the scope, location and expected schedule of construction work. These plans are prepared as projects are identified in the budget.

Current construction plans in FY 15-16 include an active contract for lining sewers downstream of the 1-M-049 manhole that have been identified as a bottleneck, and a sewer downstream of the Earlston Lift

Station that has been subject to accelerated corrosion, likely from hydrogen sulfide build-up in the forcemain, and subsequent release in the downstream sewer. For FY 16-17, design plans and specifications are being prepared for the replacement of sewers in the 1-K-028 drainage basin, which are in an area with high I/I as shown by flow metering, are in poor structural condition as identified from PACP scores, and are in an area where new pavement is being concurrently planned by the Village of Westmont.

E. Reporting and Monitoring

SSO Detection and Reporting

Sanitary sewer overflows are detected in a variety of ways, as described above. All observed overflows are reported in writing to Illinois EPA's Des Plaines Regional Office, either via fax or e-mail, within one day of the event. The written report includes the nature of the event and corrective actions taken to eliminate the overflow. A paper file is created, along with a corresponding work order in the Lucity geodatabase. Overflow information is added to lists and tabulations that are included in the annual operations report for the Board of Trustees.

2. Backup Tracking and Reporting

Backups are reported by affected public. The District keeps a database of all reported backups. For extraordinary events, the Board of Trustees is provided with an event report that details overflow and backup information. The Board of Trustees is also provided annual reports containing all recorded backup information retained by staff. The Board of Trustees is also apprised on a monthly basis of the status of all claims that arise from the backup reimbursement program.

F. Third Party Notice Plan

This third party notice plan identifies how third parties are notified of overflows, and the circumstances in which public notification is needed. The purpose of third party notice is to advise anyone who may be harmed by the overflow so that they are aware of the hazard and can take steps to avoid harm.

Overflow circumstances vary significantly, with potential hazards depending on the circumstances surrounding each event. There are no areas in the collection system with non-domestic wastewater discharges that might create hazards such as specific pollutants in toxic amounts. Domestic sewage sanitation issues and the presence of pathogens, in addition to safety hazards created by manhole covers and flooding, are generally the most prevalent concerns when considering public notification needs. Technicians are expected to exercise judgement to determine the appropriate notification needed during each overflow event.

In the case of backups, potentially affected public are acutely aware of the nature of the backup. Questions about contact and safe cleanup procedures are answered over the phone during the initial contact, and by the responding technician, and a detailed explanation is included in the backup handbook (Appendix L) which is left with the customer.

1. Types of Overflows

The circumstance of each overflow is unique. Some overflows are fully contained in the vicinity of the manhole, with no discharge to any surface water or storm sewer, with little potential for public access or

contact. In these cases, notification can be limited to putting up barriers, or remaining at the location until the overflow is resolved and the area cleaned up.

Overflows with flow reaching a nearby storm drain occur. Similar to a completely contained overflow, exposure in the vicinity of the overflow can be adequately controlled by erecting barriers or remaining at the location until the overflow is resolved and the area cleaned up. In these cases, the municipal storm sewer owner is also notified of the overflow.

Overflows reaching local waterways are reported to Illinois EPA, who is then equipped to field any complaints or questions from downstream. Local waterways are all urban drainageways with no direct recreation, water supply intakes, or other features that create the likelihood of hazardous conditions resulting from overflows. There are two government entities with parks located in the vicinity of surface waterways, the Downers Grove Park District, and the DuPage County Forest Preserve District, who are notified of overflows reaching these areas.

Overflows in large storm events, where technicians do not typically remain with active work to alleviate the overflow, can create hazardous conditions by having manhole lids dislodged, as well as discharging dilute sewage with pathogen contents that requires sanitation awareness. In these cases, in addition to alleviating safety hazards by erecting barriers and/or temporarily placing grated manhole covers, notification consisting of signage that warns of the potential hazard is also erected.

Catastrophic storms causing widespread flooding are events when emergency notification systems managed by local municipal governments are employed, providing widely broadcasted instructions about the inherent hazards, including the potential for commingled sewage in floodwaters. These systems use resources such as blanket e-mails, texting, phone calls, and internet postings on websites and various social media outlets. The District uses its social media and web site to broadcast similar information in these types of events.

2. Notice recipients

Notice recipients include basement backup complainants, anyone in the vicinity of erected signage, municipal stormwater owners, park owners, and the general public receiving broadcasted emergency information.

3. Messaging for Notifications

Technicians are trained to verbally describe the circumstances of an overflow. The Backup Handbook (Appendix L) is used to supplement this communication.

Notification for either the park or storm sewer owners includes discussion of the location, cause, timeframe and magnitude of the overflow, and the corrective actions taken to eliminate the overflow.

Sawhorse signs for placement at overflowing manholes during storm events have the following message: Caution, flow from this manhole contains sewage, Downers Grove Sanitary District, 630 969 0664.

Emergency broadcast wording is developed uniquely for each event as warranted by the event. Primary emphasis is on reminding people that floodwaters likely contain contaminants from sewage requiring

appropriate sanitation during cleanup and contact, in addition to other related hazards such as electrical, structure covers, and pooled or flowing water.

4. Lines of Communication

The most common and direct line of communication is the verbal discussion between the technician and anyone in the vicinity of the overflow.

Municipal storm sewer and park owners are notified verbally via phone or e-mail, either from one of the Collection System Supervisors, or from the General Manager.

The District's website has a specific area dedicated for public notice and emergency notifications. The District's Facebook page by its nature provides immediate updates to followers. The District's information coordinator updates these resources upon instructions from either the Collection System Supervisors or the General Manager.

Emergency notification systems managed by local municipalities include audible horns, dial-up phone messaging, cell phone and portable device messaging, and posting on internet resources such as web sites and social media outlets. The Village emergency coordinators are contacted by the Collection System Supervisors or the General Manager, and messaging is coordinated as appropriate for the event.

5. Contact Information

Illinois EPA:

Sarah Wiedel
Environmental Protection Specialist
Field Operations Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
9511 West Harrison
Des Plaines, IL 60016
Fax 847 294 4058
Phone 847 294 4000
Sarah.Wiedel@Illinois.gov

Village of Downers Grove Storm Sewers:

Karen Daulton Lange Stormwater Administrator Village of Downers Grove Public Works Department 5101 Walnut Ave Downers Grove, IL 60515 Phone 630 434 5489 kdlange@downers.us

Village of Downers Grove Park District:

Bill McAdam
Executive Director

Downers Grove Park District 2455 Warrenville Road Downers Grove, IL 60515 Phone 630 960 7252 bmcadam@dgparks.org

Village of Downers Grove Emergency Notification System:

Mary Pratt
Emergency Management Coordinator
Downers Grove Village Manager's Office
801 Burlington Ave
Downers Grove, IL 60515
Phone 630 434 5559
mpratt@downers.us

Village of Westmont Storm Sewers, Emergency Notification System, and Parks:

Noriel Noriega
Public Works Supervisor, Engineering Operations
Village of Westmont
31 West Quincy Street
Westmont, IL 60559
Phone 630 981 6272
nnoriega@westmont.il.gov

DuPage County Forest Preserve District:

Tom Wakolbinger
Director
Office of Law Enforcement
Forest Preserve District of DuPage County
(630) 933-7094
twakolbinger@dupageforest.org

District Web Site and Social Media:

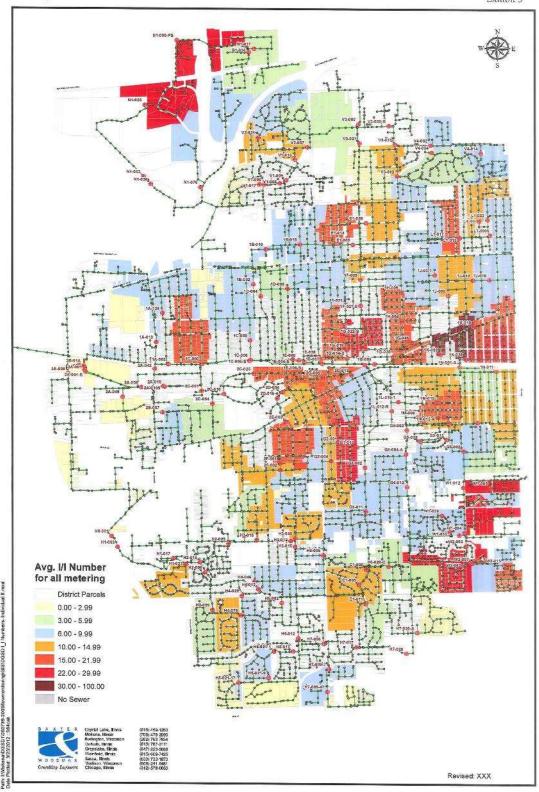
www.dgsd.org

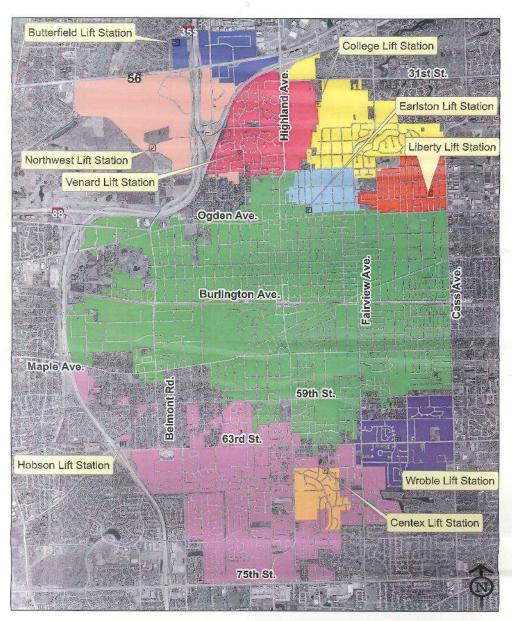
www.facebook.com/downersgrovesd/

Appendix A

GIS Maps







Downers Grove Sanitary District Lift Stations



Appendix B

Job Descriptions

TITLE: SEWER SYSTEM TECHNICIAN FLSA: Nonexempt

GENERAL SUMMARY

Performs all work necessary for the operation, investigation, inspection, maintenance, repair and rehabilitation of the sanitary sewer system. Reports directly to Sewer System Supervisor.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Performs inspections and customer service activities associated with Building Sanitary Service Repair Assistance Program, Overhead Sewer Program and Reimbursement Program for Sewer Backups Caused by Public Sanitary Sewer Blockages.
- Performs sewer maintenance activities including responding to sewer backups and high flow conditions, preventative maintenance, manhole inspections and repairs, and inflow and infiltration removal.
- 3) Operates truck mounted sewer inspection system (tv unit), combination sewer cleaning truck, camera for televising building service lines, and other equipment used in the inspection, maintenance, rehabilitation and repair of the sewer system.
- 4) Performs sewer investigations including dye tests, smoke tests, complaint investigations, flood testing and flow measurements.
- 5) Performs activities associated with flow meters including installation, removal, data retrieval, data review and report preparation.
- 6) Performs minor maintenance of sewer system equipment including tv unit, combination sewer cleaning truck, flow meters, and other equipment.
- 7) Performs data entry and analysis and report preparation for projects relating to the sewer system.
- 8) Must be able to carry a pager or phone on a 24-hour basis, seven days a week, on a rotating basis, in order to respond to emergency situations.
- 9) Performs marking of sewer line locations for utilities and maintains reports of locating activity.
- 10) May conduct or assist in topographical or level surveys using appropriate instruments.
- 11) Monitors work zones for unsafe conditions and takes corrective action when warranted. Reports such conditions to supervisor as appropriate. Adheres, at all time, to proper safety-related policies and practices. Practices safety procedures in the performance of all job duties.
- Provides high level of customer service by prompt response, evaluation and problem solving, and education of customers regarding District services.
- 13) Reads water and sewer meters for in-house accounts.
- Performs inspections associated with work by other utilities and work by contractors hired by the District.
- 15) Monitors sewer maintenance contractors for compliance with contract standards.
- Provides assistance with system inspection activities and other areas of District operations as needed.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Requires a good working knowledge of District ordinances, practices and procedures, and the District collection system. This knowledge is normally acquired with one year of work experience.
- 2) Requires ability to operate truck mounted sewer inspection system (tv unit), combination sewer cleaning truck and camera for televising building service lines normally acquired with six months of work experience.
- 3) Knowledge of methods, equipment, laws, regulations, codes, ordinances, standards and policies governing construction of sewer lines and construction and maintenance of building sanitary services normally acquired with six months of work experience.

- 4) Requires successful completion of Pipeline Assessment Certification Program (PACP) within one year of start of employment.
- 5) Requires ability to read and understand blueprints.
- Requires knowledge of methods, use of equipment and practices in locating sewer lines normally acquired with six months of work experience.
- 7) Requires knowledge of computerized data processing normally acquired through a combination of college courses and work experience.
- 8) Requires ability to prepare and maintain detailed work records and reports.
- 9) Requires knowledge of the proper care and use of equipment, tools and vehicles.
- 10) Requires interpersonal skills and abilities to communicate effectively both orally and in writing with the public, co-workers, contractors and outside agencies, including under difficult circumstances.
- Requires a minimum State of Illinois Class B Commercial Driver's License (CDL) with Full Air Brakes (no restriction) and a Tank (N) endorsement.
- 12) Requires a high school diploma or equivalent.

PHYSICAL ABILITIES REQUIRED

- 1) Drive cars, trucks, truck mounted sewer inspection system and combination sewer cleaning truck on a daily basis.
- 2) Respiratory fitness required for use of self-contained breathing apparatus for confined space entry.
- 3) Standing, walking, sitting, bending, and climbing repetitively throughout the day, for work in and around crawlspaces, manholes, trenches, construction and job sites and the Wastewater Treatment Center.
- 4) Lifting, pulling and pushing objects on a daily basis, including manhole covers weighing 150 pounds, barricades, hoses, pipe and other construction materials, and tools and equipment.
- 5) Work with equipment or perform duties that require extreme precautions to avoid injury.
- 6) Wear and use protective equipment, such as safety glasses, gloves, ear protection, respirators and air packs, safety shoes, hard hats and other items as required by the task or job.
- 7) Ability to identify and distinguish colors.

WORKING CONDITIONS

Exposure to dirt, noise, wastewater and the like. Perform work outdoors under all weather conditions and during day and night hours. Perform all duties while working alone. Must be available for emergency operations as required.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

10/2/84

Revised 3/7/88, 3/21/00, 8/18/03, 11/3/03, 8/25/06, 2/1/07, 8/25/15

GENERAL SUMMARY

Responsible for maintenance of programs relating to District's comprehensive infiltration and inflow removal and sewer system rehabilitation policy and providing technical assistance to the operation and maintenance of the sanitary sewer system. Reports directly to the Sewer System Supervisor.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Assists with all activities related to flow basin rehabilitation program including evaluate system data, recommend repairs, customer service, construction administration and program monitoring.
- 2) Assists with all activities related to administration and monitoring of Building Sanitary Service Repair Assistance Program, Overhead Sewer Program and Reimbursement Program for Sewer Backups Caused by Public Sanitary Sewer Blockages.
- 3) Responsible for flow metering program including meter installation, meter removal, data retrieval, data review and analysis, and report preparation.
- 4) Assess pipe and manhole conditions from television inspections using Pipeline Assessment Certification Program (PACP) and recommend appropriate rehabilitation
- Assist in the design and review of plans and specifications for the construction of sanitary sewers into unsewered areas, special assessment areas, new construction and sewer replacements.
- 6) Review subdivision and commercial development engineering plans for sanitary sewer system.
- 7) Maintain Geographic Information System (GIS) database within GBS Master Series sanitary sewer system software and ESRI ArcMap software.
- 8) Analyze and measure results of sewer system operations in order to effectively assist with planning and prioritizing future work schedules.
- 9) Assist with construction management for sanitary sewer system projects.
- 10) Prepare cost estimates for sewer system projects.
- 11) Perform sewer maintenance activities including responding to sewer backups and high flow conditions, preventative maintenance flushing and manhole inspections and repairs.
- Operate combination sewer cleaning truck, camera for televising building service lines, and other equipment used in the inspection, maintenance, rehabilitation and repair of the sewer system.
- 13) Assist with monitoring sewer construction and maintenance contractors for compliance with contract standards.
- 14) Assist with planning, evaluation and coordination of preventative and corrective maintenance on the sewer system.
- Assist with inspection of all connections and disconnections (including groundwork, finals, blocking and repairs), construction of sanitary sewers and related appurtenances (including air testing, lamping and manhole inspections) and work by contractors hired by the District or other utilities.
- Assist with code enforcement inspections and activities including illegal connections, grease traps and triple basins and management of grease trap monitoring program, including inspections, correspondence to grease trap cleaners and restaurant owners.
- 17) Perform sewer investigations including marking District facilities for JULIE, dye tests, smoke tests, compliance investigations, flood testing and flow measurements.
- 18) Provide technical assistance to sewer system employees.
- 19) Assist with sanitary sewer cleaning and televising as needed.
- 20) Answer questions and provide information to the public. Respond to complaints and recommend and implement corrective action. Maintain a high level of customer service, problem solving and customer awareness.

FLSA: Nonexempt

- 21) Maintain required records and database of sewer system activity, including data entry, analysis and report preparation, in GBA Master Series software, ESRI ArcMap, Access and/or Excel, as appropriate.
- 22) Update sewer system atlas maps.
- 23) Develop or recommend new practices to insure the efficient operation of the sewer system.
- 24) Recommend and/or prepare specifications for major equipment and material purchases.
- 25) Provide engineering assistance to projects related to the Wastewater Treatment Center and pumping stations.
- 26) Must be able to carry a pager or phone on a 24-hour basis, seven days a week, on a rotating basis, in order to respond to emergency situations.
- 27) Must be available to assist with emergency operations as necessary.
- 28) Responsible for special projects as assigned by the Sewer System Supervisor.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Two years of college-level course work in engineering or related field.
- 2) Bachelor's or Associate's degree from an accredited college or university.
- 3) Good working knowledge of District ordinances, practices and procedures, and the District collection system. This knowledge is normally acquired with one year of work experience.
- 4) Knowledge of construction materials, methods and applicable laws, survey techniques and engineering design procedures.
- 5) Skills in the use of computers and software, including knowledge of ArcView GIS, GBA Master Series sanitary sewer system software, Access, Excel and Word.
- Requires successful completion of Pipeline Assessment Certification Program (PACP) within one year of start of employment.
- 7) Ability to operate combination sewer cleaning truck and camera for televising building service lines normally acquired with six months of work experience.
- 8) Ability to read and understand plans and specifications.
- 9) Knowledge of methods, use of equipment and practices in locating sewer lines normally acquired with six months of work experience.
- 10) Skills in establishing and maintaining effective working relationships with coworkers, residents, contractors, and other governmental agencies.
- 11) Interpersonal skills and abilities to communicate effectively both orally and in writing with the public, co-workers, contractors and outside agencies, including under difficult circumstances.
- 12) Skills in project implementation, organization and teamwork.
- 13) Ability to effectively implement multiple projects and meet deadlines.
- Ability to think independently, exercise judgement and initiative and prioritize all sewer system operations effectively, economically and efficiently.
- Ability to prepare analytical, accurate and concise reports and maintain required records and database of sewer system activity.
- 16) Knowledge of budgeting and purchasing procedures.
- 17) Requires a minimum State of Illinois Class B Commercial Driver's License (CDL) with Full Air Brakes (no restriction) and a Tank (N) endorsement.

PHYSICAL ABILITIES REQUIRED

- 1) Ability to operate required office equipment in order to send and receive information with necessary optical, auditory, and manual dexterity.
- 2) Ability to use a keyboard to enter, retrieve, or transform words and data.

- 3) Ability to closely examine computer screen or written reports and proofread and check documents for errors.
- 4) Ability to walk, stand, or sit for an hour or more at a time for office related activities. Ability to walk, stand, sit, bend, and climbing for field work including work in and around crawlspaces, manholes, trenches, construction and job sites and the Wastewater Treatment Center.
- 5) Lifting, pulling and pushing objects on a daily basis, including manhole covers weighing 150 pounds, barricades, hoses, pipe and other construction materials, and tools and equipment.
- 6) Valid State of Illinois Driver's License and ability to operate a motorized vehicle on public roads and highways to visit work sites.
- 7) Ability to identify and distinguish colors.

WORKING CONDITIONS

Varied work environment, involves both office work and outdoor work under all weather conditions and during day and night hours. Outdoor work includes exposure to dirt, noise, wastewater and the like. Must be available for emergency operations as required.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

04/20/10 Revised 8/25/15 TITLE: MECHANIC - MAINTENANCE FLSA: Nonexempt

GENERAL SUMMARY

Performs preventive maintenance and repairs on mechanical and electromechanical machinery and equipment, vehicles, buildings and structures. Reports directly to Maintenance Supervisor.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Replaces or repairs wide variety of equipment including pumps, motors, valves, heat exchangers, boilers, vehicles and other District equipment.
- 2) Repairs and maintains buildings and structures including plumbing and carpentry.
- 3) Inspects equipment for malfunctions.
- 4) Installs and sets up new equipment.
- 5) Performs plumbing and pipefitting tasks.
- 6) Uses welding equipment to heat, cut, braze or weld.
- 7) Performs limited electrical maintenance and repairs.
- 8) Assists in sludge handling functions including drying, pulverizing and deliveries.
- 8) Assists in keeping maintenance records.
- 9) Assists in maintenance of lift stations.
- 10) Performs custodial and landscaping tasks including snow removal, as required.
- 11) Assists with other areas of District operations as required.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Must live within a 30 minute travel time from the District's Wastewater Treatment Center.
- 2) Requires ability to be on-call on a 24-hour basis, 7 days a week, on a rotating basis, in order to respond to emergency situations.
- 3) Requires a good working knowledge of wastewater plant mechanical and electrical equipment and vehicle maintenance, which is normally acquired through one year of work experience and one year of vocational training.
- 4) Requires thorough knowledge of general building maintenance, including plumbing and carpentry acquired through one year of work experience.
- 5) Requires computer skills and ability to utilize a computerized maintenance program database.
- 6) Requires ability to read prints and O & M manuals, and prepare written reports as necessary.
- 7) Requires minimum of High School diploma or GED. Higher education levels, such as associates degree or vocational training in mechanical or electrical maintenance is desirable.
- 8) Requires the ability to comprehend and follow complicated written and verbal instructions. This is normally acquired through the completion of a high school education.
- 9) Requires knowledge of the proper care and use of equipment, tools and vehicles.
- 10) Requires interpersonal skills and abilities to communicate effectively both orally and in writing with the public, coworkers, contractors and outside agencies, including under difficult circumstances.
- Requires a minimum State of Illinois Class B Commercial Driver's License (CDL) with Full Air Brakes (no restriction) and a Tank (N) endorsement.
- 12) Requires the ability to operate heavy equipment including dump truck, front-end loader and sludge pulverizer.

PHYSICAL ABILITIES REQUIRED

1) Drive cars and trucks and operate heavy equipment, including dump truck, front end loader and sludge pulverizer.

- 2) Standing, walking, sitting, bending and climbing repetitively throughout the day in areas including stairways, grating, catwalks, ladders and a variety of other interior and exterior surfaces and work areas.
- 3) Lifting, pulling and pushing objects on a daily basis, including buckets, tools, shovels, rakes and other equipment. Some objects weighing up to 50 pounds. Lifting of heavier objects with assistance, such as motors and pumps.
- 4) Work with equipment or perform duties that require extreme precautions to avoid injury.
- Wear and use protective equipment, such as safety glasses, gloves, hearing protection, respirators and air packs, safety shoes, hard hats and other items as required by the task or job.
- 6) Ability to identify and distinguish colors.

WORKING CONDITIONS

Exposure to dirt, noise, wastewater, oils and the like. Most of work performed outdoors in all weather conditions and during day and night hours. Perform all duties while working alone. Work hours and work week vary accordingly to operations requirements. Must be available for emergency operations as required.

The above is intended to describe the general content of and requirement for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

Revised 8/22/13, 8/25/15

TITLE: ELECTRICAL TECHNICIAN FLSA: Nonexempt

GENERAL SUMMARY

Performs preventive maintenance and repair work on electronic equipment located at the Wastewater Treatment Center, Administration Center and at remote pumping stations, as well as mobile equipment such as vehicles, sewer system equipment, and portable generators. Reports directly to the Maintenance Supervisor.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Specializes in repair of electrical components on process equipment at the Wastewater Treatment Center. This equipment includes 480 volt electrical systems, such as breakers, starters, relays, and wiring. This type of work also pertains to remote pumping stations.
- 2) Is involved with electrical high voltage areas (beyond 480 voltage) which would include the primary feeder system from the Utility Company and the District utility transfer switch.
- 3) Performs electrical maintenance on low voltage systems, such as 240 and 120, on various equipment that may include HVAC, office and maintenance receptacles and other minor equipment and wiring.
- 4) Performs electrical maintenance on low voltage electronic equipment, such as SCADA System, PLC's, alarm units, auto dialers, level controls, flow meters, etc.
- 5) Performs installation of new electrical equipment, such as motors, PLC's, alarm systems, flow meters, lighting fixtures, HVAC equipment, etc.
- 6) Plans layout of wiring and installs wiring, conduit, and electrical apparatus.
- 7) Performs maintenance and calibration work on non-electrical equipment such as manometers, pneumatic and hydraulic gauges and controls.
- 8) Is responsible for maintaining in good condition all specialized tools, meters, and other equipment normally used to perform the work.
- 9) Assists with other areas of District operations and maintenance as required.
- 10) Keeps maintenance records.
- 11) Assists Maintenance Supervisor in scheduling work assignments and ordering parts.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Must live within a 30 minute travel time from the District's Wastewater Treatment Center and must be able to carry a pager or phone on a 24-hour basis, 7 days a week, on a rotating basis, in order to respond to emergency situations.
- 2) Requires a good working knowledge of electrical equipment which is normally acquired through five years of work experience in the wastewater treatment field, or some other major industrial or utility company.
- 3) Requires an understanding of current electrical codes and safety precautions.
- 4) Requires the ability to understand electrical and mechanical drawings and schematics.
- 5) Requires a minimum of a high school diploma or GED. Higher education levels, such as an associates degree or vocational training in electrical maintenance is desirable.
- 6) Possession of an electrical license by an authorized agency.
- 7) Requires the ability to comprehend and follow complicated written and verbal instructions. This is normally acquired through the completion of a high school education.
- 8) Requires interpersonal skills and abilities to communicate effectively both orally and in writing with the public, coworkers, contractors and outside agencies, including under difficult circumstances.
- 9) Requires a minimum State of Illinois Class B Commercial Driver's License (CDL) with Full Air Brakes (no restriction) and a Tank (N) endorsement.

PHYSICAL ABILITIES REQUIRED

- 1) Standing, walking, sitting, bending and climbing repetitively throughout the day in areas including stairways, grating, catwalks, ladders and a variety of other interior and exterior surfaces and work areas.
- 2) Lifting, pulling and pushing objects on a daily basis, including buckets, tools, shovels, rakes and other equipment. Some objects weighing up to 50 pounds. Lifting of heavier objects with assistance, such as motors and pumps.
- 3) Work with equipment or perform duties that require extreme precautions to avoid injury.
- 4) Wear and use protective equipment, such as safety glasses, gloves, hearing protection, respirators and air packs, safety shoes, hard hats and other items as required by the task or job.
- 5) Ability to identify and distinguish colors.

WORKING CONDITIONS

Exposure to dirt, noise, wastewater, oils and the like. Work can be performed outdoors in all weather conditions and during day and night hours. Perform duties while working alone. Must be available for emergency operations as required.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

2/16/93, 1/4/10, 8/25/15

TITLE: SEWER SYSTEM SUPERVISOR FLSA: Exempt

GENERAL SUMMARY

Responsible for the operation, investigation, inspection, maintenance, repair and rehabilitation of the sanitary sewer system. Supervises four or more Sewer System Technicians and an Engineering Technician. Reports directly to the General Manager.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Supervises and manages Sewer System Technicians including scheduling, assigning projects and duties, approval of time off, assignment and approval of overtime, assignment of emergency response duties, directing and monitoring work.
- 2) Monitors employee performance to ensure productivity and compliance with work rules. Performs periodic written performance evaluations for Sewer System Technicians at least quarterly.
- Trains and advises subordinates regarding rules and regulations governing Sanitary District employees, including safety and emergency procedures, and applies and enforces same.
- 4) Implements disciplinary measures.
- 5) Recommends promotions, transfers and terminations for subordinates.
- 6) Interviews applicants and recommends the hiring of subordinates.
- 7) Responsible for sewer maintenance including responding to sewer backups, high flow conditions, preventative maintenance, manhole inspections and repairs and inflow and infiltration removal.
- 8) Responsible for flow basin rehabilitation program including evaluate system data, recommend repairs, customer service, construction administration and program monitoring.
- 9) Administers Building Sanitary Service Repair Assistance Program.
- 10) Responsible for proper and efficient operation and maintenance, including preventative maintenance program, of truck mounted sewer inspection system, combination sewer cleaning truck, camera for televising building service lines, and other equipment used in sewer system activities.
- 11) Administers flow meter program including installation, removal, data retrieval, data review and report preparation.
- 12) Develops, initiates and recommend new practices to insure the efficient operation of the sewer system, including improvements in work methods and standards of service.
- 13) Assists General Manager in developing operational and regulatory policies and procedures related to sewer system operations.
- 14) Oversees and participates in comprehensive customer service problem solving for the sewer system.
- 15) Oversees ordering of services and materials required for areas of responsibilities.
- 16) Assists in preparation and control of Sewer System Operation and Maintenance budget.
- 17) Performs report preparation including analysis of data for projects relating to the sewer system.
- 18) Provide direction to other staff on projects relating to the sewer system.
- 19) Performs system investigations and inspections as needed.
- 20) Under normal conditions, less than forty percent of work time is spent in activities similar to that of the supervised employees.
- 21) Must be able to carry a pager or phone on a 24-hour basis, seven days a week, as necessary to respond to emergency situations.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Requires strong working knowledge of methods, techniques, practices and procedures used in the operation, investigation, inspection, maintenance, repair and rehabilitation of the sanitary sewer system. This knowledge is normally acquired with five years of work experience.
- 2) Interpersonal skills and abilities to communicate effectively both orally and in writing with subordinates, co-workers, the public, contractors and outside agencies, including under difficult circumstances.
- 3) Requires skills in effective personnel supervision.
- 4) Must be able to inspire loyalty and cooperation from those supervised, and to improve the productivity of same.
- 5) Interpersonal skills necessary to lead others and to work effectively with all levels of the organization.
- 6) Skills in the use of computers and software, including knowledge of ArcView GIS, GBA Master Series sanitary sewer system software, Access, Excel and Word.
- 7) Ability to schedule and prioritize work and programs, assess problems and make decisions to resolve problems utilizing initiative, analysis, and reasoning.
- 8) Ability to prepare analytical, accurate, and concise reports and maintain required records of sewer system activities.
- 9) Knowledge of budgeting and purchasing procedures.

PHYSICAL ABILITITES REQUIRED

- 1) Ability to operate required office equipment in order to send and receive information with necessary optical, auditory and manual dexterity.
- 2) Ability to use a keyboard to enter, retrieve or transform words or data.
- 3) Ability to closely examine computer screen or written reports.
- 4) Ability to walk, stand, or sit for an hour or more at a time for office related activities. Ability to walk, stand, sit, bend and climb for field work including work in and around crawlspaces, manholes, trenches, construction and job sites and the Wastewater Treatment Center.
- 5) Ability to life or carry objects weighing 50 pounds.
- Ability to effectively enter and work in confined spaces. Ability to wear personal protective equipment including respiratory protection as necessary.
- 7) Requires a minimum State of Illinois Class B Commercial Driver's License (CDL) with Full Air Brakes (no restriction) and a Tank (N) endorsement.
- 8) Ability to identify and distinguish colors.

Working Conditions

Must be able to work effectively in varied work environment, involving both office work and outdoor work under all weather conditions and during day and night hours. Outdoor work includes exposure to dirt, noise, wastewater and the like.

Must be available for emergency operations as required.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

11/3/03 Revised 9/9/05, 8/25/15

GENERAL SUMMARY

Responsible for supervision of Senior Field Inspector and Field Inspector, enforcement of District ordinances, review and permitting program for sewer service, reporting and recordkeeping, contract administration and direction of sewer maintenance contractors. Performs engineering and general assistance to General Manager. Performs administrative duties by special assignment from General Manager. Reports directly to the General Manager.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Supervise and manage Senior Field Inspector and Field Inspector including scheduling, assigning projects and duties, approval of time off, assignment and approval of overtime, assignment of emergency response duties, directing and monitoring work.
- 2) Monitor employee performance to ensure productivity and compliance with work rules. Performs periodic written performance evaluations for subordinates at least quarterly.
- Train and advise subordinates regarding rules and regulations governing Sanitary District employees, including safety and emergency procedures, and applies and enforces same.
- 4) Implement disciplinary measures.
- 5) Recommend promotions, transfers and terminations for subordinates.
- 6) Interview applicants and recommend the hiring of subordinates.
- 7) Enforce District ordinances relating to the collection system.
- 8) Review engineering drawings for sanitary sewer construction, new building construction, existing buildings, commercial buildings, etc.
- 9) Coordinate, assign, monitor, inspect and document activities related to sanitary sewer construction inspection projects.
- 10) Coordinate utility locations, inspections and mapping for sanitary sewer lines and appurtenances.
- 11) Maintain recordkeeping associated with collection system activities including sewer print files and base maps and maintenance records.
- Assist with administration and monitoring of Building Sanitary Service Repair Assistance Program, Overhead Sewer Program and Reimbursement Program for Sewer Backups Caused by Public Sanitary Sewer Blockages.
- Assist with administration of collection system maintenance contracts for sewer jetting, televising, bucketing and manhole work, including direction and coordination of contractors, inspection for compliance with District contract standards and payouts to contractors.
- 14) Perform illegal connection survey inspections, report preparation and data analysis.
- Assist with sewer investigations including dye tests, smoke tests, complaint investigations, flood testing and flow measurements.
- Answer questions and provide information to the public. Responds to service requests from citizens including sewer availability and assistance programs. Respond to complaints and recommend and implement corrective action. Maintain a high level of customer service, problem solving and customer awareness.
- Assist with maintenance of required records and database of sewer system activity, including data entry, analysis and report preparation, in GBA Master Series software, Access and/or Excel, as appropriate.
- 18) Assist with preparation of specifications for major equipment and material purchases.
- 19) Assist with flow metering program including meter installation, meter removal, data retrieval, data review and analysis, and report preparation.

FLSA: Exempt

- 20) Maintain Unsewered Area Plan including periodic updates, establishment of project areas, and attendance at informational meetings, and administration of sewer construction including payouts to contractors.
- 21) Prepare briefings, attend meeting and prepare minutes for Board of Local Improvements.
- 22) Identify District needs for easements on private property, research and obtain easements where needed, develop master list of easements and periodic updating.
- Process recapture agreements including cost documentation, preparation of agreements, maintain list of outstanding agreements and annual updates.
- 24) Prepare annexation and access agreements and periodic reporting.
- Participates in the Illinois Association of Wastewater Agencies including attendance at meetings and participation on the Collection System Subcommittee.
- 26) Under normal conditions, less than forty percent of work time is spent in activities similar to that of the supervised employees.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Good working knowledge of sanitary sewer construction and operations, District ordinances, practices and procedures, and the District collection system including familiarity with the District's Building Sanitary Service Repair Assistance Program, Overhead Sewer Program, Reimbursement Program for Sewer Backups Caused by Public Sanitary Sewer Blockages and the Unsewered Area Plan. This knowledge is normally acquired with two year of work experience.
- 2) Knowledge of methods, equipment, laws, regulations, codes, ordinances, standards and policies governing construction of sewer lines and construction and maintenance of building sanitary services normally acquired with six months of work experience.
- 3) Knowledge of construction materials, methods and applicable laws, survey techniques and engineering design procedures.
- 4) Skills in the use of computers and software, including knowledge of ArcView GIS, GBA Master Series sanitary sewer system software, Access, Excel and Word.
- 5) Skills in effective personnel supervision.
- 6) Ability to schedule and prioritize work and programs, assess problems and make decisions to resolve problems utilizing initiative, analysis, and reasoning.
- 7) Ability to prepare analytical, accurate, and concise reports and maintain required records of sewer system activities.
- 8) Skills in establishing and maintaining effective working relationships with coworkers, residents, contractors, and other governmental agencies.
- 9) Interpersonal skills and abilities to communicate effectively both orally and in writing with the public, co-workers, contractors and outside agencies, including under difficult circumstances.
- 10) Ability to think independently and exercise judgement and initiative.
- 11) Must be available to assist with emergency operations as necessary.
- 12) Responsible for special projects as assigned by the General Manager.

PHYSICAL ABILITIES REQUIRED

- 1) Operate required office equipment in order to send and receive information with necessary optical, auditory, and manual dexterity.
- 2) Use a keyboard to enter, retrieve, or transform words and data.
- 3) Walk, stand, or sit for an hour or more at a time for office related activities. Ability to walk, stand, sit, bend, and climbing for field work including work in and around crawlspaces, manholes, trenches, construction and job sites and the Wastewater Treatment Center.

4) Valid State of Illinois Driver's License and ability to operate a motorized vehicle on public roads and highways to visit work sites.

WORKING CONDITIONS

Majority of work time is in a normal office environment. Some field work required under all weather conditions for monitoring employee activities and during day and night hours. Field work includes exposure to dirt, noise, wastewater and the like. Must be available for emergency operations as required.

08/01/06

TITLE: MAINTENANCE SUPERVISOR FLSA: Exempt

GENERAL SUMMARY

Responsible for management of maintenance services including the Wastewater Treatment Center, lift stations and all equipment and vehicles. Supervises five or more mechanics and mechanic trainees. Reports directly to Operations Director.

PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Supervises and manages maintenance mechanics and mechanic trainees.
- 2) Trains and evaluates maintenance mechanics and mechanic trainees.
- 3) Interviews and recommends the hiring of maintenance employees.
- 4) Apprises newly hired employees of rules and regulations governing Sanitary District employees and applies and enforces same.
- 5) Approves payroll and schedules overtime of all subordinates.
- 6) Directs mechanics and participates in variety of maintenance and repair tasks.
- 7) Determines lift station maintenance procedures and operations.
- 8) Responsible for lift station building and grounds maintenance.
- 9) Performs system and station investigations and inspections as needed.
- 10) Directs mechanics and participates in limited electrical duties which may include inspecting, maintaining, and repairing wiring, lighting, electrical control equipment, meters, outlets and panels and other electrical equipment.
- 11) Instructs maintenance personnel on safety and emergency procedures.
- 12) Establishes and operates preventive maintenance program under consultation with Operations Director.
- 13) Orders and stock parts.
- 14) Assists in preparation and control of Operation and Maintenance budget for area of responsibility.
- 15) Assigns schedules for emergency personnel.
- 16) Under normal conditions, no more than forty percent of work time is spent in activities similar to that of the supervised employees.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Requires strong working knowledge of wastewater plant mechanical and electrical equipment, and vehicle maintenance procedures which is normally acquired with a combination of three years of vocational training and three years of work experience.
- 2) Requires strong working knowledge of the operation and maintenance of lift stations acquired through a combination of three years of vocational training in mechanics and electrical components, and two years of work experience.
- 3) Requires the ability to communicate both orally and in writing. This is normally acquired through the completion of a high school education, with additional knowledge acquired through college-level management courses.
- 4) Interpersonal skills necessary to lead others and to work effectively with all levels of the organization.
- 5) Must be able to inspire loyalty and cooperation from those supervised, and to improve the productivity of same.
- 6) Job is sometimes physically demanding.
- 7) Must have or be able to obtain a Class C drivers license.

WORKING CONDITIONS

Majority of work performed in maintenance shop with exposure to dirt, noise and the like. Some work performed outdoors in all weather conditions. Sometimes hard, physically demanding work. Must be available for emergency operations as required.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

10/2/84 Revised 3/7/88

Appendix C

Five Year Plan FY15/16-19/20

TABLE OF CONTENTS

I.	Introdu	iction	1
II.	Gener	al Corporate Fund	
	A.	Expenditures 1. Summary	10 13 14 15 16
	В.	Revenues 1. Summary 2. Analysis by Revenue Type	
	C.	Fund Balance 1. Summary	27
III.	Consti	uction Fund	30
IV.	Improv	rement Fund	33
V.	Public	Benefit Fund	36
VI.	Audit	Reconciliation	36
VII.	. Projed	ets Not Included in Plan	38
LIS	ST OF E	XHIBITS	
Exh Exh Exh Exh Exh	nibit 1 nibit 2 nibit 3 nibit 4 nibit 5 nibit 6 nibit 7	Five Year Financial Plan – Operation & Maintenance	19 28 29 32

Introduction

This five year plan presents recommended expenditures and revenues necessary to meet the operation, maintenance, replacement, capital improvement and debt service requirements of the District over the five year period from May 1, 2015 to April 30, 2020. The plan contains separate projections for the combined general corporate and replacement funds (operation, maintenance and replacement needs), the construction fund (Wastewater Treatment Center capital improvements), the improvement fund (sewer system and pump station capital improvements) and the public benefit fund. A brief overview of each of these separate projections is provided below.

General Corporate Fund – This plan treats the replacement fund as a restricted portion of the general corporate fund. The balance in the replacement fund is maintained throughout the five year period at the April 30, 1991 level of \$820,000. This treatment allows major replacements to be included in the operation and maintenance budget of the general corporate fund, allows all interest earned on the replacement fund to be fully utilized, and applies the balance in the replacement fund towards meeting the minimum recommended working balance in the general corporate fund.

The plan includes expenditures for the replacement and rehabilitation of the wastewater collection system, including building service repairs to help control sewer system backups and overflows. The goal is to sustain annual replacement and rehabilitation expenses at a level equal to 0.75% of the replacement value of the sewer infrastructure. Sewer rehabilitation and replacement costs increase steadily over the five year period, with the intent of approaching the 0.75% level on a sustained basis. Expenses include the portion of ARRA loan repayments to the Illinois Environmental Protection Agency (IEPA) associated with sewer rehabilitation work previously conducted with ARRA loan funding.

Planned replacements and major maintenance items for non-sewer fixed assets necessary for continued reliable operation are identified. FY 15-16 non-sewer annual replacement, rehabilitation and upgrade expenses represent about 150% of the FY 13-14 annual depreciation of non-sewer fixed assets.

The user rate is proposed to remain at the current level for FY 15-16 through FY 19-20. Monthly service fees are proposed to increase from \$11.00 to \$12.00 for FY 15-16, and to increase \$1.00 each of the four years after FY 15-16. This allows repayment to Capital funds for recent major replacement projects, along with a trend towards appropriate levels of sewer system replacement and rehabilitation expenditures while keeping up with inflation. Other user charges such as surcharge and sampling and monitoring charges will increase as the cost to provide matching services increases with inflation.

<u>Construction Fund</u> – The primary source of revenue to the construction fund is sewer permit fees. These fees are utilized for improvements and additions at the WWTC and for the repayment of loans from the IEPA. Revenues are accumulated for the next major expansion of WWTC capacity, purchase of adjacent property, or other capital improvements. Repayments from the general fund are scheduled to reimburse for recent major replacement projects funded from the construction fund. The plan anticipates improvements to the digesters, a grease delivery ramp, the expansion of the plant's CHP facility with grant funding, and the installation of a high speed turbo-blower with grant funding.

Improvement Fund – The primary sources of revenue to the improvement fund are trunk and lateral sewer service charges. The plan proposes to pay for sewer system additions from this fund. Funds used for previous sewer replacements are scheduled to be repaid from the general corporate fund. Revenues are accumulated for sewer and lift station capital improvements. This fund is used to finance special assessments extending sewers into unsewered areas, with funds repaid by the owners of properties benefited by the new sewers through vouchers. The renovation of the Liberty Park Lift Station is anticipated in the plan.

<u>Public Benefit Fund</u> – The public benefit fund may only be used to pay for the portion of sewer extensions or sewer special assessments which the Board of Trustees deems to be of benefit to an area larger than the immediate service area.

DOWNERS GROVE SANITARY I	DISTRICT - FIVE YEAR FIN	ANCIAL PLAIN - FI	SCAL YEARS 2013	5-2016 (0 2019-2020	U	=>/						EXHIBIT 1
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 14-15 Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
11. Administration												
A. Salary & Wages												
001. Trustees	\$18,000	\$18,000	\$18,016	\$17,136	\$18,000	\$18,000	\$18,000		\$18,000	\$18,000	\$18,000	\$18,000
002. B.O.L.I.	0	0	0	0	900	0	900		900	900	900	900
003. General Management	215,166	233,076	218,953	222,560	235,750	230,309	240,100		248,500	257,200	266,200	275,500
004. Financial Records	154,287	174,601	196,101	190,282	191,550	197,542	196,600		203,500	210,600	218,000	225,600
005. Administrative Records	61,740	58,307	43,536	49,383	52,300	49,966	60,650		62,800	65,000	67,250	69,600
007. Code Enforcement	266,666	255,371	264,148	272,694	286,650	274,265	294,300		304,600	315,250	326,300	337,700
008. Safety Activities	·	4,203	3,126	2,236	3,700	1,026	2,400		2,500	2,550	2,650	2,750
030. Building & Grounds	96	187	575	1,145	150	4,409	150		150	150	150	150
Subtotal	\$715,955	\$743,746	\$744,455	\$755,436	\$789,000	\$775,517	\$813,100	\$940,000	\$840,950	\$869,650	\$899,450	\$930,200
B. Operation & Maintenance												
100. Electricity	\$6,423	\$4,497	\$3,201	\$3,760	\$4,400	\$3,948	\$4,400		\$4,650	\$4,950	\$5,250	\$5,550
101. Natural Gas	1,490	1,243	1,198	1,494	3,000	1,622	3,000		3,100	3,200	3,300	3,400
102. Water, Garbage, Other	426	428	733	852	1,100	734	1,000		1,050	1,100	1,150	1,250
110. Bank Charges	17,589	19,387	19,649	19,315	18,500	19,589	20,200		20,600	21,000	21,450	21,850
112. Communication	10,721	11,250	12,620	14,393	13,350	14,858	14,500		15,000	15,100	15,600	15,700
115. Eqpt/Eqpt Repair	54,640	53,633	143,973	78,172	124,250	129,363	71,500		111,650	109,300	106,800	100,150
116. Supplies	8,424	9,194	8,093	9,591	10,500	9,366	10,400		11,100	11,200	11,000	11,350
117. Employee/Duty Costs	12,307	13,057	10,351	11,940	17,400	9,050	17,000		17,350	17,700	18,050	18,400
118. Building & Grounds	19,206	11,852	24,890	21,221	27,000	13,832	24,200		61,050	42,800	70,000	56,100
119. Postage	10,555	10,676	9,694	12,683	15,000	12,590	14,500		14,800	15,100	15,300	15,650
120. Printing/Photography	7,415	8,619	8,242	9,541	10,500	10,696	11,150		10,550	10,600	11,350	11,000
121. User Billing Material	62,776	60,822	65,377	67,273	68,750	66,244	72,000		70,550	72,550	74,650	76,800
124. Contract Services	78,435	86,896	123,717	95,829	85,000	72,314	88,000		86,050	91,850	90,100	96,100
137. Memberships/Subscriptions	9,337	9,515	10,379	10,490	11,000	10,887	12,000		11,800	12,450	12,300	12,900
Subtotal	\$299,745	\$301,068	\$442,117	\$356,555	\$409,750	\$375,093	\$363,850	\$450,000	\$439,300	\$428,900	\$456,300	\$446,200
C. Vehicles												
222. Gas/Fuel	\$2,403	\$2,589	\$2,421	\$2,508	\$2,600	\$2,219	\$2,600		\$2,650	\$2,700	\$2,750	\$2,800
225. Operation/Repair	963	687	809	949	1,450	1,125	1,150		1,100	1,250	1,500	1,750
226. Vehicle Purchase	0	0	15,992	0	17,500	16,111	12,000		0	0	0	0
Subtotal	\$3,366	\$3,276	\$19,222	\$3,457	\$21,550	\$19,455	\$15,750	\$30,000	\$3,750	\$3,950	\$4,250	\$4,550
TOTALS	\$1,019,067	\$1,048,090	\$1,205,794	\$1,115,448	\$1,220,300	\$1,170,065	\$1,192,700	\$1,420,000	\$1,284,000	\$1,302,500	\$1,360,000	\$1,380,950

DOWNERS GROVE SANITARY	DISTRICT - FIVE YEAR FIN	ANCIAL PLAN - FI	SCAL YEARS 2013	5-2016 (0 2019-202	U							EXHIBIT 1
						FY 14-15						
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
12. Wastewater Treatment Center												
A. Salary & Wages												
009. Oper. Management	\$12,439	\$14,419	\$16,455	\$19,137	\$16,950	32,277	\$20,300		\$21,000	\$21,700	\$22,500	\$23,300
010. Maintenance	356,596	398,600	408,297	450,539	473,750	487,172	502,500		520,100	538,300	557,150	576,650
020. WWTC	505,143	512,553	536,043	508,314	522,900	556,072	532,900		551,550	570,850	590,850	611,500
030. Building & Grounds	51,566	36,187	39,136	32,971	47,150	33,362	43,050		44,550	46,100	47,750	49,400
Subtotal	\$925,744	\$961,759	\$999,931	\$1,010,961	\$1,060,750	\$1,108,883	\$1,098,750	\$1,260,000	\$1,137,200	\$1,176,950	\$1,218,250	\$1,260,850
B.Operation & Maintenance												
100. Electricity	\$348,731	\$390,066	\$279,023	\$332,450	\$206,700	\$248,848	\$195,000		\$206,050	\$175,000	\$75,000	\$78,000
101. Natural Gas	17,231	9,976	9,510	18,134	20,000	16,811	17,000		18,000	19,100	20,250	21,450
102. Water, Garbage, Other	28,123	29,826	33,343	36,318	47,150	40,197	33,500		34,500	35,550	36,600	37,700
103. Odor Control	6,738	9,561	7,901	11,168	14,500	5,760	14,500		14,950	15,400	15,850	16,300
104. Fuel - Generators	10,400	11,140	10,683	12,020	15,000	12,819	15,300		15,750	16,250	16,750	17,250
112. Communication	12,517	14,142	13,779	14,545	18,900	13,950	14,150		14,400	18,100	15,000	15,250
113. Emergency/Safety Eqpt	8,665	33,722	7,125	8,261	11,500	10,921	17,600		11,850	12,200	12,550	12,950
400. Chemicals	54,336	63,179	50,183	77,304	64,700	58,800	66,600		68,600	70,700	72,800	75,000
500. Eqpt/Eqpt Repair	287,760	391,947	902,092	913,572	693,050	928,939	732,100		765,850	677,400	545,450	611,200
116. Supplies	31,652	41,355	36,782	33,161	37,800	42,317	39,100		40,200	38,850	40,000	41,150
117. Employee/Duty Costs	18,488	20,225	15,651	19,304	30,200	20,433	28,200		28,750	29,350	29,950	30,500
800. Building & Grounds	138,531	219,669	233,869	215,245	233,500	201,845	178,450		274,050	212,200	212,000	229,300
124. Contract Services	14,221	14,221	14,647	30,626	82,350	82,500	84,800		126,750	130,550	203,200	209,300
130. NPDES Permit Fees	53,000	53,000	53,000	53,000	53,000	53,000	53,000		53,000	53,000	53,000	53,000
Subtotal	\$1,030,392	\$1,302,028	\$1,667,587	\$1,775,108	\$1,528,350	\$1,737,140	\$1,489,300	\$1,900,000	\$1,672,700	\$1,503,650	\$1,348,400	\$1,448,350
C. Vehicles												
222. Gas/Fuel	\$31,052	\$34,376	\$37,227	\$26,877	\$41,300	\$30,715	\$42,500		\$43,800	\$45,100	\$46,450	\$47,850
225. Operation/Repair	4,657	7,105	5,960	4,045	7,550	6,343	6,500		6,700	6,900	7,100	7,300
226. Vehicle Purchase	10,875	13,934	18,171	13,951	22,500	19,824	22,500		0	0	70,000	24,000
Subtotal	\$46,584	\$55,415	\$61,359	\$44,873	\$71,350	\$56,882	\$71,500	\$100,000	\$50,500	\$52,000	\$123,550	\$79,150
TOTALS	\$2,002,720	\$2,319,202	\$2,728,876	\$2,830,942	\$2,660,450	\$2,902,905	\$2,659,550	\$3,260,000	\$2,860,400	\$2,732,600	\$2,690,200	\$2,788,350

						FY 14-15						
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
13. Laboratory A. Salary & Wages												
009. Oper. Management	\$302	\$8,268	\$47,957	\$47,136	\$55,200	57,045	\$53,400		\$55,250	\$57,200	\$59,200	\$61,300
040. Laboratory	207,286	174,209	114,087	122,522	126,550	123,849	142,300		147,300	152,450	157,750	163,300
Subtotal	\$207,588	\$182,477	\$162,044	\$169,659	\$181,750	\$180,894	\$195,700	\$230,000	\$202,550	\$209,650	\$216,950	\$224,600
B. Operation & Maintenance												
114. Chemicals	\$14,097	\$10,321	\$8,822	\$8,308	\$16,500	\$9,126	\$16,550		\$17,200	\$17,900	\$18,600	\$19,350
115. Eqpt/Eqpt Repair	140,972	69,353	44,135	51,264	23,300	7,382	56,300		43,200	69,000	19,500	69,000
116. Supplies	16,315	14,653	10,205	10,359	20,450	10,175	19,500		20,250	21,100	21,900	22,800
117. Employee/Duty Costs	3,416	2,813	3,077	2,220	8,600	4,762	6,500		6,650	6,750	6,900	7,050
122. Monitoring Equipment	2,211	2,158	1,907	8,032	14,400	5,931	8,500		9,200	8,500	3,500	3,500
123. Outside Lab Services	6,997	16,075	11,041	13,648	15,000	11,950	15,600		16,250	16,900	17,550	18,250
Subtotal	\$184,009	\$115,373	\$79,188	\$93,831	\$98,250	\$49,326	\$122,950	\$150,000	\$112,750	\$140,150	\$87,950	\$139,950
C. Vehicles												
222. Gas/Fuel	\$716	\$1,070	\$922	\$821	\$1,100	\$829	\$1,000		\$1,050	\$1,100	\$1,150	\$1,200
225. Operation/Repair	144	141	145	1,878	100	179	200		200	200	200	250
226. Vehicle Purchase	10,969	0	31,565	(4,000)	0	0	0		0	13,000	0	0
Subtotal	\$11,830	\$1,210	\$32,632	(\$1,301)	\$1,200	\$1,008	\$1,200	\$10,000	\$1,250	\$14,300	\$1,350	\$1,450
TOTALS	\$403,427	\$299,060	\$273,864	\$262,188	\$281,200	\$231,228	\$319,850	\$390,000	\$316,550	\$364,100	\$306,250	\$366,000

EXHIBIT 1

						FY 14-15						LANDII
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
	Actual	Actual	Actual	Actual	Buaget	Actual	Buuget	Арргорпацоп	Projected	Fiojected	Flojected	Fiojected
14. Collection System												
A. Salary & Wages												
050. Sewer Maintenance	120,694	118,385	114,722	100,649	123,100	140,822	106,500		110,200	114,100	118,050	122,200
060. Inspection	270,238	266,128	273,904	306,964	293,400	267,244	329,750		341,250	353,200	365,600	378,350
070. Investigations	13,937	9,568	9,051	9,329	10,000	14,733	10,200		10,550	10,950	11,300	11,700
Subtotal	\$404,868	\$394,081	\$397,677	\$416,942	\$426,500	\$422,799	\$446,450	\$510,000	\$462,000	\$478,250	\$494,950	\$512,250
B. Operation & Maintenance												
102. Water, Garbage, Other			\$10	\$31	\$50	\$26	\$0		\$0	\$0	\$0	\$0
112. Communication	\$6,120	\$5,349	6,308	5,620	6,500	5,597	8,850		7,150	9,750	7,300	9,100
113. Emer/Safety Equipment	1,266	5,565	1,156	2,925	7,700	2,642	7,700		2,100	2,150	2,250	2,300
115. Eqpt/Eqpt Repair	41,661	61,798	53,369	56,317	72,300	32,614	56,800		208,500	60,250	62,050	63,900
116. Supplies	6,226	4,566	5,910	6,547	8,650	4,510	11,850		12,100	12,350	12,700	13,100
117. Employee/Duty Costs	8,702	11,999	11,623	7,032	16,900	7,081	15,500		15,800	16,150	16,450	16,800
124. Contract Services	23,720	24,435	40,280	22,119	31,400	39,354	130,000		132,100	132,800	133,400	134,050
900. Collection System Repair	4,783,863	2,022,782	1,083,426	861,895	1,031,600	948,814	1,381,600		1,131,600	1,531,600	1,748,900	1,731,600
127. JULIE	13,562	15,010	12,572	13,223	13,000	9,962	13,000		13,400	13,800	14,200	14,650
128. Overhead Sewer Program	13,272	10,375	3,061	64,539	23,500	23,673	15,000		15,000	15,000	15,000	15,000
129. Public Sewer Blockage Program	2,134	6,356	6,917	2,231	12,000	11,154	12,000		12,000	12,000	12,000	12,000
Subtotal	\$4,900,524	\$2,168,236	\$1,224,634	\$1,042,478	\$1,223,600	\$1,085,427	\$1,652,300	\$2,000,000	\$1,549,750	\$1,805,850	\$2,024,250	\$2,012,500
C. Vehicles												
222. Gas/Fuel	\$17,796	\$22,657	\$23,769	\$19,318	\$26,500	\$21,130	\$26,500		\$28,100	\$29,800	\$31,550	\$33,450
225. Operation/Repair	11,588	13,798	3,996	10,517	5,300	7,254	5,300		5,450	5,600	5,750	5,900
226. Vehicle Purchase	548	151,218	0	272,100	18,000	21,812	18,000		0	20,000	0	40,000
Subtotal	\$29,932	\$187,674	\$27,765	\$301,935	\$49,800	\$50,196	\$49,800	\$70,000	\$33,550	\$55,400	\$37,300	\$79,350
TOTALS	\$5,335,325	\$2,749,991	\$1,650,076	\$1,761,356	\$1,699,900	\$1,558,422	\$2,148,550	\$2,580,000	\$2,045,300	\$2,339,500	\$2,556,500	\$2,604,100

EXHIBIT 1

DOWNERS GROVE SANITARY I	DISTRICT - FIVE YEAR FIN	IANCIAL PLAN - FI	SCAL YEARS 2013	5-2016 (0 2019-202	O							EXHIBIT 1
						FY 14-15						
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
15. Lift Stations												
A. Salary & Wages												
009. Oper. Management	\$1,302	\$1,925	\$1,463	\$374	\$1,550	167	\$400		\$400	\$450	\$450	\$450
030. Building & Grounds	0	48	473	0	500	1,463	0		0	0	0	0
080. Lift Station Maint.	83,087	61,542	57,479	53,962	73,400	37,585	58,300		60,350	62,450	64,650	66,900
Subtotal	\$84,389	\$63,515	\$59,415	\$54,335	\$75,450	\$39,215	\$58,700	\$70,000	\$60,750	\$62,900	\$65,100	\$67,350
B. Operation & Maintenance												
100. Electricity	\$145,992	\$116,887	\$85,213	\$110,145	\$90,000	\$108,511	\$110,000		\$116,600	\$123,600	\$131,000	\$138,850
102. Water, Garbage, Other			\$67	\$206	\$200	\$180	\$0		\$0	\$0	\$0	\$0
104. Fuel - Generators	\$4,768	\$8,387	4,215	5,440	6,000	\$7,070	6,000		6,200	6,350	6,550	6,750
112. Communication	6,508	6,922	6,945	7,338	8,200	5,516	6,300		6,600	6,250	6,350	6,500
113. Emer/Safety Eqpt.	13,130	1,307	2,470	182	500	75	250		250	250	250	300
500. Eqpt/Eqpt Repair	59,836	57,745	180,059	133,204	118,000	137,715	123,000		133,750	114,850	103,000	110,500
116. Supplies	385	392	173	257	300	143	250		250	250	250	300
800. Building & Grounds	21,853	36,151	27,319	49,517	72,700	76,903	30,900		28,400	16,900	20,400	17,900
Subtotal	\$252,471	\$227,791	\$306,462	\$306,289	\$295,900	\$336,113	\$276,700	\$350,000	\$292,050	\$268,450	\$267,800	\$281,100
TOTALS	\$336,860	\$291,306	\$365,877	\$360,624	\$371,350	\$375,328	\$335,400	\$420,000	\$352,800	\$331,350	\$332,900	\$348,450
17. Insurance & Employee Benefits E. Insurance & Payroll												
452. Liability/Property	\$145,114	\$161,562	\$153,728	\$170,156	\$181,500	\$194,451	\$193,000		\$196,000	\$199,850	\$203,700	\$207,650
455. Employee Group Coverage	390,169	414,780	428,464	437,752	471,600	441,152	464,250		491,800	520,950	551,900	584,700
460. I.M.R.F.	310,792	326,452	430,496	439,952	432,100	435,424	313,900		301,500	282,800	262,600	247,000
461. Social Security	175,325	175,834	177,167	180,642	191,050	191,822	196,950		203,950	211,100	218,550	226,200
TOTALS	\$1,021,399	\$1,078,627	\$1,189,855	\$1,228,502	\$1,276,250	\$1,262,849	\$1,168,100	\$1,300,000	\$1,193,250	\$1,214,700	\$1,236,750	\$1,265,550
GRAND TOTALS	\$10,118,798	\$7,786,276	\$7,414,342	\$7,559,060	\$7,509,450	\$7,500,797	\$7,824,150	\$9,370,000	\$8,052,300	\$8,284,750	\$8,482,600	\$8,753,400

DOWNERS GROVE SANITARY DISTR	RICT - FIVE YEAR FIN	ANCIAL PLAN - FR	SCAL YEARS 2015	5-2016 to 2019-2020	J							EXHIBIT 1
						FY 14-15						E/VIIDIT I
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
REVENUES												
User receipts	\$3,421,146	\$3,412,850	\$3,496,017	\$3,319,850	\$3,306,400	\$3,238,902	\$3,237,900	\$3,237,900	\$3,189,300	\$3,141,500	\$3,094,400	\$3,047,900
Surcharges	227,792	324,567	370,277	376,445	310,000	358,816	310,000	310,000	310,000	310,000	310,000	310,000
Monthly service fees	2,123,610	2,183,139	2,274,480	2,381,716	2,620,200	2,606,458	2,861,300	2,861,300	3,102,300	3,343,400	3,584,400	3,825,500
Plan review fees	0	1,030	211	324	1,000	1,070	1,000	1,000	2,000	3,000	4,000	4,000
Const inspection fees	4,519	12,262	0	0	500	420	500	500	500	500	500	500
Permit inspection fees	9,246	17,388	21,917	18,154	16,000	21,015	20,000	20,000	23,000	22,000	22,000	22,000
Interest	3,561	2,994	2,714	2,537	9,050	5,052	9,050	9,050	9,350	19,400	19,850	39,700
Sampling & monitoring charges	56,393	49,405	64,246	67,735	57,150	71,398	65,000	65,000	67,300	69,650	72,050	74,600
Real estate taxes	959,993	994,406	1,017,885	1,055,752	1,068,750	1,080,919	1,102,550	1,102,550	1,124,600	1,147,100	1,170,000	1,193,400
Television inspection fees	949	1,540	0	0	550	130	150	150	150	150	150	150
Replacement taxes	83,328	75,170	74,527	85,289	79,800	76,762	79,800	79,800	82,700	82,700	82,700	82,700
Lease payments	31,057	31,594	32,156	32,491	32,200	32,800	33,500	33,500	34,100	34,800	35,500	36,200
Miscellaneous	45,648	16,807	12,485	3,291	4,000	6,391	4,000	4,000	4,000	4,000	4,000	4,000
Grease Waste	2,665	29,061	101,820	121,418	120,000	138,932	140,000	140,000	160,000	160,000	160,000	160,000
ARRA Disbursement	3,163,744	933,899	·	•	•	·	•	,	·		·	·
TOTAL REVENUES	\$10,133,651	\$8,086,111	\$7,468,734	\$7,465,003	\$7,625,600	\$7,639,065	\$7,864,750	\$7,864,750	\$8,109,300	\$8,338,200	\$8,559,550	\$8,800,650
TOTAL EXPENSES	\$10,118,798	\$7,786,276	\$7,414,342	\$7,559,060	\$7,509,450	\$7,500,797	\$7,824,150	\$9,370,000	\$8,052,300	\$8,284,750	\$8,482,600	\$8,753,400
EXCESS (DEFICIT) REVENUES OVER EXPENSES	\$14,853	\$299,836	\$54,392	(\$94,058)	\$116,150	\$138,268	\$40,600	(\$1,505,250)	\$57,000	\$53,450	\$76,950	\$47,250
ENDING FUND BALANCE	\$1,511,698	\$1,811,533	\$1,865,926	\$1,771,868	\$1,888,018	\$1,910,136	\$1,950,736	\$404,886	\$2,007,736	\$2,061,186	\$2,138,136	\$2,185,386
RESTRICTED FOR REPLACEMENT	\$820,000	\$820,000	\$820,000	\$820,000	\$820,000	\$820,000	\$820,000		\$820,000	\$820,000	\$820,000	\$820,000
UNRESTRICTED	\$691,697	\$991,533	\$1,045,926	\$951,868	\$1,068,018	\$1,090,136	\$1,130,736		\$1,187,736	\$1,241,186	\$1,318,136	\$1,365,386
ENDING FUND BALANCE AS PERCENTAGE	450/	000/	050/	220/	050/	050/	050/		050/	050/	050/	050/
OF TOTAL EXPENSES	15%	23%	25%	23%	25%	25%	25%		25%	25%	25%	25%
USER RATE	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65		\$1.65	\$1.65	\$1.65	\$1.65
INCREASE FROM PRIOR YEAR'S RATE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%
MONTHLY SERVICE FEE	\$9.00	\$9.00	\$9.50	\$10.00	\$11.00	\$11.00	\$12.00		\$13.00	\$14.00	\$15.00	\$16.00
INCREASE FROM PRIOR YEAR'S FEE	5.9%	0.0%	5.6%	5.3%	10.0%	10.0%	9.1%		8.3%	7.7%	7.1%	6.7%

GENERAL CORPORATE FUND EXPENDITURES

Summary

The annual budgets for operation, maintenance and replacement for the next five years are contained in Exhibit 1. The proposed budget amounts represent the best estimates of actual expenditures each year. Necessary contingencies for FY 15-16 are provided in the proposed appropriation amounts for the major categories in each department. The appropriation amounts represent the legal limit on spending during the year as established in the appropriation ordinance.

Total operation, maintenance and replacement expenditures for FY 15-16 are budgeted at \$7,824,150 and actual expenditures are expected to be 100% of budget. Actual expenditures for FY 14-15 are projected to be \$7,500,797. The following table presents budget and actual totals for the last ten years and projected budget totals for the next five years:

	O & M	Actual	% of Actual	Annual Increase in Actual
Fiscal Year	<u>Budget</u>	<u>Expenditures</u>	to Budget	<u>Expenditures</u>
2005-06	6,872,800	6,031,120	88%	3.3%
2006-07	7,250,400	6,617,625	91%	9.7%
2007-08	7,635,700	7,211,744	94%	9.0%
2008-09	7,483,450	7,505,716	100%	4.1%
2009-10	7,331,500	7,742,838	106%	3.2%
2010-11	11,599,550	10,118,798	87%	30.7%
2011-12	7,507,300	7,786,276	104%	-23.1%
2012-13	7,275,100	7,414,342	102%	-4.8%
2013-14	7,589,050	7,559,060	100%	2.0%
2014-15	7,509,450	7,500,797*	100%*	-0.8%*
2015-16	7,824,150	7,824,150*	100%*	4.3%*
2016-17	8,052,300	8,052,300*	100%*	2.9%*
2017-18	8,284,750	8,284,750*	100%*	2.9%*
2018-19	8,482,600	8,482,600*	100%*	2.4%*
2019-20	8,753,400	8,753,400*	100%*	3.2%*
*projected				

The significant increases in expenditures in FY 06-07 and FY 07-08 reflect implementation of a major sewer rehabilitation program. Increases in FY 10-11 represent sewer system rehabilitation and replacement projects leveraging ARRA funding that was available in that time period, with the decrease in FY 11-12 representing the end of this program funding opportunity. The decrease in FY 12-13 is primarily due to reduced operating costs associated with low rainfall totals during this period. Increases from FY 13-14 to FY 19-20 represent expected increases in the cost of goods and services, some variability in fixed assets needing replacement, steady increases in the annual expenditures on sewer replacement and rehabilitation, and repayments into capital funds.

Analysis by Type of Expenditure

I. Salaries and Wages

<u>Year</u>	Salaries and Wages	<u>Change</u>	Full Time <u>Equivalents</u>
FY 10-11	2,338,545	4.2%	38.5
FY 11-12	2,345,577	0.3%	38.1
FY 12-13	2,363,520	0.8%	38.1
FY 13-14	2,407,333	1.9%	37.5
FY 14-15	2,527,308	5.0%	37.3
FY 15-16	2,612,700	3.4%	38.0
FY 16-17	2,703,450	3.5%	38.0
FY 17-18	2,797,400	3.5%	38.0
FY 18-19	2,894,700	3.5%	38.0
FY 19-20	2,995,250	3.5%	38.0

The increase in FY 10-11 reflects the addition of a full-time mechanic and offsetting elimination of two part-time plant positions, the retirement and overlapping replacement of a long-time employee, and some turnover in the lab. The small increase in FY 11-12 reflects regular pay increases offset by turnover in the lab, including reducing the number of analysts to two. The total for FY 12-13 reflects regular pay increases and some overlapping turnover at the plant operator position offset by lower overtime because of generally dry conditions for the year. The total for FY 13-14 reflects turnover at the plant operator position. The total for FY 14-15 reflects the conversion of a part time mechanic's helper to a full time mechanic position. Annual salary adjustments of 3.5% at full staffing account for remaining future increases.

II. O & M Expenses – Utilities

<u>Year</u>	<u>Utilities</u>	<u>Change</u>
FY 10-11	548,416	-2.9%
FY 11-12	552,922	0.8%
FY 12-13	412,297	-25.4%
FY 13-14	503,391	22.1%
FY 14-15	420,877	-16.4%
FY 15-16	363,900	-13.5%
FY 16-17	383,950	5.5%
FY 17-18	362,500	-5.6%
FY 18-19	272,550	-24.8%
FY 19-20	286,200	5.0%

The contracts for fixed priced electricity supply covering the second half of FY 11-12 to the present have been considerably lower than the previous contracts because of favorable market conditions. Electric usage in FY 12-13 was low because of generally dry conditions. Electric use in FY 13-14 returned to those associated with wet conditions, and costs were further increased by higher electricity prices. The first phase of the gas utilization system was started up during FY 14-15, and reductions in utility costs reflect resulting reduced electricity usage. Further reductions in FY 17-18 and FY 18-19 reflect implementation of the second phase of the gas utilization system.

Electric price increases are projected to grow at 6% per year. Natural gas use is expected to remain low compared to historic levels.

III. O & M Expenses – Other

<u>Year</u>	O & M Expenses - Excluding Utilities	<u>Change</u>
FY 10-11	6,118,726	57.3%
FY 11-12	3,561,574	-41.8%
FY 12-13	3,307,768	-7.1%
FY 13-14	3,070,901	-7.2%
FY 14-15	3,183,300	3.0%
FY 15-16	3,428,200	12.0%
FY 16-17	3,682,600	4.0%
FY 17-18	3,784,500	2.8%
FY 18-19	3,912,150	3.4%
FY 19-20	4,041,900	3.3%

The significant increase in expenditures in FY 10-11 represent ARRA-funded sewer replacement and I/I-focused rehabilitation projects. Lower expense levels from FY 11-12 to FY 13-14 reflect temporary curtailment of the I/I program and sewer rehabilitation. Steadily increasing expenses projected from FY 14-15 through FY 19-20 reflect planned capital fund repayments, the resumption of private property I/I program expenditures, and steady increases in sewer replacement and rehabilitation expenditures. Major planned expenses are detailed in Exhibit 2.

IV. Vehicles

<u>Year</u>	<u>Vehicles</u>	<u>Replacements</u>	<u>Change</u>
FY 10-11	91,712	2	-19.7%
FY 11-12	247,575	3	169.9%
FY 12-13	140,978	3	-43.1%
FY 13-14	348,964	6	147.5%
FY 14-15	127,541	4	-63.5%
FY 15-16	138,250	5	8.4%
FY 16-17	89,050	0	-35.6%
FY 17-18	125,650	2	41.1%
FY 18-19	166,450	2	32.5%
FY 19-20	164,500	4	-1.2%

Vehicle expenses fluctuate based on vehicle replacement needs and average \$164,067 per year during the ten year period shown. Small vehicles are generally scheduled for replacement after six years of use, while larger heavy duty vehicles have a longer service life. Small CNG vehicles are scheduled for replacement after 10 years. Rising fuel prices are offset somewhat by the addition of CNG vehicles to the fleet where appropriate. Replacement of the heavy duty sewer system jetter/vacuum truck was completed in FY 13-14. Proposed vehicle replacements are detailed in Exhibit 2 under budget codes 11C226, 12C226, 13C226 and 14C226.

V. <u>Insurance and Employee Benefits</u>

Year	Ins/Emp Benefits	<u>Change</u>
FY 10-11	1,021,399	9.8%
FY 11-12	1,078,627	5.6%
FY 12-13	1,189,855	10.3%
FY 13-14	1,228,502	3.2%
FY 14-15	1,262,849	2.8%
FY 15-16	1,168,100	-7.5%
FY 16-17	1,193,250	2.2%
FY 17-18	1,214,700	1.8%
FY 18-19	1,236,750	1.8%
FY 19-20	1,265,550	2.3%

The proposed increases in these expenditures are due to premium increases on all coverages, particularly employee group, workers compensation, property and liability. Projected decreases in the District's IMRF contribution rate help reduce the overall rate of increase over time. \$100,000 annual lump-sum IMRF payments were included in FY 12-13, FY 13-14, and FY 14-15 to reduce the District's unfunded liability and future contribution rates. The IMRF unfunded liability had been reduced substantially, so this additional contribution is discontinued in FY 15-16.

	FY 14-15											
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
SUMMARY AND ANALYSIS EXPENSE ANALYSIS BY DEPARTMENT ADMINISTRATION												
SALARIES AND WAGES	\$715,955	\$743,746	\$744,455	\$755,436	\$789,000	\$775,517	\$813,100	\$940,000	\$840,950	\$869,650	\$899,450	\$930,200
% CHANGE FROM PRIOR YEAR	3.0%	3.9%	0.1%	1.5%	4.4%	2.7%	4.8%		3.4%	3.4%	3.4%	3.4%
OFFICE EXPENSES	\$299,745	\$301,068	\$442,117	\$356,555	\$409,750	\$375,093	\$363,850	\$450,000	\$439,300	\$428,900	\$456,300	\$446,200
% CHANGE FROM PRIOR YEAR	7.3%	0.4%	46.8%	-19.4%	14.9%	5.2%	-3.0%		20.7%	-2.4%	6.4%	-2.2%
VEHICLE EXPENSES	\$3,366	\$3,276	\$19,222	\$3,457	\$21,550	\$19,455	\$15,750	\$30,000	\$3,750	\$3,950	\$4,250	\$4,550
% CHANGE FROM PRIOR YEAR	-79.7%	-2.7%	486.7%	-82.0%	523.4%	462.8%	-19.0%	******	-76.2%	5.3%	7.6%	7.1%
TOTAL ADMINISTRATION EXPENSES	\$1,019,067	\$1,048,090	\$1,205,794	\$1,115,448	\$1,220,300	\$1,170,065	\$1,192,700	\$1,420,000	\$1,284,000	\$1,302,500	\$1,360,000	\$1,380,950
% CHANGE FROM PRIOR YEAR	2.8%	2.8%	15.0%	-7.5%	9.4%	4.9%	1.9%	, , , ,	7.7%	1.4%	4.4%	1.5%

COMMENTS

Salaries and Wages Salary levels generally increase with projected salary adjustments.

Office Outside work including parking lot repairs, outside security equipment, and re-roofing the administration center are

included. Inside work including remodeling the reception area and new carpeting are included. Office servers, copier

and software updates are included.

Vehicles A vehicle is scheduled to be replaced in FY 15-16.

	FY 14-15											
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
SUMMARY AND ANALYSIS EXPENSE ANALYSIS BY DEPARTMENT WASTEWATER TREATMENT CENTER												
SALARIES AND WAGES % CHANGE FROM PRIOR YEAR	\$925,744 3.1%	\$961,759 3.9%	\$999,931 4.0%	\$1,010,961 1.1%	\$1,060,750 4.9%	\$1,108,883 9.7%	\$1,098,750 -0.9%	\$1,260,000	\$1,137,200 3.5%	\$1,176,950 3.5%	\$1,218,250 3.5%	\$1,260,850 3.5%
OPERATION & MAINTENANCE EXPENSES	\$1,030,392	\$1,302,028	\$1,667,587	\$1,775,108	\$1,528,350	\$1,737,140	\$1,489,300	\$1,900,000	\$1,672,700	\$1,503,650	\$1,348,400	\$1,448,350
% CHANGE FROM PRIOR YEAR	4.7%	26.4%	28.1%	6.4%	-13.9%	-2.1%	-14.3%		12.3%	-10.1%	-10.3%	7.4%
VEHICLE EXPENSES % CHANGE FROM PRIOR YEAR	\$46,584 -21.7%	\$55,415 19.0%	\$61,359 10.7%	\$44,873 -26.9%	\$71,350 59.0%	\$56,882 26.8%	\$71,500 25.7%	\$100,000	\$50,500 -29.4%	\$52,000 3.0%	\$123,550 137.6%	\$79,150 -35.9%
TOTAL PLANT EXPENSES % CHANGE FROM PRIOR YEAR	\$2,002,720 3.1%	\$2,319,202 15.8%	\$2,728,876 17.7%	\$2,830,942 3.7%	\$2,660,450 -6.0%	\$2,902,905 2.5%	\$2,659,550 -8.4%	\$3,260,000	\$2,860,400 7.6%	\$2,732,600 -4.5%	\$2,690,200 -1.6%	\$2,788,350 3.6%

COMMENTS

Salaries and Wages WWTC salaries and wages reflect full staffing and projected annual salary adjustments. Turnover at the Operations Supervisor position is planned for FY 15-16 due to an announced retirement.

16, FY 16-17, and FY 17-18 include repayments to the construction fund for previous major replacements. Planned

upgrades and replacements are detailed in Exhibit 2 under codes 12B500 and 12B800.

Vehicles Vehicle costs vary based on replacement needs. Vehicle replacements are detailed in Exhibit 2 under budget code

12C226.

	FY 14-15												
	FY 10-11	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected	
SUMMARY AND ANALYSIS EXPENSE ANALYSIS BY DEPARTMENT LABORATORY													
SALARIES AND WAGES	\$207,588	\$182,477	\$162,044	\$169,659	\$181,750	\$180,894	\$195,700	\$230,000	\$202,550	\$209,650	\$216,950	\$224,600	
% CHANGE FROM PRIOR YEAR	4.9%	-12.1%	-11.2%	4.7%	7.1%	6.6%	8.2%		3.5%	3.5%	3.5%	3.5%	
OPERATION & MAINTENANCE EXPENSES	\$184,009	\$115,373	\$79,188	\$93,831	\$98,250	\$49,326	\$122,950	\$150,000	\$112,750	\$140,150	\$87,950	\$139,950	
% CHANGE FROM PRIOR YEAR	159.4%	-37.3%	-31.4%	18.5%	4.7%	-47.4%	149.3%		-8.3%	24.3%	-37.2%	59.1%	
VEHICLE EXPENSES	\$11,830	\$1,210	\$32,632	(\$1,301)	\$1,200	\$1,008	\$1,200	\$10,000	\$1,250	\$14,300	\$1,350	\$1,450	
% CHANGE FROM PRIOR YEAR	1099.3%	-89.8%	2596.0%	-104.0%	-192.2%	-177.5%	19.0%	. ,	4.2%	1044.0%	-90.6%	7.4%	
TOTAL LABORATORY EXPENSES	\$403,427	\$299,060	\$273,864	\$262,188	\$281,200	\$231,228	\$319,850	\$390,000	\$316,550	\$364,100	\$306,250	\$366,000	
% CHANGE FROM PRIOR YEAR	49.5%	-25.9%	-8.4%	-4.3%	7.3%	-11.8%	38.3%	,,	-1.0%	15.0%	-15.9%	19.5%	

COMMENTS

Salaries and Wages Projected lab salaries and wages reflect future annual salary adjustments with 2 full-time analysts.

Major expenditures include the purchase of FOG testing automation equipment in FY 16-17, and casework and fumehood replacements and mold abatement in FY 15-16 and FY 17-18. Operation and Maintenance

The lab car is to be replaced in FY 17-18. Vehicles

	FY 14-15											
	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected
SUMMARY AND ANALYSIS EXPENSE ANALYSIS BY DEPARTMENT COLLECTION SYSTEM												
SALARIES AND WAGES	\$404,868	\$394,081	\$397,677	\$416,942	\$426,500	\$422,799	\$446,450	\$510,000	\$462,000	\$478,250	\$494,950	\$512,250
% CHANGE FROM PRIOR YEAR	4.6%	-2.7%	0.9%	4.8%	2.3%	1.4%	5.6%		3.5%	3.5%	3.5%	3.5%
OPERATION & MAINTENANCE EXPENSES	\$4,900,524	\$2,168,236	\$1,224,634	\$1,042,478	\$1,223,600	\$1,085,427	\$1,652,300	\$2,000,000	\$1,549,750	\$1,805,850	\$2,024,250	\$2,012,500
% CHANGE FROM PRIOR YEAR	69.0%	-55.8%	-43.5%	-14.9%	17.4%	4.1%	52.2%		-6.2%	16.5%	12.1%	-0.6%
VEHICLE EXPENSES	\$29,932	\$187.674	\$27,765	\$301.935	\$49,800	\$50,196	\$49,800	\$70,000	\$33,550	\$55,400	\$37,300	\$79,350
% CHANGE FROM PRIOR YEAR	-19.5%	527.0%	-85.2%	987.5%	-83.5%	-83.4%	-0.8%	, ,,,,,	-32.6%	65.1%	-32.7%	112.7%
TOTAL COLLECTION SYSTEM EXPENSES	\$5,335,325	\$2,749,991	\$1,650,076	\$1,761,356	\$1,699,900	\$1,558,422	\$2,148,550	\$2,580,000	\$2,045,300	\$2,339,500	\$2,556,500	\$2,604,100
% CHANGE FROM PRIOR YEAR	60.5%	-48.5%	-40.0%	6.7%	-3.5%	-11.5%	37.9%	 ,00,000	-4.8%	14.4%	9.3%	1.9%

COMMENTS

Salaries and Wages The plan reflects full staffing and normal planned annual increases.

Operation and Maintenance

Continuing implementation of the Building Sanitary Service Repair Assistance Program is reflected. Expenses for the l/l program increase in FY 15-16. Planned structural rehab work is included in FY 15-16 and FY17-18 through FY 19-20, as well as repayments to the improvement fund for previous sewer replacements in FY 17-18, FY 18-19 and FY 19-20.

Vehicles

Future vehicle purchases are shown in Exhibit 2 under section 14C226.

	FY 14-15												
	FY 10-11	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Projected	FY 15-16	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Budget	Actual	Budget	Appropriation	Projected	Projected	Projected	Projected	
SUMMARY AND ANALYSIS EXPENSE ANALYSIS BY DEPARTMENT LIFT STATIONS													
SALARIES AND WAGES % CHANGE FROM PRIOR YEAR	\$84,389 29.3%	\$63,515 -24.7%	\$59,415 -6.5%	\$54,335 -8.5%	\$75,450 38.9%	\$39,215 -27.8%	\$58,700 49.7%	\$70,000	\$60,750 3.5%	\$62,900 3.5%	\$65,100 3.5%	\$67,350 3.5%	
OPERATION & MAINTENANCE EXPENSES % CHANGE FROM PRIOR YEAR	\$252,471 14.5%	\$227,791 -9.8%	\$306,462 34.5%	\$306,289 -0.1%	\$295,900 -3.4%	\$336,113 9.7%	\$276,700 -17.7%	\$350,000	\$292,050 5.5%	\$268,450 -8.1%	\$267,800 -0.2%	\$281,100 5.0%	
TOTAL LIFT STATION EXPENSES % CHANGE FROM PRIOR YEAR	\$336,860 17.8%	\$291,306 -13.5%	\$365,877 25.6%	\$360,624 -1.4%	\$371,350 3.0%	\$375,328 4.1%	\$335,400 -10.6%	\$420,000	\$352,800 5.2%	\$331,350 -6.1%	\$332,900 0.5%	\$348,450 4.7%	

COMMENTS

Salaries and Wages The budget reflects salary adjustments based on the proportion of recent time spent on lift stations.

Operation and Maintenance

Major planned expenses include wireless telemetry, a pump replacement at College lift station, and replacement of

portable pumps.

SUMMARY AND ANALYSIS EXPENSE ANALYSIS BY DEPARTMENT INSURANCE AND EMPLOYEE BENEFITS	FY 10-11 Actual	FY 11-12 Actual	FY 12-13 Actual	FY 13-14 Actual	FY 14-15 Budget	FY 14-15 Projected Actual	FY 15-16 Budget	FY 15-16 Appropriation	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
TOTAL INSURANCE/EMPLOYEE BENEFITS % CHANGE FROM PRIOR YEAR	\$1,021,399 9.8%	\$1,078,627 5.6%	\$1,189,855 10.3%	\$1,228,502 3.2%	\$1,276,250 3.9%	\$1,262,849 2.8%	\$1,168,100 -7.5%	\$1,300,000	\$1,193,250 2.2%	\$1,214,700 1.8%	\$1,236,750 1.8%	\$1,265,550 2.3%

COMMENTS

Projected expenses for insurance and employee benefits reflect the following factors:

- 1. Expecting annual net increases in liability and property premiums of 2.0%, and annual premium increases of 2% each year for workers compensation.
- 2. Increases of 6% for employee group medical and dental each year.
- 3. The District's IMRF contributions are expected to decrease over the 5 year period. While covered payroll is expected to increase, rates are expected to decrease due to good recent investment performance and voluntary contributions.
- 4. No change is expected in the District's social security contribution rate.

	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
11B115 (ADMIN-Eqpt/Eqpt Repair) 1.Office software licensing updates 2.Replace data servers, storage, switching		40,000		40,000	20,000
3.Office equipment replacements 4.Printer replacements	3,000		4,100	2,500	
5.Copier replacement	3,000		15,000	2,300	
6.Security camera system		5,000	·		
7.Electronic building access at WWTC	# 0.000	#45.000	21,300	# 40 500	8,900
Annual Totals	\$3,000	\$45,000	\$40,400	\$42,500	\$28,900
11B118 (ADMIN-Building & Grounds)					
1.Upgrade front entrance				35,000	35,000
2.Re-roof admin building		40.000		15,000	
3.Repair/replace parking lot 4.Replace carpeting		40,000	23,000		
Annual Totals	\$0	\$40,000	\$23,000	\$50,000	\$35,000
11B137 (ADMIN-Dues/Subscriptions)	F 400	F 000	F 200	F 400	F F00
1. National association of clean water agencies	5,100 4,550	5,200 4,650	5,300 4,750	5,400 4,850	5,500 4,950
2.Illinois association of wastewater agencies Annual Totals	4,550 \$9,650	4,650 \$9,850	4,750 \$10,050	\$10,250	4,950 \$10,450
Allitual Totals	φ9,030	φ9,000	\$10,050	\$10,230	φ10, 4 50
11C226 (ADMIN-Vehicle Purchases)					
1.Administration vehicles	18,000				
2.Sale of old vehicles	(6,000)				
Annual Totals	\$12,000	\$0	\$0	\$0	\$0
12B500 (WWTC-Eqpt/Eqpt Repair)					
1.Influent pumping	20.000				
a.Climber screens - gear boxes 2.Grit removal systems	30,000				
a.Grit classifier overhaul		12,000	12,000		
b.Conveyor overhaul		,	,	20,000	
c.Grit blower overhaul	12,000				
3.Primary treatment					
a.Influent gate replacement	12,000				
b.Scum trough replacement	9,000	9,250	9,500	9,750	10,000
c.Sludge grinder replacement	8,000			8,000	8,000
4. Secondary treatment	20,000	45.000		05.000	05.000
a.Protective coatings - secondary clarifiersb.Hoffman/PD blower overhaul	30,000	45,000 15,000	15,000	25,000	25,000 15,000
c.Aeration tank diffuser plates		13,000	13,000	40,000	15,000
d.Aeration tank influent gate actuators	7,500			40,000	
e.DO probe replacements	,				
· · ·					

	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
5.Intermediate clarifier system					
a.Intermediate sludge pumps (2) - overhaul		10,000			
6.Sand filters					
a.Waste washwater pumps (2) overhaul		8,000			
7.Disinfection equipment					
a. Fiberglass tank inspections/repairs	1,500			3,500	
b.ORP probe replacement		8,000			
c.OSEC brine feed pump replacement			8,000		
8.Excess flow tanks					
a.Clarifier skimmer arm replacement	6,000				
b.Rpelace sludge grinder	8,000				
c.Clarifier scum trough replacement		20,000			
d.Overhaul sludge pump		5,000			
e.Control panel replacement			40,000		
f. Sludge valve and actuator replacement				10,000	
9.Sludge digestion					
a.Re-glaze floating covers/repair skirt	15,000				
b.Digester 3 gas flare control upgrade	20,000				
c.Digester 5 gas flare repair and control uprade	25,000				
10.Sludge dewatering system					
a.Big top - protective coating	35,000				
b.Sludge conveyor liner replacement	10,000				
c.Belt press feed pump replacement	9,000		9,500		
d.Drying pad asphalt re-pave	50,000				
e.Replace belt press washwater pump			7,500		
11.Sludge handling equipment					
a.Wheel loader - 3 yd, replace			75,000		
b.Bobcat replacement with articulated machine	60,000				
c.Bobcat replacement					25,000
13.Maintenance/utilities					
a.New forklift			25,000		
b.Replace portable pump		6,500			
c.Main switchgear maintenance	5,000				5,000
d.CHP Engine overhaul				30,000	
e.Emergency generator voltage regulator upgrades	10,500				
f.Emergency generator control panel replacement					100,000
g.Plant effluent water system controls				15,000	
14.Repay construction fund					
a.Belt press replacement	50,000				
b.Plant switchgear replacement		250,000	98,350		
Annual Totals	\$413,500	\$388,750	\$299,850	\$161,250	\$188,000

	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
12B800 (WWTC-Building & Grounds)					
1.High efficiency lighting upgrades	5,000	5,000	5,000	5,000	5,000
2.Roof repairs	6,000	88,000	18,000	25,500	40,000
3.Road / sidewalk repair	10,000	35,000	35,000	35,000	35,000
4.Window / door replacement	15,000	9,000	15,500	14,000	22,000
5.HVAC repairs	10,000	0,000	3,000	4,000	22,000
6.Outside stairs, railings and gratings	11,000	18,000	4,000	4,000	27,500
7.Replace dehumidifier media	11,000	10,000	10,000	4,000	27,000
8. Tuckpointing		30,000	30,000	30,000	30,000
9.Fence line access gates	10,000	00,000	00,000	00,000	00,000
10.Interior painting	15,000	15,500	16,000	16,500	17,000
Annual Totals	\$72,000	\$200,500	\$136,500	\$134,000	\$176,500
Authorities	Ψ12,000	Ψ200,300	ψ100,000	ψ10-1,000	ψ170,500
12B124 (WWTC-Contract Services)					
1.DRSCW membership/stream restoration	84,800	126,750	130,550	203,200	209,300
Annual Totals	\$84,800	\$126,750	\$130,550	\$203,200	\$209,300
AODAGO (MINITO NIDDEO Descrit Esca)					
12B130 (WWTC-NPDES Permit Fees)	F2 000	F2 000	F2 000	F2 000	F2 000
1.Annual permit fee	53,000	53,000	53,000	53,000	53,000
Annual Totals	\$53,000	\$53,000	\$53,000	\$53,000	\$53,000
12C226 (WWTC-Vehicle Purchases)					
1.Operations supervisor pickup					17,000
2.Maintenance supervisor pickup	16,000				,
3.Lift station pickup	-,			40,000	
4.Electric carts	10,000			,	10,500
5.Maintenance aux truck	-,			40,000	-,
6. Sale of old vehicles	(3,500)			(10,000)	(3,500)
Annual Totals	\$22,500	\$0	\$0	\$70,000	\$24,000
13B115 (LAB-Eqpt/Eqpt Repair)	0.000				
1.Excess flow autosampler	6,800				
2.Casework/fumehood replacement/mold abatement	30,000		60,000		
3.FOG automation		32,000			45.000
4.Autoclave					15,000
5.Multifunction meter	2,500			2,500	
6.Incubators				8,000	15,000
7.Balance upgrade		2,200			
8.Rotovapor					5,000
9.Autotitrator					10,000
10.Centrifuge	8,000				
11.Glass washer			•		15,000
Annual Totals	\$47,300	\$34,200	\$60,000	\$10,500	\$60,000
13C226 (LAB-Vehicle Purchase)					
1.Lab car			19,000		
2.Sale of old lab car			(6,000)		
Annual Totals	\$0	\$0	\$13,000	\$0	\$0
	ΨJ	Ψ.	+ , - 0	~~	Ψ3

	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
14B115 (SEWER SYSTEM-Eqpt/Eqpt Repair)		450.000			
1.TV truck upgrades		150,000	•	Φ0	
Annual Totals	\$0	\$150,000	\$0	\$0	\$0
14B124 (SEWER SYSTEM-Contract Services)					
1.Contract Televising	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Annual Totals	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
14B900 (SEWER SYSTEM-System Repairs)					
1.Structural/O&M					
a.Main sewers	75,000	75,000	75,000	75,000	75,000
b.Manholes	25,000	25,000	25,000	25,000	25,000
c.Building sanitary services	550,000	550,000	550,000	550,000	550,000
2.Sewer replacements and rehabilitation				a aaa	
a.Repay improvement fund for prior projects			200,000	317,300	100,000
b.Large diameter sewer rehab/replacement	150,000	0	150,000	250,000	550,000
3.I/I Program	400,000	300,000	350,000	350,000	350,000
4.IEPA ARRA loan repayment	181,600	181,600	181,600	181,600	181,600
Annual Totals	\$1,381,600	\$1,131,600	\$1,531,600	\$1,748,900	\$1,831,600
14C226 (SEWER SYSTEM-Vehicle Purchases)					
1.Inspection/technician vans	23,000				48,000
2.Maintenance pickup			25,000		
3. Sale of old vehicles	(5,000)		(5,000)		(8,000)
Annual Totals	\$18,000	\$0	\$20,000	\$0	\$40,000
15B500 (LIFT STATIONS-Eqpt/Eqpt Repair)					
1.Butterfield lift station					
a.Pump overhaul	4,000			3,000	
b.Planning study			25,000		
2.Centex lift station					
a.Pump overhaul	2,500	2,600			
b.Planning study					25,000
3.College lift station					
a.Replace pump no. 1		37,500			
b.Pump overhaul			12,000	12,350	
4.Earlston lift station					
a.Pump overhaul	2,500	2,600	9,000		
5.Liberty Park					
a.Pump overhaul	3,000				
6.Northwest					
a.Impeller replacements				12,500	
7.General maintenance					
a.Portable pump replacements				16,500	25,000
b.Wireless communications	40,000	30,000			
c.Forcemain air valve restoration	15,000	5,000	5,000		
Annual Totals	\$67,000	\$77,700	\$51,000	\$44,350	\$50,000

	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
15B800 (LIFT STATIONS-Building & Grounds) 1.Hobson driveway replacement 2.Cathodic protection testing 3.Painting	10,500	12,000		3,000	
A.Butterfield vault access improvements	4,500				
5.Earlston landscape screening Annual Totals	1,000 \$16,000	\$12,000	\$0	\$3,000	\$0
Allitual Totals	Ψ10,000	Ψ12,000	ΨΟ	ψ3,000	ΨΟ
IMPROVEMENT FUND			000 000	000 000	000 000
1.Future special assessments	00.000	00.000	200,000	200,000	200,000
2.IEPA loan repayment	93,200	93,200	93,200	93,200	93,200
3.Renovate Liberty Park LS	#00.000	#00.000	750,000	# 000 000	# 000 000
Annual Totals	\$93,200	\$93,200	\$1,043,200	\$293,200	\$293,200
CONSTRUCTION FUND					
1.IEPA loan repayment	28,900	28,900	28,900	28,900	28,900
2. Digester mixing and gas piping upgrades	300,000	400,000			
3.Grease waste delivery ramp	80,000				
4.Digester gas utilization equipment	200,000	500,000	700,000		
5.Turboblower purchase and install	250,000				
Annual Totals	\$858,900	\$928,900	\$728,900	\$28,900	\$28,900
GRAND TOTALS	\$3,252,450	\$3,391,450	\$4,241,050	\$2,953,050	\$3,128,850

GENERAL CORPORATE FUND REVENUES

<u>Summary</u>

General corporate fund revenues are detailed on the last page of Exhibit 1. Actual revenues for the last five years and budgeted revenues for the next five years are presented in this exhibit. Revenues are adequate to fund the expenditure levels recommended in this plan. The fund balance is held near 25% of annual expenses after FY 11-12. After FY 13-14, revenues are projected to outpace expenditures enough to sustain the fund balance near the target of 25% of annual expenses.

Analysis by Revenue Type

The District's annual residential charge for wastewater collection and treatment includes user charges, the monthly service charge and the real estate tax levy for sewer rehabilitation, as detailed in Exhibit 3.

User Receipts

This plan reflects no change in the user rate of \$1.65 per 1000 gallons of metered water consumption. This rate was last increased in April 2008. User rate increases are not anticipated for the duration of the plan. User receipts during FY 14-15 are projected at \$3,238,902 based upon a rate of \$1.65 per 1000 gallons, a billable flow of 5.378 MGD and late charges and delinquent account fees of 1.25%. This estimate of billable flow compares with recent experience as indicated below:

		Amount of
	Net Billable	Summer Usage
Fiscal Year	Flow (MGD)	<u>Adjustments</u>
1993-94	6.109	40,184
1994-95	6.509	96,946
1995-96	6.577	143,958
1996-97	6.587	86,414
1997-98	6.397	85,990
1998-99	6.535	103,061
1999-00	6.666	129,980
2000-01	6.606	86,980
2001-02	6.561	106,306
2002-03	6.661	135,641
2003-04	6.601	83,400
2004-05	6.333	96,616
2005-06	6.645	296,891
2006-07	6.236	125,215
2007-08	6.223	183,910
2008-09	5.893	112,621
2009-10	5.913	110,369
2010-11	5.753	112,363
2011-12	5.633	107,538
2012-13	5.768	251,934
2013-14	5.537	109,116
2014-15	5.378*	60,919
*nrojected for final	3 months	

^{*}projected for final 3 months

FY 2012-13 was very dry compared to recent years, temporarily reversing the recent downward trend of billable flow. FY 2015-16 projections of user receipts are based on a billable flow of 5.309 MGD, which represents a 1.5% anticipated reduction in billable flow under FY 2014-15 levels. Water supply utilities' efforts at reducing water consumption are expected to continue to result in future reductions in billable flow. This plan reflects a 1.5% per year reduction in billable flow based on target reductions established by water supply utilities as corroborated by the recent historic trend.

Surcharges

Surcharges for discharges in excess of normal domestic waste strengths (200 mg/l BOD and 250 mg/l SS) are projected to remain higher than historic levels due to increases in surcharge customers' pollutant concentrations in recent sampling.

Monthly Service Fees

The plan reflects an increase in the monthly fee from \$11.00 per month (\$132.00 per year) for FY 14-15 to \$12.00 per month (\$144 per year) for FY 15-16, with \$1.00 increases in each of the following four fiscal years (\$13.00 per month in FY 16-17, \$14.00 per month in FY 17-18, \$15.00 per month in FY 18-19, and \$16.00 per month in FY 19-20.) The monthly fee was last increased in April, 2014. The number of customers is not expected to change over the 5 year period.

Plan Review Fees

Plan review fees are assessed based upon the estimated construction cost of proposed sanitary sewer extensions. These fees are expected to increase over the next 5 years, returning to pre-recession levels.

Construction Inspection Fees

Construction inspection fees represent the cost of inspections by District personnel of sanitary sewer extensions. These fees are not expected to change over the next five years.

Permit Inspection Fees

The cost of inspections by District personnel of service connections and new building construction is recovered from permit inspection fees. The number of inspections is increasing to pre-recession levels, but is expected to taper off in the future after pent-up demand for building construction is satisfied.

<u>Interest</u>

Interest is estimated based on the average fund balance each year and an interest rate ranging from 0.5% to 2%.

Sampling and Monitoring Charges

Sampling and monitoring charges are assessed to all users subject to surcharge or pretreatment to recover the costs to sample and analyze wastewater from these users and are projected to increase as the cost to provide these services increases.

Real Estate Taxes

The real estate tax levy is included in the general corporate fund and is utilized for operation, maintenance and repair of sewerage facilities. It is proposed that these levies be increased by 5% each year. The actual amount of future levies will be determined in accordance with the tax cap limitation.

Television Inspection Fees

Television inspection fees are assessed to developers for the costs of televising new sewers prior to the expiration of the one-year warranty period.

Replacement Taxes

Personal property replacement taxes received from the state, estimated at \$79,800 per year for FY 15-16 and projected to increase by 3.5% the following year, will be used to fund sewer system repairs.

Lease Payments

During FY 96-97, the District signed a lease with the Village of Downers Grove for District property located on Walnut Avenue, adjacent to the Village's public works facility. The lease agreement provides for lease payments by the Village to the District.

Miscellaneous

Miscellaneous revenues include revenues from levying and collecting special assessments, fees to administer recapture agreements, and costs received for other District services. These revenues are estimated at \$4,000 each year.

Grease Waste

Hauled restaurant grease trap waste continues to be accepted for treatment at the WWTC. Haulers are charged a fee to discharge this waste. The capacity of grease receiving and treatment facilities was increased during FY 13-14. Further increases are possible with the addition of regular weekend deliveries. Utilization in FY16-17 and beyond is representative of full capacity with regular weekend deliveries.

ARRA Disbursement

Final disbursements under ARRA were received in FY 11-12.

GENERAL CORPORATE FUND FUND BALANCE

Summary

The projected fund balance of the consolidated general corporate and replacement fund as of 4/30/16 is \$1,951,336. This fund balance rises steadily above this level in future years to meet staff's recommendation that the fund balance be maintained at 25% of total annual expenditures. Projected fund balance levels are presented on the last page of Exhibit 1.

	FY 10-11 Actual	FY 11-12 Actual	FY 12-13 Actual	FY 13-14 Actual	FY 14-15 Actual	FY 15-16 Budgeted	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
USER CHARGES										
RATE PER 1000 GALS	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65	\$1.65
AVERAGE ANNUAL USAGE	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000	96,000
ANNUAL USER CHARGES	\$158.40	\$158.40	\$158.40	\$158.40	\$158.40	\$158.40	\$158.40	\$158.40	\$158.40	\$158.40
PROPERTY TAXES										
YEAR TAXES PAID	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MEDIAN ASSESSED VALUE	\$106,150	\$106,110	\$93,410	\$93,520	\$83,920	\$88,787	\$93,937	\$99,385	\$105,150	\$111,248
DISTRICT TAX RATE	0.0305	0.0336	0.0363	0.0405	0.0436	0.0432	0.0428	0.0424	0.0420	0.0416
ANNUAL TAXES PAID	\$32.38	\$35.65	\$33.91	\$37.88	\$36.59	\$38.36	\$40.21	\$42.14	\$44.16	\$46.28
MONTHLY SERVICE FEE										
MONTHLY SERVICE FEE	\$9.00	\$9.00	\$9.50	\$10.00	\$11.00	\$12.00	\$13.00	\$14.00	\$15.00	\$16.00
ANNUAL SERVICE FEE	\$108.00	\$108.00	\$114.00	\$120.00	\$132.00	\$144.00	\$156.00	\$168.00	\$180.00	\$192.00
TOTAL ANNUAL COST	\$298.78	\$302.05	\$306.31	\$316.28	\$326.99	\$340.76	\$354.61	\$368.54	\$382.56	\$396.68
TOTAL MONTHLY COST	\$24.90	\$25.17	\$25.53	\$26.36	\$27.25	\$28.40	\$29.55	\$30.71	\$31.88	\$33.06
ANNUAL PERCENT CHANGE	1.3%	1.1%	1.4%	3.3%	3.4%	4.2%	4.1%	3.9%	3.8%	3.7%
TEN YEAR AVERAGE ANNUAL PERCENT CHANGE	5.5%	5.6%	4.1%	3.2%	3.4%	3.8%	3.5%	3.1%	2.8%	3.0%

DOWNERS GROVE SANITARY DISTRICT FIVE YEAR FINANCIAL PLAN CONSTRUCTION FUND FISCAL YEARS 2015-16 TO 2019-20

	FY 10-11 Actual	FY 11-12 Actual	FY 12-13 Actual	FY 13-14 Actual	FY 14-15 Budget	FY 14-15 Projected Actual	FY 15-16 Budget	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
REVENUES											
Sewer permit fees Interest ARRA disbursement Repayments - equipment replacement	\$56,606 \$45,585 \$670,586	\$183,329 \$50,852 \$1,524	\$139,182 \$35,481	\$102,904 \$6,890	\$150,000 \$4,400	\$180,000 \$25,000	\$150,000 \$4,050	\$200,000 \$2,200	\$250,000 \$1,600	\$250,000 \$2,200	\$250,000 \$9,000
Belt filter press			\$300,000	\$310,592	\$150,000	\$150,000	\$50,000	* 0=0 000	*		
Plant switchgear State of Illinois Grant ICECF Grant			\$225,000	\$250,000			\$315,000 \$51,000	\$250,000 \$30,000	\$98,350 \$275,000		
Total Revenues	\$772,777	\$235,705	\$699,663	\$670,386	\$304,400	\$355,000	\$570,050	\$482,200	\$624,950	\$252,200	\$259,000
EXPENSES											
IEPA loan repayment Property acquisitions Belt filter press replacement Scum and grease equipment	\$107,652	\$134,305	\$185,771	\$28,807	\$28,800	\$28,807	\$28,900	\$28,900	\$28,900	\$28,900	\$28,900
Digester gas utilization equpment Digester mixing and gas piping upgrades Grease waste delivery ramp Turboblower purchase and install			\$218,976	\$2,223,495	\$700,000	\$600,000	\$200,000 \$300,000 \$80,000 \$250,000	\$500,000 \$400,000	\$700,000		
American Recovery and Reinvestment Act of	of 2009 / Water P	ollution Control Lo	oan Fund Projects	S							
Scum and grease equipment Replace pringle switch/plant switchgear	\$212,651 \$437,442	\$1,104									
Total Expenses	\$757,745	\$135,409	\$404,747	\$2,252,303	\$728,800	\$628,807	\$858,900	\$928,900	\$728,900	\$28,900	\$28,900
Excess (Deficiency) of Revenues over Expenses	\$15,032	\$100,296	\$294,916	(\$1,581,917)	(\$424,400)	(\$273,807)	(\$288,850)	(\$446,700)	(\$103,950)	\$223,300	\$230,100
Ending Fund Balance	\$2,410,089	\$2,510,385	\$2,805,301	\$1,223,384	\$798,984	\$949,577	\$660,727	\$214,027	\$110,077	\$333,377	\$563,477

CONSTRUCTION FUND

Summary

The construction fund is intended to provide funds for improvements and expansions to the WWTC. The primary source of revenue to the construction fund, sewer permit fees, is directly related to development activity within the District. As development proceeds, sewer permit fees are generated and accumulated to construct WWTC facilities. As of December 31, 2014, there are 21,321 population equivalents of hydraulic capacity remaining on the WWTC. It is not anticipated that the next incremental expansion in capacity, from 11.0 MGD to 12.0 MGD, will be needed during the next five years. Permit fees are returning to levels seen prior to 2008, and these higher levels are projected to continue over the 5 year plan. The fund is expected to recover revenue from the general fund to repay expenses associated with recent replacement projects that were funded from the construction fund. The plan includes a high efficiency blower upgrade, digester improvements and a second-phase biogas utilization project which will help control the cost to operate the facility. The plan for the construction fund envisions the gradual accumulation of funds for future improvements, expansions or property acquisition adjacent to the WWTC if such property becomes available for purchase.

Revenues

- 1. Sewer permit fees These fees are projected to return to \$250,000 per year by FY 2017-18, with a gradual increase over existing levels. Development activity is not expected to decline during the 5 year period.
- 2. Interest Interest is estimated based on the average fund balance each year and an interest rate ranging from 0.5% to 2%.
- 3. Equipment Replacement Repayments As funds become available in the general fund, repayments will be made to reimburse the construction fund for major replacement projects, including the belt filter press replacement and the plant switchgear replacement.
- 4. Grant Funds for Plant Upgrades \$361,000 in grant funding is anticipated in FY 15-16 to help cover the cost of the high efficiency blower and the biogas utilization projects.

Expenses

- 1. IEPA loan repayment The repayment of the IEPA loan for the sand filters began in FY 93-94 and the final payment was made in FY 12-13. Repayments to IEPA associated with ARRA-funded treatment plant projects being repaid from this fund are expected to be \$28,900 per year until the loan principal is fully repaid in 2031.
- 2. Digester Gas Utilization Plant Upgrades The plan anticipates digester mixing and piping improvements needed to improve gas production quality and quantity, along with the installation of a permanent grease truck delivery ramp. The plan also anticipates the construction of the second phase of the CHP facility, which will further reduce future electricity costs at the facility.

3. High Speed Turboblower – The plan anticipates the purchase and installation of a second high efficiency blower using grant funding from the State of Illinois and the Illinois Clean Energy Community Foundation.

Fund Balance

The balance in the construction fund is projected to be \$563,477 by April 30, 2020, as depicted in Exhibit 4. This balance will be reserved for future improvements and expansions to the WWTC.

DOWNERS GROVE SANITARY DISTRICT FIVE YEAR FINANCIAL PLAN IMPROVEMENT FUND FISCAL YEARS 2015-16 TO 2019-20

	FY 10-11 Actual	FY 11-12 Actual	FY 12-13 Actual	FY 13-14 Actual	FY 14-15 Budget	FY 14-15 Projected Actual	FY 15-16 Budget	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
REVENUES											
Trunk and lateral	* 40 = 00	*	*	0==	*	*	*	* 40.000		*	400.000
sewer service charges Interest	\$18,768 11,706	\$35,695 8,742	\$35,686 8,153	\$7,741 4,090	\$20,000 5,950	\$25,000 6,500	\$30,000 5,650	\$40,000 5,350	\$60,000 7,500	\$90,000 6,150	\$90,000 16,500
Repayments	11,700	0,742	0,100	4,090	5,950	0,500	5,650	5,350	7,500	6,150	10,500
Special assessment vouchers	194,366	33,736							200,000	200,000	200,000
Sewer replacements	180,000	200,000							200,000	317,300	100,000
ARRA Disbursement	1,413,390	451,855									
Total Revenues	\$1,818,229	\$730,028	\$43,839	\$11,831	\$25,950	\$31,500	\$35,650	\$45,350	\$467,500	\$613,450	\$406,500
EXPENSES											
Unsewered areas											
Planning	\$7,509	\$2,791	\$5,535		\$7,500	\$2,283	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
Special assessments	43,810								200,000	200,000	200,000
Lift station improvements											
Hobson capacity Stationary gensets											
Liberty Park upgrades									750,000		
Sewer System Improvements									,		
Sewer Replacements											
1-M-12A Alley Sewer											
American Recovery and Reinvestme			ontrol Loan Fund	Projects							
Venard Lift Station Upgrade	420,840	134,313									
Lift Station Generators	503,811	202,645									
NW Pump Upgrade Final Pum _l Ogden SA 58/Deepening	158,626 280,112	30 33,509									
IEPA Loan Repayment	200,112	74,846	74,846	93,191	93,200	93,191	93,200	93,200	93,200	93,200	93,200
Total Expenses	\$1,414,708	\$448,134	\$80,381	\$93,191	\$100,700	\$95,474	\$100,700	\$100,700	\$1,050,700	\$300,700	\$300,700
Excess (Deficiency) of Revenues											
over Expenses	\$403,522	\$281,894	(\$36,542)	(\$81,360)	(\$74,750)	(\$63,974)	(\$65,050)	(\$55,350)	(\$583,200)	\$312,750	\$105,800
Ending Fund Balance	\$1,063,629	\$1,345,523	\$1,308,981	\$1,227,621	\$1,152,871	\$1,163,648	\$1,098,598	\$1,043,248	\$460,048	\$772,798	\$878,598

IMPROVEMENT FUND

Summary

The improvement fund is intended to be utilized for sewer system and pump station expansions and improvements. The primary source of revenue to the improvement fund, trunk and lateral sewer service charges, is directly related to development activity within the District. This source of revenue for this fund is expected to continue to increase moderately in FY 15-16, gradually increasing to historic levels over the five year period. As development proceeds, charges are generated and accumulated to construct additional system capacity and improvements, as needed. The unsewered area plan does not currently identify any specific capacity needs to serve remaining unsewered areas in the facility planning area. I/I removal generally provides the most cost-effective way of creating system capacity where needed. The plan anticipates the eventual upgrade of the Liberty Park Lift Station, which has some chronic design and capacity issues. Repayments from the general fund used for sewer replacements will continue, to reimburse the cost of recent projects funded from the improvement fund. The plan for the improvement fund envisions the gradual accumulation of funds for future improvements or expansions.

Revenues

- 1. Trunk and lateral sewer service charges These charges are projected at \$30,000 in FY 15-16, and then gradually return to historic levels through the remainder of the five year period.
- 2. Interest Interest is estimated based on the average fund balance each year and an interest rate of 0.5% 2%.
- Annual repayments from special assessments These amounts represent reimbursements from special assessment projects for costs advanced by the improvement fund.
- 4. Sewer replacement The funds used for the replacement of the sewer along Butterfield Road near Downers Drive and one of the alley sewers in area 1-M-12A will be reimbursed from the general corporate fund as funds become available in FY 17-18, FY 18-19, and FY 19-20.

Expenses

- 1. Planning for unsewered areas The plan depicting the locations of proposed sanitary sewers in currently unsewered areas within the District facility planning area was prepared in FY 06-07 and is updated annually.
- 2. Special assessments in unsewered areas The improvement fund advances funds to approved special assessment projects and is then reimbursed by the issuance of vouchers for each special assessment project. Exhibit 5 anticipates limited potential future Special Assessment project activity towards the end of the 5-year period.
- 3. IEPA Loan Repayment Repayments to IEPA associated with ARRA-funded collection system projects being repaid from this fund are expected to be \$93,200 per year until the loan principal is fully repaid in 2031.

4. Liberty Park Lift Station Improvements – Upgrades to the Liberty Park Lift Station are identified for FY 17-18.

Fund Balance

The balance in the improvement fund is projected to be \$878,598 on April 30, 2020. Future expenses for sewer extensions into unsewered areas will be determined based upon the maintenance of an adequate balance in this fund.

DOWNERS GROVE SANITARY DISTRICT FIVE YEAR FINANCIAL PLAN PUBLIC BENEFIT FUND FISCAL YEARS 2015-16 TO 2019-20

EXHIBIT 6

						FY 14-15					
	FY 10-11 Actual	FY 11-12 Actual	FY 12-13 Actual	FY 13-14 Actual	FY 14-15 Budget	Projected Actual	FY 15-16 Budget	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
REVENUES											
Interest Total Revenues	\$115 \$115	\$47 \$47	\$72 \$72	\$15 \$15	\$200 \$200	\$5 \$5	\$200 \$200	\$200 \$200	\$350 \$350	\$350 \$350	\$700 \$700
EXPENSES											
Sewer deepening Total Expenses	\$0 \$0	\$0 \$0	\$0 \$0	\$45,403 \$45,403	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Excess (Deficiency) of Revenues over Expenses	\$115	\$47	\$72	(\$45,388)	\$200	\$5	\$200	\$200	\$350	\$350	\$700
Ending Fund Balance	\$80,519	\$80,566	\$80,638	\$35,250	\$35,450	\$35,255	\$35,455	\$35,655	\$35,805	\$36,005	\$36,505

PUBLIC BENEFIT FUND

Summary

The public benefit fund may only be used to pay for the portion of sewer extensions or sewer special assessments which the Board of Trustees deems to be of benefit to an area larger than the immediate service area. The projected balance in this fund as of April 30, 2015 is \$35,255.

Revenues

Interest is estimated at 0.5% - 2% on the average fund balance.

Expenses

There are no planned expenses over the duration of the five year plan.

Fund Balance

The remaining fund balance at the end of FY 19-20, projected to be \$36,505, will be available to fund improvements with public benefit.

When this fund is depleted, the tax cap limitation would prevent the District from adopting a tax levy for public benefit without decreasing the general corporate levy for sewer system repairs by an identical amount. As funding of any future public benefit expenditures may be made from the improvement or general corporate funds, it would not be necessary to continue the public benefit fund.

AUDIT RECONCILIATION

The FY 13-14 Audited Financial Report includes Combined Balance Sheet Cash and Investment totals for the general fund, the capital funds (construction and improvement funds combined), and the public benefit fund. These balances are reconciled with the general ledger ending fund balances for FY 13-14 in Exhibit 7.

DOWNERS GROVE SANITARY DISTRICT FIVE YEAR FINANCIAL PLAN RECONCILIATION OF GENERAL LEDGER WITH FYE 2014 AUDITED FINANCIAL REPORT FISCAL YEAR 2015-16

	<u>Ge</u>	eneral Fund	<u>Capital Funds</u>		·-	Public efit Fund	
FY 13-14 General ledger (GL) ending fund balance							
General Fund	\$	1,771,868					
Improvement Fund			\$	1,227,621			
Construction Fund			\$	1,223,384			
Public Benefit Fund					\$	35,250	
Special Assessments							
Outstanding voucher principal, not included in							
audited cash and investments statement	\$	(22,685)	\$	(465,487)			
Payments held in audited bank account, not yet disbursed to funds in GL			\$	166,521			
yet disbuised to fullus in GE			Ф	100,521			
Accruals							
FY13-14 expenses paid after 4/30/14 not yet							
shown in audited bank account	\$	3,798					
Clearing							
Cash in holding owed to various entities	\$	31,429					
Cash spent from holding due from various							
entities	\$	(22,470)	\$	(3,530)			
Employee hanefite withhold from novehooks							
Employee benefits withheld from paychecks being held in audited bank account as of							
4/30/14	\$	7,973					
		1,769,913	\$	2,148,509	\$	35,250	
Combined Balance Sheet Cash and	•	.,,	*	_, ,	•	,	
Investments from FYE 2014 Audited Financial							
Report Page 34	\$	1,769,913	\$	2,148,509	\$	35,250	
Government Fund Type from FYE 2014 Audited Financial Report Page 34		General	Car	oital Projects	Special		
			- 44			Revenue	

EXHIBIT 7

PROJECTS NOT INCLUDED IN PLAN

There are several major projects which have not been included in this financial plan. As these projects may be incorporated into the plan in a future update, it is useful to list them for reference.

I. WWTC

A. Improvements/Enhancements

- 1. Capacity expansion from 11.0 MGD to 12.0 MGD and from 12.0 MGD to 15.0 MGD as needed.
- 2. Additional sludge drying beds.
- 3. Increase paved area for sludge treatment and storage.
- 4. Additional covered storage area for biosolids.
- 5. Improved thickening of waste activated sludge.
- 6. Phosphorous and nitrogen removal processes.
- 7. Improved odor control facilities.
- 8. Secondary clarifier feed flow splitter.
- 9. Aeration tank feed flow splitter.

B. Replacements

- 1. Influent bar screens.
- 2. Raw sewage pumps nos. 1 5.
- 3. Excess clarifier sludge scraping equipment.

C. Investigate/evaluate

- 1. Alternate sludge processes.
- 2. Alternate sludge disposal methods.

II. SEWER SYSTEM

- A. Permanent flow metering network.
- B. Purchase of sewer grouting equipment.

III. PUMP STATIONS

- A. Install odor control equipment at the Butterfield, Centex, College, Liberty Park, Northwest, Venard and Wroble pump stations.
- B. Major upgrades to Butterfield and Centex Lift Stations
- C. Second NWLS forcemain crossing under I-355.

IV. ADMINISTRATION

A. Relocate office to WWTC site.

Appendix D

Sewer Use Ordinance and Industrial Pretreatment Ordinance

AN ORDINANCE REGULATING THE USE

OF

SANITARY SEWERS

DOWNERS GROVE SANITARY DISTRICT

DOWNERS GROVE, ILLINOIS

LAST REVISION EFFECTIVE: March 24, 2015

PREAMBLE

AN ORDINANCE OF THE BOARD OF TRUSTEES OF THE DOWNERS GROVE SANITARY DISTRICT TO REGULATE THE CONSTRUCTION AND USE OF SANITARY SEWERS AND REGULATE CONNECTIONS WITH OR USE OF ITS SEWERS AND APPURTENANCES AND TO PROVIDE PENALTIES FOR VIOLATION THEREOF, IN THE DOWNERS GROVE SANITARY DISTRICT, DUPAGE COUNTY, ILLINOIS.

BE IT ORDAINED AND ENACTED BY THE BOARD OF TRUSTEES, DOWNERS GROVE SANITARY DISTRICT, DUPAGE COUNTY, ILLINOIS, AS FOLLOWS.

ARTICLE I - DEFINITION OF TERMS

Unless the context specifically indicates otherwise, the meaning of the terms used in this ordinance shall be as follows:

- Section 1. "B.O.D." (denoting Bio-Chemical Oxygen Demand) shall mean the quantity of oxygen utilized in the bio-chemical oxidation of organic matter under standard laboratory procedure in five days at twenty degrees centigrade (20°C) expressed in parts per million by weights.
- Section 2. "Building sanitary service" shall mean a sanitary sewer extending from any building structure to the public sanitary sewer or septic system, as the case may be.
 - Section 3. "Combined Sewer" shall mean a sewer receiving both surface runoff and wastewater.
 - Section 4. "District" shall mean the Downers Grove Sanitary District.
- Section 5. "Garbage" shall mean the waste from the preparation, cooking and dispensing of food and from the handling, storage and sale of produce.
- Section 5(a). "Garbage Shredded" shall mean the wastes from the preparation, cooking and dispensing of foods that have been shredded to such a degree that all particles will be carried freely under flow conditions normally prevailing in public sanitary sewers, with no particle greater than one-quarter inch in dimension.
- Section 6. "His" Wherever in this ordinance the word "his" is used it shall be construed to mean "his", "hers" or "its", consistent with the context of the section wherein the word "his" is used.
- Section 7. "Industrial Waste" means any liquid, gaseous, solid or other waste substance or a combination thereof resulting from any process of industry, manufacturing trade or business or from the development, processing or recovery of any natural resources.
- Section 8. "Municipality" shall mean either the Village of Downers Grove, the Village of Westmont, the Village of Oak Brook, the Village of Woodridge, the City of Darien, the Village of Lombard, or the County of DuPage, as the case may be.
- Section 9. "Natural Outlet" shall mean any outlet into a water course, pond, ditch, lake, or other body of surface or ground water.

- Section 10. "Persons" shall mean individual, firm, company, association, society, corporation or group.
- Section 11. "pH" shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.
- Section 12. "Pollution" shall mean such alteration of physical, chemical or biological properties of any waters of the District, or such discharge of any liquid, gaseous or solid substance into any waters in the District as will or is likely to create a nuisance or render such waters harmful or detrimental or injurious to public health, safety or welfare.
- Section 13. "Private Sewage Disposal System" shall mean any arrangement of devices and structures used for treating wastewater on private property.
- Section 14. "Public Sanitary Sewer" shall mean a sanitary sewer in which all owners of abutting properties within the District have equal rights and is controlled by the District.
- Section 15. "Sanitary Sewer" or "Sewer" shall mean a pipe or conduit which carries wastewater and to which storm, surface, and ground waters are not intentionally permitted.
- Section 16. "Sewage" shall mean and include water-carried domestic wastes and wastes discharged from the sanitary conveniences of residences, public buildings, institutions and industrial plants (other than industrial wastes from such plants).
 - Section 17. "Shall" is mandatory; "May" is permissive.
- Section 18. "Storm Drain" or "Storm Sewer" shall mean a conduit or sewer which carries storm and surface waters and drainage but excludes sewage and industrial wastes.
- Section 19. "Manager" shall mean the General Manager of the Downers Grove Sanitary District as appointed by the Board of Trustees.
- Section 20. "Suspended Solids" shall mean the solids that either float on the surface of, or are in suspension in water, sewage, or other liquids, and which are removable by laboratory filtering.
- Section 21. "Water Course" shall mean the channel in which a flow of water occurs, either continuously or intermittently.
- Section 22. "Inspection manhole" shall mean a structure constructed for the purpose of measuring flow and sampling waste.
 - Section 23. "Mg/l" shall mean milligrams per liter.
- Section 24. "Wastewater" shall mean sewage and industrial waste but excludes storm, surface and ground waters.

Section 1. It shall be unlawful for any person to place, deposit or permit to be deposited in an unsanitary manner upon public or private property within the boundaries of the District, or any area under the jurisdiction of said District, any human or animal excrement, garbage or other objectionable waste.

Section 2. It shall be unlawful to discharge wastewater, without an NPDES permit, to any natural outlet within the District or in any area under its jurisdiction.

Section 3. No person shall uncover any public sanitary sewer or building sanitary service in the District for any purpose or make any connection therewith or uncover any of the connection branches thereof, or other facilities in said District except on a written permit from the Manager.

Section 4. No person shall discharge or cause to be discharged into the sanitary sewer system any storm water, surface water, ground water, roof runoff water, sub-surface drainage, runoff water from ground or paved areas, cistern overflow or water from air-conditioning systems, industrial cooling operations, or any flows other than wastewater.

Section 4.1. The proper maintenance and operation of a building sanitary service to and including the point of connection (such as a wye, tee or break-in connection) to the public sanitary sewer shall be the responsibility of the owner of the premises served by said building sanitary service. Maintenance means keeping the building sanitary service in satisfactory working condition and a good state of repair (including but not limited to preventing any obstruction or extraneous material or flows from entering said facilities, protecting said facilities from any damage and keeping same free from defects or malfunctions), and making necessary provisions and taking necessary precautions to assure that said sanitary sewer facilities are at all times capable of satisfactorily performing the services and adequately discharging the functions and producing the final results and purposes said facilities are intended to perform, discharge or produce. The District may, in its sole discretion, make repairs to any portion of a building sanitary service located within a public right-of-way or public easement which is found during District investigations to allow the entry of extraneous materials or flows into the public sanitary sewer or to pose a health or safety hazard to the general public and the District may seek reimbursement for the costs of any such repairs from the owner of the premises served by said building sanitary service.

Section 4.2. All downspouts or roof drains shall discharge onto the ground or be connected to storm sewers, drainage ditches or storm drainage systems. Footing drains shall be connected to sump pumps and discharge shall be made into storm sewers, drainage ditches or storm drainage systems. Sump pumps installed to receive and discharge ground waters or other storm water shall be connected to storm sewers or discharge onto the ground or into a drainage ditch or storm drainage system through a rigid discharge pipe, without any valving or quick connections for altering the path of discharge. Sump pumps installed to receive and discharge floor drain flow, laundry tubs or other wastewater shall be connected to the sanitary sewers pursuant to this ordinance. A sump pump shall be used for one function only, either the discharge of storm waters or the discharge of wastewater.

Section 4.3. The Manager shall cause to be made periodic visual outside inspections of all properties within the District, with specific attention to downspouts, roof drains and other visible or outside connections and shall request the property owner or property occupant to permit entry into the premises for the making of additional inspection of the premises to ascertain if illegal connections are present. Upon completion of the visual outside and inside inspection, the Manager will advise the property owner, in writing, if any illegal connections are observed, and will advise on the matter of corrections for compliance

with the provisions of this ordinance. If corrections are to be made, the District will, at no expense to the owner, make further inspection of the corrections to insure compliance with this ordinance.

Section 4.4. If entrance to property is denied an employee or agent of the District, the Manager shall serve notice requiring, within a period of 30 days, a written affidavit by a Licensed Professional Engineer that the sanitary sewer system of the subject property complies in all respects to the requirements and specifications of this ordinance and that no storm water, surface water, ground water, roof runoff water, sub-surface drainage, runoff water from ground or paved areas, cistern overflow or water from airconditioning systems, industrial cooling operations, or any flows other than wastewater are discharged into the sanitary sewer system from the subject property. In the event the property owner fails to provide the aforementioned affidavit within 30 days, the Manager shall commence action to terminate sanitary sewer service to the property remaining in non-compliance.

Section 4.5. In the event any property is in non-compliance with the provisions of Subsection 4.3 or 4.4 after the 30 day notice, that property shall be deemed continuing in non-compliance until there is paid to the District a sum in United States currency equal to all costs incurred by the District, including but not limited to clerical costs, mailing costs, service fees, attorneys fees, court costs, and all other reasonable fees and expenses incurred in commencing action to terminate the sanitary sewer service to the property or in terminating or restoring sanitary sewer service to the property in non-compliance.

Section 4.6. In addition to visual inspections on the outside and inside of the premises, the District may make other lawful tests and inspections of the sanitary sewer system as it deems necessary in order to locate such illegal connections and sources of extraneous flows as may exist. The District, at its option, may also invoke other legal powers vested in it or implied by the Illinois Compiled Statutes for the protection of the health and welfare of the public, and institute such legal action as it deems necessary to discover and order the disconnection of any illegal connections that may exist.

Section 5. Combined sewers shall not be constructed nor permitted.

Section 6. No person or persons shall connect to any sanitary sewer any private building cesspool, underground drain, privy, privy vault or any other channel conveying water or filth.

Section 7. Grease, oil and sand interceptors shall be provided when, in the opinion of the Manager, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients. All interceptors shall be of a type and capacity approved by the Manager, and shall be located as to be readily and easily accessible for cleaning and inspection.

Grease separators shall be required in all buildings or building sanitary services for meat packing plants, hotels, restaurants, and other institutions in which large numbers of meals are served.

Grit interceptors of a design approved by the Manager shall be required in all buildings or building sanitary services for garages, filling stations, automobile laundries or other establishments where grit is a factor.

Maintenance and operation of both grease separators and grit interceptors shall be performed in a manner satisfactory to the District.

Section 8. Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at his expense, and in a continuously efficient operation, at all times.

Section 9. The owner or builder of any new house, building or structure to be used for human occupancy, employment, recreation or other purpose, hereinafter constructed on any property within the boundaries of the District where a public sanitary sewer is available for said property, shall be required, at his own expense, to connect said building to the public sanitary sewer of the District in accordance with the provisions of this ordinance.

Section 10. The owner of any house, building, structure or property presently existing within the boundaries of the District, and used for human occupancy, employment, recreation and other purposes, and where a public sanitary sewer is available for said property and the present private sewage facilities for said house, building or structure are now or hereafter deemed defective, insufficient and ineffective by the proper officer of any municipality, shall be required, at his own expense, to connect said building to the public sanitary sewer of the District in accordance with the provisions of this ordinance.

Section 11. Whenever the duly authorized officer of any municipality located within the boundaries of said District, shall deem it advisable to require any owner of any property within said District to connect the building thereon with a public sanitary sewer as hereinabove provided, a notice of such direction shall be mailed to the last known address of the owner, tenant or occupant of said property ordering the connection of said building to the public sanitary sewer of the District within ninety (90) days after date of such notice.

Section 12. The failure of any owner, tenant, occupant or builder to connect such building to the public sanitary sewer of the District within the specified period shall be deemed, held and construed to be in violation of this provision and punishable as hereinafter provided.

Section 13. No person shall make or cause to be made any connection with a public sanitary sewer in said District except under a written connection permit for the work issued by the District and upon payment of a connection charge based on the applicable sections set forth below. The total connection charge to be paid shall be comprised of amounts calculated under sections (b), (c), (d), (e), and (f).

(a) Definitions

- (1) Single Family Class single family residential unit, including detached single family, duplex, two-flats, townhouses, and rowhouses.
- (2) Multiple Family Class residential buildings consisting of more than one dwelling unit, commonly referred to as apartment buildings, rental cooperatives, condominiums, etc.
- (3) Commercial/Industrial Class commercial and/or industrial buildings.
- (4) Commercial/Residential Class building used for both commercial and residential uses, including hospitals, nursing homes, hotels, motels, etc.
- (5) Institutional Class buildings used as schools, churches, or other governmental uses.

- (6) Population Equivalent (P.E.) One population equivalent is equal to 100 gallons of wastewater per day, containing 0.17 pounds of BOD and 0.20 pounds of suspended solids.
- (7) District-built Service the portion of a building sanitary service that has been funded for construction, repair or replacement by the District under any of its programs or in the course of its normal business.
- (b) An Inspection Fee shall be charged to cover the cost to the District of inspections of the installation of building sanitary services to ensure sanitary service lines are adequate and suitable for connection to the District and to insure compliance with District ordinances and regulations, as follows:
 - (1) Single Family Class \$185.00 per building sanitary service.
 - (2) All Other Classes \$307.00 per building sanitary service or \$177.00 per building if no work on a building sanitary service is required.
- (c) A Tap-In Fee shall be charged for all connections to the District for the necessary construction, expansion, and extension of wastewater treatment plant facilities. The tap-in fee shall be calculated upon a rate of \$810.00 per population equivalent (P.E.), and shall be assessed as follows:
 - (1) Single Family Class 3.5 P.E. per unit or \$2,835.00 per unit.
 - (2) Multiple Family Class -

Efficiency or studio apartment unit - 1.0 P.E. or \$810.00 per unit.

One bedroom apartment unit - 1.5 P.E. or \$1,215.00 per unit.

Two or three bedroom apartment unit - 3.0 P.E. or \$2,430.00 per unit.

- (3) All Other Classes The population equivalent of all other building classes shall be determined by the Manager, based upon data submitted by the owner or developer, District experience with similar building types, or other generally accepted criteria. The population equivalent so determined shall be multiplied by the tap-in fee rate per population equivalent to calculate the tap-in fee for such a building. The District reserves the right to re-evaluate the tap-in fee after one year's full operation of the building to compare actual wastewater volumes and strengths with calculated values, and either reimburse overpaid charges or assess additional tap-in fees based upon the actual operation. The reimbursement of overpaid tap-in fees or the assessment of additional tap-in fees shall be made to the fee owner of the property as of the date of the District re-evaluation of said fees.
- (d) A Trunk Sewer Service Charge shall be charged for the necessary construction, expansion, and extension of trunk sanitary sewer facilities. The trunk sewer service charge shall be

calculated upon a rate of \$375.00 per population equivalent (P.E.) and shall be assessed as follows:

- (1) Single Family Class 3.5 P.E. per unit or \$1,312.50 per unit
- (2) Multiple Family Class -

Efficiency or studio apartment unit - 1.0 P.E. or \$375.00 per unit

One bedroom apartment unit - 1.5 P.E. or \$562.50 per unit

Two or three bedroom apartment unit - 3.0 P.E. or \$1,125.00 per unit

- (3) All Other Classes The population equivalent of all other building classes shall be determined by the Manager, based upon data submitted by the owner or developer, District experience with similar building types, or other generally accepted criteria. The population equivalent so determined shall be multiplied by the trunk sewer service charge rate per population equivalent to calculate the trunk sewer service charge.
- (4) Minimum Charges The minimum trunk sewer service charge for commercial, industrial, or business use shall be \$9,375.00 per acre (25 P.E. per acre). The minimum trunk sewer service charge for all other uses shall be \$3,750.00 per acre (10 P.E. per acre).
- (5) Special Trunk Sewer Service Charge Area The trunk sewer service charge attributable to the Highland Woods Office Campus as described in Exhibit I shall be assessed at the minimum trunk sewer service charge for all other uses.
- (6) For purposes of calculating trunk sewer service charges under this ordinance, parcel size shall be calculated as gross acres, which shall include to the centerline of all adjoining public streets, rights-of-way, alleys, etc.
- (7) Trunk sewer service charges shall be assessed pursuant to Section 13.4 and Section 16 of Article II of this ordinance.
- (e) A Lateral Sewer Charge shall be charged for the necessary construction, expansion, and extension of lateral sanitary sewer facilities. The lateral sewer service charge shall be assessed whenever a building is to be connected to a public sanitary sewer which was installed at the expense of the District. The lateral sewer service charge shall be assessed as follows:
 - (1) All Classes

\$10,441.00 per building sanitary service to near side property

\$7,569.00 per building sanitary service to far side property

- (2) Near side property is located on the same side of the street as the public sanitary sewer. Far side property is located on the opposite side of the street from the public sanitary sewer and the building sanitary service for such property must cross an improved street in order to connect to the public sanitary sewer.
- (3) The Manager shall prepare and maintain a list of the public sanitary sewers installed at the expense of the District for purposes of this ordinance.
- (f) A Service Reimbursement Charge shall be charged when a District-built Service is used in lieu of removal and replacement of an existing service in cases where replacement of the service would normally be required under this ordinance. This charge shall be based on the current unit prices for such work in the District Building Sanitary Service Repair Assistance Program or other recent District contract for sanitary sewer construction.

Section 13.1. No connection permit for new construction shall be issued by the District until the person or persons seeking such permit submit to the District the appropriate District application form, a complete set of building plans, a utilities site plan and an agreement for District access to the building sanitary service signed by the property owner.

No connection permit for an existing building shall be issued by the District until the existing building is brought into compliance with all ordinances of the District, as determined by an inspection of said building by an authorized representative of the District. In addition, the person or persons seeking such permit shall submit to the District the appropriate District application form, a utilities site plan and an agreement for District access to the building sanitary service signed by the property owner.

Section 13.2. For the purpose of this section, any connection permit issued by the District shall be effective for a period of one year from the date of issuance, within which period at the written request of the applicant, one renewal of said permit for up to six (6) additional months may be issued by the District at the discretion of the Manager. In the event that said permit is not used within said period, a refund will be made under the provisions of Section 13.3 and reapplication for a new permit must be made.

Section 13.3. For the purpose of this section, a refund of the tap-in fee portion only of any connection permit will be made to the person or persons who paid the connection fee upon proper submittal of a District receipt for said payment and the return of the permit itself, if outstanding. The inspection fee is not refundable.

Section 13.4. Whenever any residence, multiple dwelling, commercial, institutional or industrial property is rebuilt in kind, expanded, its use changed, or added to, a permit shall be obtained and a fee shall be paid by such person or persons making or causing to be made such additional use, in accordance with the provisions of this section, including a trunk sewer service charge in accordance with Section 13, Article II of this ordinance.

Section 14. No statement contained in this Article shall be construed as preventing any special agreement or arrangement between the District and any person whereby any industrial waste of unusual strength, or character, may be accepted by the District for treatment, subject to payment therefore by the person as prescribed by the District.

Section 15. Sump and ejector pits must be approved by the District before installation. Sanitary sumps and ejector pits must be at least ten (10) feet away from any other sump. Material specifications for

under-slab piping is governed by the applicable municipal plumbing code. Any pit which does not meet District standards shall be removed and replaced with an acceptable pit before District approval is granted. Any sanitary ejector pit that serves plumbing fixtures on a floor level other than a basement shall be equipped with a self-powered alarm system to alert the owner of a high water-level in the system wet-well, and the sanitary ejector pit shall have a volume of no less than 150 gallons.

Section 16. Whenever any property is annexed to or serviced by the District, a trunk sewer service charge as established in accordance with Section 13, Article II of this ordinance, shall be paid to the District prior to the annexation of said property to the District or the issuance of any permit for sanitary sewer service to said property.

Section 17. No commercial/industrial, commercial/residential, or institutional building connected to the public sanitary sewer shall install or cause to have installed any type of garbage disposal.

Section 18. No swimming pools shall be discharged into the sanitary sewer system except under written agreement with the District.

Section 19. All users must meet the limitations and standards specified in Article IIA, Pretreatment Ordinance, attached to and made a part of this document.

Section 20. An outside cleanout shall be installed on each new building sanitary service at a location approved by the District.

Section 21. The Manager and other duly authorized representatives of the District, the Illinois Environmental Protection Agency and the U.S. Environmental Protection Agency, bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this ordinance. The Manager or any of the above representatives shall have no authority to inquire into any process including metallurgical, chemical, oil, refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the sanitary sewers or waterways or facilities for waste treatment.

While performing the necessary work on private properties referred to above, the Manager or duly authorized representatives of the District, the Illinois Environmental Protection Agency and the U.S. Environmental Protection Agency, shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the representatives and the District, Illinois Environmental Protection Agency and U.S. Environmental Protection Agency shall indemnify the company against loss or damage to its property by their representatives and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions.

ARTICLE III - PRIVATE SEWAGE DISPOSAL

Section 1. Where a public sanitary sewer is not available, as provided for in Article II, the building sanitary service shall be connected to a private sewage disposal system complying with the provisions of the municipality wherein such system is located.

Section 2. The owner shall operate and maintain the private sewage facilities in a sanitary manner at all times, at no expense to the District.

Section 3. Use or construction of privies, privy vaults and cesspools are prohibited.

Section 4. No statement contained in this Article shall be construed to interfere with any additional requirements that may be imposed by the Illinois Environmental Protection Agency, the Illinois Department of Public Health, the DuPage County Health Department, or any municipality controlling the construction, use or maintenance of private sewage disposal systems.

ARTICLE IV - CONSTRUCTION OF PUBLIC SANITARY SEWERS

Section 1. Each public sanitary sewer which is designed and is to be constructed so as to constitute an integral part of the system of sanitary sewers to be controlled, operated, and maintained by the District shall not be constructed until and unless the Manager has been furnished with two complete sets of plans and specifications, designed in accordance with District design standards, and an itemized estimate in writing of all direct and indirect costs of such public sanitary sewer improvements; the completeness and correctness of all such plans, specifications and cost estimates shall be certified in writing by an Illinois Registered Professional Engineer. Prior to or concurrently with the submission of such documents to the Manager, the owner shall pay or cause to be paid to the District a fee for the review thereof computed in accordance with the following table:

Estimated Costs of Construction of

of Construction of	
Public Sanitary Sewer	
<u>Improvements</u>	Review Fee
\$10,000 or less	1.65% of estimated cost
\$50,000 or less, but more than \$10,000	1.50% of estimated cost, but not less than \$165.00
\$100,000 or less, but but more than \$50,000	1.33% of estimated cost, not less than \$750.00
\$200,000 or less, but but more than \$100,000	1.17% of estimated cost, not less than \$1,330.00
More than \$200,000	1% of estimated cost, but not less than \$2.340.00

The Manager will review all such plans and specifications and may require revisions thereon to comply with applicable laws, ordinances, regulations, and with standard District principles and practices applied on a uniform basis throughout the District. The District shall approve, disapprove, or request modifications to such plans and specifications within thirty (30) days of receipt of all items required under this ordinance. After the completion of revisions, if any, required by the Manager and the receipt of four complete sets of plans and specifications, revised as required by the District, the Manager may require that the estimate of costs of such public sanitary sewer improvements be increased or decreased to reflect such

revisions and shall approve such estimate in writing. In the event of any increase in such estimate over the review fees paid, the owner shall cause to be paid to the District the amount of any increase in the review fee computed under the foregoing table, provided said increase is greater than \$50.00. In the event of any decrease in such estimate under the review fees paid, the District shall cause to be paid to the owner the amount of any decrease in the review fee computed under the foregoing table, provided said decrease is greater than \$50.00.

Section 2. A sewer permit will only be issued and sewer connection shall only be allowed if it can be demonstrated that the downstream facilities, including sanitary sewers, pump stations and wastewater treatment facilities, have sufficient reserve capacity to adequately and efficiently handle the additional anticipated waste load.

Section 3. No person shall construct or cause to be constructed any public sanitary sewer or appurtenance that is to become a part of the sewer system of the District which is not constructed pursuant to the published specifications of the District in effect at the time said construction is commenced.

Section 4.

- (a) No person shall construct or cause to have constructed any public sanitary sewer or appurtenance which is to become a part of the sewer system of the District except under a written permit for the work issued by the District and said permit will only be issued upon payment to the District of a fee of \$0.80 per lineal foot of public sanitary sewer.
- (b) The person constructing or causing to have constructed said public sanitary sewer shall reimburse the District for all costs of inspecting said sewer installation, at the rates of \$58.00 per hour straight time and \$87.00 per hour overtime if said inspection is performed by District personnel, and at billed cost if said inspection is performed by others.

Section 5. All public sanitary sewers constructed so as to become an integral part of the system of the sanitary sewers of the District shall, upon completion of construction and approval by the District, become the property of the District, except all building sanitary services shall remain the property of the owner of the premises served by said building sanitary service.

Section 6. That following the completion of construction of any public sanitary sewer pursuant to the provisions of this Article, the person constructing or causing to have constructed said sewer shall cause one reproducible set and one file set of completed "as built" plans to be prepared with competent engineering assistance and submitted to the District before acceptance will be made of said public sanitary sewers by the District.

ARTICLE V - CONNECTION

Section 1. No person or persons shall cause any connection of a building sanitary service to a public sanitary sewer unless made by a person who is a competent sewer builder duly authorized to do such work by the Manager.

Section 2. The Manager may require building sanitary services and connections of greater size than six (6) inches in interior diameter where deemed best for District and use contemplated.

Section 3. No person shall hereafter lay any pipe or conduit or excavate in any street, alley, easement or other public right-of-way within five feet of either side of the public sanitary sewer in such street, alley, easement or public right-of-way without the permission of the Manager.

Section 4. No more than one building shall be connected with the public sanitary sewer through one building sanitary service without a permit signed by the Manager.

Section 5. Notice must be left at the office of the District twenty-four hours prior to the beginning of any work upon a building sanitary service and no materials shall be used or work covered until it is inspected and approved by a District representative.

Section 6. When required by the Manager, the owner of any property serviced by a building sanitary service carrying commercial, institutional or industrial wastes shall install a suitable structure for flow measurement and sampling together with necessary meters and other appurtenance to facilitate observation, sampling, and measurement of the wastes. Such manhole or structure, known as an inspection manhole, shall be accessible to District personnel and shall be constructed and located in accordance with plans approved by the Manager. The inspection manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible to authorized personnel of the District at all times.

Section 7. No sewer work of any type involving a building sanitary service shall be done except in an emergency without first securing a written permit therefore from the District. Before such permit is issued, an application shall be filed with the District signed by the owner of the premises on which the proposed work is to be done or by his duly authorized agent accompanied by such plans, specifications and permit fee as provided for herein. Such application shall indicate the person authorized by the owner of said premises to perform said work and such permit shall not be issued unless the person indicated to do such work either (1) has on file with the District a surety bond in the sum of \$10,000 previously approved by the District, or (2) furnishes to the District a surety bond in the amount of the contract price or estimated cost of the work anticipated to be done indemnifying and saving harmless the District from all accidents and damages caused by negligence or otherwise either in the execution or protection of the work involved, including any damage to any sewer of the District. No applicant owing money to the District for fees required by any ordinances, resolutions or contracts with the District for work described in said application or for any previous work performed in the District shall be granted a permit until said fees have been paid.

Section 8. If any discharge or proposed discharge to the public sanitary sewer system contains the substances or possess the characteristics or exceed in concentration the limitations or discharges enumerated in Article IIA of this Ordinance, and which in the judgement of the Manager may have a deleterious effect upon the sewage works, processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Manager may:

- (a) Reject the waste
- (b) Require pretreatment to an acceptable condition for discharge to the public sanitary sewers.
- (c) Require payment to cover the added cost of handling and treating the waste not covered by existing taxes or wastewater service charges under other provisions of this ordinance.

If the Manager permits the pretreatment of waste flows, the design and installation of such facilities shall be subject to the review and approval of the Manager, and subject to the requirements of all applicable codes, ordinances and laws; and no such waste or water shall be permitted to be discharged into the public sanitary sewers of the District until plans and designs for such pretreatment facilities have been approved and a discharge permit is issued by the Manager.

Section 9. In any case where it is necessary to make a connection to the public sanitary sewer at points other than those provided with junction pieces, connection shall be made by removing a section of the public sanitary sewer and substituting a proper branch in its place or by making a machine tap, which must be approved by the District. Such work can only be done under the direct supervision of a District representative.

Section 10. Overhead sanitary sewers, designed to prevent the backflow of water from the public sanitary sewer system, are required for all buildings to be connected to the public sanitary sewer system. Overhead sanitary sewers shall be provided to any floor level of such buildings whenever the elevation of that floor level is lower than the elevation of the rim of the District manhole immediately upstream of the point of connection of said building into the public sanitary sewer system. Plumbing fixtures on a building floor level below an overhead sewer shall drain into an ejector pit with pump and tight seal which meets the requirements of Article II Section 15 of this ordinance and the applicable municipal plumbing code. It shall be the responsibility of the person seeking to connect said building to provide the District with the elevations described above, when so requested by the District. Said elevations must be provided on a USGS datum by a Registered Land Surveyor or Registered Professional Engineer. In cases where a floor level above the basement level is below the upstream manhole rim, a pressure relief cleanout constructed according to the District's Standard Detail may be used in lieu of draining fixtures from any level above the basement into the ejector sump.

Section 11. Whenever an existing building is to be connected to the public sanitary sewer system, a new building sanitary service shall be installed and connected to the existing sanitary sewer located immediately adjacent to the existing building foundation.

Section 12. Whenever an existing building, which is connected to the public sanitary sewer system, is demolished, torn down or otherwise removed, all existing building sanitary services for that building shall be abandoned and shall be permanently blocked at the point(s) of connection to the public sanitary sewer. Such blocking must be done under a permit issued by the District and must be inspected by a District representative. It shall be the responsibility of the contractor to determine the point of disconnection on the public sanitary sewer. The contractor shall televise and electronically locate the building sanitary service to the point of connection to the public sanitary sewer. In cases where a District-built Service can be shown to be in compliance with District requirements for new construction, including all required testing; a property owner may request District approval of the re-use of the District-built Service in lieu of removal and replacement, subject to the payment of a Service Reimbursement Charge.

Section 13. Each new building sanitary service and all repairs to any existing building sanitary service must be designed and constructed in accordance with District design standards and District construction specifications. Each new building sanitary service must be air tested and televised in accordance with District specifications, including any new building service utilizing a District-built Service. Upon completion of a new building sanitary service or any repairs to an existing building sanitary service, the sewer contractor or property owner must submit to the District a written record of the work

completed, including a sketch, pipe sizes, footages and depths, fittings and measurements from property lines or building corners, before final acceptance of said work will be granted by the District.

ARTICLE VI - WASTEWATER SERVICE CHARGES

Section 1. Basis for Wastewater Service Charges:

The wastewater service charge for the use of and for service supplied by the wastewater facilities of the District shall consist of a basic user charge for operation and maintenance plus replacement, a monthly fee, and a surcharge, if applicable.

The basic user charge shall be based on water usage as recorded by water meters or sewer flow meters for wastes having the following normal concentrations:

- (a) A five day 20 degree centigrade (20°C) biochemical oxygen demand (BOD) of 200 mg/l.
- (b) A suspended solids (SS) content of 250 mg/l.

It shall consist of operation and maintenance costs plus replacement and shall be computed as follows:

- (a) Estimate the projected annual revenue required to operate and maintain the wastewater facilities, including a replacement fund for the year, for all District operations.
- (b) Proportion the estimated costs to wastewater facility categories by volume, suspended solids and BOD.
- (c) Estimate wastewater volume, pounds of SS and pounds of BOD to be treated.
- (d) Compute costs per 1000 gal. for normal sewage strength.
- (e) Compute surcharge costs for BOD and SS.

Monthly fees shall consist of a service fee for all accounts and sampling and monitoring charges, if applicable. A sampling and monitoring charge will be levied to all users whose wastes exceed or have the potential to exceed the normal concentrations for BOD (200/mg/l) or SS (250 mg/l) and to all industrial users.

A surcharge will be levied to all users whose wastes exceed the normal concentrations for BOD (200 mg/l) and SS (250 mg/l). The surcharge will be based on water usage as recorded by water meters or sewer flow meters for all wastes which exceed the 200 mg/l or 250 mg/l concentration for BOD and SS respectively.

The wastewater service charges enumerated above and hereinafter shall be reviewed annually and revised accordingly in order to assure adequate revenues for operations and proportionality of the charges.

All users shall be notified annually by the District of the user charges, the method of calculation and how the revenue derived from said user charges will be used.

Section 2. Measurement of Flow for Basic User Charge and Surcharges:

The volume of flow used for computing basic user charges and surcharges shall be metered water consumption.

- (a) Any non-single family residential user discharging wastes into the public sanitary sewers who procures any part, or all, of his water from non-metered sources, all or a part of which is discharged into the public sanitary sewers, shall install and maintain, at his expense, water meters and/or sewer flow meters of a type approved by the District for the purpose of determining the volume of water obtained from these other sources.
- (b) Devices for measuring the volume of waste discharged may be required by the District if these volumes cannot otherwise be determined from the metered water consumption records.
- (c) Metering devices for determining the volume of waste shall be installed, owned, and maintained by the user. Following approval and installation, such meters may not be removed, unless service is terminated, without the consent of the District.
- (d) Metered single family residential users may receive a summer usage adjustment for water consumed but not discharged to the public sanitary sewer system. For such users, the basic user charge for summer usage periods shall be based upon either the actual metered water consumption for the summer usage period or one hundred fifty percent (150%) of the average of the metered water consumption for the immediately preceding winter usage periods, whichever is lower.

For purposes of this section, a billing period is considered a summer usage period if a majority of the billing period is included between the dates of April 15 to October 15. Any billing period which does not meet the criteria for a summer usage period shall be considered a winter usage period.

Section 3. Basic User Rate:

A basic user rate of \$1.65 per 1000 gallons of water consumption shall be applied to all users.

All non-metered single family residential users of the wastewater facilities shall pay a flat rate charge per quarter of \$39.60. This flat rate charge is based on water consumption of 24,000 gallons per quarter for single family residences. Any non-metered single family user who installs a water meter in accordance with District requirements shall be billed based upon the readings from such meters.

Section 4. Measurement of Waste Strengths for Surcharges:

Unless otherwise provided, all measurements, tests, sampling and analyses required hereunder shall be in accordance with the most recent edition of Standard Methods for the Examination of Water and Wastewater, published jointly by the American Public Health Association, the American Water Works Association, and the Water Environment Federation, and as follows:

(a) Inspection Manhole

In order to provide for accurate sampling and measurement of waste discharges, each user subject to the surcharge shall provide, at their expense, within sixty (60) days of written notice from the District, on each of its building sanitary services, an inspection manhole to be located so as to be available for inspection by authorized representatives of the District at reasonable times and at reasonable hours. There shall be ample room in or near each inspection manhole to accurately sample and composite the samples for analysis.

Plans for inspection manholes, with their location shown on a site plan, shall be submitted to the District for approval prior to construction.

(b) Liquid Quantity Measurements

Each inspection manhole shall contain a Parshall flume, weir or similar device with a recording and totalizing register for measurement of the liquid quantity; or the metered water supply to the user may be used as the liquid quantity where it is substantiated that the metered water supply and waste quantities are approximately the same, or where a measurable adjustment can be made in the metered water supply to determine the liquid waste quantity.

(c) Sampling

Waste sampling shall be performed by the District.

Determination of representative quantities or characteristics shall include re-evaluation periodically. The determination of representative quantities and characteristics shall include not less than three consecutive calendar days of 24-hour composite samplings taken during periods of normal operation, together with acceptable flow measurements.

Samples shall be taken every hour or half hour, as determined by the District, properly preserved and composited in proportion to the flow for a representative 24-hour sample.

The frequency of sampling, inspection manhole, metering device, sampling methods and analyses of samples shall be subject, at any time, to revision by the District.

Sampling and measuring facilities shall be such as to provide safe access for authorized personnel of the District for making such inspection and verification.

Section 5. Surcharge Rates:

(a) The surcharge rates for BOD and SS shall be as follows:

\$0.24 per pound for BOD

\$0.30 per pound for SS

(b) Any user determined by the Manager to have the potential to exceed the normal concentrations for BOD and/or SS, for which an inspection manhole is not available

to ascertain actual waste strength, shall be surcharged at the flat rate \$3.02 per 1000 gallons of metered water consumption, in addition to the basic user rate.

Section 6. Computation of Surcharge

The surcharge shall be computed by the following formula:

$$SC = [B_C (B_A - B) + S_C (S_A - S)] \times V \times 8.34 \times 10^{-6}$$

Where SC = Amount of surcharge (\$) per billing period

 B_C = Treatment cost for one pound of biochemical oxygen demand (BOD).

 B_A = Average representative measured concentration of BOD from user in mg/l.

B = Average concentration of BOD in normal domestic sewage of 200 mg/l.

S_C = Treatment cost for one pound of suspended solids (SS).

 S_A = Average representative measured concentration of SS from user in mg/l.

S = Average concentration of SS in normal domestic sewage of 250 mg/l.

V = Total volume contribution from user during billing period in gallons.

Section 7. Computation of Wastewater Service Charge

The wastewater service charge shall be computed by the following formula:

 $WC = (UR \times V) + SC + M$

Where WC = Amount of wastewater service charge (\$) per billing period.

UR = Basic user rate for operation, maintenance, and replacement (Section 3).

V = Wastewater volume for the billing period.

SC = Amount of surcharge (\$) per billing period (Sections 5 and 6).

M = Monthly service fee, including sampling and monitoring charges, if applicable

Section 8. Users Subject to Surcharge:

Any industrial user identified in the "Standard Industrial Classification Manual," Bureau of the Budget, 1967, under the category "Division D - Manufacturing" and any other user notified by the District in writing shall be subject to a surcharge if the wastes discharged to the District from such user exceed a suspended solids concentration of 250 mg/l or a BOD concentration of 200 mg/l.

Section 9. Penalties

Should the owner of any property fail to install and/or maintain a water meter and/or sewer flow meter as herein required, the District will estimate the amount of the wastewater service charges due and bill the owner for such service charges together with penalties as provided herein. Said bill shall be paid within ten (10) days after receipt thereof by the owner.

Section 10. Billing Period and Penalties:

The service charges established by this ordinance shall be payable monthly, bi-monthly, or quarterly as shall be directed by the Board of Trustees of the District. The owner of the real estate, the occupant

thereof and/or the user of the service shall be jointly and severally liable for the service on such premises and this service is furnished to the premises by the District solely upon the conditions that the owner of the real estate, and where the owner is the trustee of a trust, each beneficiary of the trust, occupant, and/or user of the service are each jointly and severally liable to the District. All bills for use and service shall be payable by a specified due date and shall be for the period specified in said billing. If payment of the amount of the bill is not made by said due date, then a penalty of ten (10) percent of the amount so billed shall be added thereto. Thereafter, if the amount so billed, or any portion thereof, remains unpaid a penalty of one (1) percent of the amount remaining unpaid shall be added 30 days after the due date, and one (1) percent shall be added for each additional 30 days or portion thereof.

In addition to the penalty herein provided, the District may assess such additional administrative and other costs as may be necessary to collect amounts not paid by the due date.

Section 11. Enforcement:

- (a) In the event the charges for use and service are not paid within 30 days after mailing of the bill for which use and service has been supplied such charges shall be deemed and are hereby declared delinquent and thereafter such delinquency shall constitute liens upon the real estate for which such use and service is applied and the Treasurer of the District is hereby authorized and directed to file sworn statements showing such delinquencies in the Office of the Recorder of Deeds of DuPage County, Illinois, and the filing of such statements shall be deemed notice for the payment of such charges for such use and service, and shall, thereafter, constitute a lien upon said real estate until such charge and penalties thereon have been paid in full.
- (b) In addition to all other penalty provisions provided herein the District shall at any time after a delinquency has occurred, pursuant to the terms hereof, take such other appropriate action as may be deemed necessary to require and demand the payment for service rendered, or to terminate sanitary sewer service or water service until full and complete payment of all delinquent charges and penalties thereon have been paid in full, together with any and all legal expenses, including attorney fees incurred by the District in enforcing the provisions of this ordinance.

Section 12. Reinstatement of Service:

The District reserves the right to require a bond or a cash deposit in lieu of a bond, from any user who previously has been determined delinquent in the payment of the service charges, specified herein, prior to reinstatement of sanitary sewer service or water service by the District in such amount as the District shall determine reasonable, based upon sewer service to such owner, occupant and/or user.

Section 13. Provision for Annual Audit:

The Treasurer of the District shall establish a proper system of accounts and shall keep proper books, records, and accounts in which complete and correct entries shall be made of all transactions relative to the general fund, and, shall, at regular annual intervals, cause to be made an audit by an independent auditing concern of the financial books and records of the District, including the records of the District wastewater service charges system.

In addition to the customary operating statements, the annual audit report shall also reflect the revenues and operating expenses of the wastewater facilities, including replacement costs. In this regard, the financial information to be shown in the audit report shall include the following:

- (a) Flow data showing total gallons received at the wastewater treatment center for the current fiscal year.
- (b) Billing data to show the total number of gallons billed.
- (c) Number of users connected to the system.
- (d) Number of non-metered users.
- (e) A list of users discharging non-domestic wastes and the volume of wastes discharged.

Section 14. Monthly Fees

Monthly fees consist of a service fee of \$12.00 per month for all accounts, and sampling and monitoring charges, if applicable.

The sampling and monitoring charges shall be as follows:

- (a) \$105.99 per month for each significant industrial user subject to any National Categorical Pretreatment Standard or discharging an average of 25,000 gallons or more of wastewater per day.
- (b) \$39.75 per month for each industrial user subject to a wastewater discharge permit issued by the District and not included in (a) above.
- (c) \$15.13 per month for each user subject to surcharge.
- (d) \$4.77 per month for all industrial (including commercial) users not included in (a), (b) or (c) above.

Section 15. Revenues

All revenues and moneys derived from the wastewater service charges described in this ordinance shall be deposited in the general fund of the District. All such revenues and money shall be held by the Treasurer of the District separate and apart from his private funds and separate and apart from all other funds of the District. The District Treasurer shall administer such fund in every respect in the manner provided by applicable Illinois statutes.

Section 16. Access to Records

The Illinois Environmental Protection Agency or its authorized representative shall have access to any books, documents, papers, and records of the District which are applicable to the District system of wastewater service charges for the purpose of making audit, examination, excerpts, and transcriptions

thereof to insure compliance with the terms of the special and general conditions to any state or federal grant.

Section 17. Hauled Grease Separator Waste

The rate for hauled grease separator waste shall be \$50.00 per 1,000 gallons of hauled grease separator waste.

ARTICLE VII - ENFORCEMENT PROCEDURES

The following procedure is designed to correct violations of this ordinance, including nonpayment of wastewater service charges. Violations may be discovered by various means, including on-site inspection of homes, businesses, and industrial sites; monitoring samples of discharge; routine surveillance and testing by District personnel and reports of possible violations by other governmental agencies and private citizens. This procedure will enable users to receive notice of a possible violation and, except in serious or persistent cases, to correct those violations without a judicial proceeding.

Where violations come to the attention of the District, seriousness is determined by the magnitude of the violation; the persistence of the violation despite past notices and attempts to correct the situation; by the discharge of materials harmful to the treatment facility and its processes and by violations which may have a significant impact upon sanitary sewer flows and/or treatment facility capacity. A pre-enforcement conference and a show cause hearing are provided which enable the District to alleviate potential hazards to District facilities, and, if necessary, to undertake appropriate actions to disconnect and discontinue sanitary sewer services, and in the case of nonpayment of wastewater service charges to discontinue water service, to a user in violation of the aforementioned ordinances. Accordingly, the following procedures are hereby adopted.

I. Pre-Enforcement Conference

Discovery and Notice

- A. Upon determination that a violation has occurred, or upon discovery that an alleged violation has probably occurred, a notice of the violation is prepared and sent to the user by mail.
- B. If a violation or potential violation has not been cured within the time limit set forth in the initial notice, then a conference date shall be established. The user and any other appropriate entities may be notified of the conference date by mail which said notice requires the user to appear at a scheduled pre-enforcement conference which describes the potential violation in sufficient detail for the user to begin abatement action; and which sets forth the time, date and place of the conference.
- C. Pre-enforcement conferences shall be scheduled not less than seven nor more than twenty one (21) days from the date notice of the conference has been sent; except that a shorter time may be set in cases of an emergency. Any respondent's request for a continuance beyond twenty one (21) days must be in the form of an affidavit or verified statement setting forth specific reasons why the delay is requested. Said

request for continuance shall be granted or denied by the Manager in writing and sent to the user.

D. The Manager may grant continuances on conference dates for good cause shown.

The term "user" in this procedure is defined as the owner of the real estate, the occupant thereof and/or the user of the service. In addition, the District may wish to join lessees, lien holders, mortgage lenders or other persons with an appropriate interest in the subject premises and whose rights in the premises may be affected by continued enforcement procedures by the District.

2. Pre-Enforcement Conference

- A. The pre-enforcement conference shall be conducted by the Manager, or his designee.
- B. At the scheduled conference, the violation shall be explained in sufficient detail for parties to understand the nature of the violation and to begin abatement actions on said violation.
- C. No formal evidence or rules of evidence shall be in effect, the proceedings shall not be transcribed by a court reporter and documents or exhibits need not be marked as items of evidence. The purpose of the pre-enforcement conference is an attempt to gain voluntary compliance with the ordinances of the District. It is not penal in nature and is specifically designed as an informal process to assist users in complying with federal and state statutes and regulations and ordinances and regulations of the District.
- D. A plan for abatement and a schedule for compliance are to be initiated at this meeting.
- E. Where a plan for abatement and a schedule for compliance are initiated at the meeting, within ten (10) working days following the pre-enforcement conference a letter shall be issued by the conference officer indicating the results of the conference, indicating a plan for abatement of a violation and indicating a schedule for compliance to be followed. In addition, the notice may contain dates of such future meetings as may be required to monitor progress until full compliance has been achieved.
- F. Extensions of time for compliance may be granted upon good cause shown in a subsequent conference and at the request of either the District or the user. All requests for extensions shall be in writing and set forth specific facts upon which the request is based.
- G. No Agreement. If during the pre-enforcement conference the parties are unable to agree upon the nature of compliance or the schedule of compliance, or the users fail to appear, the conference officer may recommend that the user be required to show cause why its discharge into the public sanitary sewer system should not be

disconnected and prohibited, or in the case of nonpayment of wastewater service charges, take steps to disconnect water service.

- 3. Emergency Hearing. If hazardous or emergency conditions exist, a user may be notified by telephone or telegram to appear immediately or on the following day(s).
- 4. The pre-enforcement conference is an optional process which may be instituted by the District. The District may, in its discretion, bypass the pre-enforcement conference or terminate the conference at any time after it has been instituted and in substitution therefore may institute a show cause hearing procedure or institute a court proceeding for fine and/or injunction whenever the District determines that it is in the best interests of the District to so proceed.

II. Show Cause Hearing Procedure

The show cause hearing procedure is instituted by the District in an attempt to gain voluntary compliance with the statutes of the United States and the State of Illinois, the rules and regulations attendant thereto, and the ordinances, rules, regulations and policies of the District. The show cause hearing procedure is to be used when the conciliation conference procedure breaks down; to be used when there are serious violations or potential harm to the District treatment facility capacities or processes; or potential harm to the District sanitary sewers, their capacities and the possible danger to other users of District facilities whether due to back-up problems or safety hazards. In addition, the show cause procedure may be used in cases of persistent non-payment of user charges. At the show cause hearing testimony is taken, District personnel may be called upon to testify concerning their activity in the matter and the respondent is given an opportunity to present evidence. These hearings may result in an order requiring the user (respondent) to comply with provisions of the ordinance, state or federal statutes and regulations by a certain date. If the user fails to comply with the order, then a recommendation shall be forthcoming as follows:

- 1. That a lawsuit be filed to seek injunctive relief, and/or
- 2. That a lawsuit be filed requesting a fine for each day that the violation continues, or
- 3. That the District take steps to disconnect the subject property from the public sanitary sewer system and, in the case of nonpayment of wastewater service charges, take steps to disconnect sanitary sewer service or water service.

SHOW CAUSE HEARING PROCEDURE

1. Notice

- A. A notice of hearing shall be forwarded to the respondents along with a complaint setting forth sufficient details for the user to begin abatement action.
- B. The notice shall set the time, date and place of a hearing not less than ten (10) nor more than twenty one (21) days from the mailing of said notice.

C. The notice shall be mailed U.S. mail, postage prepaid, and addressed to the user's last known address. The mailing of notice shall be construed as service. Notice may also be served personally upon the user.

2. Discovery

- A. Witnesses and Evidence. Prior to the hearing, and upon specific written request by the respondent.
 - (1) The District shall identify all witnesses or potential witnesses and all items of physical evidence.
 - (2) The District shall make District employees available for respondent's cross-examination at the time of a hearing.
 - (3) The District will make available all physical evidence for inspection, testing or copying prior to the hearing.
 - (4) The District will request, in writing, the presence of any witness requested by the respondent and that the respondent expects to call for testimony at the hearing.
- B. The District may request respondent to respond with similar discovery.
- C. The District and respondent may enter into stipulations of fact or law.

3. Hearing

- A. Hearing proceedings shall be recorded by a certified court reporter.
- B. The Hearing Officer shall be one or more persons appointed by the Board of Trustees of the District.
- C. The Hearing Officer shall open the hearing for record by stating the Hearing Officer's name, position, and his authority for holding the hearing, stating the name and address of the respondent, and the violation alleged. Respondent may waive notice orally or in writing.
- D. The Hearing Officer will then ask for the appearances of the parties and in response thereto, the persons representing the various parties shall state for the record their names and whom they represent.
- E. The attorney for the District will have the notice marked as an exhibit and will offer the notice into evidence. The respondent shall be provided an opportunity to indicate any objections to the notice having been received for the purpose of showing due notice given.

- F. The Hearing Officer shall determine for the record whether or not due notice has been given.
- G. Opening Statement. The hearing officer shall offer each party a reasonable time to make an opening statement.

H. Taking of Evidence

- (1) All witnesses shall be sworn individually or as a group.
- (2) The District shall call its witnesses. The attorney for the District shall conduct direct examination of District witnesses after which respondent shall be given an opportunity to cross-examine these witnesses.
- (3) The Hearing Officer may inquire of any witnesses.
- (4) The Hearing Officer shall inquire whether there is any redirect examination after there has been cross-examination. If there is redirect examination, there shall also be allowed a recross-examination by the respondent.
- (5) The same procedure in examining District witnesses shall apply to the respondent's witnesses.
- (6) All exhibits shall be marked for identification by the court reporter. When an exhibit is offered into evidence, the Hearing Officer shall inquire of the opposing party whether there is any objection to the exhibit being received. The Hearing Officer shall indicate for the record whether the exhibit is or is not received in evidence.
- (7) Stipulations of fact or evidence may be used in appropriate cases. All stipulations shall be read into the record if an oral stipulation, or shall be in writing and attached to the record. All stipulations are to be treated as an admission of the facts contained in said stipulation.

Objections

- (1) Any party may make objections to exhibits or documents presented by the other party.
- (2) The Hearing Officer shall rule on all objections which may be "sustained", "overruled", or the hearing officer may "reserve the ruling." In the event the Hearing Officer fails to make a ruling prior to the conclusion of the hearing, the attorney for the District or the respondent may request such a ruling. Failure to request a ruling waives the objection.
- J. District's Case. The District must establish as follows:
 - (1) Notice of the alleged violation and the time, place and date of the hearing.

- (2) The ordinance which has been violated must be set forth.
- (3) The nature of the violation alleged in the complaint specifically referring to facts which give rise to the complaint, the results of test data, if any. Testimony of District employees, citizens or any person may be obtained in addition to documentary evidence, reports and other indications of a violation.

K. Respondent's Case

- (1) The respondent may assert that the District has failed to establish one or more of the elements required by its ordinances.
- (2) Assuming the District has established a violation of its ordinance, the respondent may establish what, if anything, the respondent has done to correct the situation and what still remains to be done in the future, indicating a projected compliance date.
- L. Reply. At the close of the respondent's case, the hearing officer will inquire as to whether the District wishes to offer any rebuttal evidence.
- M. Closing Argument. The Hearing Officer shall offer each party a reasonable time to make a closing statement or summation. The District shall be allowed a rebuttal after respondent's closing argument.
- N. The Hearing Officer may, at his discretion, continue the hearing. In addition, he may order any party to submit copies of any and all documents, letters, reports or any other documentary or physical evidence to the opposing party which physical evidence should be submitted several days prior to the next hearing date in order to allow the opposing party time to review same.

4. Decision

- A. All findings of fact should be specific.
- B. There should be a finding made concerning whether the District has established a violation.
- C. Any findings which involve prior consents or pre-enforcement conference agreements should contain the dates of the meetings and compliance schedules.
- D. Findings should include dates of inspections or samples.
- E. Findings should include specific violations or ordinances indicating the ordinance by article and paragraph.

5. Recommendations. When the findings establish that a violation is established by the District the hearing officer shall request the District to make specific recommendations to cure the violations. Recommendations will necessarily vary depending upon the facts and circumstances in the case.

Where a violation is found, the recommendation may include the following:

- A. That the respondent shall cease and desist discharging in violation of District ordinances, or
- B. That the respondent shall install an inspection manhole on or before a specified date, or
- C. That the respondent shall take certain steps (these steps to be enumerated) to correct District ordinance violations on or before a specified date.
- D. That if the respondent shall fail to comply with the foregoing recommendations, the attorney for the District be authorized and directed to seek appropriate relief.
- E. Unless respondent provides a justifiable reason for additional time to comply, the recommendation should also be made for immediate compliance.
- F. Where a recommendation provides a substantial period of time given to correct a violation, the recommendation should also include the following:
 - (1) That a construction or compliance time schedule should be submitted to the District by a specific date.
 - (2) That progress reports be required of the respondent on a weekly, biweekly or monthly basis. Such reports shall contain chemical analysis where applicable.
 - (3) That specific interim measures be taken to minimize the violations during the time compliance is proceeding. (Note: Progress reports and analysis may be used to judge the effectiveness of the interim measures.)
- G. That the following forms of relief be initiated by the District's attorney, namely:
 - (1) Seek a court injunction to enjoin such violations.
 - (2) Seek a court ordered fine for each day the violation continues as provided in the ordinance.
 - (3) Order disconnection from the public sanitary sewer system and, in the case of nonpayment of wastewater service charges order disconnection of sanitary sewer service or water service.

- H. Where non-payment of user charges is found, the recommendations shall include the following:
 - (1) That the respondent shall pay all of the following costs and charges incurred, namely:
 - (a) All user charges including the most recently billed statement.
 - (b) All penalties assessed thereon.
 - (c) All costs, recording fees and legal expenses incurred in connection with collection of the delinquent account.
 - (2) That the respondent post a bond or cash deposit in lieu of a bond in such amount of twice the billing period average, or the anticipated average use to such user.
 - (3) That a time schedule for compliance be established for performance of subparagraphs (1) and (2) above.
 - (4) That disconnection procedures be undertaken if the provisions herein are not fully completed.
- In the event a compliance schedule has been ordered, and at any time during said time period the respondent becomes aware of facts which indicate a need for an extended compliance date, the respondent shall petition the Manager with a written affidavit setting forth the order of the District, the compliance schedule and the reasons for requesting an extended compliance date. All reasons shall be set forth in detail including, where applicable, letters or other documents from contractors or suppliers indicating a new proposed compliance date. The Manager shall grant or deny the petition, or may establish a compliance date different from that requested in the petition.

The granting of an extended compliance date shall not be construed as any abandonment of previous decisions except as to the extended date for compliance. Any and all previously ordered penalties shall remain in full force and effect, except as extended pursuant to this subparagraph.

In the event the Manager denies a user's petition for an extended compliance date, or alters the compliance date to a period of time less than requested, the user may request a new Show Cause Hearing for the sole purpose of introducing evidence on the issue of the time reasonably required to comply with a previous order.

J. In all cases where the Hearing Officer finds that a violation has occurred, the Hearing Officer may assess the costs of enforcement as part of the recommendations. These costs may include, but shall not be limited to the following:

- (1) Hearing officers fees.
- (2) Court reports costs, including transcript.
- (3) Service fees.
- (4) District attorney's fees actually incurred.
- (5) Title company charges and recording fees.
- (6) Newspaper publications.
- (7) Expert witness examination and testimony fees incurred.
- (8) Independent chemical or laboratory analysis charges incurred.
- (9) Disconnection charges.

These charges shall be waived by the Hearing Officer upon presentation of a pauper's affidavit by or on behalf of a user.

6. Effective Date. The enforcement procedure decision becomes effective and final upon the issuance of findings with recommendations from the hearing officer.

7. Court Review

- A. This enforcement procedure is hereby made expressly subject to the "Administrative Review Act" of the State of Illinois as set forth in Illinois Compiled Statutes, 735 ILCS 5/3-101 et.seq., as amended from time to time.
- B. For purposes of court review, venue shall be in the Eighteenth Judicial Circuit, DuPage County, Illinois.
- C. In the event any respondent appeals any order, or findings and recommendations made pursuant to this enforcement procedure, then, absent the filing of a pauper's affidavit, said respondent shall forward to the District all costs incurred by the District in preparing and certifying the record of proceedings before the District which costs shall include, but not be limited to, reproduction costs of the District record, costs of obtaining a copy of the court reporter's transcript and an administrative charge of Twenty-five Dollars (\$25.00) for the cost of staff time to collect, prepare, certify and forward the record of proceedings to the court. Failure to make such payment or file said pauper's affidavit shall relieve the District from filing any answer to the Administrative Review proceeding and the District shall order the District's attorney to motion the court to dismiss the complaint and request entry of a judgement against the respondent and in favor of the District for any amounts shown due by orders, findings and recommendations of the District and for costs.
- D. In the event any portion of this enforcement procedure should be held by a court of competent jurisdiction, to be invalid or unenforceable, such invalid or unenforceable provisions shall be intended to be severable and the remaining provisions of this ordinance shall be construed to be enforced to the extent that such enforcement is reasonable.
- E. The procedures under this enforcement procedure shall not be the exclusive remedy of the District and shall not preclude the District from requesting or

obtaining a court ordered injunction to prohibit wastes or harmful materials or flows from entering or being discharged into the District system; shall not preclude the District from seeking any other court remedies that may be available to the Sanitary District; and shall not preclude the collection of user charges pursuant to Illinois Compiled Statutes, 70 ILCS 3010/17, as Amended.

- 8. Disconnection Procedure. When the District commences disconnection of sanitary sewer or water service, the following procedure shall apply:
 - A. Notice. At least thirty (30) days prior to disconnection, written notice shall be mailed, certified mail, return receipt requested, to the following:
 - (1) Property owner.
 - (2) Mortgage and lien holders of record.
 - (3) Taxpayer
 - (4) Occupant
 - (5) Health Department of the appropriate municipality and DuPage County.
 - B. The notice shall contain the remedy, if any, that will forestall said disconnection.
 - C. No property disconnected under any enforcement action shall be reconnected to the District or have water service resumed until prior payment of all costs, fees, charges and expenses incurred by the District in conjunction with the enforcement proceedings and the disconnection of said property; and until the appropriate remedy has been completed which ensures compliance with state and federal laws and regulations and District ordinances.

ARTICLE VIII - NOTICES

Section 1. Whenever and wherever within the boundaries of the District it shall be made to appear that any person is violating any of the provisions of this ordinance, the Manager may (but is not required as a condition precedent to prosecution for violation) cause to be served, personally or by mail, upon the alleged offender, a notice in writing stating the date and nature of the alleged offense, and directing that the same cease and desist immediately upon service of the notice, and that the act or omission causing such violation be corrected within thirty days or within such reasonable time as the circumstances may require.

Section 2. The failure, neglect and refusal of the person, alleged to be in such violation, to cease and desist therefrom within the time stated in such notice, shall be deemed a violation of the provisions of this ordinance, and punishable as hereinafter provided.

ARTICLE IX - PROTECTION FROM DAMAGE

No person shall maliciously, willfully or wantonly break, damage, destroy, uncover, deface or tamper with any of the sanitary sewers, appurtenances, equipment, machinery, lift stations, or structures of the wastewater treatment center owned and operated by the District. Any violation hereof shall be punishable as hereinafter provided.

ARTICLE X - PENALTIES

Section 1. Any person who is apprehended in the violation of the provisions of any of the articles of this ordinance shall be taken before any judge or magistrate serving in the 18th Judicial Circuit, DuPage County, Illinois and there charged and prosecuted in the name of the People of the State of Illinois, pursuant to the Criminal Code of the State of Illinois as made and provided.

Section 2. Any person found to be violating any of the provisions hereof and who fails, and neglects and refuses to comply with the provisions thereof within the time limited thereby, shall be prosecuted in an action for a misdemeanor instituted on the complaint of the Trustees or Manager of the District before a magistrate or judge of the 18th Judicial Circuit, DuPage County, Illinois, or before a magistrate or judge of the Circuit Court wherein the offense occurs, and upon conviction shall be fined an amount not less than \$25.00 and not exceeding \$500.00 and costs. Each day in which any violation shall continue shall be deemed a separate offense.

Section 3. The District shall have the right to discontinue service to any person, firm or corporation whenever said person, firm or corporation shall have been shown to be in violation of this ordinance.

Section 4. The District shall have the right to plug or disconnect the sanitary sewer at any point in the building sanitary service whenever any person shall be shown to be in violation of this ordinance.

Section 5. In the case of a violation of this ordinance for the nonpayment of wastewater service charges, the District shall have the right to require the termination of water service to property by the supplier of the water, in addition to all other rights as provided by this ordinance.

ARTICLE XI - GENERAL PROVISIONS

Section 1. The foregoing penalties and prosecutions therefore shall not be held or construed as constituting a bar, release or waiver by the District to the prosecution by the District for any civil damages it may sustain because of violations by any person of the provisions hereof, and where it shall appear that such violation has occasioned damage to the appurtenances, machinery, equipment and buildings of the District.

Section 2. It is hereby made the duty of the Manager to enforce full compliance with the provisions of this ordinance in every particular relating to the sewer connections, construction of building sanitary services and plumbing work, and the exclusion of all improper substances from the sanitary sewers.

Section 3. The Manager or other duly authorized person of the District herein authorized to issue permits, shall require any sewer builder or contractors seeking a permit from this District, which will include therein the breaking or entering through the surface or sub-surface of any street in said District, which is also located within the corporate limits of any municipality to produce a permit from said municipality as may be required by said municipality for the breaking or entering the surface or sub-surface of such street, before any permit will issue from the District.

Section 4. The invalidity of any section, clause, paragraph or provision of this ordinance shall not affect the validity of other provisions of this ordinance which may be given effect without such invalid part or parts.

Section 5. All ordinances or parts of ordinances of the District in conflict with the provisions herein are hereby expressly repealed.

Section 6. This ordinance shall be in full force and effect from and after its passage, approval and publication as provided by statute.

DOWNERS GROVE SANITARY DISTRICT Article IIA PRETREATMENT ORDINANCE

(Last Revision Date: April 10, 2015)

AN ORDINANCE ENACTING A GENERAL PRETREATMENT PROGRAM
REGULATING THE USE OF SEWERS
AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF
IN THE DOWNERS GROVE SANITARY DISTRICT

PREAMBLE

WHEREAS, Title III of the Clean Water Act of 1977 (33 USC, Section 1251, et seq.) and the regulations promulgated thereunder relating to the development by publicly owned treatment works of general pretreatment programs, requires the Downers Grove Sanitary District to develop and implement such a general pretreatment program, and

WHEREAS, the Board of Trustees of the Downers Grove Sanitary District has determined that the general pretreatment program as set forth in this ordinance regulating the use of sewers complies with the Act and Regulations, and

WHEREAS, the Board of Trustees of the Downers Grove Sanitary District has determined that the ordinance is necessary for the public health, safety and welfare.

NOW THEREFORE, be it ordained by the Board of Trustees of the Downers Grove Sanitary District, State of Illinois:

Section 1 - GENERAL PROVISIONS

1.1 ENACTMENT

Pursuant to the requirements of Title III of the Clean Water Act Amendments (33 USC 1311 et seq.) and regulations promulgated thereunder, the Illinois Environmental Protection Act of 1970 as amended (Ch. 111 ½. ILL. Rev. Stat. 1983, Sec. 1001, et seq.), and in accordance with the Sanitary District Act of 1917 (III. Rev. Stat. 1983, Ch. 42, Paragraph 298.99, et seq.), the following ordinance is hereby enacted by the Board of Trustees of the Downers Grove Sanitary District, State of Illinois. The Downers Grove Sanitary District, and the Publicly Owned Treatment Works of the Downers Grove Sanitary District are known as the "DGSD".

1.2 PURPOSE AND POLICY

This ordinance regulates the use of sewers, private wastewater disposal, and the discharge of wastewater into the DGSD wastewater system. The ordinance sets forth uniform requirements for discharges into wastewater collection and treatment system for the Downers Grove Sanitary District and enables the District to comply with all applicable State and Federal laws including the Clean Water Act (33 USC 1251 et seq.), and the General Pretreatment Regulations (40 CFR Part 403).

The objectives of this ordinance are:

- (a) To regulate private wastewater disposal systems;
- (b) To prevent the introduction of pollutants into the DGSD that will interfere with the operation of the treatment system;
- (c) To prevent the introduction of pollutants into the DGSD wastewater treatment system which will pass through the treatment works, inadequately treated, into the receiving stream or the atmosphere, or otherwise be incompatible with such works;
- (d) To ensure the quality of the wastewater treatment plant sludge is maintained at a level which allows its use and disposal in compliance with applicable statutes and regulations;
- (e) To improve opportunities to recycle and reclaim wastewater and sludge's;
- (f) To protect DGSD personnel who may be affected by wastewaters and sludge in the course of their employment and to protect the general public;
- (g) To provide for fees for the equitable distribution of the cost of operation, maintenance and improvement of the DGSD; and
- (h) To enable the Downers Grove Sanitary District to comply with its NPDES permit conditions, sludge use and disposal requirements, and any other Federal or State laws to which the DGSD is subject.

This ordinance shall apply to all industrial users of the DGSD. The ordinance authorizes the issuance of wastewater discharge permits; monitoring, compliance and enforcement activities; establishes administrative review procedures; requires industrial user reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

1.3 JURISDICTION

This ordinance shall apply to all industrial users of the DGSD, and to persons outside the DGSD who are by contract or agreement with the DGSD, users of the DGSD.

1.4 EFFECTIVE DATE

The effective date of this ordinance shall be April 13, 1985.

1.5 RIGHT OF REVISION

The DGSD reserves the right to establish by ordinance more stringent limitations or requirements on discharges to the DGSD.

1.6 **SEVERABILITY**

If any provision, paragraph, word, section or article of this ordinance is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections and articles shall not be affected and shall continue in full force and effect.

1.7 CONFLICT

All other ordinances and parts of other ordinances inconsistent or conflicting with any part of this ordinance are hereby repealed to the extent of such inconsistency or conflict.

1.8 ADMINISTRATION

Except as otherwise provided herein, The General Manager of the DGSD shall administer, implement and enforce the provisions of this ordinance.

Section 2 - ABBREVIATIONS AND DEFINITIONS

2.1 ABBREVIATIONS

The following abbreviations have the following designated meanings:

BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
DGSD	Downers Grove Sanitary District

FOG Fats Oils and Grease gpd Gallons per day

IEPA Illinois Environmental Protection Agency

L Liter mg Milligrams

mg/L Milligrams per liter

NCPS National Categorical Pretreatment Standards
NPDES National Pollutant Discharge Elimination System

O&M Operation and Maintenance
POTW Publicly Owned Treatment Works

PSES Pretreatment Standards for Existing Sources
PSNS Pretreatment Standards for New Sources
RCRA Resource Conservation and Recovery Act

SIC Standard Industrial Classification

SWDA Solid Waste Disposal Act (42 USC 6901, et seq.)

TSS Total Suspended Solids
TTO Total Toxic Organics
USC United States Code

USEPA United States Environmental Protection Agency

2.2 **DEFINITIONS**

<u>"A"</u> as in "Cyanide-A", means cyanide amenable to alkaline chlorination.

"Act" means the Federal Water Pollution control Act, as amended. (33 UC, 1251, et seq.)

"Authorized Representative of the Industrial User" is defined as:

(1) A reasonable corporate officer,

- (i) a president, secretary, treasurer or vice president of the corporation in charge of the principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
- (ii) the manager of one or more manufacturing, production or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) A general partner or proprietor if the industrial user submitting the reports is a partnership or sole proprietorship respectively.
- (3) A duly authorized representative of the individual designated in paragraphs (1) and (2) above, if:
 - (i) the authorization is made in writing by the individual described in paragraphs (1) and (2) above; and
 - (ii) the authorization specifies either an individual or position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager or a position of equivalent responsibility for environmental matters for the company; and
 - (iii) the written authorization is submitted to the DGSD.
- (4) If the industrial user is a Federal, State or local governmental facility, an authorized representative shall mean a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or his or her designee.
- (5) If an authorization under paragraph (3) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new authorization, satisfying the requirements of paragraph (3) must be submitted to the DGSD prior to or together with any reports signed by an authorized representative.
- "Baseline Report" means that report required by 40 CFR Section 403.12 (b)(1-7).
- <u>"Biochemical Oxygen Demand (BOD)"</u> means the quantity of oxygen, expressed in mg/L, consumed in the biochemical oxidation of organic matter over a five-day period, at 20 degrees Centigrade, under standard laboratory procedures.
- <u>"Bypass"</u> means the intentional diversion of wastestreams from any portion of an industrial user's treatment facility.
- <u>"Chemical Oxygen Demand (COD)"</u> means the quantity of oxygen consumed from a chemical oxidant (standard potassium dichromate solution) under standard laboratory procedures as described in Standard Methods.
- <u>"Color"</u> means the optical density at the visual wavelength of absorption, relative to distilled water. One hundred percent (100%) transmittance is equivalent to zero (0.0) optical density.
- "Combined Wastestream Formula" means the formula as found in 40 CFR

Section 403.6(e).

- <u>"Composite Sample"</u> means a sample of wastewater taken at selected intervals based on a flow proportional or time proportional method.
- "Cooling Water" means the water discharged from any use such as air conditioning, cooling or refrigeration, to which the only pollutant added is heat.
- "Compatible Pollutant" means biochemical oxygen demand, chemical oxygen demand, FOG, total suspended solids, pH, and fecal coliform bacteria.
- Consistent POTW Treatment Works Removal, Pollutant Removal or Removal"

 means the reduction in the amount of a pollutant or alteration of the
 nature or concentration of a pollutant in the influent of the POTW to a less incompatible
 or concentrated state in the effluent. Consistent POTW removal efficiency shall be the
 difference between the average concentration in the influent of the treatment plant and
 the average concentration of the pollutant in the effluent.
- "DGSD" means the Downers Grove Sanitary District.
- "Director" means the Director of the IEPA.
- <u>"District Ordinance"</u> means "An Ordinance Regulating the Use of Public Sewers and Sewer Systems". Adopted by the Downers Grove Sanitary District on May 16, 1967, and subsequently amended.
- <u>"Existing Source"</u> means any building, structure, facility or installation from which there is or may be a discharge, which is not a new source.
- <u>"Fats, Oils and Grease (FOG)"</u> means any hydrocarbon, fatty acids, soaps, fats, waxes, oils and any other material that is extracted by hexane under standard laboratory procedures.
- <u>"Flow"</u> means any volume of wastewater per unit time.
- <u>"Garbage"</u> means any solid wastes from the domestic and commercial preparation, cooking and dispensing of food and from the commercial handling, storage and sale of produce.
- <u>"General Manager"</u> or <u>"Manager"</u> means the chief administrator of the DGSD, or his designee.
- <u>"Grab Sample"</u> means a sample which is taken from a wastestream on a one-time basis without regard to the flow in the wastestream and without consideration of time.

- <u>"Incompatible Pollutant"</u> means all pollutants other than compatible pollutants as defined in this section.
- Indirect Discharge or Discharger" means the introduction of pollutants into the POTW from any non-domestic source regulated under 307(b), (c), or (d) of the Act.
- <u>"Industrial User"</u> means a source of indirect discharge, including but not limited to a manufacturer, commercial or process facility, or other facility engaged in the purchase or sale of goods, transaction or business or who otherwise renders services to the public.
- "Instantaneous Maximum Allowable Discharge Limit" means the maximum concentration (or loading) of a pollutant to be allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected independent of the industrial flow rate and the duration of the sampling event.
- <u>"Interference"</u> means a discharge, which alone, or in conjunction with a discharge from other sources, both:
 - (1) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal, and
 - (2) therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of the violation) or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Recovery Act (RCRA)), and State regulations contained in any State sludge management plan (prepared pursuant to Subtitle D of the SWDA), the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research and Sanctuaries Act.
- <u>"Medical Waste"</u> means isolations wastes, infectious agents, human blood and blood byproducts, pathological wastes, sharps, body parts and fomites, etiological agents, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes and dialysis wastes.
- "National Categorical Pretreatment Standard" means any pretreatment standard specifying quantities or concentration of pollutants which may be discharged to a POTW by industrial users in specific industrial subcategories as established in regulations by the USEPA in 40 CFR Chapter I, subchapters N Parts 405-471.

"New Source" means:

(1) any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be

applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

- (a) the building, structure, facility or installation is constructed at a site at which no other source is located; or
- (b) the building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
- (c) the production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
- (2) Construction on a site at which the existing source is located results in the modification rather than a new source of the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs (1)(b) or (1)(c) of this section but otherwise alters, replaces or adds to existing process or production equipment.
- (3) Construction of a new source as defines under this paragraph has commences if the owner or operator has:
 - (a) begun, or caused to begin as part of a continuous on-site construction program;
 - (i) any placement, assembly or installation of facilities or equipment; or
 - (ii) significant site preparation work including clearing, excavation or removal of existing building, structures, or facilities which is necessary for the placement, assembly or installation of new source facilities or equipment; or
 - (b) entered into a binding contractual obligation for the purchase of facilities or equipment, which are intended to be used in its operations within a reasonable time. Options to purchase or contracts, which can be terminated or modified without substantial loss and contracts for feasibility engineering and design studies do not constitute a contractual obligation under this paragraph.
- (4) If National Categorical Pretreatment Standards are not applicable, New Source shall mean any building, structure, facility or installation from which there is or may be a discharge of pollutants, the remodeling (if that remodeling could result in assigning of a new standard industrial classification code) or the construction of which commences after the effective date of this ordinance.

<u>"Pass Through"</u> means a discharge which exits the POTW into the waters of the United States in quantities or concentrations which alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

<u>"Person"</u> means any individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, government entity or other legal entity, or their legal representatives, agents or assigns. This definition includes all Federal, State and local governmental entities.

- <u>"pH"</u> means the intensity of the acid or base condition of a solution, calculated by taking the logarithm of the reciprocal of the hydrogen ion concentration.
- <u>"Pollutant"</u> means any dredged spoil, solid waste, incinerator residue, sewage garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, or industrial, municipal and agricultural waste discharged to water.
- <u>"Pretreatment"</u> means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of pollutants to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical or biological processes, by process changes, or by other means, except by diluting the concentration of the pollutants unless allowed by applicable pretreatment standard.
- <u>"Pretreatment Requirements"</u> means any substantive or procedural requirement related to pretreatment imposed on an industrial user, other than a pretreatment standard.
- <u>"Pretreatment Standard or Standards"</u> means prohibitive discharge standards, categorical pretreatment standards, and local limits.
- "Publicly Owned Treatment Works (POTW)" means a treatment works as defined by Section 212 of the Act (33 USC 1292), owned by the Downers Grove Sanitary District. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes and any conveyances which convey wastewater to a treatment plant. The term also means the Downers Grove Sanitary District, which has jurisdiction over the indirect discharges to and the discharges from the treatment works.
- <u>"Sanitary Sewer"</u> means a sewer, which is designed to carry sanitary and industrial wastewater, and to which storm, surface and ground water are unintentionally admitted.
- <u>"Septic Tank Waste"</u> means any sewage from holding tanks such as vessels, chemical toilets, campers and septic tanks.
- <u>"Severe Property Damage"</u> means substantive physical damage to property, damage to treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- "Significant Industrial User (SIU)" means any industrial user of the POTW's wastewater disposal system who:
 - (1) discharges an average of 25,000 gpd or more of process wastewater; or
 - (2) contributes a process wastewater which makes up 5 percent or more of the dry weather average hydraulic or organic capacity of the DGSD; or

- (3) is designated as such by the DGSD on the basis that it has a reasonable potential for adversely affecting the DGSD operation or violating a pretreatment standard or requirement; or
- (4) is subject to any National Categorical Pretreatment Standard.
- "Significant Noncompliance (SNC)" (See Section 9.1 (A) through (H)).
- <u>"Sludge"</u> means the settable solids separated from the liquids during the wastewater treatment process.
- <u>"Slug"</u> means any discharge of water or wastewater in which the concentration of any given pollutant, as measured by a grab sample, exceeds by more than five (5) times the allowable concentration as set forth in Section 3.3 of this ordinance, or any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration, which would interfere or pass-through the POTW.
- <u>"Standard Industrial Classification (SIC) Code"</u> means classification pursuant to the STANDARD INDUSTRIAL CLASSIFICATION MANUAL issued by the U.S. Office of Management and Budget.
- <u>"Storm Water"</u> means any flow occurring during or following any form of natural precipitation, and resulting therefrom, including snowmelt.
- "T" as in "Cyanide-T" means total.
- <u>"Total Metals"</u> means the sum of the concentrations of metals as specified in the applicable National Categorical Pretreatment Standard.
- "Total Solids" means the sum of suspended and dissolved solids.
- <u>"Total Suspended Solids (TSS)"</u> means total suspended matter, expressed in milligrams per liter, that either floats on the surface of, or is in suspension in water, wastewater or other liquids and is removable by laboratory filtration using a Reeve Angel type 934A or 984H glass fiber filter disc as prescribed in STANDARD METHODS.
- <u>"Toxic Pollutant"</u> means any one of 126 pollutants, or combinations of those pollutants, listed as toxic in regulations promulgated by the EPA under provisions of Section 307 (33 USC 1317) of the Act.
- "Treatment Plant Effluent" means any discharge of pollutants from the POTW to the waters of the State.
- <u>"Unpolluted Water"</u> means water of quality equal to or better than the effluent criteria set forth in 35 III. Adm. Code Part 304 or water that would not cause violation of receiving water quality standards set forth in 35 III. Adm. Code Part 302 and 303 and would not be benefited by discharge to the sanitary sewers and wastewater treatment facilities provided.

- "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Industrial User. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless of improper operation.
- <u>"User"</u> means any person who contributes, causes or permits the contribution of wastewater into the Downers Grove Sanitary District system.
- <u>"Wastewater"</u> means the combination of liquid and water carrying wastes from residences, commercial buildings, industrial plants and institutions including polluted cooling water.
 - (1) Sanitary wastewater means the combinations of liquid and water carried wastes discharged from toilets and other sanitary plumbing facilities.
 - (2) Industrial wastewater means a combination of liquid and water carried waste discharged from any industrial user including the wastewater from pretreatment facilities and polluted cooling water.
- "Wastewater Discharge Permit" means the document or documents allowing discharge to the POTW issued to a user by the POTW in accordance with the terms of this ordinance.
- <u>"Wastewater Treatment Plant"</u> or <u>"Treatment Plant"</u> means that portion of the POTW designed to provide treatment of sewage and industrial waste.
- "Waters of the State of Illinois" means all streams, lakes, ponds, marshes, water courses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the State of Illinois or any portion thereof.

Shall is mandatory; may is permissive or discretionary. The use of the singular shall be construed to include the plural and the plural shall include the singular as indicated by the context of its use.

Section 3 – WASTEWATER TREATMENT AND PRETREATMENT REGULATIONS

3.1 USE OF WASTEWATER FACILITIES

- (A) It shall be unlawful for any person to deposit or discharge, or cause to be deposited or discharged, to any DGSD treatment plant, any solid, liquid or gaseous waste unless through a connection approved by the DGSD.
- (B) It shall be unlawful to discharge wastewater, without an NPDES permit, to any natural outlet within the DGSD or in any area under its jurisdiction.

3.2 PROHIBITIVE DISCHARGE STANDARDS

- (A) No person shall discharge or cause to be discharges any storm-water, foundation drain-water, groundwater, roof runoff, surface drainage, cooling waters, or any other unpolluted water to any DGSD sanitary sewer.
- (B) No user shall contribute or cause to contribute, directly or indirectly, any pollutant or wastewater, which would interfere with the operation or performance of the DGSD treatment plant or will pass through the treatment plant.
- (C) The following general prohibitions shall apply to all users of the DGSD whether or not the user is subject to National Categorical Pretreatment Standards or any other National, State or local pretreatment standards or requirements. A user shall not contribute the following substances to the DGSD system:
 - (1) Pollutants which create a fire or explosive hazard in the municipal wastewater collection system and the treatment plant, including, but not limited to wastestreams with a closed cup flash-point of less than 140 degrees F (60 degrees C) using the test methods specified in 40 CFR Part 261.21.
 - (2) Solids or viscous pollutants in amounts which will cause obstruction of the flow in the DGSD collection system or treatment plant resulting in interference with the operation of the wastewater treatment facilities, including but not limited to: means grease, garbage with particles greater than one half inch (1/2") in any dimension, animal guts, tissues, paunch manure, bones, hair, hides, or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metals, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, tar, asphalt residues from road work, refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes or tumbling and deburring stones.
 - (3) Any wastewater which will cause corrosive structural damage to the DGSD treatment plant or District sewers, but in no case wastewater having a pH of less than 5.5 or greater than 9.0, unless more strictly limited elsewhere in this ordinance.
 - (4) Any wastewater containing incompatible pollutants in sufficient quantities, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, cause a violation of the water quality standards of the receiving waters of the DGSD, exceed the limitations set forth in a National Categorical Pretreatment Standard (when effective) or in Section 3.3, of this ordinance, or create a public nuisance.
 - (5) Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastewaters are sufficient to create a public nuisance or hazard to life, or are sufficient to prevent entry into sewers for their maintenance and repair.
 - (6) In no case shall a substance discharged to the DGSD cause the DGSD to be in noncompliance with sludge use or disposal criteria, guidelines or regulations developed under section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the RCRA, SWDA, the Clean Water Act, the Toxic Substance Control Act, or State criteria applicable to the sludge management method being used.
 - (7) Any substance which will cause the DGSD to violate its NPDES permit or the receiving stream water quality standards.
 - (8) Any wastewater having a temperature at the point of discharge to the DGSD which will inhibit biological activity in the DGSD treatment plant resulting in interference; in no case shall wastewater be introduced to the DGSD which exceeds 65 degrees C (157 degrees F) or which exceeds 40 degrees C (104 degrees F) at the treatment plant.

- (9) Any wastewater containing pollutants, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the treatment process, sludge treatment process or disposal procedure, will pass-through the plant to the receiving stream, or which will constitute a hazard to humans and animals
- (10) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by State and Federal regulations.
- (11) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass-through.
- (12) Any pollutants which result in the presence of toxic gases, vapors or fumes within the DGSD in a quantity that may cause acute worker health and safety problems.
- (13) Any trucked or hauled pollutants, except at discharge points designated by the DGSD in accordance with Section 3.10.
- (14) Any wastewater which may contain more than 100 mg/L concentration of fats, oils and grease (FOG).
- (15) Ammonia nitrogen in amounts that would pass-through the treatment plant and cause a violation of the water quality standards of the receiving stream.
- (16) Any discharge exceeding the standards established in 35 III. Adm. Code 307.
- (17) Any slug discharge to the DGSD.
- (18) Any wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to dye wastes and vegetable tanning solution, which consequently imparts a color to the treatment plant's effluent thereby violating the DGSD's NPDES permit. Color (in combination with turbidity) shall not cause the treatment plant's effluent to reduce the depth of the compensation point for photosynthetic activity by more than 10 percent from the seasonally established norm for aguatic life.
- (19) Any slugs, screening, or other residues from the pretreatment of industrial wastes.

Compliance with the provisions of this Section 3.2 shall be required on the effective date of promulgation of this ordinance.

3.3 SPECIFIC LIMITATIONS ON DISCHARGE

Discharges from each separate discharge point of a user, as measured under the provisions of this ordinance, shall not contain in excess of the following concentrations based upon a 24-hour composite sample. Multiple industrial wastewater discharges from a permitted facility may be combined in a flow-weighted manner to determine the compliance with the following limitations for a 24-hour composite sample:

POLLUTANT MAXIMUM CONCENTRATION

Arsenic, Total	0.52 mg/L
Cadmium, Total	0.28 mg/L
Chromium, Total	27.0 mg/L
Copper, Total	2.54 mg/L
Lead, Total	2.15 mg/L
Mercury, Total	0.0005 mg/L
Nickel, Total	4.27 mg/L
Silver, Total	0.57 mg/L
Zinc, Total	2.61 mg/L

pH shall be in the range of 5.5 - 9.0 Standard Units, for any grab sample. Hexavalent Chromium shall be limited to 0.81 mg/L for any grab sample. Total Cyanide shall be limited to 1.34 mg/L for any grab sample.

Compliance with the provisions of this section shall be required within one year of the effective date of this ordinance.

3.4 INCORPORATION OF NATIONAL CATEGORICAL PRETREATMENT STANDARDS

The National Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471 are hereby incorporated.

3.5 PRETREATMENT

- (A) All industrial users shall provide necessary wastewater pretreatment as required to comply with this ordinance and shall achieve compliance with all applicable pretreatment standards within the time limitations as specified by appropriate statutes, regulations and this ordinance. National Categorical Pretreatment Standards shall be added to this ordinance as amendments. Any facilities required to pretreat wastewater to a level acceptable to the DGSD shall be provided, properly operated and maintained at the user's expense. All industrial users shall obtain the necessary construction permits from IEPA. Such pretreatment facilities shall be under the control and direction of an IEPA certified Wastewater Treatment Operator. Any subsequent significant changes to the pretreatment facilities or method of operation shall be reported to and accepted by the DGSD prior to the industrial user's initiation of the changes.
- (B) Industrial users with pretreatment facilities are prohibited from bypassing the pretreatment system if it will result in a violation of pretreatment standards, unless: bypass is unavoidable to prevent loss of life, personal injury or severe property damage; there is no feasible alternative to the bypass, such as auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime; and the industrial user notified the DGSD of the bypass either, a written notice at least 10 days in advance of bypass if it is due to a non-emergency condition, or a verbal notice within at least 24-hours of when the industrial user becomes aware of the bypass in the case of an emergency bypass.

3.6 COMPLIANCE WITH CATEGORICAL DEADLINES AND LIMITATIONS

Compliance by existing sources with categorical pretreatment standards shall be within 3 years of the date the standard is effective unless a shorter compliance time is specified in the appropriate Subpart of 40 CFR Chapter I, Subchapter N. Existing sources which become industrial users subsequent to promulgation of an applicable categorical pretreatment standard shall be considered existing industrial users except where such sources meet the definition of a New Source as defined in this ordinance. New Sources shall install and have in operating condition and shall "start-up" all pollution control equipment required to meet applicable pretreatment standards before beginning to discharge. Within the shortest feasible time (not exceeding 90 days), new sources must meet all applicable Pretreatment Standards.

3.7 EXCESSIVE DISCHARGE

No user shall ever increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate pretreatment to achieve compliance with the limitations contained in the National Categorical Pretreatment Standards (NCPS) or in any other pollutant specific limitations developed by the DGSD. The DGSD may impose mass limitations on industrial users, which are using dilution to meet applicable pretreatment standards or requirements, or in other cases where the imposition of mass limitations is appropriate.

3.8 SLUG CONTROL PLANS

The General Manager may require any industrial user to develop and implement a slug control plan. The General Manager shall evaluate whether each significant industrial user needs such a plan within one year of being identified as significant. Applicable slug control requirements will be incorporated into each industrial user's wastewater discharge permit and follow up evaluations shall monitor existing plans. Any industrial user required to develop and implement a slug control plan shall submit a plan which addresses, at a minimum, the following:

- (A) description of discharge practices, including non-routine batch discharges;
- (B) description of stored chemicals;
- (C) procedures for immediately notifying the DGSD of any accidental or slug discharge. Such notification must also be given for any discharge, which would violate any of the prohibited discharges in Section 3.2 of this ordinance;
- (D) procedures to prevent adverse impact of any accidental or slug discharge. Such procedures include, but are not limited to: inspection and maintenance of storage areas; handling and transfer of materials; loading and unloading operations; control of plant site run-off; building of containment structures or equipment; training of workers; measures for containing toxic organic pollutants (including solvents); and/or measures and equipment for emergency response.

3.9 TENANT RESPONSIBILITY

Where an owner of property leases premises to any other person as a tenant under any rental or lease agreement, if either the owner or the tenant is an industrial user, either or both may be held responsible for compliance with the provisions of this ordinance.

3.10 HAULED WASTEWATER

- (A) Septic tank wastes may be accepted into the DGSD treatment plant at a designated receiving structure within the treatment plant area and at such times as are established by the General Manager, provided such wastes do not violate Sections 3.2 through 3.4 of this ordinance or any other requirements established or adopted by the District.
- (B) The discharge of hauled industrial septage shall be prohibited under the terms of this ordinance unless prior approval and a wastewater discharge permit are issued by the District. No such permit shall be granted for any hauled industrial septage which would cause interference or pass-through the treatment plant or otherwise adversely affect operations of the DGSD treatment plant.
- (C) Fees for dumping hauled wastes shall be established as part of the user fee system as authorized in Article VI of "An Ordinance Regulating the Use of Public Sewer Systems" of the Downers Grove Sanitary District, as amended.
- (D) Hauled grease separator waste Hauled grease separator waste originating from grease separators of customers of DGSD using said grease separators in accordance with rules established by DGSD may be discharged at the DGSD treatment plant as specified here.
 - (1) Only DGSD authorized permit holders may discharge hauled grease separator waste at the DGSD treatment plant.
 - (a) Any person wishing to obtain authorization to discharge hauled grease separator waste at the DGSD treatment plant shall submit a Waste Transporter Identification Application on a form provided by DGSD complete with all supplementary information as specified on the application form and in this section. If approved, the applicant will be issued a Waste Transporter Permit. The following supplementary information shall be included with the application:
 - (i) Proof of comprehensive general liability and auto liability insurance which includes DGSD as an additional insured and includes provisions for informing DGSD ten days prior to the time of policy cancellations or renewals. Permit holders shall maintain general liability insurance and automobile liability insurance in such amounts as DGSD may, from time to time, deem appropriate.
 - (ii) A list of the vehicles applicant has in service for transportation of liquid waste. The list shall include the make and model, the state of registration, the state vehicle license number and the tank volume, in gallons, for each vehicle operated.
 - (iii) Proof that applicant's vehicles which are to discharge at the DGSD treatment plant are in compliance with all applicable laws and regulations applicable to waste transporters within the jurisdictions within which applicant operates.
 - (iv) Volumes and type of waste transported each year for the last three years. A new business shall submit an estimate of volumes for the first year.
 - (b) Any permit holder who has been granted authorization to discharge hauled grease separator waste at the DGSD treatment plant shall annually provide proof to the General Manager of continued liability insurance and proof of continued compliance with applicable laws and regulations.
 - (c) DGSD may rescind a permit holder's authorization to discharge hauled waste if the permit holder is found to be in violation of the provisions of this ordinance or other DGSD ordinances.
 - (2) Any hauled grease separator waste which is acceptable to DGSD may be discharged only at the District's Hauled Grease Waste Receiving Station located at 5003 Walnut Avenue, Downers Grove, Illinois, 60515. Hauled grease separator waste may be discharged at

- this location only between the hours of 8:00 AM and 3:30 PM, Monday through Friday, excluding holidays or at other times prearranged at the convenience of the District. A truck may discharge grease separator waste from non-DGSD customers when capacity is available after DGSD customers' disposal needs are met and the waste is consistent with provisions of the District's ordinance.
- (3) No permit holder shall discharge or cause to be discharged hauled grease separator waste without presenting a completed Hauled Grease Separator Waste Receipt to the receiving station attendant at the time of discharge. The Hauled Grease Separator Waste Receipt shall be on a form provided by DGSD and shall fully identify, to the satisfaction of the attendant, the source and nature of the grease separator waste.
 - (a) A sample of each load of hauled grease separator waste to be discharged shall be collected by the receiving station attendant and appropriate screening analyses performed prior to discharge being allowed. The sample will be retained for such further analyses as deemed necessary to determine its compliance with the requirements of DGSD's sewer use ordinance and applicable local, state and federal regulations. In the event this hauled grease separator waste is found to be in violation of said ordinance or regulations, approval to discharge to DGSD facilities may be revoked and/or any damages incurred by DGSD will be charged to the permit holder discharging said grease separator waste.
- (4) Any permit holder granted authorization under paragraph (1) to discharge hauled grease separator waste at the point designated herein and in possession of proper Hauled Grease Separator Waste Receipts assents to the conditions hereinafter stated and agrees to be bound by his conditional obligations and duties, to wit:
 - (a) The permit holder shall comply with all DGSD regulations and follow the directions of DGSD employees while on DGSD premises.
 - (b) The permit holder agrees to indemnify and to hold DGSD harmless from any and all damage and expenses which may be suffered by him by reason of any or all of his acts done on its premises, including but not as a limitation, the discharge of the aforesaid hauled grease separator waste which violates any standard or standards of DGSD's sewer use ordinance.
 - (c) The permit holder shall, in the event of spills or leakage of hauled grease separator waste on DGSD's premises, as a result of his acts or faulty equipment, appropriately clean, to the satisfaction of the attendant on duty, the area involved.
- (5) DGSD has the right to refuse the discharge of any hauled grease separator waste brought to the Hauled Grease Waste Receiving Station if, in the opinion of the attendant on duty, based on a review of the Hauled Grease Separator Waste Receipt, District records and the screening analyses:
 - (a) The hauled grease separator waste does not meet the conditions of this ordinance, or
 - (b) The hauled grease separator waste could cause operational and maintenance problems, be detrimental to the health of DGSD employees or cause violations of DGSD's NPDES Permit or any other City, State or Federal laws and regulations.
- (6) Permit holders shall pay a fee for hauled grease separator waste discharged pursuant to this ordinance based upon the hauled grease separator waste user charges in effect at the time of the discharge. The fee for each discharge will be calculated based upon the full volume of the transport vehicle, or upon the actual volume delivered as verified with a NTEP certified truck net weight ticket provided by the permit holder at the time of delivery. Permit holders will be billed by the District monthly. If any charges billed

are not paid by the due date indicated on any bill rendered, then an additional late payment charge, based on the percentage established by ordinance for late payments of wastewater user charges, is hereby imposed for each month or portion thereof the bill remains unpaid beyond the due date. When any permit holder's monthly charge has not been paid and has been delinquent for more than fifteen days after the due date, then the District may refuse to accept any further waste discharges from that permit holder.

Section 4 - WASTEWATER DISCHARGE PERMIT ELIGIBILITY

4.1 WASTEWATER SURVEY

When requested by the General Manager, all industrial users must submit information on the nature and characteristics of their wastewater by completing a wastewater survey, on a form authorized by the General Manager. New users must complete the survey prior to commencing their discharge. Existing users shall be periodically surveyed to update the information on file. Failure to complete this survey shall be considered a violation of this ordinance.

4.2 PROHIBITION OF DISCHARGE WITHOUT PERMIT

- (A) It shall be unlawful for any significant industrial user to discharge wastewater into the Downers Grove Sanitary District's system without a permit, or contrary to the conditions of the permit, issued by the General Manager in accordance with the provisions of this ordinance.
- (B) Any violation of the terms and conditions of a wastewater discharge permit shall be deemed a violation of this ordinance and subjects the wastewater discharge Permittee to the sanctions set out in Section 9 of this ordinance. Obtaining a wastewater discharge permit does not relieve the Permittee of its obligation to comply with Federal and State pretreatment standards or requirements or with any other requirement of Federal, State or local law.
- (C) The General Manager may require other industrial users, including liquid waste haulers to obtain wastewater discharge permits as necessary to carry out the purposes of this ordinance.

4.3 WASTEWATER DISCHARGE PERMITTING FOR EXISTING SOURCES

Any significant industrial user which discharges industrial waste into the DGSD system prior to the effective date of this ordinance and who wishes to continue such discharges in the future, shall, within ninety (90) days after the said date, apply to the DGSD for a wastewater discharge permit in accordance with Section 4.4 below, and shall not cause or allow discharges to continue after one hundred eighty (180) days of the effective date of this ordinance except in accordance with a wastewater discharge permit issued by the General Manager.

4.4 WASTEWATER DISCHARGE PERMITTING FOR NEW CONNECTIONS

Any significant industrial user proposing to begin or recommence discharging industrial wastes into the DGSD system must obtain a wastewater discharge permit prior to the beginning or recommencing of such

discharge. An application for this wastewater discharge permit must be filed at least ninety (90) days prior to the date upon which any discharge will begin.

4.5 WASTEWATER DISCHARGE PERMIT APPLICATION CONTENTS

In order to be considered for a wastewater discharge permit, all industrial users required to have a wastewater discharge permit must submit the information required in Section 6.1(C) of this ordinance. The General Manager shall approve a form to be used as a permit application. In addition, the following information may be required:

- (A) description of activities, facilities, and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility which are, or could be accidentally or intentionally discharged to the DGSD;
- (B) number and type of employees, hours of operation;
- (C) each product produced by type, amount or processes, and rate of production;
- (D) type and amount of raw materials processed (average and maximum per day);
- (E) site plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge;
- (F) time and duration of discharge;
- (G) any other information as may be deemed necessary by the General Manager to evaluate the wastewater discharge permit application;
- (H) if a pretreatment system is required, plans for its design and construction must be submitted to the General Manager for review and approval. A review fee will be assessed based on the estimated cost of the system in accordance with "An Ordinance Regulating the Use of Public Sewer Systems: as adopted May 16, 1967 and as amended, Article IV, Section 1.

Incomplete or inaccurate applications will not be processed and will be returned to the industrial user for revision.

4.6 APPLICATION SIGNATORIES AND CERTIFICATION

All wastewater discharge permit applications and industrial user reports shall contain the following certification statement and shall be signed by an authorized representative of the industrial user:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

4.7 WASTEWATER DISCHARGE PERMIT DECISIONS

The DGSD will evaluate the data furnished by the significant industrial user and may require additional information. Within ninety (90) days of the receipt of a complete wastewater discharge permit application, the General Manager will determine whether or not to issue a wastewater discharge permit. The General Manager may deny any application for a wastewater discharge permit.

The General Manager shall notify any user whose application for a permit is being denied in writing within ten (10) days of the determination to deny the permit. A user denied issuance of a permit may appeal to the DGSD Board of Trustees as described in Section 5.3.

Section 5 – WASTEWATER DISCHARGE PERMIT ISSUANCE

5.1 WASTEWATER DISCHARGE PERMIT DURATION

Wastewater discharge permits shall be issued for a specified time period not to exceed five (5) years. A wastewater discharge permit may be issued for a period of less than five (5) years, at the discretion of the General Manager. Each wastewater discharge permit shall indicate the specific date upon which it will expire.

5.2 WASTEWATER DISCHARGE PERMIT CONTENTS

Wastewater discharge permits shall include such conditions as are reasonably deemed necessary by the General Manager to prevent pass-through or interference, protect the quality of the receiving stream, protect worker health and safety, facilitate sludge management and disposal, protect ambient air quality, and protect against damage to the DGSD wastewater treatment and collection systems.

- (A) Permits must contain the following:
 - (1) specific permit number, date of issuance and expiration date;
 - (2) a statement that the wastewater discharge permit is non-transferable without prior notification to and approval from the DGSD, and provisions for furnishing the new owner or operator with a copy of the existing wastewater discharge permit;
 - (3) effluent limits applicable to the user based on applicable standards in Federal, State, or local law:
 - (4) self-monitoring, sampling, reporting, notification, and record keeping requirements. These requirements shall include an identification of pollutants to be monitored, sampling location, sampling frequency, and sample type based on Federal, State or local law;
 - (5) statement of applicable civil, criminal, and administrative penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedule may not exceed beyond that required by applicable Federal, State or local law.
- (B) Wastewater discharge permits may contain, but need not be limited to the following:
 - (1) limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization;
 - (2) limits on the instantaneous, daily and monthly average and/or maximum concentration, mass, or other measure of identified wastewater pollutants or properties;
 - (3) requirements for the installation of pretreatment technology, pollutant control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works;
 - (4) development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated, or routine discharges;
 - (5) development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the DGSD;

- (6) the unit charge or schedule of industrial user fees for the management of the wastewater discharged to the DGSD;
- (7) requirements for installation and maintenance of inspection and sampling facilities and equipment;
- (8) a statement that compliance with the wastewater discharge permit does not relieve the Permittee of responsibility for compliance with all applicable Federal, State, and local pretreatment standards, including those which become effective during the term of the wastewater discharge permit;
- (9) other conditions as deemed appropriate by the General Manager to ensure compliance with this ordinance, State and Federal laws, rules and regulations.

5.3 WASTEWATER DISCHARGE PERMIT APPEALS

Any persons, including the industrial user, may petition the Board of Trustees of the Downers Grove Sanitary District to reconsider the terms and conditions of a wastewater discharge permit within thirty (30) days of its issuance.

- (A) Failure to submit a timely petition for review shall be deemed to be a waiver of the administrative appeal.
- (B) In its petition, the appealing party must indicate the wastewater discharge permit provisions objected to, the reasons for the objection, and the alternative condition, if any, it seeks to place in the wastewater discharge permit.
- (C) The effectiveness of the wastewater discharge permit shall not be stayed pending the appeal.
- (D) If the DGSD fails to act within thirty (30) days, a request for reconsideration shall be deemed to be denied. Decisions not to reconsider a wastewater discharge permit, not to issue a wastewater discharge permit, or not to modify a wastewater discharge permit shall be considered final administrative action for the purposes of judicial review.

5.4 WASTEWATER DISCHARGE PERMIT MODIFICATION

The General Manager may modify the wastewater discharge permit for good cause including, but not limited to, the following:

- (A) to incorporate any new or revised Federal, State or local pretreatment standards or requirements;
- (B) to address significant alterations or additions to the industrial user's operation, processes, or wastewater volume or character since the time of wastewater discharge permit issuance;
- (C) a change in the DGSD system that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- (D) information indicating that the permitted discharge poses a threat to the DGSD's treatment system, personnel, or the receiving stream;
- (E) violation of any terms or conditions of the wastewater discharge permit;
- (F) misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting;
- (G) to correct typographical or other errors in the wastewater discharge permit;
- (H) to reflect a transfer of the facility ownership and/or operation to a new owner/operator.

The filing of a request by the Permittee for a wastewater discharge permit modification does not stay any wastewater discharge permit condition.

5.5 WASTEWATER DISCHARGE PERMIT TRANSFER

Wastewater discharge permits may be reassigned or transferred to a new owner and/or operator only if the Permittee gives at least thirty (30) days advance notice to the General Manager and the General Manager approves the wastewater discharge permit transfer.

The notice to the General Manager must include a written certification by the new owner and/or operator which:

- (A) states that the new owner and/or operator has no immediate intent to change the facility's operations and processes;
- (B) identifies the specific date on which the transfer is to occur;
- (C) acknowledges full responsibility for complying with the existing wastewater discharge permit.

Failure to provide advance notice of a transfer renders the wastewater discharge permit void on the date of facility transfer.

5.6 WASTEWATER DISCHARGE PERMIT REVOCATION

Wastewater discharge permits may be revoked for the following reasons:

- (A) failure to notify the DGSD of significant changes to the wastewater prior to changed discharge;
- (B) failure to provide prior notification to the DGSD of changed condition pursuant to Section 6.5;
- (C) misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
- (D) falsifying self-monitoring reports;
- (E) tampering with monitoring equipment;
- (F) refusing to allow DGSD personnel timely access to the facility premises and records;
- (G) failure to meet effluent limitations;
- (H) failure to pay fines;
- (I) failure to pay sewer charges;
- (J) failure to meet compliance schedules;
- (K) failure to complete a wastewater survey or the wastewater discharge permit application;
- (L) failure to provide advance notice of the transfer of a permitted facility;
- (M) violation of any pretreatment standard or requirement, or any terms of the wastewater discharge permit or the ordinance.

5.7 WASTEWATER DISCHARGE PERMIT RENEWAL

A significant industrial user shall apply for wastewater discharge permit renewal by submitting a completed wastewater discharge permit application in accordance with Section 4.4 a minimum of ninety (90) days prior to the expiration of the industrial user's existing wastewater discharge permit.

Section 6 - REPORTING REQUIREMENTS

6.1 BASELINE MONITORING REPORTS

Industrial users subject to National Categorical Pretreatment Standards shall submit baseline reports to the DGSD in a form prescribed and furnished by the DGSD.

- (A) Within either 180 days after the effective date of a categorical pretreatment standard, or the final administrative decision on a categorical determination under 40 CFR Part 403.6(a)(4), whichever is later, existing industrial users subject to such categorical standards, and currently discharging to or scheduled to discharge to the DGSD, shall submit to the Downers Grove Sanitary District a report which has the information listed in paragraph (C), below.
- (B) New sources and sources that become industrial users subsequent to the promulgation of any applicable categorical pretreatment standard, shall be required to submit a baseline monitoring report at least ninety (90) days prior to commencement of their discharge. The report shall include the information in paragraph (C), below. A new source shall also be required to report the method of pretreatment it intends to use to meet applicable pretreatment standards. A new source shall also give estimates of its anticipated flow and quantity of pollutants discharged.
- (C) In support of the baseline report, the industrial user shall submit, in units and terms specified in the application, the following information:
 - (1) Identifying information The name and address of the facility, including the names of the operators and owners.
 - (2) Environmental permits A list of any environmental control permits held by the facility.
 - (3) Description of the operation A brief narrative description of the nature of the operations, average rate of production, and all the Standard Industrial Classification (SIC) codes that apply to the facility. This description shall include a schematic process diagram, which indicates the points of discharge to the DGSD system of regulated processes.
 - (4) Flow measurement Information showing the measured average daily and maximum daily flow, in gallons per day to the DGSD from regulated process streams and other streams, as necessary to allow use of the combined waste-stream formula set out in 40 CFR Part 403.6(e).
 - (5) Measurement of pollutants The industrial user shall identify the categorical pretreatment standards applicable to each regulated process, and shall:
 - (a) Submit the results of sampling and analysis identifying the nature and concentration (and/or mass, where required by the standard or the DGSD) of the regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum and long-term average concentrations (or mass, where required) shall be reported. The sample shall be representative of daily operations.
 - (b) Where feasible, obtain samples through the flow-proportional composite sampling techniques specified in the applicable National Categorical Pretreatment Standards. Where compositing is not feasible, four (4) grab samples shall be collected and analyzed.
 - (c) Sampling must be performed in accordance with procedures set out in Section 6.10.
 - (6) Certification A statement reviewed by the industrial user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the pretreatment standards and requirements.
 - (7) Compliance schedule If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the industrial user will provide such additional pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment

- standard. A compliance schedule pursuant to this section must meet the requirements set out in Section 6.2 of this ordinance.
- (8) All baseline monitoring reports must be signed and certified in accordance with Section 4.6

6.2 COMPLIANCE SCHEDULE PROGRESS REPORTS

The following conditions shall apply to the schedule required in Section 6.1(7). The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include the hiring of an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, beginning and conducting routine operations). No increment referred to above shall exceed nine (9) months. The industrial user shall submit a progress report to the General Manager no later than fourteen (14) days following each date in the schedule and the final date of compliance. These reports shall include as a minimum, whether or not the user complied with the increment of progress, the reason for any delay, and (if appropriate) the steps being taken by the industrial user to return to the established schedule. In no event shall more than nine (9) months elapse between such progress reports to the General Manager.

6.3 <u>REPORTS ON COMPLIANCE WITH CATEGORICAL PRETREATMENT</u> STANDARD DEADLINE

Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards, or, in the case of a new source, following commencement of the introduction of wastewater into the DGSD system, any industrial user subject to such pretreatment standards and requirements shall submit a report, to the District containing the information described in Section 6.1(C)(4-6). For industrial users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR Part 403.6(c), this report shall contain a reasonable measure of the industrial user's long term production rate. For all other industrial users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the industrial user's actual production rate during the appropriate sampling period. All reports must be signed and certified in accordance with Section 4.6 of this ordinance.

6.4 PERIODIC COMPLIANCE REPORTS

- (A) Any significant industrial users subject to a pretreatment standard shall, at a frequency determined by the General Manager but in no case less than twice per year in July and January, submit a report indicating the nature and concentration of pollutants in the discharge which are limited by such applicable pretreatment standards, and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with section 4.6 of this ordinance.
- (B) All wastewater samples must be representative of the industrial user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean and maintained in good working order at all times. The failure of an industrial user to keep its monitoring facility in good working order shall not be grounds for the industrial user to claim that sample results are unrepresentative of its discharge.

- (C) At the discretion of the General Manager the reporting period of an industrial user may be altered from semi-annual to quarterly or monthly.
- (D) If an industrial user subject to the reporting requirement in this section monitors any pollutants more frequently than required by the wastewater discharge permit, using the procedures described in Section 6.10 of this ordinance, the results of all monitoring shall be included in the report.

6.5 REPORT OF CHANGED CONDITIONS

Each industrial user is required to notify the General Manager of any planned significant changes to the industrial user's operations or systems which might alter the nature, quality or volume of its wastewater at least sixty (60) days before the change.

- (A) The General Manager may require the industrial user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 4.5 of this ordinance.
- (B) The General Manager may issue a wastewater discharge permit under Section 4.7 or modify an existing wastewater discharge permit under Section 5.4 of this ordinance.
- (C) No industrial user shall implement the planned changed condition(s) until and unless the General Manager has responded to the industrial user's notice.
- (D) For the purpose of this requirement, flow increases of ten percent (10%) or greater, and/or the discharge of any previously unreported pollutants, shall be deemed a significant change.
- (E) Planned significant changes include changes that occur at the facility affecting the potential for a slug discharge the reporting of which shall allow the General Manager to reevaluate the need for a slug control plan or other actions to prevent such discharges.

Planned significant changes include changes that occur at the facility affecting the potential for a slug discharge, the reporting of which shall allow the General Manager to reevaluate the need for a slug control plan or other actions to prevent such discharges.

6.6 REPORTS OF POTENTIAL PROBLEMS

- (A) In the case of any discharge, including, but not limited to: accidental discharges; discharges of a non-routine, episodic nature; a non-customary batch discharge, or a slug load which may cause potential problems with the DGSD's system (including a violation of the prohibited discharge standards in Section 3.2 of this ordinance), it is the responsibility of the industrial user to immediately telephone and notify the District of the incident. This notification shall include the location of the discharge, type of material, concentration and volume, if known, and corrective actions to be taken by the industrial user.
- (B) Within five (5) days following such discharge, the industrial user shall, unless waived by the General Manager, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the industrial user to prevent similar future occurrences. Such notification shall not relieve the industrial user of any expense, loss, damage or other liability which may be incurred as a result of damage to the DGSD, natural resources, or any other damage to person or property; nor shall such notification relieve the industrial user of any fines, civil penalties, or other liability which may be imposed by this ordinance.
- (C) Failure to notify the DGSD of potential problem discharges shall be deemed a separate violation of this ordinance.

(D) A notice shall be permanently posted on the industrial user's bulletin board or other prominent place, advising employees whom to call in the event of a discharge described in paragraph (A), above. Employer's shall ensure that all employees who may cause, or suffer such a discharge to occur, are advised of the emergency notification procedure.

6.7 REPORTS FOR NON-SIGNIFICANT INDUSTRIAL USERS

All industrial users not subject to categorical pretreatment standards and not required to obtain a wastewater discharge permit shall provide appropriate reports to the DGSD as the General Manager may require.

6.8 NOTICE OF VIOLATION/REPEAT SAMPLING REPORTING

If sampling performed by an industrial user indicates a violation, the industrial user must notify the DGSD within 24-hours of becoming aware of the violation. The industrial user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the DGSD within thirty (30) days of becoming aware of the violation. The industrial user is not required to resample if the DGSD performs monitoring at the industrial user at least once per month, or if the DGSD performed sampling between the industrial user's initial sampling and when the industrial user received the results of this sampling.

6.9 NOTIFICATION OF THE DISCHARGE OF HAZARDOUS WASTE

- (A) Any industrial user who commences the discharge of hazardous waste shall notify the DGSD, the USEPA, Region V Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the DGSD of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch or other). If the industrial user discharges more than 10 kilograms of such waste per calendar month to the DGSD, the notification shall also contain the following information to the extent such information is known and readily available to the industrial user: an identification of the hazardous constituents contained in the wastes, and an estimation of the mass of constituents in the waste-stream expected to be discharged during the following twelve (12) months. All notifications must take place no later than 180 days after the discharge commences. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed discharges must be submitted under Section 6.5, above. The notification requirement of this section does not apply to pollutants already reported under self-monitoring requirements of Section 6.1-6.4, above.
- (B) Dischargers are exempt from the requirements of paragraph (A) of this section during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous waste as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the industrial user discharges more than such quantities of any hazardous waste do not require additional notification.
- (C) In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste, the industrial user must notify the DGSD, USEPA, Region

- V Waste Management Division Director, and the State hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.
- (D) In the case of any notification made under this section, the industrial user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

6.10 ANALYTICAL REQUIREMENTS

All measurements, tests and analyses to which reference is made in this ordinance shall be determined and performed in accordance with the procedures established by the Administrator pursuant to Section 304(g) of the Act and contained in 40 CFR Part 136 and amendments thereto or with any other test procedures approved by the Administrator. Where 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question or where the Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures approved by the Administrator.

6.11 SAMPLE COLLECTION

- (A) Except as indicated in Section (B), below, the industrial user must collect wastewater samples using flow proportional composite collection techniques. In the event flow proportional sampling is infeasible, the General Manager may authorize the use of time proportional sampling or grab sampling where the user demonstrates that this will provide representative samples of the effluent being discharged. In additions, grab samples may be required to show compliance with instantaneous discharge limits.
- (B) The baseline monitoring reports described under Section 6.1 require the use of composite sampling methods appropriate to the character of the regulated process discharge. If composite samples are not feasible, a minimum of four (4) grab samples may be collected and analyzed if approved by the General Manager.
- (C) Samples collected for analysis of oil and grease (FOG), temperature, pH, cyanide, phenols, toxicity, sulfides, and volatile organic chemicals must be obtained using grab sample collection techniques.

6.12 DETERMINATION OF NON-COMPLIANCE

The General Manager may use grab sample(s) to determine noncompliance with pretreatment standards.

6.13 TIMING OF REPORT SUBMISSIONS

Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility serviced by the U. S. Postal Service, the date of receipt of the report shall govern.

6.14 RECORD KEEPING

Industrial users shall retain, and make available for inspection and copying, all records and information required to be retained under this ordinance. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning

compliance with this ordinance, or where the industrial user has been specifically notified of a longer retention period by the General Manager.

Section 7 – COMPLIANCE MONITORING AND INSPECTION OF INDUSTRIAL USERS

7.1 MONITORING FACILITIES

- (A) The DGSD shall require to be provided and operated at the significant industrial user's own expense, monitoring facilities to allow inspection, sampling and flow measurement of the building sewer, pretreatment facilities and/or internal drainage systems. The monitoring facilities will normally be situated on the user's premises, but the DGSD may, when such a location would be impractical and cause undue hardship to the user, allow the facility to be constructed in the public street or sidewalk area and located so it will not be obstructed by landscaping, parked vehicles, or other activities of the user. Any facility to be constructed in the public street or sidewalk area may require permits or approvals from other governmental agencies.
- (B) Where required by the DGSD, additional control manholes or sampling chambers shall be provided at the end of each industrial process within an industrial user's facility suitable for the determination of compliance with pretreatment standards.
- (C) Whenever required by a wastewater discharge permit, any significant industrial user shall install a large manhole or sampling chamber for each separate discharge to the building sewer in accordance with plans and specifications approved by the DGSD to make accurate composite samples for analyses. The chamber shall be safely, easily and independently accessible to authorized representatives of the DGSD at any time.
 - (1) Each sampling chamber shall contain a Palmer-Bowlus flume, unless a weir or similar device is approved by the General Manager, with a recording and totalizing register for measurement of the liquid quantity; or at the discretion of the General Manager, the metered water supply may be used as the liquid quantity where it is substantiated that the metered water supply and waste quantities are approximately the same, or where a measurable adjustment, agreed to by the DGSD, is made in the metered water supply to determine the liquid waste quantity.
 - (2) When required, samples shall be taken every hour or half-hour, as determined by the DGSD and properly refrigerated and preserved and shall be composited in proportion to the flow for the representative 24-hour sample. Such sampling shall be done as prescribed in the user's wastewater discharge permit.

7.2 INSPECTION, MONITORING AND RECORD KEEPING

(A) The DGSD may inspect the facilities of all industrial users to ascertain whether the purposes of this ordinance are being complied with. Persons or occupants of premises in which the discharge source or treatment system is located or in which records are kept shall allow the DGSD or its representatives ready access upon presentation of credentials at reasonable times to all parts of said premises for the purposes of inspection, sampling, and examination and photocopying of records required to be kept by this ordinance and in performance of any of their duties. The DGSD shall have the right to set up on the industrial user's property such devices as are necessary to conduct sampling, monitoring and metering operations. Where an industrial user has security measures in force which would require suitable

identification, the user shall make all necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the DGSD shall be permitted to enter immediately for the purposes of performing their specific responsibilities. Such arrangements shall be made by all industrial users within 30 days of the passage of this ordinance.

- (B) Any temporary or permanent obstruction to safe and easy access to the industrial facility to be inspected and/or sampled shall be promptly removed by the industrial user at the written or verbal request of the General Manager and shall not be replaced. The costs of clearing such access shall be borne by the industrial user.
- (C) Unreasonable delays in allowing DGSD personnel access to the industrial user's premises shall be a violation of this ordinance.
- (D) Industrial users and the DGSD shall maintain records of all information resulting from any monitoring activities required by this ordinance and shall include:
 - (1) the date, exact location, methods and time of sampling, the name of the person or persons taking the samples;
 - (2) the dates analyses were performed;
 - (3) who performed the analyses;
 - (4) the analytical techniques and methods used;
 - (5) and the results for each analysis.
- (E) The DGSD and the industrial user shall maintain such records for a minimum of three (3) years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user or operation of the DGSD pretreatment program or when requested to do so by the Regional Administrator or Director of the IEPA.

7.3 SEARCH WARRANTS

If the General Manager has been refused access to the building, structure or property or any other part thereof, and if the General Manager has demonstrated probable cause to believe that there may be a violation of this ordinance or that there is a need to inspect as part of a routine inspection program of the DGSD designed to verify compliance with this ordinance or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then upon application by the DGSD attorney, the Circuit Court of the 18th Judicial Circuit, DuPage County, Illinois may issue a search and/or seizure warrant describing therein the specific location subject to the warrant. The warrant shall specify what, if anything may be searched and/or seized on the property described. Such warrant shall be served at reasonable hours by the General Manager in the company of a uniformed police officer of the city having jurisdiction of the industrial user's premises.

Section 8 - CONFIDENTIAL INFORMATION

8.1 CONFIDENTIAL INFORMATION

(A) Any information and data relating to an industrial user obtained from reports, questionnaires, permit applications, permits and monitoring programs and from inspection shall be available to the public or other governmental agencies without restriction unless the industrial user specifically requests, and is able to demonstrate to the satisfaction of the DGSD that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the industrial user.

- (B) When requested by the person furnishing a report, and until such time as the DGSD determines that the requested information is not entitled to confidential treatment, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available upon written request to the governmental agencies for uses related to this ordinance, the National Pollutant Discharge Elimination System (NPDES) permit, or for use by the State or any State agency in judicial review or enforcement proceedings involving the person or industrial user furnishing the report.
- (C) Information and data provided to the DGSD which is wastewater constituents and other "effluent data" as defined by 40 CFR 203.2 will not be recognized as confidential information and shall be available to the public without restriction.
- (D) Information claimed by an industrial user to be confidential shall not be transmitted to the general public by the DGSD until and unless a thirty-day notification is given to the industrial user.
- (E) The DGSD shall implement measures to prevent the negligent release of confidential information, however, neither the DGSD nor its employees shall be held responsible for the release of information if they acted in good faith.

Section 9 – ENFORCEMENT PROCEDURES AND PENALTIES

9.1 PUBLICATION OF USERS IN SIGNIFICANT NONCOMPLIANCE

The DGSD shall annually publish in the largest newspaper published in Downers Grove or municipalities where the DGSD has jurisdiction, a list of industrial users which, during the previous 12 months, were in significant noncompliance with applicable pretreatment standards. The notification shall also summarize any enforcement actions taken against those industrial users during the same twelve months. The term significant noncompliance shall mean:

- (A) Violations of wastewater discharge limits:
 - (1) Chronic violations. A pattern of significantly violating applicable pretreatment standards and requirements under District ordinance is indicated when 66% or more of all measurements taken during a six month period exceed, by any magnitude, the daily maximum limit or the average limit for the same pollutant parameter;
 - (2) Technical Review Criteria (TRC) violations. Defined here as those in which 33% or more of all the measurements taken during a six month period equal or exceed the product of the daily maximum or average limit times the applicable TRC (TRC = 1.4 for BOD, TSS and FOG, and 1.2 for all other pollutants except pH);
 - (3) Any other violation or violations of an effluent limit, daily maximum limit or average that has or have caused alone or in combination with other discharges, interference (e.g., slug loads or contamination effecting sludge disposal options), or pass through; or has endangered the health of District personnel or the public;
 - (4) Any discharge of pollutants which have caused imminent endangerment to human health, welfare or to the environment and resulting in the District exercising its emergency authority to halt or prevent such a discharge;
- (B) Violation, by ninety days or more after the schedule date, of a compliance schedule milestone, contained in a wastewater discharge permit or enforcement order for starting construction, completing construction, and attaining final compliance;
- (C) Failure to provide reports for compliance schedules, self-monitoring data, or categorical standards (baseline monitoring reports, 90 day compliance reports, and periodic self-

monitoring reports), or to submit incomplete, inaccurate or improper reports returned to a user by the District within 30 days from the due date or date the report was returned to the user for resubmission;

- (D) Failure to accurately report noncompliance;
- (E) Reporting false information;
- (F) Failure to install monitoring facilities;
- (G) Discharging without permit or approval when such discharge causes interference, pass through, adversely effects sludge disposal options, or when continuing violations occur resulting in environmental damage;
- (H) Any violation of permit conditions if evidenced by intent or neglect;
- (I) Refusal by a significant industrial user to allow access by District employees for the purposes of inspection or monitoring activities;
- (J) Violation of orders. Any violation of an order is SNC.
- (K) Any other violation or group of violations which the District considers significant.

9.2 COMPULSARY COMPLIANCE PROCEDURES

- (A) Informal Telephone Call/Written Follow-up: Whenever the General Manager finds that any user has a minor and infrequent or isolated violation of this ordinance, a wastewater discharge permit, or any other pretreatment requirement, the General Manager or his agent may notify by telephone call and maintain a written record of the conversation and required actions of the industrial user.
- (B) Notice of Violation: Whenever the General Manager finds that any user has violated or is violating this ordinance, a wastewater discharge permit or order issued hereunder, or any other pretreatment requirement, the General Manager or his agent may serve upon said user a written Notice of Violation (NOV). Within ten (10) working days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the General Manager. Submission of this plan in no way relieves the industrial user of liability for any violations occurring before or after receipt of the Notice of Violation. Nothing in this section shall limit the authority of the DGSD to take any action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation.
- (C) Pre-enforcement Conference: Where the violation(s) of an industrial user are considered significant or where past enforcement actions have not resulted in compliance, the General Manager may call a pre-enforcement conference. The pre-enforcement conference shall be conducted in accordance with the procedures contained in Article VII of the District's ordinances.
- (D) Administrative Order: Issued to industrial users that sets specific requirements and means to meet compliance standards. The General Manager issues the order which details the nature of the violation and specific actions required by the IU to return to compliance and prevent reoccurrence of the violation. A schedule is included for the steps involved in the order and for overall compliance.
- (E) Show Cause Hearing: The General Manager may order any user which causes or contributes to violations(s) of this ordinance, wastewater discharge permits, or orders issued herein, or any other pretreatment standard or requirement, to appear at a hearing and show cause why a proposed enforcement action should not be taken. The show cause hearing shall be conducted in accordance with the procedures contained in Article VII of the District's ordinance.

9.3 REVOCATION OF PERMIT

- (A) Conditions for revocation: Any industrial user who violates this ordinance, an order issued pursuant to Section 9.2(C) of this ordinance, the Illinois Environmental Protection Act or the Federal Act, or regulations promulgated under either Act, or any of the following is subject to having its wastewater discharge permit revoked in accordance with the procedures of this Section 9.3:
 - (1) failure of an industrial user to fully and accurately report the wastewater constituents and characteristics of its wastewater discharge as determined by the industrial user or the POTW's analysis;
 - (2) failure of the industrial user to fully and accurately report significant changes in process activity which could effect its wastewater discharge or wastewater constituents and characteristics;
 - (3) refusal of reasonable access to the industrial user's premises for the purpose of inspection or monitoring by the POTW representatives;
 - (4) tampering with, disrupting, or destroying POTW equipment;
 - (5) failure to report an accidental discharge of pollutants;
 - (6) failure to report an upset of the industrial user's treatment facilities; or
 - (7) violation of any condition of the wastewater discharge permit.
- (B) Procedures for Revocation
 - (1) The General Manager may order any industrial user who causes or allows any action, which is subject to revocation under Section 9.3(A) above, to show cause at a hearing why its wastewater discharge permit should not be revoked. The show cause hearing shall be conducted in accordance with the procedures contained in Article VII of the District's ordinance.
 - (2) Following an order for the revocation of its wastewater discharge permit, the industrial user shall cease discharging to the POTW in accordance with the terms of said order. Failure to do so shall be a prima facie evidence of the continuing harm to the DGSD and provide grounds for the granting of injunctive relief or temporary restraining orders.

9.4 ORDER TO SHOW CAUSE REGARDING DISCONNECTION

The DGSD may, upon discovering an ongoing or potential discharge to the DGSD which presents or may present imminent danger to the environment or the health and welfare of persons or which threatens to interfere with operations of the POTW, immediately issue an order to the responsible industrial user to show cause before the Board of Trustees why the DGSD should not disconnect service, revoke the industrial user's wastewater discharge permit or seek injunctive relief to prohibit the industrial user from making the discharge to the DGSD. Procedures to be followed in said show cause hearing shall be in accordance with article VII of the District's ordinance.

9.5 IMMEDIATE DISCONNECTION OF SERVICE

- (A) Conditions of immediate disconnection of service: Any industrial user is subject to immediate disconnection of service under either of the following conditions:
 - (1) whenever immediate disconnection is required to halt or prevent any discharge of pollutants to the DGSD which reasonably appears to the General Manager to present

- imminent danger to the environment or the health and welfare of persons or which threatens to interfere with operation of the DGSD; or
- (2) whenever the industrial user's wastewater discharge permit is revoked.
- (B) Procedures for immediate disconnection: notwithstanding any other sections of this ordinance, the General Manager shall have the authority, after informal notice to the industrial user, to immediately and effectively halt or prevent any discharge of pollutants to the DGSD that reasonably appears to present imminent danger to the environment, or the health and welfare of persons, or which threatens to interfere with operations of the DGSD. When the General Manager determines that such an emergency exists, he shall issue a verbal order, followed immediately by a written order, to the industrial user stating the problem and requiring immediate cessation of the discharge. The General Manager's actions may include disconnection of wastewater collection service. The General Manager shall obtain the concurrence of the DGSD attorney before initiating action. Methods of informal notice shall include, but not be limited to, any of the following: personal conversation between the industrial user and DGSD employees, telephone calls, letters, hand delivered messages or notices posted at the industrial user's premises or point of discharge.

9.6 ELIMINATION OF DISCHARGER/REINSTATEMENT

Any industrial user notified of a disconnection of wastewater treatment service or revocation of its wastewater discharge permit shall immediately stop or eliminate the discharge. In the event of failure of the industrial user to comply voluntarily with the disconnection or revocation order, the DGSD shall take such steps as are deemed necessary, including immediate blockage or severance of the sewer connection, to prevent or minimize damage to the DGSD system or damage to any person. If the General Manager exercises his authority under Section 9.5(A)(1), above, the Manager shall reinstate the wastewater treatment service upon proof of the elimination of the non-complying discharge.

Section 10 – JUDICIAL ENFORCEMENT REMEDIES

10.1 INJUNCTIVE RELIEF

Whenever a user has violated a pretreatment standard or requirement or continues to violate the provisions of this ordinance, wastewater discharge permit or orders issued hereunder, or any other pretreatment standard, the General Manager may petition the Circuit Court for the 18th Judicial Circuit, DuPage county, Illinois through the DGSD's attorney for the issuance of a temporary restraining order, preliminary injunction, or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit, order, or other requirement imposed by this ordinance on activities of the industrial user. Such other actions as appropriate for legal and/or equitable relief may also be sought by the DGSD. A petition for injunctive relief need not be filed as a prerequisite to taking other action against a user.

10.2 CIVIL PENALTIES

(A) Any user that is found to have violated an order of the DGSD or who has failed to comply with the provisions of this ordinance and the orders, rules and regulations, wastewater discharge permits issued hereunder, shall be fined in an amount of no less than \$100, or more than \$1,000 for each violation. For the purpose of this section, each day in which any such violation shall occur shall be deemed a separate violation, and a separate violation shall

- be deemed to have occurred for each constituent, which has limitations listed in Section 3 of this ordinance, found to exceed the limits established in this ordinance during such day.
- (B) The General Manager may recover reasonable attorney's fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the District.
- (C) In determining the amount of civil liability, the Court may take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user, and any other factors as justice requires.
- (D) Filing a suit for civil penalties shall not be a prerequisite for taking other action against a user.

10.3 FALSIFICATION

Any person who knowingly makes any false statements, representations or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this ordinance or wastewater discharge permit, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this ordinance, shall be in violation of this ordinance and shall be subject to the penalties provided herein.

10.4 REMEDIES NONEXCLUSIVE

The provisions in Sections 9 through 11 are not exclusive remedies. The DGSD reserves the right to take any, all, or any combination of these actions against a noncompliant user. Enforcement of pretreatment violations will generally be in accordance with the DGSD enforcement response plan. However, the DGSD reserves the right to take other actions against any user when the circumstances warrant. Further, the DGSD is empowered to take more than one enforcement action against any noncompliant user. These actions may be taken concurrently.

Section 11 - ADDITIONAL REMEDIES

11.1 ADDITIONAL REMEDIES

- (A) In addition to the remedies available to the DGSD set forth elsewhere in this ordinance, if the DGSD is fined by the State of Illinois or USEPA for violation of the DGSD NPDES permit or violations of water quality standards as a result of a discharge of pollutants, then the fine, including all DGSD legal, sampling, analytical testing costs, and any other related costs shall be charged to the responsible industrial user. Such charges shall be in addition to, and not in lieu of, any other remedies the DGSD may have under this ordinance, statutes, regulations, at law and in equity.
- (B) If the discharge from any industrial user causes a deposit, obstruction or damage to any DGSD wastewater facility, the DGSD shall cause the deposit or obstruction to be promptly removed or cause the damage to be promptly repaired. The cost of such work, including materials, labor and supervision, shall be borne by the person(s), or industrial user causing such deposit, obstruction or damage.
- (C) The remedies provided in this ordinance shall not be exclusive and the DGSD may seek whatever other remedies authorized by statute, at law or in equity against any person or industrial user violating the provisions of this ordinance.

(D) In addition to any fine levied under Section 10, the DGSD may, where the circumstances of the particular case so dictate, seek injunctive relief to prohibit the user from discharging into the sanitary sewer system, or provide such other affirmative relief as may be appropriate.

Section 12 – <u>AFFIRMATIVE DEFENSES TO DISCHARGE VIOLATIONS</u>

12.1 **UPSET**

- (A) For the purposes of this section "upset," means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (B) An upset shall constitute an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements of paragraph (C) are met.
- (C) An industrial user who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and the industrial user can identify the cause(s) of the upset;
 - (2) The facility was being operated at the time in a prudent and workman like manner and in compliance with applicable operation and maintenance procedures;
 - (3) The industrial user has submitted the following information to the DGSD and the treatment plant operator within 24-hours of becoming aware of the upset. If this information was provided verbally, a written submissions must be provided within five (5) days:
 - (a) a description of the indirect discharge and cause of the noncompliance;
 - (b) the period of noncompliance, including exact dates and times, or, if not corrected, the anticipated time noncompliance is expected to continue;
 - (c) steps being taken and/or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- (D) In any enforcement proceeding, the industrial user seeking to prevent reoccurrence of an upset shall have the burden of proof.
- (E) Industrial users will have the opportunity for a judicial determination on any claim of upset in an enforcement action brought for noncompliance with categorical pretreatment standards.
- (F) The industrial user shall control production of all discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss, or failure of its pretreatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

12.2 GENERAL/SPECIFIC PROHIBITIONS

An industrial user shall have an affirmative defense to an enforcement action brought against it for noncompliance with the general and specific prohibitions in Section 3 of this ordinance if it can prove that it did not know or have reason to know that its discharge, along with or in conjunction with discharges from other sources would cause pass through or interference and that either:

- (A) a local limit exists for each pollutant discharged and the industrial user was in compliance with each limit directly prior to, and during the pass through or interference, or
- (B) no local limit exists, but the discharge did not change substantially in nature or constituents from the user's permit, and in the case of interference, was in compliance with applicable sludge use or disposal requirements.

12.3 BYPASS

- (A) An industrial user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is essential for maintenance to assure efficient operation. These bypasses are not subject to paragraphs (B) and (C) of this section.
- (B)
- (1) If an industrial user knows in advance of the need for a bypass, it shall submit prior notice to the DGSD, at least ten (10) days before the date of the bypass, if possible.
- (2) An industrial user shall submit oral notice of an unanticipated bypass that exceeds the applicable pretreatment standards to the DGSD within 24-hours from the time it becomes aware of the bypass. A written submission shall also be provided within 5 days of the time the industrial user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass. The DGSD may waive the written report on a case by case basis if the oral report has been received within 24-hours.

(C)

- (1) Bypass is prohibited, and the DGSD may take enforcement action against an industrial user for bypass unless:
 - (a) bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (c) the industrial user submitted notices as required under paragraph (B) of this section.
- (2) The DGSD may approve an anticipated bypass, after considering adverse effects, if the DGSD determines that it will meet the three conditions listed in paragraph (C)(1) of this section.

Section 13 - MISCELLANEOUS PROVISIONS

13.1 PRETREATMENT CHARGES AND FEES

The DGSD may adopt reasonable charges and fees for reimbursement of costs of operating the Pretreatment Program, which may include:

 (A) fees for wastewater discharge permit applications including the cost of processing the applications;

- (B) fees for monitoring, inspection and surveillance procedures including the cost of collection and analyzing an industrial user's discharge and reviewing monitoring reports submitted by industrial users;
- (C) fees for reviewing and responding to accidental discharge procedures and construction;
- (D) fees for filing appeals; other fees as the DGSD may deem necessary to carry out the requirements contained herein. These fees relate solely to the matters covered by this ordinance and are separate from other fees, fines and penalties charged by the DGSD.

Appendix E

2016 Sewer Work Plan

DOWNERS GROVE SANITARY DISTRICT M E M O

DATE: January 6, 2016

TO: Nicholas Menninga

General Manager

FROM: Robert Swirsky

Sewer System Maintenance Supervisor

RE: 2016 Collection System Work Plan

Proposed work on the collection system for 2016

- 1. Regular cleaning of 313,034 feet of sewers with diameter 21 inches or smaller (4 year cycle). Sewer areas C1, H1, H2, H3, H4, H5, H6, H7, H8, W2 and annual cleaning of all siphons.
- 2. Contract cleaning and televising of the selected sections of 30" sewer in Walnut Avenue.
- 3. Continue to heavy clean main sewers on the PM. List every 6 months (approximately 37,500 feet), and every 3 months (approximately 5,408 feet).
- 4. Continue annual monitoring and heavy cleaning if needed of 3,974' of 18" and 30" main sewer in the Denburn Woods and Gilbert Park area.
- 5. Televise 100,000 feet of main sewers (12 year cycle).
- 6. Continue the regular metering of the 50 basins for 9 weeks per basin (3 year cycle).
- 7. Continue the inspection of private property under the Private Property Infiltration and Inflow (I&I) Removal Program in the targeted basins.
- 8. Continue the Building Sanitary Service Repair Assistance Program including the removal of identified I/I sources within these buildings.
- 9. Televise and locate 500 building services for the Private Property I/I Removal Program, Building Sanitary Service Repair Assistance Program and the Cost Reimbursement Program for the installation of Overhead Sewers or Backflow Prevention Devices.
- 10. Inspect 500 buildings for I/I sources for the above programs.
- 11. Inspect 300 district manholes (20 year cycle)
- 12. Utilize flow meter data and other district records to prioritize main sewers for repair or rehabilitation in accordance with the I/I Removal and Sewer System Rehabilitation Policy.
- 13. Begin the replacement of mainlines in the alleys in the 1K-028 l&l removal target basin.

- 14. Utilize the Lucity software and other district records to prioritize main sewers for repair or rehabilitation in accordance with the I/I removal and Sewer system Rehabilitation Policy.
- 15. Continue updating records and correcting errors in GIS and Lucity.
- 16. Continue to assist at the treatment plant and lift stations with maintenance and other tasks where the use of the Vac-Con is beneficial.

CC: WDVB, ASK, DFP, RTJ, KJR, MS, TTC, WCC, MCW

Appendix F

Ordinance 01-02 and I/I Program Documents

ORDINANCE NO. ORD 01-02 ORDINANCE ESTABLISHING A PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM

WHEREAS, the Downers Grove Sanitary District owns, operates and maintains a public sanitary sewer system to carry wastewater from buildings connected to that system; and

WHEREAS, District ordinances establish that the owner of the property connected to the public sanitary sewer system is the owner of the entire building sanitary service; and

WHEREAS, District ordinances prohibit the discharge of any stormwater, surface water, ground water, roof runoff water, sub-surface drainage, runoff water from ground or paved areas, cistern overflow or any flows other than wastewater into the District sanitary sewer system. These flows, referred to as infiltration and inflow or I/I, overload the sanitary system, resulting in the backup of raw sewage into basements and the overflow of raw sewage from manholes; and

WHEREAS, infiltration and inflow can be contributed from private property through direct footing drain connections, indirect footing drain connections, sump pumps, downspouts or roof drains, driveway drains, area drains, patio or yard drains, leaking sanitary or ejector sump pits, leaks in subsurface sanitary waste piping or the building sanitary service, or other sources of contribution; and

WHEREAS, the District sanitary sewer system continues to receive high levels of I/I despite an aggressive sewer system rehabilitation and repair program; and

WHEREAS, the majority of these I/I flows come from private property.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE DOWNERS GROVE SANITARY DISTRICT:

A program for the removal of infiltration and inflow from private property into the District sanitary sewer system must be developed that will provide a mechanism to insure that this work is performed properly and in a manner which protects the integrity of the District sanitary sewer system.

The removal of infiltration and inflow from the District sanitary sewer system benefits all users of the system and, therefore, the costs of this removal should be borne by all users as a system cost.

Therefore, a Private Property Infiltration and Inflow Removal Program is hereby established in accordance with the following conditions:

 The District will provide assistance to property owners to identify and remove infiltration and inflow sources located on their property.

- 2) The following I/I sources are eligible for removal under this program: direct footing drain connections, indirect footing drain connections, driveway drains, area drains, patio or yard drains, or leaks in subsurface sanitary waste piping or the building sanitary service. The following I/I sources are not eligible for removal under this program and must be removed at the owner's sole expense: sump pumps, downspouts, or roof drains.
- 3) This program applies to all buildings connected to the Downers Grove Sanitary District sanitary sewer system which meet one of the following criteria:
 - a) Building is located within an area selected by the District for infiltration and inflow removal.
 - b) Building owner has applied for the District Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices.
- 4) This program shall be effective June 4, 2001.
- 5) The program will be evaluated annually and the District may change or eliminate the program.
- 6) The program is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 7) Prioritization of applications shall be at the sole discretion of the District. For purposes of prioritizing applications, the District may consider the severity of the I/I flows, costs for corrective measures, time constraints, and such other considerations as the District deems necessary.
- 8) An owner desiring to participate in the program must sign an Agreement and Building Sanitary Service Easement. Said Agreement shall include, among other items, a clause whereby the Owner releases and waives any claim of liability against the District from any consequence of their participation in the program including, the District's determination of corrective actions, selection of the contractor to be utilized, implementation and completion of the corrective action, or the owner's eligibility, participation or funding priority in this program.
- 9) The District will pay for the costs of identifying and removing all eligible I/I sources, including testing; televising; installation of storm water sump pits, pumps and piping; disconnection of existing drains from the sanitary sewer and connection to a storm water sump or piping; repair, rehabilitation or replacement of subsurface sanitary waste piping or the building sanitary service, and reasonable restoration. The installation of a footing tile drainage system is not eligible for assistance under the program.
- 10) The property owner retains ownership and operation, maintenance and replacement responsibility for all sump pumps, piping, connections and

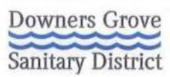
appurtenances which may be installed under this program. Nothing contained in the program shall transfer ownership or operation, maintenance or replacement responsibility for these facilities to the District.

- The District's assistance is limited to the actual costs incurred for the eligible 11) work contained in the program.
- The General Manager shall develop, subject to approval of the Board of Trustees, 12) such program conditions as may be necessary to implement the program established by this ordinance.
- 13) The General Manager may, in his discretion, provide a waiver of program requirements which he deems appropriate based on his evaluation of the individual circumstances related to a request for reimbursement.
- 14) The District shall have the sole authority to determine eligibility for participation, prioritization of requests and compliance with all requirements for the program and District ordinances.
- 15) Notwithstanding any of the foregoing, the District admits no responsibility or liability of any kind, nor shall the adoption of this ordinance result in any responsibility or liability, for any sanitary sewer backup.

PASSED AND APPROVED by the President and Board of Trustees of the Downers Grove Sanitary District at a regular meeting of the Trustees held on the 15th day of May, 2001, to become effective within ten (10) days after publication thereof.

ATTEST: Dail Monilo

Board of Trustees
Wallace D. Van Buren
President
Arny S. Kovacevic
Vice President
Donald F. Peters
Clerk



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General Manager
W. Clay Campbell
Administrative Sérvices
Director
Legal Counsel

Michael C. Wiedel

Providing a Better Environment for South Central DuPage County

DOWNERS GROVE SANITARY DISTRICT

PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM

In order to address continuing sewer backup and manhole overflow problems, the District has implemented a comprehensive infiltration and inflow removal and sewer system rehabilitation policy. One important part of this policy is the Private Property Infiltration and Inflow Removal Program. The majority of infiltration and inflow (I/I) comes from private property. District ordinances prohibit all sources of I/I from private property. If I/I sources are located on private property, the District will provide assistance and work with the property owner to determine the most feasible methods of removing the sources of I/I, obtain proposals from contractors for completion of the work and inspect the work. The District will provide financial assistance by paying for the costs of identifying and removing all eligible I/I sources. The following materials regarding this program are attached.

- Program Summary
- · Program Requirements
- Application for Participation
- Agreement for Private Property Infiltration and Inflow Removal
- · Building Sanitary Service Access Agreement

After review of the enclosed material, please contact our office if you have any questions or need any additional information. The program information is also available on the District website.

DOWNERS GROVE SANITARY DISTRICT PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM

In order to address continuing sewer backup and manhole overflow problems, the District adopted a comprehensive infiltration and inflow removal and sewer system rehabilitation policy. One important part of this policy, the Private Property Infiltration and Inflow Removal Program, was recently adopted. To understand the significance of this Program and the need for citizen participation and cooperation, the following information is provided.

Sanitary Sewer System

The sanitary sewer system consists of both a public portion and a private portion. The public portion includes sanitary sewer lines and manholes, located in the public right-of-way, which collect and transport wastewater to the District wastewater treatment center. The private portion includes homes and businesses and building sanitary services which receive the wastewater from a home or business and connect to the public sanitary sewer. The sanitary sewer system is designed to receive only wastewater, not storm water or ground water.

Infiltration and Inflow

Infiltration and inflow, commonly referred to as I/I, is storm water or ground water that enters the sanitary sewer system from any source on either the public portion, a building sanitary service, or within a building.

Problems Caused by Infiltration and Inflow

High levels of I/I overload the sanitary sewer system in a significant way. Normal flows to the Wastewater Treatment Center during dry weather average 8 million gallons per day. During significant rainfall or snow melt, I/I results in these flows reaching peak rates in excess of 80 million gallons per day, ten times the dry weather flow. This excess flow is responsible for sanitary sewer backups into homes and businesses, manhole overflows, and increased costs required for treatment of flows which would otherwise be runoff into the ground or storm sewers.

Reducing Infiltration and Inflow

To make significant reductions in I/I, the problem must be addressed by removing sources from both the public portion and the private portion of the system. To reduce I/I from sources in the public sanitary sewers, the District has an ongoing aggressive program for maintenance, rehabilitation and repair. This work includes televising and cleaning of the sanitary sewers, flow monitoring, smoke testing, flood testing, manhole repairs and rehabilitation, sewer lining and sewer replacement projects.

The majority of infiltration and inflow comes from private property. District ordinances prohibit all sources of I/I from private property. To address these sources of I/I, for many years, the District has conducted building inspections to identify and require correction of any downspout

or sump pump connection which contributed I/I. Other major sources of I/I from private property include direct footing drain connections, indirect footing drain connections, roof drains, driveway drains, area drains, patio or yard drains, leaking sanitary or ejector sump pits, leaks in subsurface sanitary waste piping or the building sanitary service, etc. The District must now identify and correct these I/I sources. These sources were not addressed in previous inspections of buildings because of the cost of identification and correction. The Private Property Infiltration and Inflow Removal Program has been implemented to address these I/I sources.

Selection of Areas for the Private Property Infiltration and Inflow Removal Program

In order to determine the extent of I/I, intensive flow monitoring is performed on the sanitary sewer system. This flow monitoring allows the volume of infiltration and inflow to be determined by area. Those areas with the largest volumes of I/I are selected for rehabilitation which will include the Private Property Infiltration and Inflow Removal Program. After rehabilitation, flow monitoring is used to evaluate the effectiveness of the rehabilitation efforts in reducing I/I. Your area has been selected for this Program.

Identification of sources of I/I

Generally, one inspection is needed to identify any sources of storm water or ground water discharges from private property. The inspection is an investigation of the plumbing system in the basement or crawlspace and the area around the outside of the building. It involves inserting a small television camera into the building sanitary service pipe from inside the building and possibly injecting water into the ground in the area over this pipe on the outside of the building to identify and locate any leaks. This inspection can take from one to two hours, depending upon individual conditions. There is no charge for this inspection.

Removal of I/I sources

The District will provide assistance and work with the homeowner to determine the most feasible methods of removing the sources of I/I, obtain proposals from contractors for completion of the work and inspect the work. The District will provide financial assistance by paying for the costs of identifying and removing all eligible I/I sources. Eligible I/I sources include installation of storm water sump pits, pumps and piping; repair, rehabilitation or replacement of subsurface sanitary waste piping or the building sanitary service; and reasonable restoration. The installation of a footing tile drainage system or the disconnection of downspout or sump pump connections is not eligible.

If I/I sources are located, the District will provide the building owner with the detailed Program Requirements. The detailed Program Requirements can also be obtained at any time by calling the District office.

The financial assistance is being provided by the District to recognize that the removal of I/I from the sanitary sewer system benefits all users of the system and, therefore, the costs of this removal should be paid by all users as a system cost. The Program also provides a mechanism to insure that the work is performed cost effectively and in a manner which protects the integrity of the sanitary sewer system.

Compliance with the Program

Your home or building may have been inspected by the District in the past. These prior inspections identified only those sources of I/I which could be readily identified by a visual inspection and did not involve the testing and television inspection elements of the new Program. We are appreciative of this past cooperation.

The District is hopeful that all property owners will cooperate in this important and necessary new Program. The District will make every effort to work with the property owner to accomplish the goal of significant I/I removal. It is important to note that District ordinances require compliance with the Program. Storm water or ground water connections to the sanitary sewer, if found, must be eliminated. A schedule for compliance will be implemented for any property owner who fails to schedule inspections or follow through with corrections.

Your cooperation and assistance in this Program are crucial to the success of this extraordinary effort to eliminate sanitary sewer backups into homes and businesses and manhole overflows.

If you have any questions or would like any additional information, please feel free to contact the District office at 969-0664. The office is open Monday through Friday, 8:00 a.m. to 4:30 p.m.

DOWNERS GROVE SANITARY DISTRICT PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM

PROGRAM REQUIREMENTS

BACKGROUND

District ordinances prohibit the discharge of any stormwater, surface water, ground water, roof runoff water, subsurface drainage, runoff water from ground or paved areas, cistern overflow or any flows other than wastewater into the District sanitary sewer system. These flows, referred to as infiltration and inflow or I/I, overload the sanitary system, resulting in the backup of raw sewage into basements and the overflow of raw sewage from manholes. Infiltration and inflow (I/I) can be contributed from private property through direct footing drain connections, indirect footing drain connections, sump pumps, downspouts or roof drains, driveway drains, area drains, patio or yard drains, leaking sanitary or ejector sump pits, leaks in subsurface sanitary waste piping or the building sanitary service, etc. In 1973, the District began inspecting buildings to identify downspout and sump pump connections which contributed I/I to the sanitary sewer system. Property owners were requested to correct any downspout or sump pump connection which contributed I/I and these corrections have been completed at the property owner's expense. A copy is attached of those sections of District ordinances which prohibit the discharge of I/I into the sanitary sewer system, provide for District inspections to identify such sources and require the correction of any such illegal connections.

Unfortunately, the District sanitary sewer system continues to receive high levels of I/I. Normal flows to the District Wastewater Treatment Center during dry weather average 8 million gallons per day. During significant rainfall or snow melting events, these flows reach peak flow rates in excess of 80 million gallons per day. The majority of these I/I flows are coming from private property. As a result, in order to reduce I/I, the District must now identify and correct the remaining I/I sources, such as direct footing drain connections, indirect footing drain connections, driveway drains, area, patio or yard drains, and leaks in subsurface sanitary waste piping or the building sanitary service. These sources have not previously been addressed because of the cost of identification and correction. The District developed this Private Property Infiltration and Inflow Removal Program to address these I/I sources.

PROGRAM REQUIREMENTS

The District will provide assistance to property owners to identify and remove infiltration and inflow sources located on their property as detailed in this program. This program is being implemented to recognize that the removal of infiltration and inflow from the District sanitary sewer system benefits all users of the system and, therefore, the costs of this removal should be borne by all users as a system cost. This program will also provide a mechanism to insure that this work is performed properly and in a manner which protects the integrity of the District sanitary sewer system.

The District has determined that certain requirements for the Private Property Infiltration and Inflow Removal Program are necessary to protect the integrity of such a program and the financial well being of the District.

A private property infiltration and inflow removal assistance program is hereby implemented under the following conditions and requirements:

- 1) The following I/I sources are eligible for removal under this program: direct footing drain connections, indirect footing drain connections, driveway drains, area drains, patio or yard drains, leaking plumbing waste lines, or leaks in subsurface sanitary waste piping or the building sanitary service. The following I/I sources are not eligible for removal under this program and must be removed at the owner's sole expense: sump pumps, downspouts, or roof drains.
- 2) This program applies to all buildings connected to the Downers Grove Sanitary District sanitary sewer system which meet one of the following criteria:
 - a) Building is located within an area selected by the District for infiltration and inflow removal.
 - b) Building owner has applied for the District Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices.
- 3) This program shall be effective June 4, 2001.
- 4) The program will be evaluated annually and the District may change or eliminate the program.
- 5) This program is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 6) Prioritization of applications shall be at the sole discretion of the District. For purposes of prioritizing applications, the District may consider the severity of the I/I flows, costs for corrective measures, time constraints, and such other considerations as the District deems necessary.
- 7) An owner desiring to participate in this program must sign an Agreement for Private Property Infiltration and Inflow Removal (hereinafter referred to as the "Program Agreement") and a Building Sanitary Service Access Agreement (hereinafter referred to as the "Access Agreement"). Said Program Agreement shall include, among other items, a clause whereby the Owner releases and waives any claim of liability against the District from any consequence of their participation in the program including, the District's determination of corrective actions, selection of the contractor to be utilized, implementation and completion of the corrective action, or the owner's eligibility, participation or funding priority in this program.

- 8) The District will pay for the costs of identifying and removing all eligible I/I sources, including testing; televising; installation of storm water sump pits, pumps and piping; disconnection of existing drains from the sanitary sewer and connection to a storm water sump or piping; repair, rehabilitation or replacement of subsurface sanitary waste piping or the building sanitary service, and reasonable restoration. The installation of a footing tile drainage system is not eligible for assistance under this program.
- 9) The property owner retains ownership and operation, maintenance and replacement responsibility for all sump pumps, piping, connections and appurtenances which may be installed under this program. Nothing contained in this program shall transfer ownership or operation, maintenance or replacement responsibility for these facilities to the District.
- 10) The property owner retains ownership and maintenance responsibilities for the building sanitary service serving the subject property and nothing contained in this program shall transfer ownership or maintenance responsibilities of the building sanitary service to the District.
- The District's assistance is limited to the actual costs incurred for the eligible work contained in this program.
- 12) This program includes the following steps:
 - a) Letter is sent to property owner explaining the program and requesting that the owner schedule the preliminary inspection of the building.
 - b) District personnel conduct preliminary inspection of building, take measurements, interview owner, complete inspection form, and take photos or videos, as appropriate. District schedules date for second inspection with the owner.
 - c) District conducts second inspection including televising and locating all subsurface sanitary waste piping and the building sanitary service, dye testing all outside drains and any suspect downspouts, and performing flood and/or dye test to ascertain leaks and footing tile.
 - d) Based upon review of all data, the I/I quantity from each source is estimated and a cost-effective rehabilitation method is developed by the District.
 - e) The District provides the owner with written findings of the inspections, the recommended rehabilitation method(s) and the eligibility of these methods under this program. These items are reviewed and discussed with the owner during a follow-up site visit.

- f) The District schedules site visits with the owner and appropriate contractors to review the proposed work and to assist the contractors in the preparation of proposals for the completion of the recommended repairs.
- g) The District receives proposals from contractors, evaluates each proposal and selects the lowest, responsible proposals for the work.
- h) The District prepares and sends to the property owner for signature the Program Agreement and the Access Agreement.
- The property owner signs and returns to the District the Program Agreement and the Access Agreement. The District schedules the work with the owner and the contractors.
- j) The contractors complete the work. The District inspects the work and performs any appropriate testing. The Village also inspects the work.
- k) Upon acceptance, the District pays the contractors for the work.
- 13) The General Manager may, in his discretion, provide a waiver of those program requirements listed above which he deems appropriate based on his evaluation of the individual circumstances.
- 14) The District shall have the sole authority to determine eligibility for participation, prioritization of requests and compliance with all requirements for the program and District ordinances.
- 15) If a building sanitary service is rehabilitated, repaired or replaced under this program and the existing building is subsequently demolished and a new building is constructed, a service reimbursement charge may be applied if a portion of a District-built building sanitary service is reused, eliminating the need to completely remove and replace the existing service.

EXCERPT FROM DISTRICT ORDINANCES

ARTICLE II - USE OF PUBLIC SEWERS

Section 4. No person shall discharge or cause to be discharged into the sanitary sewer system any storm water, surface water, ground water, roof runoff water, subsurface drainage, runoff water from ground or paved areas, cistern overflow or water from air conditioning systems, industrial cooling operations, or any flows other than wastewater.

Section 4.1. The proper maintenance and operation of a building sanitary service to and including the point of connection (such as a wye, tee or break-in connection) to the public sanitary sewer shall be the responsibility of the owner of the premises served by said building sanitary service. Maintenance means keeping the building sanitary service in satisfactory working condition and a good state of repair (including but not limited to preventing any obstruction or extraneous material or flows from entering said facilities, protecting said facilities from any damage and keeping same free from defects or malfunctions), and making necessary provisions and taking necessary precautions to assure that said sanitary sewer facilities are at all times capable of satisfactorily performing the services and adequately discharging the functions and producing the final results and purposes said facilities are intended to perform, discharge or produce. The District may, in its sole discretion, make repairs to any portion of a building sanitary service located within a public right-of-way or public easement which is found during District investigations to allow the entry of extraneous materials or flows into the public sanitary sewer or to pose a health or safety hazard to the general public and the District may seek reimbursement for the costs of any such repairs from the owner of the premises served by said building sanitary service.

Section 4.2. All downspouts or roof drains shall discharge onto the ground or be connected to storm sewers, drainage ditches or storm drainage systems. Footing drains shall be connected to sump pumps and discharge shall be made into storm sewers, drainage ditches or storm drainage systems. Sump pumps installed to receive and discharge ground waters or other storm water shall be connected to storm sewers or discharge onto the ground or into a drainage ditch or storm drainage system through a rigid discharge pipe, without any valving or quick connections for altering the path of discharge. Sump pumps installed to receive and discharge floor drain flow, laundry tubs or other wastewater shall be connected to the sanitary sewers pursuant to this ordinance. A sump pump shall be used for one function only, either the discharge of storm waters or the discharge of wastewater.

Section 4.3. The Manager shall cause to be made periodic visual outside inspections of all properties within the District, with specific attention to downspouts, roof drains and other visible or outside connections and shall request the property owner or property occupant to permit entry into the premises for the making of additional inspection of the premises to ascertain if illegal connections are present. Upon completion of the visual outside and inside inspection, the Manager will advise the property owner, in writing, if any illegal connections are observed, and will advise on the matter of corrections for compliance with the provisions of this ordinance. If corrections are to be made, the District will, at no expense to the owner, make further inspection of the corrections to insure compliance with this ordinance.

Section 4.4. If entrance to property is denied an employee or agent of the District, the Manager shall serve notice requiring, within a period of 30 days, a written affidavit by a Licensed Professional Engineer that the sanitary sewer system of the subject property complies in all respects to the requirements and specifications of this ordinance and that no storm water, surface water, ground water, roof runoff water, subsurface drainage, runoff water from ground or paved areas, cistern overflow or water from air conditioning systems, industrial cooling operations, or any flows other than wastewater are discharged into the sanitary sewer system from the subject property. In the event the property owner fails to provide the aforementioned affidavit within 30 days, the Manager shall commence action to terminate sanitary sewer service to the property remaining in noncompliance.

Section 4.5. In the event any property is in noncompliance with the provisions of Subsection 4.3 or 4.4 after the 30 day notice, that property shall be deemed continuing in noncompliance until there is paid to the District a sum in United States currency equal to all costs incurred by the District, including but not limited to clerical costs, mailing costs, service fees, attorneys fees, court costs, and all other reasonable fees and expenses incurred in commencing action to terminate the sanitary sewer service to the property or in terminating or restoring sanitary sewer service to the property in noncompliance.

Section 4.6. In addition to visual inspections on the outside and inside of the premises, the District may make other lawful tests and inspections of the sanitary sewer system as it deems necessary in order to locate such illegal connections and sources of extraneous flows as may exist. The District, at its option, may also invoke other legal powers vested in it or implied by the Illinois Compiled Statutes for the protection of the health and welfare of the public, and institute such legal action as it deems necessary to discover and order the disconnection of any illegal connections that may exist.

APPLICATION FOR PARTICIPATION IN DOWNERS GROVE SANITARY DISTRICT PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM

I/We hereby request participation in the Downers Grove Sanitary District Private Property Infiltration and Inflow Removal Program, hereinafter called the "Program."

I/We own, and this Application is for, the following described property: Property Address: Legal Description: Parcel Number (P.I.N.): ____ (You may obtain the Parcel Number (P.I.N.) for your property from your real estate tax bill.) I/We have received a copy of the Program Requirements for the Private Property Infiltration and Inflow Removal Program attached to and made a part of this Application. I/We agree to allow the Downers Grove Sanitary District or its representatives to make any and all inspections and testing as detailed in the Program Requirements. I/We have received sample copies of the Agreement for Private Property Infiltration and Inflow Removal and the Building Sanitary Service Access Agreement and understand that said Agreements must be signed in order to participate in the Program. Dated this day of , 20 . OWNER(S) Printed Name Signature Printed Name Signature Telephone Number

NOTE: If this property is held in a trust or the owner is a corporate entity, please contact Kim Giardini at 630-969-0664 to obtain a form to provide required additional information. The above mentioned Program and Access Agreements cannot be prepared without this additional information.

SAMPLE - DO NOT SIGN AT THIS TIME

AGREEMENT FOR PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM

FOR PRIVATE PROPERTY INFILTRATION AND INFLOW REMOVAL PROGRAM
This Agreement is made this day of,, by and between the Downers Grove Sanitary District ("District") and ("Owners") of the premises located at:
Address:
Legal Description:
P.I.N.:
Whereas, the District has a program for the removal of infiltration and inflow sources on private property, and
Whereas, the District has conducted an evaluation of the property described above, including appropriate tests and inspections, in accordance with District ordinances, and
Whereas, the Owners and the District agree that there are connections on the subject property which discharge storm water, surface water or ground water into the sanitary sewer system of the District, and
Whereas, the Owners and the District desire to correct such illegal connections in accordance with the District's Private Property Infiltration and Inflow Removal Program ("Program").
Now, therefore, in consideration of the mutual covenants contained herein, the District and the Owners hereby agree to the following terms and conditions:
 Owners have read and understand the program requirements attached to and made a part of this agreement.
The Owners agree to allow District employees, engineers, contractors and agents reasonable access to the subject property for the completion of all work required under the Program.

Upon compliance of Owners with all terms and conditions as stated in the program requirements, the District agrees to pay for all eligible work required under the

3)

Program.

- 4) The Owners agree that if they fail to comply with all terms and conditions as stated in the program requirements, they shall be liable to the District for any and all costs incurred by the District for any work performed at the subject premises in the course of correcting illegal connections.
- 5) The Owners agree to retain ownership and operation, maintenance and replacement responsibility for all sump pumps, piping, connections and appurtenances which may be installed under this program and nothing contained herein shall transfer ownership or operation, maintenance or replacement responsibility for these facilities to the District.
- 6) The Owners agree to retain ownership and maintenance responsibilities for the building sanitary service serving the subject property and nothing contained herein shall transfer ownership or maintenance responsibilities of the building sanitary service to the District.
- Owners agree to release and waive any claim, suit or liability and to indemnify and hold harmless the Downers Grove Sanitary District, its trustees, officers, employees, engineers and agents, from and against all liability, damage, loss, claims, demands and actions of any nature whatsoever which arise out of or are connected with, or are claimed to arise out of or be connected with the undersigned's participation in this program. This covenant shall include, but not be limited to, any consequence of the inspection of the premises, selection of the system installed or the contractor utilized, installation of the system, operation, maintenance or failure of the system once it is installed, or eligibility for, participation in or funding priority in the Program.
- 8) Owners state that they are the owners of the premises listed above and that they have read and understand this Agreement.

DOWNERS GROVE SANITARY DISTRICT	OWNER(S)	
Lawrence C. Cox, General Manager		

PREPARED BY: Clay Campbell, Attorney at Law 2710 Curtiss Street Downers Grove, IL 60515

BUILDING SANITARY SERVICE ACCESS AGREEMENT

In consideration of good and valuable consideration, receipt and sufficiency of which are
hereby expressly acknowledged, and
(hereinafter referred to as "Grantors"), legal owners of the below described property, hereby
warrant, grant and convey to the DOWNERS GROVE SANITARY DISTRICT, a body politic and
corporate of DuPage County, Illinois, (hereinafter referred to as "District") its engineers
contractors, agents, successors and assigns, the right to inspect, test, measure flows or otherwise
monitor each underground building sanitary service and the right of access thereto, in, upon, under
over, through and across the land over each building sanitary service from the property line to each
building located on the following described property:
Legal Description:
P.I.N.:
Property Address:
The access for said building sanitary service, herein granted, is subject to the following
terms and covenants, which the District expressly acknowledges, undertakes and agrees to fulfill,
to-wit:

1. This access shall not unreasonably interfere with the use and enjoyment of the Grantors' property, by the Grantors, their successors and assigns.

- 2. In the event that a building sanitary service requires repair, reconstruction, rehabilitation or replacement, Grantors agree to cooperate with the District to allow reasonable additional access for such work. The responsibility for the repair, reconstruction, rehabilitation or replacement shall be governed by ordinances of the District in effect as of the date of this Agreement and as subsequently amended from time to time.
- 3. If the surface of the subject property is disturbed by the District, its engineers, contractors, agents, successors or assigns, at any time, and from time to time, by the inspection, testing, reconstruction, rehabilitation, repair or replacement in connection with said building sanitary service, the District shall, at its sole cost and expense, repair and restore any disturbed property to substantially the same condition that existed immediately prior to such disturbances, including, without limitation, necessary repairs and replacement of paving and landscaping.
- 4. Grantors agree that the operation and maintenance of said building sanitary service shall be governed by ordinances of the District in effect as of the date of this Agreement and as subsequently amended from time to time.

The District, as a condition of rights granted to it by this Agreement, hereby agrees to protect, indemnify and hold the owners of the above described property harmless from and against any and all claims, demands, causes of action, losses, suits, liabilities, judgements and decrees relating to the use of this Agreement, and the costs and expenses (including attorney's fees) incident to the defense of and by such owners, in any manner caused by, resulting from, growing out of, connected with, or in any way attributable to its use of this Agreement.

"Grantors" do hereby warrant that they are the legal owners of the above described property.

"Grantors" when used herein is intended to refer to the holder or holders from time to time of title to the Tract and to any portions thereof. All provisions of this Agreement, including the benefits of burdens, are hereby declared to run with the land and shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto, as well as, the future owners of the above described property. This Agreement will be recorded with the DuPage County Recorder of Deeds to serve as notice to future owners of the subject property.

For the consideration expressed herein, the District joins in the execution of this document for the purpose of accepting, consenting and agreeing to the terms and obligations contained in this Agreement. IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed as of this ____day of _______, 20____. DOWNERS GROVE SANITARY DISTRICT General Manager SAMPLE - DO NOT SIGN AT THIS TIME ATTEST: ______ Assistant Clerk STATE OF ILLINOIS)) SS COUNTY OF DUPAGE) I, the undersigned, a Notary Public in and for the County and State aforesaid, DO HEREBY _____ and _ known to me to be the same persons whose names are subscribed to the foregoing instrument appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act for the uses and purposes therein set forth. GIVEN under my hand and official seal this _____day of ______, 20___. Notary Public

Prepared By: Clay Campbell, Attorney at Law, 2710 Curtiss Street, Downers Grove, Illinois 60515 Mail To: Downers Grove Sanitary District, 2710 Curtiss Street, Downers Grove, Illinois 60515

Appendix G

Ordinance 02-04 and BSSRAP Documents

ORDINANCE NO. ORD 02-04 ORDINANCE ESTABLISHING A BUILDING SANITARY SERVICE REPAIR ASSISTANCE PROGRAM

WHEREAS, the Downers Grove Sanitary District owns, operates and maintains a public sanitary sewer system to carry wastewater from users connected to that system; and

WHEREAS, private sanitary sewer service lines, commonly referred to as building sanitary services, connect users to the public sewer; and

WHEREAS, District ordinances establish that the owner of the property connected to the public sanitary sewer system is the owner of the entire private sanitary sewer service line; and

WHEREAS, District ordinances establish that, the owner of the property connected to the public sanitary sewer system is responsible for all maintenance and operation of the building sanitary service. Maintenance and operation as defined by District ordinances means keeping the sanitary sewer connection, sewer lines and other sewer facilities in satisfactory working condition and a good state of repair (including but not limited to preventing any obstruction or extraneous material or flows from entering said facilities, protecting said facilities from any damage and keeping same free from defects or malfunctions), and making necessary provisions and taking necessary precautions to assure that said sewer facilities are at all times capable of satisfactorily performing the services and adequately discharging the functions and producing the final results and purposes said facilities are intended to perform; and

WHEREAS, blockages of a building sanitary service sometimes occur despite repeated maintenance activities by the owner of the property; and

WHEREAS, blockages of the building sanitary service can be difficult and expensive to correct; and

WHEREAS, the repair, rehabilitation or replacement of a building sanitary service provides a unique opportunity for the District to reduce or eliminate infiltration and inflow into the public sanitary sewer system; and

WHEREAS, the District finds it to be in the best interests of all District users to provide assistance with the repair, rehabilitation or replacement of a building sanitary service when such assistance will provide a mechanism for the District to be certain that said repairs are performed properly, to reduce or eliminate infiltration and inflow from the building sanitary service and insure that repairs are made in a manner which protects the integrity of the public sanitary sewer system.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE DOWNERS GROVE SANITARY DISTRICT:

That a Building Sanitary Service Repair Assistance Policy is hereby established in accordance with the following conditions:

- 1) The District will assume responsibility for work necessary to relieve a blockage of a building sanitary service under certain conditions.
- 2) The program shall apply to all buildings connected to the Downers Grove Sanitary District collection system.
- 3) This program is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 4) Prioritization of applications shall be at the sole discretion of the District. For purposes of prioritizing applications, the District may consider the severity of the problem, costs for corrective measures, time constraints, future work that may be applicable to that location, and such other considerations as the District deems necessary. Any appeal of decisions made by the General Manager shall be made to the Board of Trustees and said Board of Trustees shall be the final authority.
- An owner desiring to participate in the program must complete and submit a signed Application for Participation, Building Sanitary Service Repair Assistance Agreement, and Access Agreement. Said Building Sanitary Service Repair Assistance Agreement shall include, among other items, a clause whereby the Owner releases and waives any claim of liability against the District from any sanitary sewer backups or any consequence of their participation in the program including, the District's determination of corrective actions, selection of the contractor to be utilized, implementation and completion of the corrective action, or the owner's eligibility, participation or funding priority in the program.
- The owner must comply with the District's Private Property Infiltration and Inflow Removal Program.
- 7) The program will be evaluated annually and the District may change or eliminate the program.
- 8) The General Manager shall develop, subject to approval of the Board of Trustees, such program conditions as may be necessary to implement the program established by this ordinance.
- 9) Notwithstanding any of the foregoing, the District admits no responsibility or liability of any kind, nor shall the adoption of this ordinance result in any responsibility or liability, for any sanitary sewer backup.

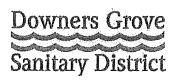
PASSED AND APPROVED by the President and Board of Trustees of the Downers Grove Sanitary District at a regular meeting of the Trustees held on the ALT day of MAU, to become effective within ten (10) days after publication thereof.

PRESIDENT

TEST: 1/C

CLERK

Board of Trustees
Wallace D. Van Buren
President
Amy S. Kovacevic
Vice President
Donald F. Peters
Clerk



2710 Curtles Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Pax: 630-969-0827 www.dgsd.org Staff
Nicholas J. Menninga
General Manager
W. Clay Campbell
Administrative Services
Director
Legal Counsel
Michael G. Philipp

Providing a Better Environment for South Central DuPage County

BUILDING SANITARY SERVICE REPAIR ASSISTANCE PROGRAM

Effective July 1, 2002, the Downers Grove Sanitary District implemented a Building Sanitary Service Repair Assistance Program. The District will repair, rehabilitate or replace a building sanitary service under certain conditions. If you are interested in this Program, carefully review the enclosed material which includes the following:

- Application for Participation
- Program Requirements Building Sanitary Service Repair Assistance Program
- Agreement Building Sanitary Service Repair Assistance Program (SAMPLE, DO NOT COMPLETE)
- Building Sanitary Service Access Agreement (SAMPLE, DO NOT COMPLETE)
- Program Requirements Private Property Infiltration and Inflow Removal Program

After review of the enclosed material, please call our office if you have any questions or need any additional information. If you would like to apply for this Program, please complete the one-page Application for Participation Form and mail it to the District along with copies of recent rodding invoices in the envelope provided.

Please note that if we do not receive these items within 90 days of the date of this letter, and the condition of your building sanitary service requires an emergency repair under the Program, additional charges will apply.

Be sure that all pets are confined for our arrival, and for the duration of the inspection, to an area where your pets will not have contact with our personnel for the safety of our personnel and your pets.

APPLICATION FOR PARTICIPATION IN DOWNERS GROVE SANITARY DISTRICT BUILDING SANITARY SERVICE REPAIR ASSISTANCE PROGRAM

I/We hereby request participation in the Downers Grove Sanitary District Building Sanitary Service Repair Assistance Program, hereinafter called the "Program."

I/We own, and this Application is for, the fol	lowing described property:
Address:	
Legal Description:	
Parcel Number (P.I.N.); Number (P.I.N.)	(You may obtain the Parcel for your property from your real estate tax bill.)
I/We have received copies of the Program Repair Assistance Program and for the Private Pro attached to and made a part of this Application.	Requirements for the Building Sanitary Service operty Infiltration and Inflow Removal Program
I/We agree to allow the Downers Grove Sani all inspections and testing as detailed in the Program	tary District or its representatives to make any and Requirements.
I/We agree to be sure that all pets are confine the inspection, to an area where my/our pets will not of my/our pets and District Personnel.	d, for District Personnel arrival and the duration of have contact with District Personnel for the safety
I/We have received sample copies of the Assistance Program and the Building Sanitary Serv Agreements must be signed in order to participate in the	
Dated thisday of	, 20
OWNE	R(S)
Printed Name	Signature
Printed Name	Signature
	Telephone Number
NOTE: If this property is held in a trust or th	e owner is a corporate entity, please contact

NOTE: If this property is held in a trust or the owner is a corporate entity, please contact Kimberly Giardini at 630-353-3604 to obtain a form to provide required additional information. The above mentioned Program and Access Agreements cannot be prepared without this additional information.

DOWNERS GROVE SANITARY DISTRICT BUILDING SANITARY SERVICE REPAIR ASSISTANCE PROGRAM

PROGRAM REQUIREMENTS

The District will repair, rehabilitate or replace a building sanitary service under certain conditions as detailed in this program. This program will provide a mechanism for the District to be certain that said repairs are performed properly, to reduce or eliminate infiltration and inflow, and insure that repairs are made in a manner which protects the integrity of the public sanitary sewer system.

The District has determined that certain requirements for the Building Sanitary Service Repair Assistance Program are necessary to protect the integrity of such a program and the financial well-being of the District.

A building sanitary service repair assistance program is hereby implemented under the following conditions and requirements:

- A building sanitary service is defined as the entire private sanitary sewer service line from the building to the District public sanitary sewer line including the point of connection (such as a wye, tee or break-in connection) as defined by District ordinance.
- 2) This program applies to all buildings connected to the Downers Grove Sanitary District collection system.
- 3) This program shall be effective July 1, 2002.
- 4) This program is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 5) Priorization of applications shall be at the sole discretion of the District. For purposes of prioritizing applications, the District may consider the severity of the problem, costs for corrective measures, time constraints, future work that may be applicable to that location, and such other considerations as the District deems necessary.
- An owner desiring to participate in this program must complete and submit a signed Application for Participation, a Building Sanitary Service Repair Assistance Agreement and an Building Sanitary Service Access Agreement. The Building Sanitary Service Repair Assistance Agreement shall include, among other items, a clause whereby the Owner releases and waives any claim of liability against the District from any sanitary sewer backups or any consequence of their participation in the program including, the District's determination of corrective actions, selection of

- the contractor to be utilized, implementation and completion of the corrective action, or the owner's eligibility, participation or funding priority in this program.
- The program will be evaluated annually and the District may change or eliminate the program.
- 8) The District will pay for the repair, replacement, or rehabilitation of a building sanitary service and reasonable restoration.
- 9) In accordance with District ordinances, the owner of the property retains ownership of the entire building sanitary service and nothing contained in this program, its underlying ordinances, or administration of the program shall transfer ownership for any portion of the building sanitary service to the District.
- 10) In accordance with District ordinances, the owner of the property is responsible for all maintenance and operation of the building sanitary service. Maintenance and operation as defined by District ordinance means keeping the sanitary sewer connection, sewer lines and other sewer facilities in satisfactory working condition and a good state of repair (including but not limited to preventing any obstruction or extraneous material or flows from entering said facilities, protecting said facilities from any damage and keeping same free from defects or malfunctions), and making necessary provisions and taking necessary precautions to assure that said sewer facilities are at all times capable of satisfactorily performing the services and adequately discharging the functions and producing the final results and purposes said facilities are intended to perform. Types of maintenance activities may include, but are not limited to, any and all work necessary to keep the entire length of the building sanitary service in working condition and free of infiltration and inflow, including televising, rodding, cleaning, root cutting or other root eradication procedures, removal of materials or debris, or repair, replacement or rehabilitation. The owner of the property is solely responsible for selecting a contractor to perform any maintenance activities related to the building sanitary service. The District does not recommend nor does it require the owner of the property to utilize any particular contractor in performing maintenance activities. Nothing contained in this program, its underlying ordinances, or administration of the program shall transfer maintenance for any portion of the building sanitary service to the District.
- 11) An owner desiring to participate in this program must apply for the District Private Property Infiltration and Inflow Removal Program and complete all work required under that program, either prior to or concurrent with this program
- 12) The District exercises no authority or responsibility for trees located in the public right-of-way. Property owners who believe that public right-of-way trees may be causing or contributing to building sanitary service problems should direct their concerns to the appropriate municipality.

- 13) If at any time, the District makes any repair, replacement, or rehabilitation or other work to relieve a building sanitary service problem, the owner must agree to allow the District to install a cleanout.
- 14) In order to be eligible for an initial investigation under this program, the following steps are required:
 - a) The owner must submit a program application and a copy of an invoice showing that the service has been rodded within the previous 12 months. The District must have been notified and allowed to investigate each of the building sanitary service backups including the corrective measures taken by the owner. Investigation may include visiting the site, viewing and copying any invoices for costs incurred, contact with any contractor who performed work at the site, and inspecting any work performed at the site. If, after investigation, the District determines that the work was not completed properly and thoroughly and in a manner which could reasonably be expected to relieve the immediate problem and prevent future problems, that situation will not be considered one of the three building sanitary service backups towards eligibility in this program.
 - b) Upon completion of the investigation, the District shall have sole responsibility and authority to determine if the cause of the repeated maintenance activity by the homeowner is a problem which requires repair, rehabilitation or replacement. The District shall have sole authority to determine if the repair, rehabilitation or replacement is eligible under this program. If this determination is made, the District shall have authority to determine corrective measures and may contract for or use its own personnel to make any rodding, repair, replacement or rehabilitation of the building sanitary service. The District shall have no obligation to use any contractor who may already be at the job site at the request of the homeowner.
 - c) The District reserves the right to waive the requirement contained in Item 14b above and proceed to provide assistance as provided by this program in the case of a total blockage of the building sanitary service, where the District has determined that maintenance by the owner shall not relieve said blockage.
 - d) In the event the District performs an investigation, the homeowner shall confine all pets, for District personnel arrival and the duration of the inspection, to an area where the homeowner's pets will not have contact with District personnel for the safety of both District personnel and the homeowner's pets.
 - e) The District shall have sole responsibility and authority to determine the cause of a total blockage of the building sanitary service. If this determination is made, the District shall have authority to determine corrective measures and may contract for or use its own personnel to make any rodding, repair,

- replacement or rehabilitation of the building sanitary service. The District shall have no obligation to use any contractor who may already be at the job site at the request of the homeowner.
- f) Blockages of the building sanitary service determined by the District to be caused by actions of the property owner or resident of the premises shall not be eligible under this program.
- 15) The District's assistance is limited to the actual costs incurred by the District for investigation, repair, replacement, rehabilitation, rodding or restoration of the building sanitary service.
- 16) The General Manager may, in his discretion, provide a waiver of those program requirements listed above which he deems appropriate based on his evaluation of the individual circumstances related to a request for financial assistance.
- 17) The District shall have the sole authority to determine eligibility for participation, prioritization of requests and compliance with all requirements for the program and District ordinances.
- 18) If a building sanitary service is rehabilitated, repaired or replaced under this program and the existing building is subsequently demolished and a new building is constructed, a service reimbursement charge may be applied if a portion of a District-built building sanitary service is reused, eliminating the need to completely remove and replace the existing service.

$\label{eq:AGREMENT} \textbf{AGREEMENT} \\ \textbf{FOR BUILDING SANITARY SERVICE REPAIR ASSISTANCE PROGRAM}$

	en th	is Agreement is made this day of, 20 by and the Downers Grove Sanitary District ("District") and) of the premises located at:
	Ad	dress:
	Leg	gal Description:
	P.I.	N.:
("Prog		nereas, the District has a Building Sanitary Service Repair Assistance Program'), and
	Wh	nereas, Owners hereby request participation in the Program.
the Ov		w, therefore, in consideration of the mutual covenants contained herein, the District and shereby agree to the following terms and conditions:
	1)	Owners have read and understand the Building Sanitary Service Repair Assistance Program Requirements ("Program Requirements") attached to and made a part of this Agreement.
	2)	Owners understand that participation in the Program requires compliance with the District's Private Property Infiltration and Inflow Removal Program.
	3)	Owners understand that participation in the Program requires execution of a Building Sanitary Service Access Agreement.
	4)	Owners agree to allow the District employees, engineers, contractors and agents reasonable access to the subject property for the completion of all work required under the Program.
	5)	Upon compliance of Owners with all terms and conditions as stated in the Program information, the District will provide assistance to the Owners as allowed by the Program.
	6)	Owners agree that if they fail to comply with all terms and conditions as stated in the Program Requirements, they shall be liable to the District for any and all costs incurred by the District for any work performed at the subject premises in the course of providing assistance under this Program.

- 7) Owners agree to retain ownership and maintenance responsibilities for the building sanitary service serving the subject property and nothing contained herein shall transfer ownership or maintenance responsibilities of the building sanitary service to the District.
- 8) Owners agree to release and waive any claim, suit or liability and to indemnify and hold harmless the District, its trustees, officers, employees, engineers and agents, from and against all liability, damage, loss, claims, demands and actions of any nature whatsoever which arise out of or are connected with, or are claimed to arise out of or be connected with any previous sanitary sewer backups or the undersigned's participation in this Program. This covenant shall include, but not be limited to, any consequence of their participation in the Program including, the District's determination of corrective actions, selection of the contractor to be utilized, implementation and completion of the corrective action, or the owners' eligibility, participation or funding priority in this Program.
- 9) Owners state that they are the owners of the premises listed above, and that they have read and understand this Agreement.

DOWNERS GROVE SANITARY DISTRICT	OWNER(S)
General Manager	
SAMPLE	Z – DO NOT SIGN AT THIS TIME
STATE OF ILLINOIS)	
) SS COUNTY OF DUPAGE)	
I, the undersigned, a Notary Public in and HEREBY CERTIFY that	
HEREBY CERTIFY that personally known to me to be the same persons whinstrument, appeared before me this day in person delivered the said instrument as their own free and volset forth.	and acknowledged that they signed and
GIVEN under my hand and Notarial Seal, this	day of, 20
Notary Public	

PREPARED BY: Clay Campbell, Attorney at Law, 2710 Curtiss Street, Downers Grove, IL 60515

BUILDING SANITARY SERVICE ACCESS AGREEMENT

In consideration	of good and valuab	ole consideration, r	eceipt and sufficienc	y of which are
hereby expressly acknow	ledged,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	and	VOID (
(hereinafter referred to	as "Grantors"), leg	gal owners of the	below described pr	roperty, hereby
warrant, grant and conve	y to the DOWNERS	S GROVE SANITA	ARY DISTRICT, a b	ody politic and
corporate of DuPage (County, Illinois, (1	nereinafter referred	I to as "District")	its engineers,
contractors, agents, succe	essors and assigns,	the right to inspec	t, test, measure flow	s or otherwise
monitor each undergroun	d building sanitary	service and the righ	nt of access thereto, i	n, upon, under,
over, through and across	the land over each l	building sanitary se	rvice from the prope	rty line to each
building located on the fo	llowing described p	roperty:		
Legal Description	•			

P.I.N.:		interior de la constantina della constantina del		
Property Address:		,	All AND	
The access for sa	uid building sanitar	y service, herein g	ranted, is subject to	the following
terms and covenants, whi	ich the District exp	ressly acknowledge	es, undertakes and a	grees to fulfill,
to-wit:				

1. This access shall not unreasonably interfere with the use and enjoyment of the Grantors' property, by the Grantors, their successors and assigns.

- 2. In the event that a building sanitary service requires repair, reconstruction, rehabilitation or replacement, Grantors agree to cooperate with the District to allow reasonable additional access for such work. The responsibility for the repair, reconstruction, rehabilitation or replacement shall be governed by ordinances of the District in effect as of the date of this Agreement and as subsequently amended from time to time.
- 3. If the surface of the subject property is disturbed by the District, its engineers, contractors, agents, successors or assigns, at any time, and from time to time, by the inspection, testing, reconstruction, rehabilitation, repair or replacement in connection with said building sanitary service, the District shall, at its sole cost and expense, repair and restore any disturbed property to substantially the same condition that existed immediately prior to such disturbances, including, without limitation, necessary repairs and replacement of paving and landscaping.
- 4. Grantors agree that the operation and maintenance of said building sanitary service shall be governed by ordinances of the District in effect as of the date of this Agreement and as subsequently amended from time to time.

The District, as a condition of rights granted to it by this Agreement, hereby agrees to protect, indemnify and hold the owners of the above described property harmless from and against any and all claims, demands, causes of action, losses, suits, liabilities, judgements and decrees relating to the use of this Agreement, and the costs and expenses (including attorney's fees) incident to the defense of and by such owners, in any manner caused by, resulting from, growing out of, connected with, or in any way attributable to its use of this Agreement.

"Grantors" do hereby warrant that they are the legal owners of the above described property.

"Grantors" when used herein is intended to refer to the holder or holders from time to time of title to the Tract and to any portions thereof. All provisions of this Agreement, including the benefits of burdens, are hereby declared to run with the land and shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto, as well as, the future owners of the above described property. This Agreement will be recorded with the DuPage County Recorder of Deeds to serve as notice to future owners of the subject property.

For the consideration expressed herein, the District joins in the execution of this document for the purpose of accepting, consenting and agreeing to the terms and obligations contained in this Agreement, IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed as of this ______, 20____. DOWNERS GROVE SANITARY DISTRICT BY: _____ General Manager SAMPLE - DO NOT SIGN AT THIS TIME ATTEST: _____ Assistant Clerk STATE OF ILLINOIS COUNTY OF DUPAGE) I, the undersigned, a Notary Public in and for the County and State aforesaid, DO HEREBY CERTIFY that _____ and ______, personally known to me to be the same persons whose names are subscribed to the foregoing instrument appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act for the uses and purposes therein set forth. GIVEN under my hand and official seal this _____day of ______, 20___. Notary Public

Prepared By: Clay Campbell, Attorney at Law, 2710 Curtiss Street, Downers Grove, Illinois 60515 Mail To: Downers Grove Sanitary District, 2710 Curtiss Street, Downers Grove, Illinois 60515

Appendix H

Ordinance 97-03 and Overhead Sewer Program Documents

ORDINANCE NO. 97-03 ORDINANCE ESTABLISHING A COST REIMBURSEMENT PROGRAM FOR THE INSTALLATION OF OVERHEAD SEWERS OR BACKFLOW PREVENTION DEVICES

WHEREAS, the Downers Grove Sanitary District has an ongoing sanitary sewer system repair and rehabilitation program to reduce infiltration and inflow, and

WHEREAS, despite the sanitary sewer system repair and rehabilitation program and the District's best efforts, some District residents have experienced sanitary sewer backups during periods of heavy rainfall, and

WHEREAS, the District has determined that the installation of overhead sewers or backflow prevention devices may reduce infiltration and inflow and prevent future occurrences of sanitary sewer backups, and

WHEREAS, the District has determined that a cost reimbursement program for the installation of overhead sewers or backflow prevention devices may be beneficial, and

WHEREAS, the District has determined that certain requirements for a cost reimbursement program are necessary to protect the District's sanitary sewer system, the integrity of such a program and the financial well-being of the District.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE DOWNERS GROVE SANITARY DISTRICT;

That a cost reimbursement program for the installation of overhead sewers or backflow prevention devices to reduce infiltration and inflow is hereby established in accordance with the following requirements:

- The District will reimburse an owner up to \$2,500, or 50% of the cost, whichever is less, of installing a District approved overhead sewer system or backflow prevention device.
- 2) The program applies to all buildings connected to the Downers Grove Sanitary District collection system and constructed prior to July 17, 1996.
- 3) The program shall apply to installations of overhead sewers or backflow prevention devices made on or after the effective date of this ordinance and shall also apply to installations made from July 17, 1996, to date of approval of this ordinance. The District shall, in its sole discretion, determine the eligibility of installations for this program.
- 4) Financial participation of the District is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 5) The program is limited to the actual cost of the overhead sewer or backflow prevention device installation, subject to the funding limitations described above, but does not include incidental costs such as landscape restoration, painting, tile, carpeting, etc.
- 6) The owner of the building where the overhead sewer or backflow prevention device is installed must agree to release and waive any claim, suit or liability against the District from any previous sanitary sewer backups or any consequence of the selection of the

system to be installed, contractor to be utilized, installation of the system, operation or maintenance of the system once it is installed, or the eligibility, participation or funding priority in this program.

7) The owner must allow the District to inspect the building prior to the District's determination of eligibility for this program. All sources and potential sources of infiltration and inflow must be eliminated as part of this program. The owner must allow the District to inspect the building following participation in the program and completion of the installation to insure that all infiltration and inflow into the District sanitary sewer system has been eliminated.

te

Passed: ____ Approved:

Published: 8/27/9

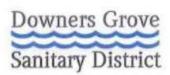
- 8) The General Manager shall develop, subject to approval of the Board of Trustees, such program requirements as may be necessary to implement the program established by this ordinance.
- 9) The General Manager shall review all applications for participation, including the proposals for installation, and may require revisions thereon to comply with applicable District ordinances and requirements.
- 10) The District shall have the sole authority to determine eligibility for participation, prioritization of requests and compliance with all District ordinances. Any appeal of decisions made by the General Manager shall be made to the Board of Trustees and said Board of Trustees shall be the final authority.
- 11) The program will be evaluated annually and the District may change or eliminate the program.

PASSED AND APPROVED by the President and Board of Trustees of the Downers Grove Sanitary District at a regular meeting of the Trustees held on the day of ________, 1997, to become effective within ten (10) days after publication thereof.

PRESIDENT

Page **191** of **292**

Board of Trustees Wallace D. Van Buren President Amy S. Kovacevic Vice President Donald F. Peters



2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.desd.org Staff
Nicholas I. Menninga
General Manager
W. Clay Campbell
Administrative Services
Director
Legal Counsel

Michael C. Wiedel

Providing a Better Environment for South Central DuPage County

COST REIMBURSEMENT PROGRAM FOR THE INSTALLATION OF OVERHEAD SEWERS OR BACKFLOW PREVENTION DEVICES

The Downers Grove Sanitary District provides a Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices. If you are interested in this important program, carefully review the enclosed material which includes the following:

- · Application for Participation
- Summary Outline
- Program Requirements Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices
- Agreement Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices (SAMPLE, DO NOT COMPLETE)
- Building Sanitary Service Access Agreement (SAMPLE, DO NOT COMPLETE)
- Program Requirements Private Property Infiltration and Inflow Removal Program
- Sanitary Sewer Backup Handbook

This program has been implemented as a part of the District's ongoing efforts to reduce infiltration and inflow of storm water into the sanitary sewer system. During periods of heavy rainfall, infiltration and inflow of storm water overloads the sanitary sewer system and contributes to sanitary sewer backup problems. The District will continue to address sanitary sewer backup problems through an aggressive sanitary sewer maintenance and rehabilitation program. However, despite the District's efforts, sanitary sewer backups can occur and residents should consider installation of overhead sewers or backflow prevention devices.

After review of the enclosed material, please call our office if you have any questions or need any additional information. If you would like to participate in this program, please complete the one-page Application for Participation Form and return to the District in the envelope provided.

Be sure that all pets are confined for our arrival, and for the duration of the inspection, to an area where your pets will not have contact with our personnel for the safety of our personnel and your pets.

Printed on Recycled Paper

WEB PAGE FORM

APPLICATION FOR PARTICIPATION IN DOWNERS GROVE SANITARY DISTRICT COST REIMBURSEMENT PROGRAM FOR THE INSTALLATION OF OVERHEAD SEWERS OR BACKFLOW PREVENTION DEVICES

I/We hereby request participation in the Downers Grove Sanitary District Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices, hereinafter called the ("Program").

Le	gal Description:	
_		
Pa	rcel Number (P.I.N.):Number (P	(You may obtain the Parce (I.N.) for your property from your real estate tax bill.)
	e Property Infiltration and I	gram Requirements for the Overhead Sewer Program Inflow Removal Program attached to and made a part
The state of the s		
	to allow the Downers Gro and testing as detailed in t	we Sanitary District or its representatives to make any the Program Requirements.
I/We have he Installation of Service Access A	and testing as detailed in the received sample copies of Overhead Sewers or Back	the Program Requirements. the Agreement for Cost Reimbursement Program for kflow Prevention Devices and the Building Sanitary that said Agreements must be signed upon notice of
I/We have he Installation of Service Access A preliminary appro	received sample copies of Overhead Sewers or Back greement, and understand	the Program Requirements. the Agreement for Cost Reimbursement Program for kflow Prevention Devices and the Building Sanitary that said Agreements must be signed upon notice of an Requirements.
I/We have he Installation of Service Access A preliminary appro	received sample copies of Overhead Sewers or Backgreement, and understand val as detailed in the Progradus ofday of	the Program Requirements. the Agreement for Cost Reimbursement Program for kflow Prevention Devices and the Building Sanitary that said Agreements must be signed upon notice of an Requirements.
I/We have he Installation of Service Access A preliminary appro	received sample copies of Overhead Sewers or Backgreement, and understand val as detailed in the Progradus ofday of	the Program Requirements. the Agreement for Cost Reimbursement Program for kflow Prevention Devices and the Building Sanitary that said Agreements must be signed upon notice of m Requirements.
I/We have he Installation of Service Access A preliminary appro Dated this	received sample copies of Overhead Sewers or Backgreement, and understand val as detailed in the Progradus ofday of	the Program Requirements. the Agreement for Cost Reimbursement Program for kflow Prevention Devices and the Building Sanitary that said Agreements must be signed upon notice of m Requirements.

DOWNERS GROVE SANITARY DISTRICT COST REIMBURSEMENT PROGRAM FOR THE INSTALLATION OF OVERHEAD SEWERS OR BACKFLOW PREVENTION DEVICES

SUMMARY OUTLINE

- 1) Owner submits completed Application for Participation.
- 2) District performs initial inspection of the building.
- 3) District performs second inspection of the building, including inserting a small television camera into the building sanitary service pipe from inside the building and injecting water into the ground in the area over this pipe on the outside of the building to identify and locate any leaks.
- 4) District issues a Notice of Eligibility or Noneligibility for the Overhead Sewer Program and issues written findings of the inspections.
- 5) If Owner receives a Notice of Eligibility, the Owner has six months from the date of the Notice to submit the required information.
- 6A) If there are no infiltration and inflow (I/I) sources eligible for removal under the Private Property I/I Removal Program, the Owner obtains at least two proposals from contractors and submits the proposals to the District.
- 7A) Upon receipt of all required information, the District issues preliminary approval and sends to the Owner for signature the Program Agreement, Building Sanitary Service Access Agreement and the selected contractor proposal. Owner must return signed Agreements and signed proposal within thirty days of the date of the preliminary approval.
- 8A) Upon submittal to the District of the signed Agreements and signed proposal with selected contractor, Owner and contractor must obtain all permits, complete the work, request inspection by the District and the building authority, and submit paid receipt within six months of the date of the preliminary approval.
- 9A) Upon acceptance, the District pays the Owner for the appropriate portion of the overhead sewer work.
- 10A) If owner fails to comply within any of the allotted time frames detailed above, funding priority ceases and Owner must submit new Application for Participation and such application will be treated as a new application for determination of funding eligibility.

- 6B) If there are infiltration and inflow (I/I) sources eligible for removal under the Private Property I/I Removal Program, the District assists the Owner in obtaining proposals from contractors and selecting the lowest, responsible proposal.
- 7B) Upon receipt of all required information, the District issues preliminary approval and sends to the Owner for signature the Program Agreement, Building Sanitary Service Access Agreement and the selected contractor proposal. Owner must return signed Agreements and signed proposal within thirty days of the date of the preliminary approval.
- 8B) The Owner signs and returns to the District the Program Agreement, Access Agreement and contractor proposal. The Owner schedules the work with the contractor.
- 9B) The contractor completes the work. The District inspects the work and performs any appropriate testing. The Village also inspects the work.
- 10B) Upon acceptance, the Owner pays the contractor for the appropriate portion of the overhead sewer work and the District pays the contractor for the appropriate portion of the overhead sewer work and for the eligible I/I removal work.
- 11B) If Owner fails to comply within any of the allotted time frames detailed above, funding priority ceases and Owner must submit new Application for Participation and such application will be treated as a new application for determination of funding eligibility.

DOWNERS GROVE SANITARY DISTRICT COST REIMBURSEMENT PROGRAM FOR THE INSTALLATION OF OVERHEAD SEWERS OR BACKFLOW PREVENTION DEVICES

PROGRAM REQUIREMENTS

The District will provide funds to building owners who have or may experience sanitary sewer backups during periods of heavy rainfall for the installation of overhead sewers or backflow prevention devices.

The District has determined that certain requirements for the cost reimbursement program are necessary to protect the District's sanitary sewer system, the integrity of such a program and the financial well-being of the District.

A cost reimbursement program for the installation of overhead sewers or backflow prevention devices is hereby implemented in accordance with the following requirements:

- The District will reimburse an owner up to \$3,000, or 50% of the cost, whichever is less, of installing a District approved overhead sewer system or backflow prevention device.
- The program applies to all buildings connected to the Downers Grove Sanitary District collection system and constructed prior to July 17, 1996.
- The program shall apply to installations of overhead sewers or backflow prevention devices made on or after July 17, 1996.
- 4) Financial participation of the District is limited to funds budgeted for the program. Said funding level may be changed or eliminated based on the District's annual review of the program.
- 5) Applications will be classified into the following priority groups for purposes of determining funding eligibility.
 - a) First priority One or more sanitary sewer backups have occurred at the building and been reported to the District. The owner must provide documentation of previous sanitary sewer backups. Prior reports of sewer backups to the District, either by telephone at the time of the backup or by submittal of a Sanitary Sewer Backup Report shall constitute adequate documentation of a sanitary sewer backup.

Upon initial approval of the program, the District will mail a notice of availability of the program to all users who reported a backup during the July 17-18, 1996, or February 21, 1997, storm events. Thereafter, and for as long as the program remains in effect, the District will notify all users who report backups of the availability of the program.

- b) Second priority The following applications will be classified as second priority:
 - Any building which has the potential to experience sanitary sewer backups as
 a result of an insufficient elevation differential between the building's internal
 plumbing and the District's sanitary sewer system. No sanitary sewer backups
 have occurred at the property, but the owner is desirous of installing an
 overhead sewer or backflow prevention device as a preventive measure.
 - 2. A building for which the overhead sewer or backflow prevention device was installed from July 17, 1996, to the date of approval of this policy.
 - At least one reimbursement has been made for the building and the application is a second or succeeding request for reimbursement for the same building.

Between May 1 and the following February 28 of each fiscal year, applications from the first priority group will be funded on a first come, first served basis within available budget limitations. If budget funds remain, on March 1, applications from both priority groups will be funded between March 1 and April 30 of each fiscal year on a first come, first served basis within available budget limitations. Applications not funded in a fiscal year will be carried over to the next fiscal year and funded in accordance with the above procedures.

- 6) An owner desiring to participate in this program must complete the following steps:
 - a) Owner submits a complete and signed Application for Participation form.
 - b) District inspects the building, as described in the Program Requirements for the Private Property Infiltration and Inflow Removal Program, and issues a notice of eligibility or noneligibility to the owner. Said notice may include the sources or potential sources of infiltration and inflow which must be removed as a requirement of this program.
 - c) Upon receipt of a notice of eligibility from the District, the owner obtains proposals from contractors as described in Item 13. If the owner does not submit all of the required information within six (6) months of the date of the notice of eligibility, the owner must resubmit an application for participation form and such application will be treated as a new application for determination of funding eligibility.

- d) District reviews proposals, provides owner with preliminary approval, and provides agreements for owner signature. Owner must return signed agreements and signed proposal with selected contractor within thirty (30) days of the date of the preliminary approval.
- e) Owner and contractor obtain all permits and complete the work.
- f) Upon completion of the work, premises are inspected by the District and the appropriate building authority. Upon approval by the District and the appropriate building authority, acceptance by the owner, and submission of a paid receipt from the contractor to the owner, reimbursement will be made directly to the owner. (The owner is also encouraged to obtain an appropriate waiver of lien from the contractor for the owner's protection.) Said reimbursement will be made in the District's normal course of business.
- g) Owner must complete the items described in Items e and f above within six (6) months of the date of the preliminary approval described in Item d above, or the funding commitment shall be withdrawn and the owner must reapply and such application will be treated as a new application for determination of funding eligibility.
- Owners of the building where the overhead sewer or backflow prevention device is installed must execute an agreement which includes a clause whereby the Owners release and waive any claim of liability against the District from any previous sanitary sewer backups or any consequence of the selection of the system to be installed, the contractor to be utilized, installation of the system, operation or maintenance of the system once it is installed, or the eligibility, participation or funding priority in this program.
 - If a backflow prevention device is installed, the District will record a memorandum of the agreement against the property. Said memorandum shall serve as notice that a backflow prevention device has been installed on the property which requires maintenance for proper operation.
- 8) No owner shall be eligible for participation unless the owner and the building where the overhead sewer or backflow prevention device is or has been installed are in compliance with all District ordinances, including but not limited to payment of all fees and charges due to the District.
- 9) An owner shall be eligible for participation more than once for the same property, however, in no case, shall the total reimbursement from the District for any one property exceed the limits prescribed in Paragraph 1 above.
- 10) The program will be evaluated annually and the District may change or eliminate the program.

- 11) The owner must comply with the District's Private Property Infiltration and Inflow Removal Program.
- 12) The program is limited to the actual cost of the overhead sewer or backflow prevention device installation, subject to the funding limitations contained herein, but does not include incidental costs such as landscape restoration, painting, tile, carpeting, etc.
- 13) The owner must provide the District with proposals from a minimum of two contractors (three proposals are recommended) for the type of backup prevention selected by the owner prior to authorizing the work. If the desired backup prevention is not an overhead sewer, a proposal for an overhead sewer conversion must also be submitted. An overhead sewer does not rely upon a backflow valve or device and is believed to be the best backup prevention method. All proposals must provide sufficient detail for the District to determine the exact method of installation, the costs for labor and materials, the portion of the work not eligible for this program under Item 12 above, and compliance with all District ordinances and conditions, including this program.
- 14) The owner must obtain a no-charge District sewer permit for the work and must obtain a permit from the appropriate building authority (i.e., municipality or county), if required. After issuance of the permits, any changes or modifications to the work will require review and approval of the District and the appropriate building authority.
- 15) The contractor hired by the owner to perform the work must be bonded with the District, and the appropriate building authority, if required.
- 16) The District is not a party to any contract between the owner and the contractor.
- 17) In order to be eligible for this program, the installation of an overhead sewer shall meet the following requirements:
 - a) Overhead sanitary sewers must be provided to all floor levels that are less than one foot (1') above the elevation of the rim of the District manhole immediately upstream of the point of connection of said building into the District sanitary sewer system. Plumbing fixtures on a building floor level below an overhead sewer shall drain into an ejector pit. The elevations described above shall be included in the contractor's proposal.
 - b) A properly vented ejector basin shall be installed for all installations under this program. Ejector basins must comply with all District and appropriate building authority requirements. Ejector basins must be at least ten (10) feet from any storm water sump pits. The District shall maintain a list of ejector basins approved for use under this program.

- c) The manufacturer and model number of the proposed ejector pump must be specified in the contractor's proposal. The pump curve for the proposed ejector pump must be provided with the contractor's proposal. All ejector pumps must be able to pass a two inch solid. The smallest capacity pump suitable for the proposed installation must be specified. The capacity of the ejector pump shall not exceed 89 gallons per minute at a total head of ten feet. The ejector pump must be selected and installed in accordance with the manufacturer's requirements.
- d) Connections to the proposed ejector pump must be specifically listed on the contractor's proposal and all such connections shall be for the disposal of sanitary wastes only.
- e) A sketch indicating the proposed work must be included with each proposal.
- f) The District shall have the right to enter the building for inspection upon completion of the work and to impose penalties if the capacity of the ejector pump exceeds the capacity allowed by Item c. above. All such penalties shall be imposed in accordance with District ordinances prescribing penalties for ordinance violations as may be in effect at the time the violation of this section is discovered.
- 18) All work under this program must comply with District and applicable municipal or county ordinances, codes and requirements. In the event of any conflict between the District and municipal or county ordinances, codes or requirements, the District shall prevail.
- 19) The owner may elect to proceed with the work even though funding is not available. Reimbursement will be made when budgeted funds become available in accordance with this program. Such installations must comply with all requirements of this program in order to be eligible for future reimbursement.
- 20) The General Manager may, in his discretion, provide a waiver of those program requirements listed above which he deems appropriate based on his evaluation of the individual circumstances related to a request for reimbursement.
- 21) The District shall have the sole authority to determine eligibility for participation, prioritization of requests and compliance with all District ordinances.

AGREEMENT FOR COST REIMBURSEMENT PROGRAM FOR THE INSTALLATION OF OVERHEAD SEWERS OR BACKFLOW PREVENTION DEVICES

Th the Downe	is Agreement is made this day of, 20, by and between rs Grove Sanitary District ("District") and and and ("Owners") of the premises located at:
Pro	perty Address:
Leg	gal Description:
P.I.	N.:
	ereas, the District has a Cost Reimbursement Program for the Installation of Overhead Backflow Prevention Devices ("Program"), and
Wh	ereas, Owners desire to participate in the Program.
	w, therefore, in consideration of the mutual covenants contained herein, the District and hereby agree to the following terms and conditions:
1)	Owners have read and understand the Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices Program Requirements ("Program Requirements") attached to and made a part of this Agreement.
2)	Owners understand that participation in this Program requires compliance with the District's Private Property Infiltration and Inflow Removal Program.
3)	Owners understand that participation in the Program requires execution of a Building Sanitary Service Access Agreement.

5) Owners agree to release and waive any claim, suit or liability and to indemnify and hold harmless the District, its trustees, officers, employees, engineers and agents, from and against all liability, damage, loss, claims, demands and actions of any nature whatsoever which arise out of or are connected with, or are claimed to arise out of or be connected with any previous sanitary sewer backups or the undersigned's

the Program.

Upon compliance of Owners with all terms and conditions as stated in the Program information, the District will provide a reimbursement to the Owners as allowed by

participation in this Program. This covenant shall include, but not be limited to, any consequence of the inspection of the premises, selection of the system installed or the contractor utilized, installation of the system, operation, maintenance or failure of the system once it is installed, or eligibility for, participation in or funding priority in the Program.

- 6) Owners state that they are the owners of the premises listed above, that they have read and understand this Agreement.
- 7) If a backflow prevention device is installed, a Memorandum of Agreement will be recorded with the DuPage County Recorder. This Memorandum shall serve as notice to future property owners that a backflow prevention device has been installed on the property and that the backflow prevention device requires maintenance to insure proper operation.

DOWNERS GROVE SANITARY DISTRICT	OWNERS
General Manager	
SAMPLE – DO <u>NOT</u> SIGN	N AT THIS TIME
STATE OF ILLINOIS)	
) SS COUNTY OF DUPAGE)	
I, the undersigned, a Notary Public in and : HEREBY CERTIFY that	
personally known to me to be the same persons who instrument, appeared before me this day in person delivered the said instrument as their own free and therein set forth.	ose names are subscribed to the foregoinand acknowledged that they signed as
GIVEN under my hand and official seal this	day of, 20
	Notary Public

PREPARED BY: Clay Campbell, Attorney at Law, 2710 Curtiss Street, Downers Grove, IL 60515

BUILDING SANITARY SERVICE ACCESS AGREEMENT

In consideration of good and valuable consideration, receipt and sufficiency of which are
hereby expressly acknowledged, and
(hereinafter referred to as "Grantors"), legal owners of the below described property, hereby
warrant, grant and convey to the DOWNERS GROVE SANITARY DISTRICT, a body politic and
corporate of DuPage County, Illinois, (hereinafter referred to as "District") its engineers,
contractors, agents, successors and assigns, the right to inspect, test, measure flows or otherwise
monitor each underground building sanitary service and the right of access thereto, in, upon, under,
over, through and across the land over each building sanitary service from the property line to each
building located on the following described property:
Legal Description:
P.I.N.:
Property Address:
The access for said building sanitary service, herein granted, is subject to the following
terms and covenants, which the District expressly acknowledges, undertakes and agrees to fulfill,
to-wit:

1. This access shall not unreasonably interfere with the use and enjoyment of the Grantors' property, by the Grantors, their successors and assigns.

- 2. In the event that a building sanitary service requires repair, reconstruction, rehabilitation or replacement, Grantors agree to cooperate with the District to allow reasonable additional access for such work. The responsibility for the repair, reconstruction, rehabilitation or replacement shall be governed by ordinances of the District in effect as of the date of this Agreement and as subsequently amended from time to time.
- 3. If the surface of the subject property is disturbed by the District, its engineers, contractors, agents, successors or assigns, at any time, and from time to time, by the inspection, testing, reconstruction, rehabilitation, repair or replacement in connection with said building sanitary service, the District shall, at its sole cost and expense, repair and restore any disturbed property to substantially the same condition that existed immediately prior to such disturbances, including, without limitation, necessary repairs and replacement of paving and landscaping.
- 4. Grantors agree that the operation and maintenance of said building sanitary service shall be governed by ordinances of the District in effect as of the date of this Agreement and as subsequently amended from time to time.

The District, as a condition of rights granted to it by this Agreement, hereby agrees to protect, indemnify and hold the owners of the above described property harmless from and against any and all claims, demands, causes of action, losses, suits, liabilities, judgements and decrees relating to the use of this Agreement, and the costs and expenses (including attorney's fees) incident to the defense of and by such owners, in any manner caused by, resulting from, growing out of, connected with, or in any way attributable to its use of this Agreement.

"Grantors" do hereby warrant that they are the legal owners of the above described property.

"Grantors" when used herein is intended to refer to the holder or holders from time to time of title to the Tract and to any portions thereof. All provisions of this Agreement, including the benefits of burdens, are hereby declared to run with the land and shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto, as well as, the future owners of the above described property. This Agreement will be recorded with the DuPage County Recorder of Deeds to serve as notice to future owners of the subject property.

For the consideration expressed herein, the District joins in the execution of this document for the purpose of accepting, consenting and agreeing to the terms and obligations contained in this Agreement, IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed as of this _____day of _______, 20 . DOWNERS GROVE SANITARY DISTRICT BY: _____ General Manager SAMPLE - DO NOT SIGN AT THIS TIME ATTEST: ______ Assistant Clerk STATE OF ILLINOIS)SS COUNTY OF DUPAGE) I, the undersigned, a Notary Public in and for the County and State aforesaid, DO HEREBY CERTIFY that _____ and _____, personally known to me to be the same persons whose names are subscribed to the foregoing instrument appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act for the uses and purposes therein set forth. GIVEN under my hand and official seal this _____day of ______, 20___. **Notary Public**

Prepared By: Clay Campbell, Attorney at Law, 2710 Curtiss Street, Downers Grove, Illinois 60515 Mail To: Downers Grove Sanitary District, 2710 Curtiss Street, Downers Grove, Illinois 60515

Appendix I

Table 5 from 2015 WWTC Annual Operations Report

WWTC REMAINING CAPACITY 2015

Hydraulic Capacity	2011		2012		2013		2014		2015	
Three Low Flow Months (MGD), Plant Influent	Aug Sep Oct	Sep 8.8		7.2 7.6 7.5	Jul Aug Sep	8.1 7.5 7.7	Oct Nov Dec	9.4 8.3 8.9	Feb Aug Oct	9.4 8.8 7.4
Average, 3 Low Flow Months (MGD)		8.9		7.4		7.8		8.9		8.5
Annual Average Flow (PE)	89,000		74,333 77,70		7,700	88,500		85,300		
IEPA Permitted Flow - last 2 years (PE)		70	231		230		179		425	
Total Load (PE)	89	9,070	74	,564	77	7,930	88	,679	85,725	
WWTC Hydraulic Capacity (PE)	110),000	110),000	110	0,000	110	,000	110,000	
Remaining Hydraulic Capacity (PE)	20),930	35	5,436	32	2,070	21	,321	24	1,275
% of Hydraulic Capacity Utilized	80.	97%	67.	79%	70	.85%	80.	62%	77.	93%
Organic Capacity										
Influent Loadings (annual avg. lbs/day) BOD TSS NH3-N	15,119 19,648 1,295		11),425 ,895 ,386	10,865		10,937 13,459 1,337		12	,630 2,028 1,218
WWTC Organic Capacity (lbs/day) BOD TSS NH3-N	14,120 15,920 1,651		14,120 15,920 1,651		14,120 15,920 1,651		14,120 15,920 1,651		15	I,120 5,920 1,651
% of WWTC Organic Capacity Utilized BOD TSS NH3-N	107.08% 123.42% 78.44%		73.83% 74.72% 83.95%		68.25%		77.46% 84.54% 80.98%		75.	37% 55% 77%

Appendix J

2015 Sewer Operations Report

DOWNERS GROVE SANITARY DISTRICT MEMO

DATE: January 4, 2016

TO: Nicholas J. Menninga

General Manager

FROM: Robert Swirsky

5.

6.

7.

LETS TV

Manhole inspections

Sewer System Maintenance Supervisor

Main Sewer Televising (DGSD personnel):

a. Sewer Televising (outside contractors):

RE: Monthly Report – December, 2015

RE:	Monthly Report – December, 2015		
1.	JULIE Line Markings:	Current	Year to Date
	Received	584	13,311
	In District	549	12,484
	Marked	192	3,001
	Man Hours	100	1,295
2.	Building Service:	Current	Year to Date
	a. BSSRAP TV Inspections	14	179
	b. Emergency BSSRAP Repairs	07	79
	c. Total BSSRAP Repairs	13	149
	d. I&I inspections	2	21
	e. I&I C.O. installation	00	00
	f. Replace broken cleanout caps	00	06
	g. OHSP TV Inspections	01	04
	h. Post Rodding TV	00	19
3.	Sewer backups:	Current	Year to Date
	a. Public sewer	1	11
	b. Private sewer	22	227
	c. Surcharged main	0	0
	d. Pump station	<u>0</u>	<u>0</u>
	Total	$\frac{0}{23}$	238
		Current	Year to Date
4.	Sewer Cleaning (DGSD personnel):	5,408	240,988 Ft.
	a. Sewer Cleaning (outside contractors):	0	690 Ft.

0

52

23,268 Ft.

26,870 Ft.

340

0

DOWNERS GROVE SANITARY DISTRICT MEMO

TO: Nicholas J. Menninga General Manager

FROM: Robert Swirsky

Sewer System Maintenance Supervisor

DATE: January 5, 2016

RE: Review of Operations - Collection System Performance for 2015

I have enclosed copies of the following items for your review:

- 1) Annual Sewer Backup Comparisons for 1994 through 2015
- 2) Manhole Overflow and Sewer Backup Summary by Event
- 3) Manhole Overflow and Sewer Backup Summary by Year
- 4) 2015 Public Sewer Blockages
- 5) 2015 Building Service Blockages

CC: WDVB, ASK, DFP, RTJ, KJR, MS, TTC, WCC, MCW

DOWNERS GROVE SANITARY DISTRICT ANNUAL SEWER BACK UP COMPARISONS

r	T		Υ	i	
REPORTING YEAR	TOTAL BACK UPS FOR YEAR ***	PUBLIC SEWER BLOCKAGES	BUILDING SERVICE PROBLEMS	HEAVY RAIN SURCHARGE ***	LIFT STATION FAILURE
1994	181	26	148	5	2
1995	164	26	136	2	0
1996	765	23	199	542	1
1997	632	24	114	494	0
1998	209	32	137	40	0
1999	227	31	191	5	0
2000	241	29	205	7	0
2001	216	22	132	61	0
2002	190	35	155	0	0
2003	207	27	180	0	0
2004	213	18	193	2	0
2005	328	21	300	7	0
2006	373	13	330	30	0
2007	286	11	275	0	0
2008	418	17	312	101	0
2009	312	19	242	59	0
2010	305	11	285	9	0
2011	280	15	262	3	0
2012	273	14	258	1	0
2013	474	13	322	139	0
2014	311	21	281	9	0
2015	238	11	227	0	0
20 year AVE	325	20	230	75	0
5 year AVE	315	15	270	30	0

^{***} TOTALS FOR YEARS 1996 & 1997 INCLUDES DATA FROM SURVEY RESPONSES

MANHOLE OVERFLOW AND SEWER BACKUP HISTORY -

DATE OF EVENT	8/29/2015	6/15/2015	5/26/2015	11/28/2014	10/18/2014	8/22/2014	6/30/2014
PRECIP FOR DAY	N/A	1.5	0.57	N/A	N/A	1.52	2.04
PRECIP FOR 3 PREVIOUS DAYS	Dry Weather Overflow	1,93	0.31 Dry Weather	Dry Weather Overflow	Dry Weather Overflow	2.15	0.07
10- day rainfall		4	Overflow 0.88	Gverriow		3.81	2.97
PEAK WWTC FLOW		88.4				85.66	71.9
# OF OVERFLOWS	1	2	1	1	1	3	1
MR LOCATIONS	2G-037	1M-349 2D-001	IA-021	H5-021-90	1H-012	1M-049 1M-050 2D-001	1M-045
∜ OF BACKUPS	С	2 1165 Barberry 3524 Saratoga		1 1230 75th	o	8 4129 Washington 115 S. Grant 117 S. Grant 5604 Carpenter 200 S. Lincoln	1 1129 Earbetry
						5436 Cumnor 1928 Curtiss 122 S. Lincoln	

DATE OF EVENT	5/20/2014	11/22/2013	10/31/2013	4/18/2013	3/10/2013	8/26/2012	2/21/2612
PRECIP FOR DAY	1.47	N/A	2.46	4,67	1.62	3.4	N/A
PRECIP FOR 3 PREVIOUS DAYS	0	Dry Weather Overflow	0.65	2.59	0.4	0	Dry Weather Overflow
10- day rainfall	3.1		3.2	8.61	1.52	3.7	
PEAK WWTC FLOW	67.28		75.19	116	74.79	73.26	N/A
# OF OVERFLOWS	2			?	1	0	1
MH LOCATIONS	1N-049 2D-001	FИCL-003.	1м-049	IN-049 H4-088 2C-089-1 G1-012 IH-005 2D-001 IK-049 2A-011-A ZE-023 unable to verify all locations due to surface flocding	1M-049		1н-012
# OF BACKUPS	0			269	i	1	1
				124 N. Lincoln 5505 Dunham 7717 Main 5505 Fairview 1928 Curtiss 4936 Francisco 17 W. Naperville 6021 Grand 4812 Sarratoga 6035 Dunham 3840 Florence 5320 Benton 5300 Blodgett 6941 Lyman 4515 Ele 130 N. Williams 6121 Carpenter 5236 Fairmount 917 Blanchard 301 Stell 4915 Washington 1944 Main 1925 Prairie 1936 Prairie 1937 Prairie 1948 Highland 5235 Fairmount 4945 Highland 5235 Fairmount 426 S. Caos 5310 Lyman 1424 Gland 6131 Dunham 1426 S. Caos 5310 Lyman 1424 Gland 6131 Dunham 1426 S. Caos 5310 Lyman 1424 Gland 6131 Dunham 1424 Frairie 2035 Prairie	117 S. Grant	1129 Barberry	310 Otia

MANHOLE OVERPLOW AND SEWER BACKUP HISTORY -

DATE OF EVENT	6/9/2011	5/25/2011	3/5/2011	1/31/2011	12/31/2010	12/14/2010	8/3/2010
PRECIP FOR DAY	2.49	N/A	N/A	N/A	0.89	N/A	1.65
PRECIP FOR 3 PREVIOUS DAYS	0.27	Dry Weather Overflow	Dry Weather Overflow	Dry Weather Overflow	0.35	Dry Weather Overflow	1
10- day rainfall	2.95				1.46		4.85
PEAK WATC FLOW	77.56	N/A	H/A	N/A	52,38	N/A	73,52
# OF OVERFLOWS	6	1	2	1.	o	1	1
MH LOCATIONS	IM-649 H1-003* H1-005* 2D-001 IK-649 • Lift Station Failure	V3-649	V-4-112 V-4-060	1н-055		L1-051	1M-049
# OF BACKUPS	3	2		1	1		
	5701 Webster 4111 Roslyn 1165 Barberry	3840 Florence 3831 Florence		405 Grant	1129 Barberry		

MANHOLE OVERPLOW AND SEWER BACKUP HISTORY -

DOWNERS GROVE SANITARY DISTRICT - OVERFLOW BACKUP HISTORY

DATE OF EVENT	7/24/2010	6/23/2010	6/2/2010	5/10/2010
PRECIP FOR DAY	2.86	0.97	1.95	N/A
PRECIP FOR 3 PREVIOUS DAYS	0.79	0.59	1.26	Dry Weather Overflow
10- day rainfall	3.65	2.07	3.61	Overliow
PEAK WWTC FLOW	89	71	92.98	N/A
# OF OVERFLOWS	6	1	S	1
MH LOCATIONS	1M-049 1H-012 1H-005 1H-004 1K-049 G4-004-A	1M-049	1M-049 2D-001 1K-046 2A-011-A G1-012	10-062

OF BACKUPS

4 0 4032 N. Grant 4020 Liberty 3941 Main 4031 N. Grant 5533 Washington 335 S. Park 115 S. Grant 109 N. Williams

DATE OF EVENT	10/30/2009	8/28/2009	3/8/2009	2/26/2009
PRECIP FOR DAY	1.32	N/A	2.21	2.46
PRECIP FOR 3 PREVIOUS DAYS	0.78	DRY WEATHER OVERFLOW	1.34	0.13
10- day rainfall	4.81		6.04	3.02
PEAK WUTC FLOW	71,05	N/A	83.04	92.57
# OF OVERFLOWS	2	1	12	6
MELOCATIONS	1N-949 G1-012	нз-002-2	1M-049 H1-004 H1-005 1H-005 1H-005 1C-049 G1-012 G1-015 2A-011-A 1M-056-A G4-004-A C1-009 H6-050	1M-049 H1-005 H1-005 1R-005 1K-049 L1-001
# OF BACKUPS	2 4727 Fairview 4715 Fairview	° C	192 1922 A Curtiss 1224 Brockside 917 Chicago 100 Chicago 101 Chicago 121 Chicago 1924 Curtiss 1926 Curtiss 1926 Curtiss 1927 Fairmount 1441 Golden Bell 301 Indianapolis 231 James 235 James 235 James 5536 Lywan 5536 Lywan 5536 Lywan 5548 Lyman 5536 Lywan 5549 Lyman 5544 Lyman 1018, Washington 1018, Washington 11218, Washington 1109den 4604Pershing 4604Pershing 4604Pershing 1725Prairie 415Roslyn 1178. Grant 3355. Park 1125Sixty Second PL 1020Sixty Second PL 1020Sixty Second PL 741Sixty Seventh St 348, Fifty Fifth FL	18 616 Rogers 125 Eight 212 Lincoln 335 S. Park 101 N. Park 430 Rogers 100 Chicago 1240 Gilbert 221 Chicago 521 N. Park 307 N. Washington 420 N. Washington 1125 Barneswood 115 S. Grant 5436 Cumnor 1924 Curties 4004 Washington 200 W. Chicago
			18M. Fifty Fifth FL 29W. Fifty Fifth St 5701Webster 5704Webster 116West End 4119Williams 4636Wilson	

ME OVERFLOR SEXER BACKUR SURBARY - 1585 THOU LOIS

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ate of Backup	Name of Caller	Phone #	Address	Street	USMH	DSMH
1/21/2015	Harden, Ray	630 964-8537	309	W. Traube	1J-062	1J-013
3/25/2015	Gartlan	630 663-9495	4706	Saratoga	1E-141	1E-140
4/9/2015	Cummane, Stephen#7	630 737-0128	115	5. Grant	1N-014	1N-013
5/26/2015	Scott Taylor	630 675-6843	2205	Ogden	1A-021	1A-019
6/14/2015	Cummane, Stephen#8	630 737-0128	115	S. Grant	1N-014	1N-013
6/16/2015	Hasan, Mazen	773 679-7304	4821	Bryan	1E-123	1E-122
6/18/2015	Kucia, Tom#2	630 493-0014	6933	Valley View		
8/18/2015	Beine, Floyd	630 968-1712	4524	Wilson	1A-057	1A-056
8/29/2015	DGPW/VOC	N/A	5202	Washington	2G-037	2G-036
9/7/2015	Lindenburger, Martin	630 515-1663	3719	Downers	V1-028	V1-027
9/7/2015	Cortesio, Clare#2	630 724-7833	3725	Downers	V1-028	V1-027
12/21/2015	Koehler	630 698-5048	4064	Sterling	E1-076	E1-075

Tuesday, January 05, 2016

Year End Lateral Backup Report

Date of Backup	Name of Caller	Phone #	Address	Street
1/2/2015	Bowling, Arne	630 991-7019	3917	N. Washington
1/5/2015	Bartkowiak, Dan#2 (2nd Pr	630 414-5542	4707	Douglas
1/7/2015	Andreshak, Ann	630 322-9438	5841	Webster
1/7/2015	Besaga, Mariana	773 715-3150, 630 524-14	246	N. Park
1/7/2015	Deal, David	312 339-1879	950	Summit
1/8/2015	Krejci, Mike (Jay's Plumbin	815 494-6207	155	Washington
1/10/2015	Reiselt, Pete	312 310-5858	4618	Roslyn
1/10/2015	Kamano, David	630-930-2306	600	Sixty First
1/13/2015	Sumida, Phil	630-890-0229	5933	Osage
1/14/2015	Kubelsky, Diane(Neighbor	630 769-9397	4910	Cross
1/16/2015	Cui, Li	773 426-0600	4005	N. Williams
1/28/2015	Mendez, LeEllyn	630 885 5524	6309	Barrett
1/30/2015	Renner, Ed	312 371-4852	4925	Forest
1/30/2015	Wagner, Jeff#2	312 213-8699	5145	Blodgett
2/4/2015	Naidu, Kumar	630 248-6000	1211	Butterfield
2/6/2015	Hein, Ron	630 969-6529	1100	Candlewood
2/7/2015	Rodding Contractor - Har	630-212-4994	20	W. Naperville
2/8/2015	Brown, David	630-969-3477	1508	Gilbert
2/8/2015	Kirk, Crystal (New owner)	708 421-9129	30	S. Washington
2/9/2015	Rhoades, Bruce	708-243-0749	721/3	Grant
2/9/2015	Gaspar, J&S Plumbing	847 668-9031	2800	Hitchcock
2/9/2015	Mehnert, Ruth	630 968-1909	20	S. Washington
2/10/2015	Pompe, Mateya	312 566-8405	5709	Fairmount
2/10/2015	Greg A., Masters Property	630 272-1962	32	S. Park
2/12/2015	Sporer, Chris	773 354-1697	4924	Washington
2/16/2015	Bartasis, Jackie#2	630 415-5180	3805	N. Park
2/18/2015	Casmere, Edward#2	630 987-9223	624	Crescent
2/20/2015	Vandeyacht, Linda	630 464-4277	1141	Parker
2/21/2015	Herrick Middle School	N/A	4435	Middaugh

Tuesday, January 05, 2016

Page 1 of 9

Date of Backup	Name of Caller	Phone #	Address	Street
2/23/2015	Taylor, Susan#2	630 725-1985	1346	Turvey
2/23/2015	Owner: Wheaton, Greg	331 208-8309 (tenant 312	1729	Breasted
2/23/2015	Patel, Dakshesh	630 852-8688	6400	Woodward
2/24/2015	Han, Steven	630 969-0111	6218	Main
2/26/2015	McDonald, David	630 776-7654	2106	Oxnard
2/27/2015	Adventure Realm(Mike)	630 935-1298	2011	Sixty Third
2/28/2015	unknown		4836	Lee
3/2/2015	O'Rourke, Sean	708 522-8822	124	N. Park
3/4/2015	Gagala, Debbie	630 852-3243	6618	Briargate
3/5/2015	Matook, Jeff	630 561-5963	1239	Holly
3/7/2015	Steiner, Bob#3	630-886-5168	4613	Stonewall
3/8/2015	Moriarti, Bob	630-417-4207	4934	Northcott
3/9/2015	Keller, Phil	630 964-5795	6766	Valley View
3/9/2015	Destefano, Tamara	630 841-2673	224	Thirty Ninth
3/10/2015	Bates, Scott	312 262-2601	117	N. Williams
3/11/2015	Manouel, Patricia#2	630 201-4335	132	N. Park
3/11/2015	Alvarado, Monsi	630 515-1533	1650	Ogden
3/12/2015	Rudzionite, Aidina	224 622-0888	125	Forty First
3/12/2015	Muerer Plumbing		5401	Carpenter
3/13/2015	Gondal, Shagufta	630 400-2999	4910	Cross
3/13/2015	Gondol, Shagufta	630 400-2999	4910	Cross
3/14/2015	Bardoczi, Bill#2	630 963-2825	242	Fifty Fifth
3/16/2015	Johnson, Brian C.	630 379-1457	6118	Hillcrest
3/16/2015	Hurd, Jen	312 617-2054	3684	Downers
3/18/2015	Bacastow, Randy (Sybaris)	815 956-1262	4126	Sterling
3/19/2015	Randall, Gail	630 810-1323	3012	Thirty Eighth
3/24/2015	Kotula, Bob	630 969-3822	4519	Linscott
3/24/2015	Shanbacher, Todd	773 573-0924	742	Claremont
3/25/2015	Wood, Elizabeth#2	630 921-1787	2046	Grant
3/28/2015	Lang, Dionne#3	630 481-8312	5441	Fairmount
4/2/2015	Shah, Nirav(Property Own	N/A	424	Thirty Seventh

Tuesday, January 05, 2016

Date of Backup	Name of Caller	Phone #	Address	Street
4/6/2015	Kras, Theodora	630 968-2022	4726	Highland
4/8/2015	Minium, Micah	312 933-3711	1504	George
4/9/2015	Vandercar, John (Ed's Plu	630 699-8980	507	Lindley
4/9/2015	Maciorowski, #4	630 362-9423	5519	Fairview
4/9/2015	Nelson, Michael	630 988-8121	418	S. Cass
4/9/2015	Snyder, Chris#3	630 399-1325	840	Stratford
4/10/2015	Martel, Alex	630 852-2381	5724	Deer Creek
4/10/2015	Amy Gozalka & Kamien, K	815 483-6921	1205	Grant
4/10/2015	Baldwin, Nancy	630 207-0930	904	Garrett
4/10/2015	Li Cui & JinJu Li	773-426-0600	4005	N. Williams
4/10/2015	Martel, Alex#2	630 852-2381	5724	Deer Creek
4/10/2015	Mareya, Guerrero	630 515-8549	5917	Grand
4/10/2015	Hart, Amy	630 390-0410	101	S. Adams
4/11/2015	Pasakarnis, John	630-968-4028	4713	Washington
4/11/2015	Amy Gozalka & Kamien, K	815 483-6921	1205	Grant
4/13/2015	King, Dan#2	708 528-0699	2130	Oxnard
4/16/2015	Kerr, Susan	630 971-0848	303	W. Chicago
4/18/2015	Kerr, Bill	630 971-0848	303	W. Chicago
4/20/2015	Flores, Mike	630 971-3958	5815	Carpenter
4/20/2015	Wren, Steven	630 297-8147	621	S. Adams
4/26/2015	Kochan, Chester & Carla	630 969-4493	4524	Sherwood
4/29/2015	Mingey, Frank#2	312 656-5530	4727	Pershing
5/4/2015	Clark, Mary Ann	630 880-4836	7117	Lyman
5/4/2015	Hogan, Theresa	630 559-5180	4444	Lee
5/6/2015	Kasper, Keith	630-964-1020 or 630-921-	4925	Whiffen
5/8/2015	Coleman, Brian	708 935-5653	4928	Washington
5/11/2015	Pam(Academy of Dance)	630 495-4940	1524	Centre Cir
5/11/2015	Williams, Chad(new owner	217-899-6020	5732	Dunham
5/12/2015	Dzambazi, Ed#4	630 841-4324	2230	Oxnard
5/18/2015	Glahn	N/A	217	N. Washington
5/18/2015	Wilson, Donna	630 339-6556	4633	Prince

Date of Backup	Name of Caller	Phone #	Address	Street
5/19/2015	Ardizzone, Mary Jo	630 434-9561	6029	Brookbank
5/19/2015	Velasquez, Mario	630 969-8741	4112	N. Adams
5/19/2015	Matook, Jeff#2	630 561-5963	1239	Holly
5/25/2015	Hochstedt, Kathleen	630-968-0206	2136	Midhurst
5/25/2015	Parabis, Jerome	630 969-6976	4912	Woodward
5/27/2015	Wolkow, Kate#2	630 215-7483	443	Davis
5/29/2015	Sadowski, Barbara	630 518-1677	5723	Buck
5/30/2015	Naidu, Kumar#2	630-248-6000	1211	Butterfield
5/30/2015	Hawkins, Terry	630-935-6508	906	Sixty Seventh
6/1/2015	Garza, Kathy	630 291-4135	1221	Palmer
6/1/2015	Winke, Cheryl	630 546-3044	315	Grant
6/1/2015	Dell, Adam	630 965-7782	625	Crescent
6/2/2015	Kubik, Jim	630 732-0923	302	N. Lincoln
6/2/2015	Yee, Andrew	630 863-4020	1124	Florence
6/5/2015	Blazek, Irene#2	630 969-4263	1819	Sturbridge
6/6/2015	Shea, Mary	312 953-8198	2	Seventh
6/15/2015	Doncrank, John#3	630 964-9222	3524	Saratoga
6/15/2015	Lithio, Tom	853 565-5653	1214	Fifty Ninth
6/15/2015	Renspie, Richard & Dianne	630 247-4642	1165	Barberry
6/16/2015	Parrott, Tiffany	502 592-7446	333	Maple
6/16/2015	Manak, John	630 969-3036	4137	Highland
6/16/2015	Bonk, Jeff	N/A	4924	Edward
6/16/2015	Audilkas, Joyce	630 968-3285	3901	Liberty
6/16/2015	Johnson, Carol	630 963-2580	3813	Liberty
6/17/2015	Mooneyham, Kody	309 212-4507	6400	Barrett
6/18/2015	Lamonica, Joe	630 964-9397	1710	Oxnard
6/18/2015	Jensen, Sandra#2	630 512-0709	8	N. Roslyn
6/18/2015	Krampitz, Cheryl	630 991-0050	1410	Holland
6/18/2015	Joe/Ryder, Robert Bair Plu	630 699-7908	428	Wilson
6/18/2015	Vlach, Brenda	708 522-6972	2132	Maple
6/22/2015	Shultz, Maureen	630 991-7908	3932	Forest

Date of Backup	Name of Caller	Phone #	Address	Street
6/22/2015	Hletko, Mary	630 920-8952	209	S. Washington
6/22/2015	Dziedzic, Zack	630 434-9133	4021	Washington
6/29/2015	Reberg, Mark	708 712-3153	3924	Forest
7/2/2015	Lipitis, Elmar	630 852-9078, mobile 708	1116	Barberry
7/2/2015	Hackett, Tom	630 835-1902	6730	Meadow Crest
7/4/2015	Medjoly, Allison	630 968 1905, mobile 847	120	West End
7/4/2015	Marvic, Vince	630 960 1622 or 630 379 4	4521	Washington
7/4/2015	Taylor, Angela	630-618-0765	1146	Sixty Seventh
7/7/2015	Peckhart, Barry	630 212-5312	1028	Sixty First
7/7/2015	Gabriel, Vargas	708 654-0795	41	W. Naperville
7/8/2015	Le Donne, John		1930	Fifty Fifth PL
7/15/2015	Wolff, Emery	630 969-1980	4000	Saratoga
7/16/2015	Hatcher, Laurie	331 777-5789	338	Ogden
7/20/2015	Tobey, Scott	630 258-4670	1249	Barneswood
7/20/2015	?	?	501	Lincoln
7/20/2015	Ardizzone, Mary Jo#@	630 247-1509	6029	Brookbank
7/21/2015	Safford, John	773 540-7559	4107	Washington
7/21/2015	Mattes, Debbie#2	630 310-0227	7404	Canterbury
7/22/2015	Bement, Lynn	708 606-0953	6235	Park
7/23/2015	Niven, Cheryl#2	630 810-1050	4915	Washington
7/23/2015	Williams, Walter#2	630 776-5109	310	W. Ogden
7/23/2015	Ward, Mary	630 810-1080	4525	Seeley
7/24/2015	Spohn, Mike	630 461-3043	6813	Osage
7/27/2015	Reynolds, David	630 390-6398	21	Fifty Fifth PI
7/28/2015	Cooper, Corrine	630 969-2583	1123	Oxford
8/6/2015	Burton, Bill	630 963-7645	3625	Saratoga
8/7/2015	Kucia, Tom#3	630 493-0014	6933	Valley View
8/10/2015	Fedi, Savannah	630 200-1140	6315	Saratoga
8/11/2015	Chrobak, Carolyn#2	630 886-8124	6401	Dunham
8/13/2015	Fitzgerald, Bill	630 290-5742	1241	Maple
8/13/2015	Ferris, Michael	630 202-0898	6123	Hillcrest

Date of Backup	Name of Caller	Phone II	Address	Street
8/17/2015	Dugo, Mike	630 363-4147	175	Saddlebrook
8/20/2015	Kalache	630 404-3155	5524	Wilcox
8/22/2015	Cummane, Stephen#9	630 210-4155	115	S. Grant
8/23/2015	Norman, William	630 730-3681	124	W. Traube
8/25/2015	Hecht, Brian & Janet	630 969-8286	4818	Wallbank
8/25/2015	Morrissey, Mary	312 560-2399	4901	Montgomery
8/27/2015	Marlovitz, Lisa	630 487-5072	40	West End
8/28/2015	Gharpure, Varsha	630 297-2522	3015	Thirty Fifth
8/31/2015	Mazur, Ed		5927	Brookbank
9/1/2015	Cleary, Joy	630 969-9210	1034	Warren
9/1/2015	Palomo, Rich	630 290-7507	1034	Warren
9/3/2015	Wilcox, John#2	630 971-0663, 630 474-45	6029	Osage
9/3/2015	Boulougouris, Nick	630 742-4132	4532	Pershing
9/11/2015	Taylor, Melissa		7324	Canterbury
9/11/2015	Pahone, Emil	630 607-9650	7326	Canterbury
9/18/2015	Scacco, Mark	630 816-6605	1080	Thirty Fifth
9/18/2015	Murphy, Jennine	630 981-4417	5643	Hillcrest
9/18/2015	Bakosh, Mike	630 880-6969	4906	Cross
9/21/2015	Grimm, Dennis	630 310-6560	4605	Stonewall
9/21/2015	Cummane, Stephen#10	630 210-4155	115	S. Grant
9/24/2015	Clima, Lydia	630 908-8087	5510	Brookbank
9/25/2015	Palkoner, John	630 241-2243	323	Grant
9/26/2015	Partlo, Michael & Charlene	630 493-9975, M# 630-72	643	Maple
9/28/2015	Chauhan, Meeta	847 347-1476, M# 312 20	158	Saddlebrook
9/29/2015	Crumble, Doris	630 969-3148	3816	Florence
10/5/2015	Moore, Richard	630 852-0098	5512	Pershing
10/5/2015	Judy or Brandon	630 484-6025	6600	Fairmount
10/5/2015	Stern, Meghan	630 546-9858	6317	Barrett
10/12/2015	Knudsen, William	630-964-6294	1560	Almond
10/12/2015	Saladino, Joe	630 699-9827	134	W. Chicago
10/13/2015	Ibarra-Lorence, Mary	630-960-5705	5712	Hillcrest

Date of Backup	Name of Caller	Phone #	Address	Street
10/14/2015	Michaels, Jackie	630 964-9589, M# 630-65	6509	Hathaway
10/16/2015	Drobnik, Mike	630 247-7650	4509	Stonewall
10/16/2015	Segroves, Nancy	630 969-7156, M#331-625	339	Third
10/17/2015	Monroy, Leo	773 612-8971	5748	Dearborn
10/19/2015	Lechner, Peggy#2	630 846-4629	4629	Prospect
10/22/2015	Hroma, Jim	630 853-8241	445	Wilson
10/24/2015	Dining, Kathleen #4	630-968-0669	3820	Liberty
10/24/2015	Kim Winter(Academy of D	630 495-4940	1524	Centre Cir
10/26/2015	Kucia, Tom#4	630 493-0014	6933	Valley View
10/27/2015	Hvasti, John	630 745-0922	638	S. Cass
10/28/2015	Barrera, Adela	773 931-7161	315	S. Adams
10/29/2015	Richardson, Lisa	331 240-0103	5501	Washington
10/31/2015	Barrera, Adela#2	773 931-7161	315	S. Adams
10/31/2015	Orion#2	630 962-1184	6506	Barclay
11/3/2015	Ross, Lorraine (2nd proper	630 986-7368	4952	Florence
11/3/2015	Rizner, David	708 359-5973	6720	Meadowcrest
11/3/2015	Gibbons, Mary	630 964-1154, W# 630-85	4237	Highland
11/4/2015	Mike/Jay's Plumbing	312 493-3242, 312-493-86	4509	Stonewall
11/4/2015	Wolfe, Bradley	312 493-3242	1837	Concord
11/5/2015	Vela, Carlos	708 785-9482	725	Ogden
11/6/2015	O'Brien, Tim	630 673-3372	6948	Meadowcrest
11/9/2015	Moore, Richard#2	630 852-0098	5512	Pershing
11/9/2015	Pappalardo, Frank	630 207-6993	6650	Dunham
11/12/2015	Wunglueck, Christine	708 244-1341	721	Grant
11/12/2015	Good, David	630 816-8100	3810	Downers
11/12/2015	Pasquinelli, Vinnie	630 546-8084	4330	Washington
11/12/2015	Owens, Timothy	630 968-7785	1248	Maple
11/13/2015	Lehner, Jeanette	630 737-0345	6208	Fairmount
11/16/2015	Allen, Gary (plumber)	773-587-7957	5138	Fairmount
11/16/2015	Moustis, John#2	630 772-6744	125	W. Traube
11/18/2015	Licata, Maryann	630-969-7320	732	W. Sixty First

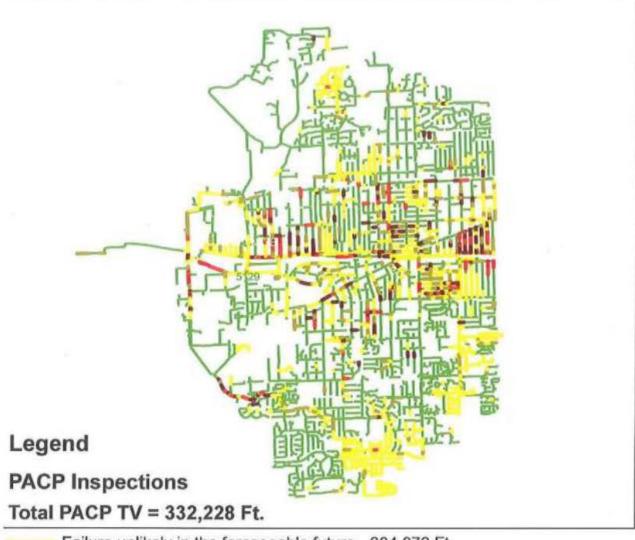
Date of Backup	Name of Caller	Phone II	Address	Street
11/19/2015	Mele-Young, Charline	630 661-3050	6831	Valley View
11/19/2015	Breslin, Colin	630 660-0431	6807	Valley View
11/20/2015	Stedman, Mark	773 562-4374	307	W Naperville
11/22/2015	Willhoite, Jeri	630 963-7845	4728	Florence
11/25/2015	John, Precision Plumbing	877 863-2977	4821	Northcott
11/25/2015	Kummerow, Linda	630 201-1701	4943	Seeley
11/27/2015	Clark, Mark#2	630-235-9557	7117	Lyman
11/27/2015	Newman, Cori	630 769 1641	1024	Sixty First
11/29/2015	Faber, Soraya	773-307-8582	6025	Middaugh
11/30/2015	Sutton, Donald	630-651-7980	1219	Ross
11/30/2015	Weidman, Ed	630 915-0675	4101	Earlston
11/30/2015	Papa, Tony	260 580-2455	6508	Main
11/30/2015	Pittroff, Irma	630 969-7071	4428	Sterling
1/30/2015	Jarosinksi, John	630 666-0060	4927	Western
1/30/2015	Dahl, Nick	630 768-6281	4939	Woodward
1/30/2015	Audickas, Joyce#2	630 968-3285	3901	Liberty
12/2/2015	Weidman, Ed#2	630 915-0675	4101	Earlston
12/2/2015	Farley, Emily	630 363-5442	820	Randall
12/8/2015	Staisiunas, Vilimas	630 290-2664	6437	Loomes
12/9/2015	Bowers, Phillip	630 886-4229	415	Chicago
12/9/2015	Erickson, Jessica	847 826-0276	3911	N. Washington
12/9/2015	Danalewich, Travis	630 201-8654	4226	Main
2/10/2015	Evans, Loren	630 926-9414	813	Bonnie Brae
2/14/2015	Johnson, Brian#4	630 632-9376	29	N. Washington
2/15/2015	O'Neill, Dan	847 830-9134	3935	Glendenning
2/17/2015	Saladino, Joe#2	630 699-9827	240	Thirty Ninth
2/18/2015	Dweydari, Omar	630 241-2424	1725	Ogden
2/18/2015	Martin, Dave	630 541-8388	2135	Sixty Third
2/21/2015	Stepina, Nick	815 919-9495	1241	Williamsport
2/21/2015	Morris, Helen#2	630 908-7510	951	Indian Boundary
2/21/2015	Arnold, Carol	630 968-2343	3010	Thirty Eighth

Tuesday, January 05, 2016

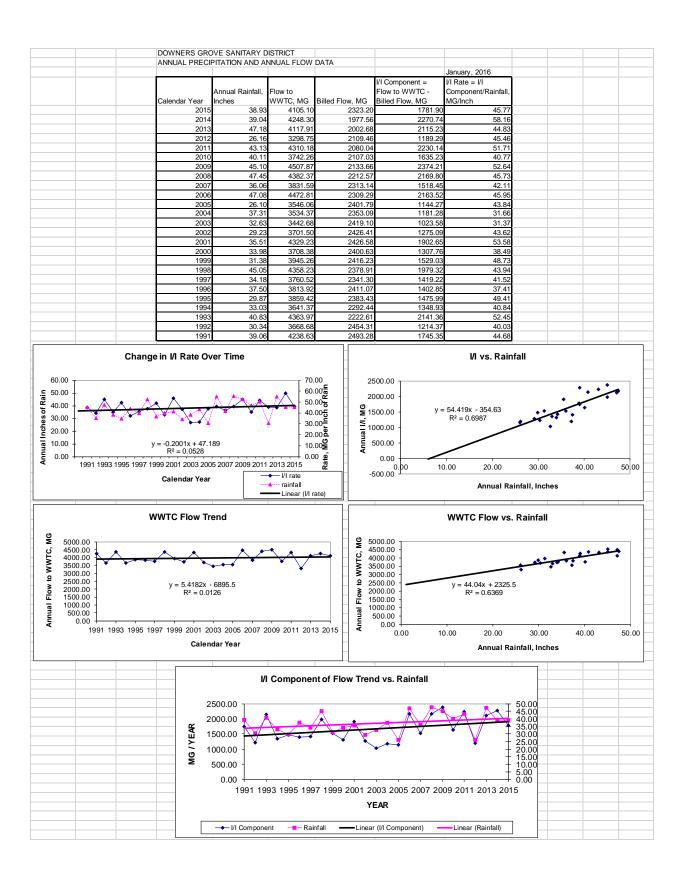
Date of Backup	Name of Caller	Phone #	Address	Street
12/23/2015	Nelli, Alex	847 989-3888	6525	Lyman
12/29/2015	Mungerson, Andrew#3	630 430-3719	4525	Main
12/30/2015	Caporali, Mary	630 853-8851	36	N. Williams
12/30/2015	Homolka, Vit	630 631-4192	4213	Main
12/31/2015	Don Donahue	630 205-6614	525	Fifty Seventh
12/31/2015	Cheevers, Diana	N/A	4323	Sterling
12/31/2015	Schultz, David	630 960-1281, M#312 771	5245	Fairmount



Mainline PACP TV Status



- Failure unlikely in the foreseeable future 204,072 Ft.
- Pipe unlikey to fail for at least 20 years 64,473 Ft.
- Pipe may fail in 10 to 20 years 35,052
- Pipe wil probably fail in 5 to 10 years 18,456
- Pipe has failed or will fail within the next 5 years 7,753
- Total District Sanitary Mainlines 1,345,342 Ft.



Appendix K

September 13, 2013 Collection System Asset Report

Memo

To: Board of Trustees

From: Nick Menninga, General Manager

Date: September 13, 2013

Subject: Collection System Assets

The Sanitary District's collection system consists of 252 miles of sewer. This is by far the most significant set of assets owned by the District.

We have dedicated significant resources and staff time to developing the data handling tools needed to manage this complex asset set. We first identified and purchased the collection system database software in 1999, and have been populating the database as part of our routine operations since then. The software was originally published by George Butler and Associates, and was recently re-branded as Lucity. Recent upgrades of the software provide us with GIS mapping tools that are invaluable for identifying geographic trends and patterns to assist in management decisions.

Our service area includes pipes that date back as far as 1904. Historic sewer construction has generally followed development patterns in our service area. Figure 1 is a map that color-codes sewer pipes by age. The central portion of our service area includes the oldest portions of the system. As development radiated northward and southward, sewer construction followed, along with expansions of the main trunklines to accommodate increasing flows. The newest sewers consist of replacements of failing sewers and expansion of service to areas that were originally developed with septic tanks.

The most common sewer size is 8-inch diameter. Current construction standards don't allow smaller pipe for mains, although there are some older smaller diameter pipes in the system. Larger pipes are needed as flow from the 8-inch collector sewers discharge into trunk-line sewers. Trunk-line sewers range in size up to 48-inch diameter. Figure 2 is a map that color codes pipes by size.

There are numerous materials of construction that have been used for pipes. The current construction standard is PVC pipe for smaller sewers, and concrete pipe for larger sewers. The most common pipe material in the system is vitrified clay pipe. There is also a significant amount of iron pipe, either cast or ductile. Figure 3 is a map that shows different materials of construction.

Pipe installation techniques have varied over time, with different materials and methods for making and sealing joints between pipe segments, bedding the pipe, and backfilling the trench. Each of these factors can have a significant impact on the effective life of the pipe before failure.

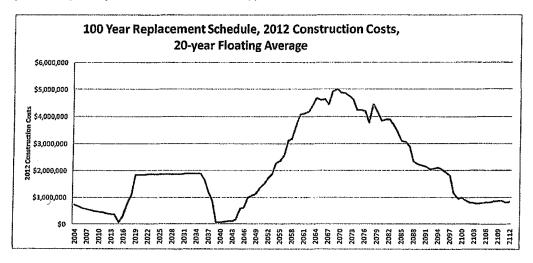
Manhole construction varies, as well. Older brick manholes can be found in good condition. The current standard requires precast concrete manholes in vertical sections with sealed joints. Other types include concrete block, cast-in-place structures, and hybrid manholes with more than one technique in a single structure. Figure 4 is a map showing materials of construction of manholes.

Asset Value and Replacement Costs

Asset value is reported in the annual audit, presented as the original installation cost net of depreciation. Sewer assets are depreciated using a straight-line 100 year schedule. Sewer liners are depreciated over 50 years, and other sewer rehabilitation (such as grouting or manhole coatings) is depreciated over 20 years. For the FY 12-13 audit, the sewer system assets were depreciating at a rate of \$763,000 per year. While we generally out-pace depreciation with the addition and/or replacement of fixed assets, this is not necessarily the best metric for determining whether ongoing sewer replacement and rehabilitation are meeting the needs of the District.

An important monetary characteristic is the replacement cost of these assets. Many existing sewers were installed long ago, at a fraction of the current replacement cost. Planning future replacements cannot be done without giving consideration to replacement costs. The replacement cost of all 252 miles of pipe is estimated at \$225 million in 2012 construction dollars.

One way to benchmark monetary metrics is to assign replacement costs to assets as they reach the end of their depreciation schedule. While sewer assets don't always need replacement after 100 years, the resulting analysis can give an indication of the magnitude of costs if a strict 100 year replacement schedule was followed. The following graph shows the trend of annual costs, smoothed by using a 20-year floating average to make the trends more apparent.



The graph shows that the 42 miles of sewers built in the 1920s are fast approaching 100 years of age. Sustaining a program of replacement as these assets reach 100 years of age would cost roughly \$2 million per year, in 2012 dollars, if such a program were spread over a 20 year period.

Asset Management

A key aspect of sewer system management is understanding the condition of assets in order to plan improvements needed to control risks associated with failure. Structural failures are a different risk than infiltration and inflow (I/I) and resulting operational problems during high flow events. Unexpected collapses incur expensive emergency repairs, cut off all sanitary sewer service to customers, and create undiluted discharges of raw wastewater with a high likelihood of environmental and public health impacts and associated regulatory repercussions.

Risk of failure can be thought of as a metric of consequence of failure and likelihood of failure. From a sewer asset management standpoint, an interceptor sewer serving a larger area should not be allowed to deteriorate as much as a smaller sewer with a smaller service area before being replaced or rehabilitated. Balancing these aspects is necessary to optimize spending needed to control overall risk.

Consequence of failure can be ranked using numerous criteria, in addition to simply upstream service area size. The criticality of served facilities (a hospital), the vicinity of the sewer that may impact the cost of an emergency repair (an interstate highway or railroad crossing), or the location of a related spill (a public park or area with a high potential incidence of public contact) can all be characteristics used to assess the consequence of failure.

The likelihood of failure is determined by assessing the condition of the asset. The current state-of-theart for condition assessment in sewer pipes is using standardized coding of defects observed while televising sewers.

Condition Assessment Data Handling

The District is currently assessing pipe conditions using coding from the Pipeline Assessment Certification Program (PACP) developed by NASSCO. A preliminary discussion of the PACP condition grading system is attached.

Our technicians are trained to record observations using a consistent reproducible system of codes for all types of defects observed while televising or reviewing TV tapes. Each observation record is entered into the sewer system database, where it is used to provide a rating for each manhole-to-manhole segment of pipe. The rating system is ranked according to expected remaining service life prior to failure. The rating system is currently calibrated against industry-wide benchmarks, although it is possible to calibrate it against local failure data if enough data is available.

Two examples of pipe segment observations are attached here. The first is for a pipe segment along the 400 block of Austin in very good condition, characterized as unlikely to fail in the foreseeable future. The second is for a pipe segment in the alley at the 100 block of N. Lincoln, characterized as expected to fail in the next 5 years.

A map of the results of PACP assessment work can be seen on Figure 5. Pipe segments where data is available are shown in the yellow to red color scales, while as yet un-ranked pipes are shown in green. As can been seen on the figure, there is a meaningful portion of pipes (4% of those that have been

3 of 5

rated) with ratings in the range where rehabilitation or replacement should be considered within our current 5-year budget horizon. Replacement or rehabilitation of 10,639 feet of sewer main is potentially within our current projections of costs for this type of work over the next 5 years. Projecting known conditions over the entire collection system is more of a challenge. The incidence of poor PACP ratings in the older sections of the system are higher than in newer sections. If we project the known poor PACP rating percentages (6.8%) onto the pipes installed between 1904 and 1949, and project the known poor PACP rating percentage (2.6%) onto the pipes installed since 1950, we can estimate a total of 45,800 feet of sewer main that will need attention in the 5-year financial plan horizon. This correlates to roughly \$1,550,000 per year in replacement costs, more than the current annual rate of depreciation of sewer assets, but less than the cost of a strict 100-year replacement program.

At this point, about 20% of the mains are PACP rated. Approximately 4% more of the system has already been televised, with our technicians coding the conditions by reviewing the TV recordings as time permits.

Short Term Priorities

Our TV program gives priority to sewers with higher consequences of failure, particularly trunk lines. This will enable us to more rapidly incorporate the highest failure risks into our replacement and rehab program. Larger sewers with more flow require more manpower in the field, slowing the field televising production rate. A complete condition assessment of trunk-line sewers is the near-term goal for the televising program.

Spending levels for the sewer system have been reduced since completion of the rehabilitation and replacement work done under the 2009 ARRA program. That program accelerated sewer system rehabilitation and replacement work by about 5 years, reducing the backlog of projects. Five years have nearly passed since the onset of the ARRA program. Careful consideration needs to be given in the 5-year financial plan and budget to identify appropriate spending levels needed to address sewers with the highest risk of failure. The current 5-year plan envisions a steady annual increase of monthly service fees, and a gradual increase of system replacement and rehabilitation spending levels from the current level of \$100,000 per year to \$900,000 per year in the 5th year. The condition assessment analysis shows that, while this is the correct trend, there is a clear need to continue this trend to match the spending levels needed to stay ahead of system failures.

We are currently assessing options for addressing the trunk-lines that have the poorest conditions (pipes larger than 8" with a known PACP rating above 200 – see attached table). At this time, those pipe segments include large diameter pipe along Walnut Avenue just north of the treatment plant, along Warren Avenue between Belmont and Forest, sections of the pipe that takes discharge from the College and Earlston lift stations, and short sections of smaller pipe (10 and 12-inch) along Webster, Kenyon and Quincy. There are sections of 36-inch and 48-inch interceptor along Warren that are of particular concern. Rehabilitation measures being reviewed include open-cut replacement or rehabilitation by lining with a structural-type liner similar to the work completed this year along Warrenville Road,

Authority Drive, and Ogden Avenue. We hope to have cost estimates ready for budget preparation for FY 14-15.

Long Term Priorities

The long term goal is to develop a cost-effective, sustainable program of sewer replacement that optimizes service life of these assets while controlling unplanned failures.

Condition assessment needs to move forward at a pace that will sustain a data set that is current enough to support decision-making for replacement and rehabilitation. The goal we have set in the past is a production rate of about 9% of the system per year. Our historic production rate has not met this goal for various reasons, but has increased appreciably in the past year. We need to continue to monitor our televising production levels and make resource adjustments as needed.

As we approach the completion of a first condition data set of the system, we will have the data needed to calibrate the condition assessment observations produced by PACP against historic failures in the system to better understand the expected service life of DGSD sewers, rather than relying on industry-wide benchmarks.

Funding levels should be established to reduce and eventually eliminate the inventory of sewers rated for impending failure. Asset failure goals need to be integrated with I/I control needs to optimize expenditures to satisfy both sets of system maintenance needs.

C: BOLI, RPS, TTC, WCC, MCW

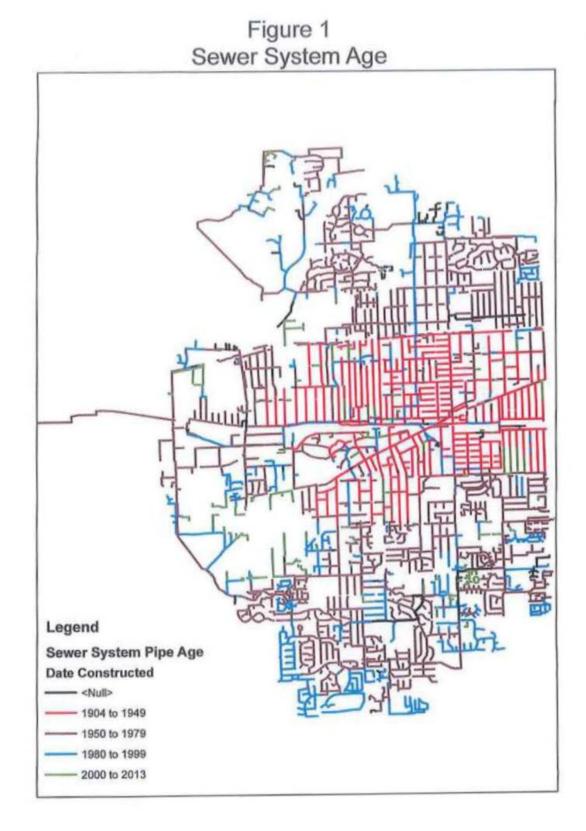
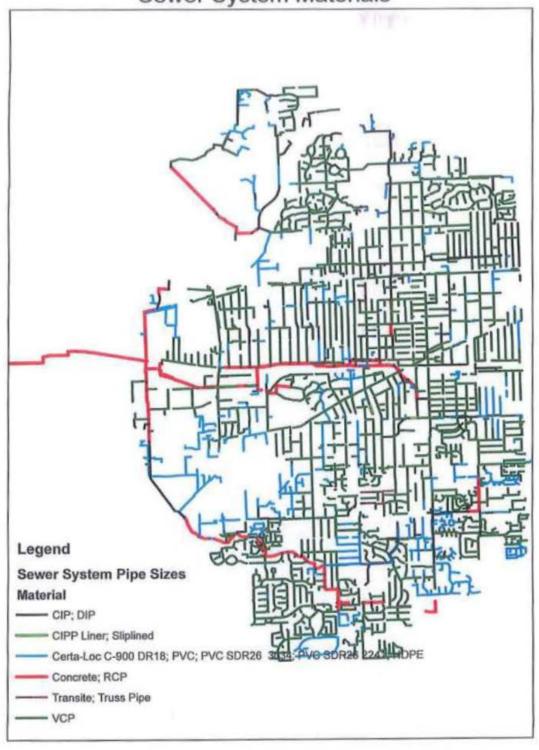


Figure 2 Sewer System Pipe Diameters Legend Sewer System Pipe Sizes Dia/Height (in) - 5; 6; 8 - 10; 12; 14 15; 16; 18 - 20; 21; 24 27; 30; 33

- 36; 42; 48

Figure 3 Sewer System Materials



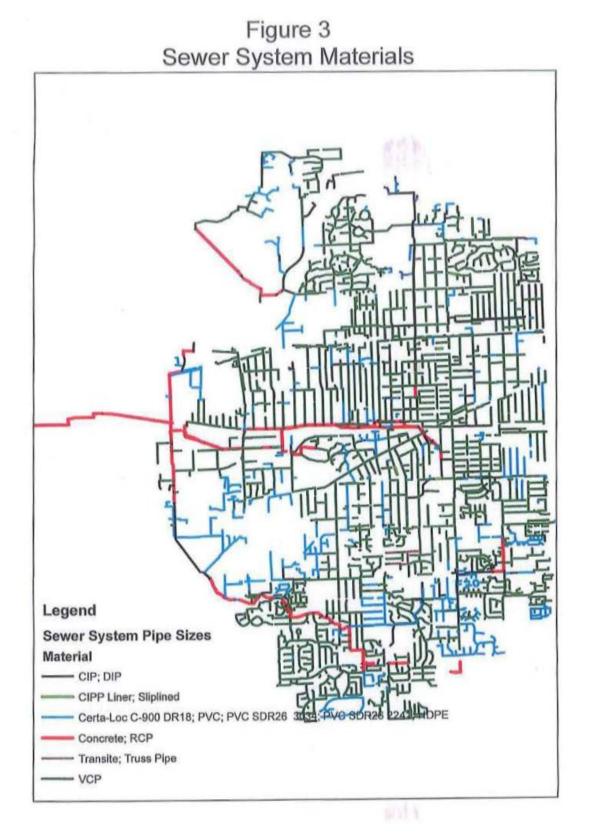
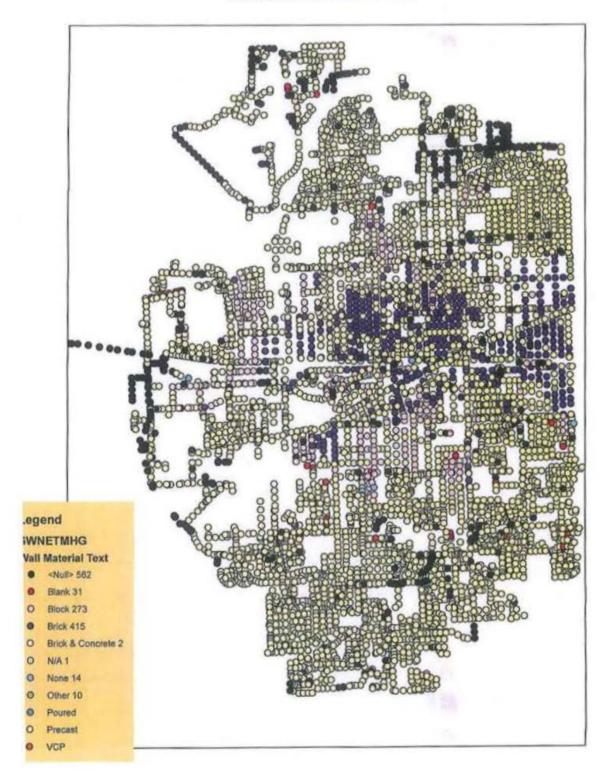


Figure 4 Manhole Materials







PAC Program© Condition Grading System

The Pipeline Assessment and Certification Program (PACP) developed by NASSCO provides a mechanism for creating reliable descriptions of pipe conditions. NASSCO has also developed a system based on the PACP codes to assign a condition rating to pipelines. Requirements of the grading system are as follows:

- 1. Like the PACP, the grading system should be direct and objective.
- Provide the ability to quantitatively measure the difference in pipe condition between one inspection and subsequent Inspections, and to prioritize among different pipe segments.

Many other approaches to sewer pipe grading have been used in the United States as well as in other parts of the World. These approaches generally use some type of defect grading that is then used to calculate an overall pipe rating.

It is problematic to develop a single pipe segment rating that fully describes all of the important aspects of a pipe. Therefore the PACP Condition Grading System uses more than one method of rating pipe segment condition including a rating that considers the number of total defects within the pipe segment and a rating that considers the most severe defects within the pipe segment.

The PACP Condition Grading System only considers internal pipe conditions obtained from TV inspection. While other factors such as pipe material, depth, soils, and surface conditions also affect pipe survivability, those factors have not been included in this version of the PACP Condition Grading System. It is expected that as the PACP further develops the PACP Condition Grading System will expand to include other factors.

The PACP Condition Grading System provides condition ratings for Structural Defects and Operation and Maintenance Defects.

E-1

Pipeline Assessment and Certification Program





APPROACH

Using the PACP Code Matrix, Each PACP defect code is assigned a condition grade of from 1 to 5. Grades are assigned based on potential for further deterioration or pipe failure. Pipe failure is defined as when the pipe can no longer convey the pipe design capacity.

Grades are assigned for two categories, Structural, and O&M defects. Grades are as follows;

5 - Immediate Attention Defects requiring immediate attention

4 - Poor Severe defects that will become Grade 5 defects within the

foreseeable future

3 - Fair Moderate defects that will continue to deteriorate

2 - Good Defects that have not begun to deteriorate

1 - Excellent Minor defects

The mechanisms and rates of pipeline deterioration are highly dependent on local conditions. However the following general guidelines are provided to estimate the amount of time before the defect causes complete line failure. These guidelines should be verified by actual research under prevailing local conditions.

- 5 Pipe has falled or will likely fail within the next five years
- 4 Pipe will probably fail in 5 to 10 years
- 3 Pipe may fall in 10 to 20 years
- 2 Pipe unlikely to fail for at least 20 years
- 1 Failure unlikely in the foreseeable future

Grading of Continuous Defects

The number of "repeated continuous" (joint) defect grades is calculated by dividing the length of the continuous defect by the joint length. For example, a 15 ft long repeating continuous defect, 3-foot joints, and a grade 2 defect, would equate to 5 grade 2 defects.

F.-2

Pipeline Assessment and Certification Program





The number of "truly continuous" defects is calculated by dividing the length of the continuous defect by 5. Example, a 20-foot long continuous defect, grade 3, should equate to four Grade 3 defects. Fractions are rounded to the nearest whole number.

Pipe Ratings

The pipe rating is based on the number of occurrences for each condition grade. Ratings are calculated separately for **Structural Defects** and **O&M Defects**. Several ways of expressing pipe segment condition are used by the PACP Condition Grading System as follows.

Segment Grade Scores - Each pipe segment will have a Segment Grade Score for each of the five grades. The number of occurrences of each pipe grade is multiplied by the pipe grade to calculate the segment grade score. Example, six Grade 5 defects would be 6 times 5 and equates to a Segment Grade 5 Score of 30. If a pipe segment had no defects of a particular grade, then the Segment Grade Score for that grade would be 0.

Overall Pipe Rating —The five Segment Grade Scores are added together to calculate the Overall Pipe Rating. Structural Pipe Ratings are calculated using only Structural Defect grades, while O&M Pipe Ratings are calculated using only O&M Defect grades.

PACP Quick Rating – The PACP Quick Rating is a shorthand way of expressing the number of occurrences for the two highest severity grades. The PACP Quick Rating is a four character score as follows:

- 1. The first character is the highest severity grade occurring along the pipe length.
- 2. The second character is the total number of occurrences of the highest severity grade. If the total number exceeds 9, then alphabetic characters are used as follows- 10 to 14 A; 15 to 19 B; 20 to 24 C; etc.
- The third character is the next highest severity grade occurring along the pipe length.

F-3

Pipeline Assessment and Certification Program





4. The fourth character is the total number of the second highest severity grade occurrences, derived as in item 2 above.

For Example

4B27

This immediately shows that no grade 5 defects or grade 3 defects, however 15 to 19 grade 4 defects and seven grade 2 defects were found.

Another Example

3224

Two grade 3 defects and four grade 2 defects, however no grade 5 or grade 4 defects were found.

The PACP Quick Rating provides the ability to summarize the number and severity of defects found within a pipe segment. As with the Pipe Rating, Quick Structural Ratings are calculated using only Structural Defect Grades, and Quick O&M Ratings are calculated using only O&M Defect Grades.

Pipe Ratings Index — This is an indicator of the distribution of defect severity. The Pipe Ratings Index is calculated by dividing the Pipe Rating by the number of defects. For example, the Structural Pipe Ratings Index would be the Structural Pipe Rating divided by the number of structural defects. Pipe Ratings Indexes are calculated for Structural, O&M, and Overall.

Summary

The following procedures are used to calculate pipe segment ratings using the PACP Condition Grading System:

- Determine the number of occurrences for each condition grade within the pipe segment. Calculate separately for Structural Defect Grades and O&M Defect Grades.
- Calculate the Segment Grade Score by multiplying the number of occurrences by the respective grade 1 through 5. Calculate the Structural Segment Grade Score and the O&M Segment Grade Score separately, then add together for the Overall Segment Grade Score.

F-4

Pipeline Assessment and Certification Program



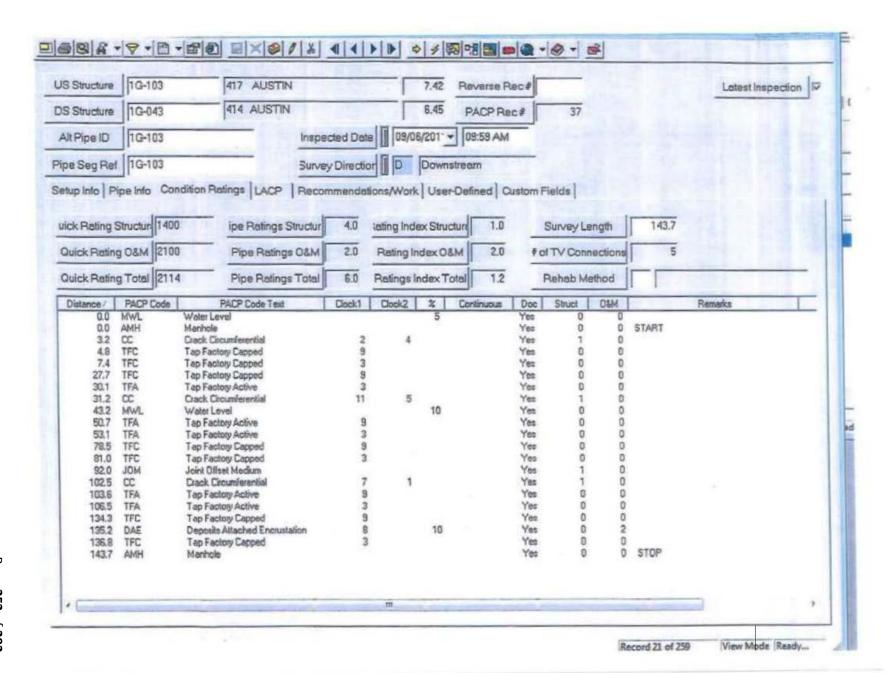


- 3. Calculate the Pipe Rating for the pipe segment by adding the Segment Grade Scores. Add all five Structural Segment Grade Scores for the Structural Pipe Rating, and add all five O&M Segment Grade Scores for the O&M Pipe Rating. Add all five Overall Segment Grade Scores for the Overall Pipe Rating.
- 4. Determine the PACP Quick Rating by calculating the number of occurrences of the two highest severity grades.
- 5. Calculate the Pipe Ratings Index by dividing the Pipe Rating by the number of defects.

E-5

NASSCO PACP Condition Grading System Code Matrix

Family	Group	Descriptor	Modifier	Code	Structural Grade	O&M Grade
Structural	Crack (C)	Circumferential (C)		CC	1	
		Longitudinal (L)		CL	2	
		Multiple (M)		CM	3	
		Spiral (S)		CS	2	
Structural	Fracture (F)	Circumferential (C)		FC	2	
		Longitudinal (L)		FL	3	
		Multiple (M)		FM	4	
		Spiral (S)		FS	3	
Structural	Pipe Failures (Silent)	Broken (B)		В	clock pos - 4, >=3 clock pos - 5	
			Soil Visible (SV)	BSV	5	
		Broken (B)	Void Visible (V V)	BVV	5	
		Hole (H)		Н	clock pos - 4, >= 3	
		Hole (H)	Soil Visible (SV)	HSV	5	
		Hole (H)	Void Visible (V V)	HVV	5	
Structural	Collapse (X)	Pipe (P)		XP	5	***************************************
		Brick (B)		XB	5	
Structural	Deformed (D)	(Pipe) (P)		D	<=10% - 4,>10% - 5	
		Brick (B)	Horizontally (H)	DH	5	
		Brick (B)	Vertically (V)	DV	5	
Structural	Joint (J)	Offset (displaced) (O)	Med (M)	JOM	1	
			Large (L)	JOL	2	
		Separated (open) (S)	Med (M)	JSM	1	
			Large (L)	JSL	2	
		Angular (A)	Med (M)	JAM	1	
-			Large (L)	JAL	2	
	Surface Damage Chemical (S)	Roughness Increased (RI)	C	SRIC	1	
		Surface Spalling (SS)	С	SSSC	2	
		Aggregate Visible (AV)	C	SAVC	3	
		Aggregate Projecting (AP)	C	SAPC	3	
		Aggregate Missing (AM)	С	SAMC	4	
		Reinforcement Visible (RV)	C	SRVC	5	
		Reinforcement Corroded (RC)	C	SRCC	5	



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	pected: 9/6/2011	TV Direction: Dow	nstream		Surveyed By: Ken Roske	
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Defect:	Manhole Remark:	Clock 2:		Continuous:	O & M Gr:	0
Distance:	0 Remark:					
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Distance:	27.70 Remark:					
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Distance:	43.20 Remark:	Clock 2:		Continuous:	O & M Gr:	U
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iea #:	12	Clock 4:	9	Value %:	Statestinal Car	0
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istance:	78.50 Remark:				* * * *	
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Seq #: Defect: Distance:	21 Manhole 143.70 Remark:	Clock 1: Clock 2: STOP	Value %: Continuous:	Structural Gr: O & M Gr:	0

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7.84

Reverse Rec#

Latest Inspection IV

1K-084

US Structure

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Seq #: Defect: Distance:	11 Roots Ball Joint	Clock 1: 12 Clock 2: 12	Value %: 55 Continuous: F02	Structural Gr: 0 O & M Gr: 4
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Defect: Distance:	Crack Multiple 155.80 Remark:	Clock 2: 3	Continuous:	O & M Gr: 0
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Defect: Distance:	Water Level 188.70 Remark:	Clock 2:	Continuous:	O & M Gr: 0
Seq#:	28	Clock 1:	Value %: 10	Structural Gr: 0
Defect: Distance:	Water Level 195.50 Remark:	Clock 2:	Continuous:	O & M Gr: 0
Seq#:	29	Clock 1: 12	Value %:	Structural Gr: 1
Defect: Distance:	Crack Circumferential 204.30 Remark:	Clock 2: 12	Continuous: S04	O & M Gr: 0
Seg #:	30	Clock 1: 12	Value %:	Structural Gr: 5
Defect: Distance:	Broken 206.80 Remark:	Clock 2:	Continuous:	O & M Gr: 0
Seq#:	31	Clock 1: 9	Value %:	Structural Gr: 0
Defect:	Tap Factory Active	Clock 2:	Continuous;	O & M Gr: 0
Distance:	208.50 Remark:			
Seq#:	32	Clock 1: 3	Value %:	Structural Gr: 0
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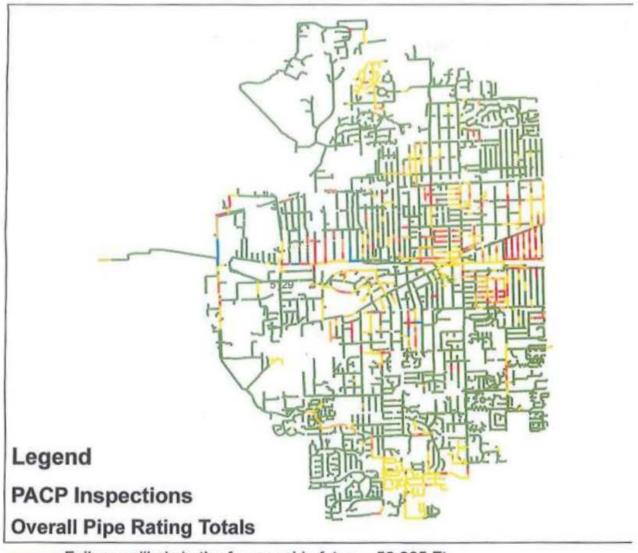
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Seq#:	40		Clock 1:		Value %:	Structural Gr:	0
Defect: Distance:	Manhole 300,70	Remark:	Clock 2: STOP		Continuous:	O & M Gr:	0

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Figure 5 2014 Sewer System Pipe Rehab Possible Selections



- Failure unlikely in the foreseeable future 56,665 Ft.
- Pipe unlikely to fail for at least 20 years 28,362 Ft.
- Pipe may fail in 10 to 20 years 17,228 Ft.
- Pipe will probably fail in 5 to 10 years 11,451.90
- Pipe has failed or will fail within the next 5 years 4,743 Ft.
- Sanitary Mainlines 1,331,244 Ft.

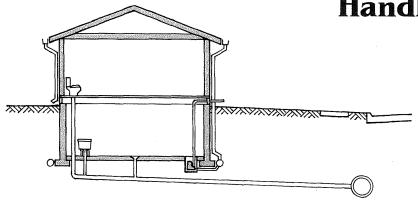
PACP over 201 Pipe Dia. Over 8 inches

US Structure	DS Structure	Flow Basin	Length (ft)	Dia (in)	Material	Date Constructed	US Pipe Total	Location
G2-004	G2-003	G2-001	416	10	VCP	1/1/1925	285	Webster St.
1N-007	1N-006	1N-001-A	37 5	12	VCP	1/1/1928	216	Quincy St. Alley
G2-001	G1-037	G1-015	451	12	VCP	1/1/1925	329	Kenyon St.
1A-004	1A-003	1A-003	345	24	RCP	1/1/1956	212	Warren Ave
1F-026-S	1F-025-S	1G-022-S	. 349	24	DIP	1/1/1987	210	Stanley Ave
1F-001-R	1G-024-R	1G-022-S	654	30	RCP	1/1/1987	385	Debolt Ave
3A-037	3A-036	3A-002	299	30	RCP	1/1/1969	236	Walnut Ave
1C-007	1C-006	1C-006	464	36	RCP	1/1/1926	250	Warren Ave
1C-018	1C-006-S	1C-006-S	486	48	RCP	1/1/1987	288	Warren Ave

Appendix L

Backup Handbook

Downers Grove Sanitary District Sanitary Sewer Backup Handbook



2710 Curtiss Street Downers Grove, Illinois 60515 (200) 969-0664

DOWNERS GROVE SANITARY DISTRICT WASTEWATER COLLECTION SYSTEM

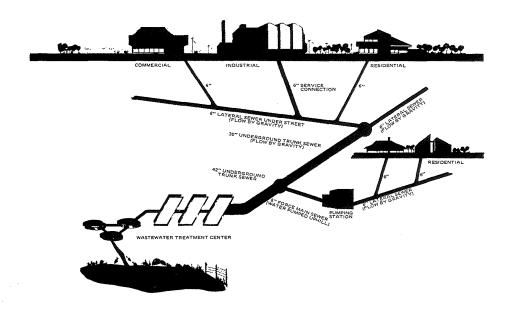


Table of Contents

	Pag	је
I.	Foreword	3
II.	Nature of the Backup Problems	4
III.	Types of Backups and their Prevention A. Faulty Private Service Pipe B. Overloaded Sanitary Sewer Main	
IV.	Storm Water Flooding/Seepage	11
V.	How to Minimize Damage from Backups	13
VI.	Cleaning Up Following a Backup	15
VII.	Summary	16

--2-

I. Foreword

This handbook has been prepared by the Downers Grove Sanitary District to explain the causes of sewer backups that occur in the District during severe rainstorms and to describe steps that are available to homeowners to prevent backups and to protect the contents of their house.

Sanitary sewer backups have three main causes: a blockage located in the private sewer lateral (service line) from the house to the public sewer, a blockage in the public sewer main, or an overloading of the public sewer main during rainstorms.

While this handbook addresses backups which occur during rainstorms, the preventive measures and methods of correction will help to prevent backups caused by blockages of the service line and main sewer.

Even if you do not experience sewer backups, we hope that you will study the information since, quite unknowingly, you may be contributing to the problems. Your house may be contributing storm water runoff or ground water to the sanitary sewer system through plumbing connections that were made when the house was constructed. The storm or ground water may overload the sanitary sewer system and cause backups of sanitary sewage in some other resident's basement. You can help the situation by disconnecting

these storm or ground water sources.

You should report a sanitary sewer backup as soon as it occurs and before you call a plumber. The District's telephone number, 969-0664, is manned at all times. District personnel will respond as discussed on page 16 of this handbook.

It is important to realize that backups may occur at any time due to blockages of your service line or the public sewer main, or during extreme rainstorm events. Therefore, you should consider improvements to your house to prevent future sewer backups. Since the improvements that will solve a problem in one situation may not be effective in other situations, the knowledge and skill of an engineer, a plumber and/or a sewer contractor may be needed to find the proper solution to the problem. Therefore, the only specific recommendation that can be made to all residents is: secure competent help and advice in determining the proper course of action to be taken.

The purposes of this handbook are to help you understand the real nature of your specific problem, to suggest methods that you may use to resolve the problem, and to explain when competent help is necessary to solve the problem.

II. The Nature of the Backup Problems

The Downers Grove Sanitary District owns and maintains a separate sanitary sewer system that is designed to collect only the sewage from the buildings in the District. If that were actually the case, many of the backup problems would not exist. Unfortunately, during rainstorms, storm water gets into the sanitary sewers which causes the basement backups.

The sanitary sewers are designed to collect the wastewater from the bathrooms, kitchens, etc., and transport it to the District's Wastewater Treatment Center for purification and discharge to the DuPage River. The system includes the District's sanitary sewer mains beneath the streets and the individual building services that extend from each house or building to the main sewer. The sanitary sewers are not designed to collect or transport the large amounts of storm water runoff that results from a rainstorm. Whenever

significant amounts of storm water get into the sanitary sewers, the system's capacity is exceeded and surcharging (overloading) of the system and basement backups occur. Normally, the sanitary sewage enters the basement through the floor drain which is the lowest access point. If the surcharge elevation is much higher than the floor drain or if the drain is plugged, the sewage can enter the basement through a shower drain, toilet, or laundry tub.

The storm water drainage system includes the storm water inlets in the streets, the storm sewer network, and Lacy, St. Joseph and Prentiss Creeks. The storm water drainage system is designed to collect and carry away the storm water runoff from the streets, driveways, roofs, and yards. The storm drainage systems are the responsibility of the local villages, the County, or special drainage districts.

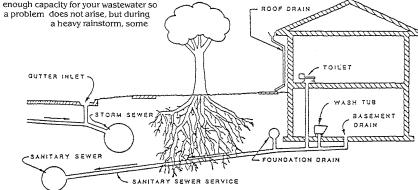
III. Types of Backups and Their Problems

If you experience a backup during a rainstorm, it is probably caused by (A) a faulty private service pipe; or (B) an overloaded local sanitary sewer main in the street.

A. Faulty Private Service Pipe

The service line between your house and the District sanitary sewer may be broken or partially plugged with roots. During dry weather, the service has enough capacity for your wastewater so a problem does not arise, but during

storm water may be getting into your service and the extra water may exceed its restricted capacity which would cause the water to back up into your basement. If you experienced a backup but your neighbors with a similar basement and plumbing did not, this situation may be causing your problems.



TYPICAL RESIDENCE WITH SANITARY SEWER SERVICE PARTIALLY CLOGGED BY TREE ROOTS AND FOUNDATION DRAIN CONNECTED TO SANITARY SEWER SERVICE

FIGURE 1

Tree roots can become entangled in sewer lines, thus clogging pipes and causing sewer backup.

As the maintenance and repair of an individual building service is the responsibility of the building owner, the correction of a backup problem caused by roots or defective service pipes will be your responsibility. If your problem is caused by root blockage, it can be relatively easy and inexpensive to correct depending on which alternative action you choose. First, the sewer must be cleaned with an electric rodding machine using a root cutter that will thoroughly remove the roots that have grown into the pipe. Following that, the homeowner may elect to do the following:

- 1. Periodic rodding Having the sewer rodded on a regular schedule to cut out all root growth will often be sufficient to keep them under control and reduce the likelihood of sewer backup. No rules can be given on how often this must be done because it depends on how active the roots are and how thorough a job the contractor is able to do. Some homeowners have found it necessary to have the sewer rodded as often as every six months, and others have found that once every few years is enough.
- 2. Use of root remover products A number of root remover products are available commercially. Be sure to follow all of the manufacturer's instructions. Although these products may not completely eliminate the growth, they may increase the interval between needed rodding.
- Sewer pipe replacement The surest method of permanently correcting the problem is to have the sewer pipe dug up and replaced at the location

where the roots are getting in. The new pipe used for replacement has a new type of joint that is tightly sealed to completely eliminate future entrance of roots. The sewer contractor or whoever performs the repair must be bonded with the Downers Grove Sanitary District and a Sewer Permit must be obtained from the District, at no charge. This is not, however, an inexpensive solution.

4. Any ground water or storm water which enters the sanitary sewer, such as foundation drains, roof downspouts, or sump pumps must be removed from the sanitary sewer. These types of connections are in violation of District ordinances and contribute significantly to the overloading of the sanitary sewer system.

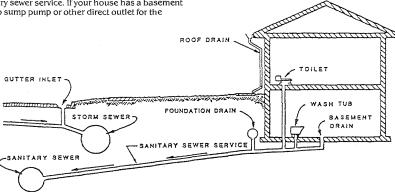
Blockage of house sewers is also occasionally caused by broken or separated pipe. This is usually the result of soil settlement under the pipe or poor installation of the pipe. In these cases, there is little alternative than to dig up the pipe at the damaged location and make repairs.

A professional firm specializing in sewer repair can best advise on the type of blockage in a sewer, the location and the probability that it will recur. Before making any decision on how to proceed, we would strongly advise the homeowner to get more than one opinion (and cost estimate) on work needed to be done.

B. Overloaded Sanitary Sewer Main

The sanitary sewer main in the street may be overloaded during wet weather periods because the sewer system cannot handle the extra storm water that gets into the system. Much of the storm water gets into the system through plumbing connections that were made when the houses were first constructed, particularly the houses that were built prior to 1960. Prior to that time, it was common practice to connect the foundation drain to the sanitary sewer service. If your house has a basement but no sump pump or other direct outlet for the

foundation drain, it is likely that your drains are directly connected to the sanitary sewers. Some houses have direct connections between the sanitary sewer service and the roof downspouts and/or an area drain. Each of these connections will contribute large amounts of storm water to the sanitary sewer system. These connections are violations of District ordinances and must be disconnected.



TYPICAL RESIDENCE WITH FOUNDATION DRAIN CONNECTED TO SANITARY SEWER SERVICE

FIGURE 2

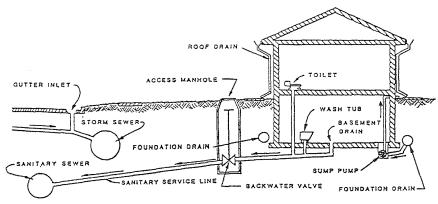
If an overloaded sanitary sewer main is the cause of your sewer backup, your neighbors probably experienced similar problems. If so, you can either protect the contents of your basement and let the sewer continue to backup, or you can prevent the backups. If you want to simply protect the contents of your basement from damage, please refer to the tasks, warnings, advantages and disadvantages discussed in a subsequent section of this report. If you want to prevent the backups, several alternative procedures are available.

- 1. Plugs or Standpipes: Since the basement floor drain is the lowest opening to the sewer in your house, it is the first place of entry for the backup. The floor drain can be closed with a rubber plug or with a standpipe during heavy rainstorms. Some drains are specifically threaded for a screw-in plug or a standpipe. This is the simplest and least expensive way to stop backups through the drain, but it is effective only until the sewage level rises up to the level of the next opening, probably a shower, toilet, or sink. At that level, the sewage will overflow into your basement.
 - If you use a plug or a standpipe, you must consider and protect against the possible uplift pressure on your basement floor. To be effective, a plug or standpipe confines the sewage to the pipes under the basement. If these pipes are watertight, the sewage won't leak out
- so no uplift presssure will develop. If the pipes are not watertight, the sewage will leak out of the pipes and saturate the ground beneath the floor. This sewage will then push up on your floor and if the pressure is large enough, your floor may buckle which would cause more damage than a basement backup. Since it is difficult to determine the condition of the pipes beneath your basement floor, plugs or tall standpipes should be used with caution. A "rule of thumb" which may be used as a guide is that a water level six inches higher than the basement floor level will not exert significant uplift pressure on the floor so, under normal conditions, a six-inch standpipe may reduce minor flooding without damage to the floor.
- 2. Valve: Since the sewer backup comes through the service line, an obvious solution is to install a valve in that line and to close that valve when flooding is imminent. The valve is normally installed in a manhole that is located outside the house where it is easier to install and maintain. Some valves are manual and others operate automatically such as a "check valve." The manual valves are not effective unless someone is available to close them. The automatic valves sometimes fail to close completely because sewage solids get jammed in the valve. In those cases, the valves may not prevent the backup.

When the valve is tightly closed, the sewage backup into the house is cut off, but the sewage flow from the house to the sewer is also cut off. Thus, the household plumbing cannot be used unless a pumped bypass is provided. Also, all storm water sources such as the foundation drain and roof downspout must be disconnected from the sanitary service, otherwise the storm water will back up into the basement through the floor drain. In addition, this connection is a violation of District ordinances.

Valves installed in sewer lines sometimes become "jammed" with debris and fail to close completely. In this case, the valve may slow down the backflow of sewage, but not stop it completely. For this reason, a valve installed on a sewer line should not be depended on for 100 percent protection, and an access manhole should always be provided for service and repair work.

A sanitary sewer permit, at no charge, is required from the District for this type of work.



TYPICAL RESIDENCE WITH BACKWATER VALVE

FIGURE 3

-9-

3. Overhead Sewer: The term "overhead sewer" means that there are no direct openings to the sanitary sewer in the basement. All of the wastewater that is collected in the basement is discharged into a separate sump pit and pumped into the sanitary service line so the basement drainage is dependent on a pump and a continuous electric power supply. Generally, the plumbing from the fixtures on the main floor is installed just below the basement ceiling (hence, the term "overhead"), and is routed to the outside service line through an opening high up on the basement wall.

Converting your plumbing to an overhead sewer is one of the most expensive ways to prevent basement backups. Nevertheless, it is generally considered to be the best method available.

A sanitary sewer permit, at no charge, is required from the District for this type of work.

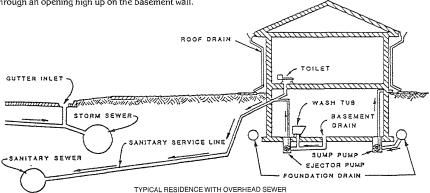


FIGURE 4

IV. Storm Water Flooding/Seepage

Apparent basement backups can be caused by ground water that enters the basement through cracks in the walls or through the basement sump or by storm water runoff flowing overland that enters the house through windows, doorways, or other openings.

Ground water is always present but the depth of the ground water is dependent on the soil type, ground surface elevation, surrounding topography and previous rainfall amounts. During rainstorms, some of the rainfall percolates into the ground which raises the ground water level. Since a basement is essentially a concrete bowl in the ground, the basement may become surrounded by ground water. If there are cracks in the basement walls or leaks between the walls, floor or foundation, the ground

water will enter the basement. Minor leaks can be corrected by the careful application of special hydraulic cements, which must be applied in strict accordance with the manufacturer's recommendations to be effective.

At the base of most houses, there is a pipe that is laid all around the outside of the foundation. The pipe may be perforated or may have open joints so that the ground water can easily enter it. This foundation drain protects the house by draining the ground water away from the basement.

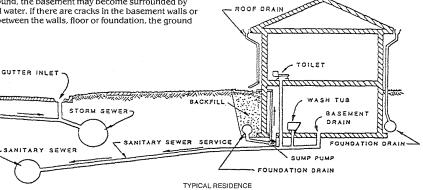


FIGURE 5

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In many cases, the foundation drain is directly connected to the sump pump and all of the drainage must be pumped out of the basement.

Any flooding through the basement sump is either caused by: (1) a pump that does not work properly; or (2) by water entening the sump at a rate that exceeds the capacity of the pump. If you rely on a sump pump to keep water out of your basement, you may want to start a routine maintenance program to be sure that the pump will operate when needed. Such a program should follow the pump manufacturer's instructions. It could consist of:

- Every month, pour some water into the pump to make sure that the pump operates and that it quickly empties the sump.
- 2. Every six months, check and clean the strainer on the suction side of the pump.

If the pump is working properly, the flooding could be caused by water entering the sump at a rate that exceeds the pump's capacity. The excess water floods the basement floor. The large amounts of water may be coming from the foundation drain, the roof downspouts, or both.

Grading - After construction of a house, the space around the basement is filled with backfill. In some cases, this backfill will settle, creating a low area adjacent to the basement walls. Any storm water runoff that gets into the low area will rapidly percolate down along the basement walls and will enter the foundation drain. This situation can be corrected by filling the low area with soil to create a slope away from the basement walls that will divert storm water runoff away from the basement and foundation drain.

Roof Downspouts - The roof downspouts can have a substantial impact on the flow from a foundation drain. In some cases, as shown on the right side of Figure 5, the roof downspouts are directly connected to the foundation

drains. During an intense rainstorm, this type of downspout can discharge thousands of gallons of rainwater to the sump pit which can exceed the pump's capacity and cause basement flooding. To eliminate this problem, the downspout should be cut off above the ground surface and the drain pipe into the ground should be carefully sealed. An elbow and an extension should be installed on each downspout to direct the rainwater away from the basement. The extension should reach well beyond the old excavation.

If the existing downspout is not fitted with an extension as shown in the left side of Figure 5, the rainwater may collect near the basement wall and percolate directly to the foundation drain. To correct this situation, an extension should be installed on the elbow to direct the rainwater away from the basement walls.

If the house does not have roof gutters and downspouts, the rainwater falls directly off the roof and percolates along the basement wall. To correct this situation, gutters and downspouts with extensions will prove beneficial.

The importance of proper grading and proper discharge of the roof downspouts cannot be over-emphasized and the problems can be alleviated by simple measures performed by the homeowner.

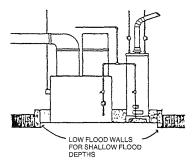
Overland Flow - Storm water flooding can be caused by water runoff that exceeds the capacity of the drainage system. The excess runoff flows overland and enters houses through windows, doors, or other openings. Generally, this type of flooding is more difficult and expensive to prevent than the flooding by ground water that was discussed above.

Basement flooding, caused by storm water runoff or seepage, is not a sanitary sewer backup. Flooding problems should be directed to your local village or other agency responsible for the storm drainage system in your

V. How To Minimize Damage From Backups

If it is impossible or prohibitively expensive to prevent a backup in your house, the damages can be minimized by measures aimed at protecting the house and its contents.

There are five main tasks to protect your house to reduce sewer backup damage. (These tasks may also help protect your home from flooding caused by storm water runoff or seepage.)



 Relocate expensive items that are subject to water damage. Freezers, washers, dryers, furniture, power tools, large appliances and similar items should be permanently moved to higher floors.

- Protect what cannot be moved. A floodwall or protection closet could be built around valuable, immovable equipment. Such protection walls must withstand all the pressure caused by the flood waters.
 - Another alternative is to place the equipment on a pedestal above the flood height. Some equipment can be protected by a coating of grease or covering with plastic bags or plastic sheets.
- 3. Relocate or adjust your utilities. Either move all electric outlets above the flood level or install a control panel where the power can be shut off easily in time of flood. If your furnace, water heater, dryer, and other gas appliances are not all elevated, make sure there is an accessible gas shut-off valve.
- 4. Seal off the sewer and water systems to prevent health hazards caused by interflows with flood waters. A water heater moved to an attic can act as an emergency storage tank for a gravity-fed potable water supply. Heating and air conditioning ducts should have removable plugs along the bottom to permit water to drain out when the flood recedes.
- Store things that are very quick to remove or items that won't be damaged; garden tools, metal furniture or cabinets, spare tires, boats, or floatable items (if water is shallow), plastic curtains, etc.

-13-

If you rebuild or improve the floodable area, use the following types of materials:

Concrete, concrete block or glazed brick; clay, concrete or ceramic tile; mastic, silicone or polyurethane formed-in-place flooring; terrazzo, rubber, vinyl or vinyl-asbestos floor covering with waterproof adhesives; stone, slate or cast stone (with waterproof mortar); glass or glass block; metal doors and window frames; foam or closed cell type insulation; polyester-epoxy or other waterproof type paint; indoor-outdoor carpeting (be able to remove it so the debris can be hosed out of it).

Do not use the following types of materials because they dissolve and decompose when wet or they absorb and retain too much water:

Wood, chipboard; gypsum products; cork; fabrics, carpeting, felt based floor coverings; linoleum; fiberboard, paperboard, strawboard; batt, blanket, and other types of insulation; wallpaper.

Certain items should not be stored in the floodable area because they would become especially hazardous or create health or pollution problems during a flood:

- Hazardous chemicals: chlorine, fluorine, acids, sulfur products, magnesium, many industrial chemicals.
- Hazardous household products: lye, pesticides, poisons, calcium hypochlorite (swimming pool chlorine), bleach, ammonia, lime detergents.
- Charcoal, coal, coal dust, coke, and hay are subject to spontaneous combustion when wet or moist.
- · Gasoline, acetone, benzyne.
- · Drugs, food (unless in tin cans).
- Storage tanks and buoyant materials can float and cause damage to walls, ceilings, and other contents.

Finally, here is a list of products that are particularly subject to flood damage. They should be removed, if possible, from any flood-prone areas as an extra precaution:

Appliances, clocks and other electric motors; art works, musical instruments; books, magazines, papers; clothing, curtains; televisions, radios, electronic equipment; upholstered furniture, mattresses; cabinets, pool tables, and similar wood furniture that would become useless with only a little warping.

Never enter a flooded basement unless absolutely necessary, and then only with extreme caution. The possibility of electrocution is always present. Always wear rubber boots. When cleaning the basement after water has receded, use caution around electrical outlets and appliances, and disconnect power from electrical equipment as quickly as possible.

VI. Cleaning Up Following A Backup

Shovel out any mud and debris while it is still moist and hose down the walls to remove silt. To get rid of any odor that may accompany a backup, scrub all interior wetted surfaces. Use hot sudsy water followed by double strength sanitizing solution, or use a household disinfectant, following manufacturer's directions. Repeat scrubbing and rinsing if necessary. You may also try sprinkling liberally with baking soda. Odors in the basement may be harder to treat. If the above approaches don't work, sprinkle bleaching powder (chlorine or lime) over the floor. Let it dry then sweep it up. Remember, bleaching powder is caustic and poisonous. Follow all the precautions on the label

Wooden floors dry very slowly. Assuming your fumace is operational, keep the house at 60-70 degrees F. to hasten drying but don't overheat the house as this could cause cracking or splitting. All loose plaster should be removed because plaster board and drywall can be ruined if immersed for a long time. Removal will also speed drying of the walls and will enable you to inspect the insulation in the exterior walls. Any waterlogged insulation must be replaced.

Mildew may appear if a warm spell follows a flood. Scrub mildewed floors or woodwork with a mild alkali solution such as washing soda or tri-sodium phosphate (four to six

tablespoons to a gallon of water). Badly stained walls will need new paint.

All electric motors that have gotten wet should be disconnected and thoroughly cleaned to get rid of dirt and grit. After cleaning, the motors should be re-oiled and allowed to dry for two weeks. You can shorten the drying time by using a fan or hair dryer.

Washers should be sanitized by pouring a disinfectant such as chlorine, pine oil, or phenolic into the empty washing machine, and then complete a 15-minute cycle at the hot setting. The dryer can be cleaned by wiping the drum with a cloth dipped in a disinfectant solution, rinse with cloth dipped in clear water. Leave washer and dryer doors open, preferably overnight, until all parts are dry.

Clothing, sheets, etc., should be hosed or rinsed with cool water to get as much mud out as possible. Then wash with as much detergent as possible. Bleach or other disinfectant should be used to kill bacteria. After drying, rugs and carpets can be cleaned with a vacuum cleaner and then shampooed.

Gasoline engines need to be thoroughly inspected and cleaned. All electrical parts must be dry. Grit or silt must be removed from the oil, transmission or gas lines.

VII. Summary

Problems which cause the sanitary sewers to occasionally back up are many and they are often interrelated. Many residents of the District may be worried and inconvenienced by the occurrence of a sewer backup in their basement or crawl space. It is our hope that if you have such a problem, you have found some suggestions in this report which may be of help. If you have a question regarding the connections in your home, call our office at 969-0664 during our regular business hours, 8:00 A.M. to 4:30 P.M., Monday through Friday.

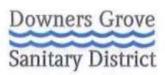
In conclusion, please remember that the District's telephone number, 969-0664, is manned 24 hours a day, seven days a week, in the event you must contact the District to report a sanitary sewer backup or other emergency. Call this number as soon as the backup occurs and before you call a plumber. District personnel will respond as promptly as possible. If the backup is caused by a blockage located in the public sewer main, the problem will be corrected. If, however, the backup is caused by an overloading of the public sewer main during a rainstorm, the problem cannot be relieved and your backup will not recede until the rainstorm stops and overloading of the sewer main subsides, which may take several hours. If the backup is caused by a blockage in your private service lines, you must take appropriate measures to eliminate the problem.

Downers Grove Sanitary District • 2710 Curtiss St. • Downers Grove, IL 60515 • 969-0664

Appendix M

Backup Reimbursement Program Documents

Board of Trustees Wallace D. Van Buren President Amy S. Kovacevic Vice President Donald F. Peters Clerk



2710 Cuttiss Street P.O. Box 1412 Downers Grove, II. 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827

Providing a Better Environment for South Central DuPage County

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DOWNERS GROVE SANITARY DISTRICT

REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

The Downers Grove Sanitary District provides a Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages. The program provides limited financial assistance to residents who experience a sanitary sewer backup as a result of a public sanitary sewer blockage. For purposes of this program, a sanitary sewer backup is defined as the discharge of raw sewage from the District sanitary sewer system through a resident's service line into the resident's building. If you are interested in this program, carefully review the enclosed materials which include the following:

- 1) Program Conditions
- 2) Sanitary Sewer Backup Handbook

This Handbook explains the causes of backups and preventive measures, in addition to information on clean up (page 15) if you decide to do the work yourself.

3) Obtaining Professional Assistance with Cleanup

As sanitary sewer backups can occur at any time, despite the District's efforts, residents are strongly encouraged to consider the installation of overhead sewers or backflow prevention devices. The District has a program that provides partial reimbursement for any preventive measures you may take to prevent future backups. Information on this program, the Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices, is also available on the District's website.

In addition, the District also offers a Building Sanitary Service Repair Assistance Program. Typically, blockages or problems of any nature in the homeowner's private service line are the responsibility of the homeowner but may be eligible for repair, rehabilitation or replacement by the District under this program, Information on this program is also available on the District's website.

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DOWNERS GROVE SANITARY DISTRICT REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

PROGRAM CONDITIONS

BACKGROUND

The Downers Grove Sanitary District is responsible for the maintenance and operation of over 230 miles of sanitary sewer lines located in the District service area. The District has an aggressive sanitary sewer system maintenance, rehabilitation and repair program. The program is intended to maintain the structural integrity of the system, minimize public sanitary sewer blockages, and remove infiltration and inflow of storm water into the sanitary sewer system. Components of the program include televising and cleaning of the sanitary sewer, flow monitoring, smoke testing, flood testing, manhole repairs and rehabilitation, sewer lining and sewer replacement projects.

It is important to understand that sanitary sewer backups may occur at any time. The backup may be due to blockages in the homeowner's private sanitary sewer service or the public sanitary sewer, or high flow conditions in the public sanitary sewer. Therefore, homeowners should consider improvements to their homes to prevent sewer backups. A Sanitary Sewer Backup Handbook is available free to District residents by contacting the District office. In addition, the District has implemented a cost sharing program for residents who have experienced sewer backup problems and desire to convert to an overhead sewer system or install backflow prevention devices. Information regarding the cost sharing program is also available from the District office.

District residents who experience a sanitary sewer backup problem at any time should call the District office at 630-969-0664. District personnel will investigate the backup to determine the causes and appropriate corrective action.

If District personnel determine that the sanitary sewer backup was caused by a public sanitary sewer blockage, the resident may be eligible for reimbursement under the District Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages as discussed below. For purposes of this program, a sanitary sewer backup is defined as the discharge of raw sewage from the public sanitary sewer through a resident's private sanitary sewer service into the resident's building. Sanitary sewer backups occurring as a result of high flow conditions in the public sanitary sewer are <u>not</u> eligible for reimbursement under this program. Blockages or problems of any nature in the homeowner's private sanitary sewer service are the responsibility of the homeowner and are <u>not</u> eligible for reimbursement under this program.

PROGRAM CONDITIONS

The District will provide reimbursement to residents who have experienced a sanitary sewer backup as a result of a public sanitary sewer blockage.

The District has determined that certain conditions for the reimbursement program are necessary to protect the integrity of such a program and the financial well-being of the District.

A reimbursement program for the costs incurred for cleanup, damages and loss of personal property by residents who experience a sanitary sewer backup as a result of a public sanitary sewer blockage is hereby implemented in accordance with the following conditions:

- 1) The District will reimburse a resident up to \$1,200 for eligible expenses.
- The program applies to all buildings connected to the Downers Grove Sanitary District public sanitary sewer system.
- The program applies to sanitary sewer backups which occur on or after the effective date of the ordinance establishing this program.
- Financial participation of the District is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 5) Reimbursement shall be made only under the following circumstances:
 - a) The resident has notified the District that a sanitary sewer backup has been experienced within twenty-four hours of the occurrence. The District is able to verify that a sanitary sewer backup occurred at the residence and that the sewer backup was a result of a public sanitary sewer blockage.
 - b) The resident must allow the District and its representatives (including third party claims adjusters or claims administrators) to have access to the residence and the area where the backup occurred; allow photographing, videotaping and inventorying of the area; and cooperate in all respects with District efforts to verify that the sanitary sewer backup occurred and the extent of damages.
 - c) The Agreement and Claim must be submitted to the District within six months of the date of the sanitary sewer backup.
 - d) The resident must have cooperated in all respects with District efforts to relieve the public sanitary sewer blockage.
 - The resident must disclose if a claim is being made, or will be made, against any other parties or insurance.
 - f) If the claim is being made against any other parties or insurance, the amount of compensation made, or estimated to be made, must be disclosed to the District. Only those costs not paid by other parties or insurance are eligible under this program.
 - g) The resident, and owner if the building is not owner-occupied, must execute an agreement which includes a clause whereby the resident and owner release and

waive any claim of liability against the District from the sanitary sewer backup which is the subject of the reimbursement claim and any prior sanitary sewer backups or any consequence of the resident's participation in the program and agree that the District is claiming no responsibility for the damages as a result of the backup for which a claim is being made.

- h) The District must find no evidence that the resident claiming damages was in any way responsible for the public sanitary sewer blockage due to any cause, including but not limited to: failure to maintain the private sanitary sewer service which results in debris or extraneous water entering the public sanitary sewer; or disposal of items which cause a blockage of the public sanitary sewer, or vandalism; or other acts which cause a blockage of the public sanitary sewer.
- i) The District must be able to verify that the sanitary sewer backup or the public sanitary sewer blockage was not caused by any other parties, including contractors, utilities, etc. Sanitary sewer backups occurring as a result of public sanitary sewer blockages caused by any other party are not eligible for reimbursement under this program.
- Sanitary sewer backups occurring as a result of high flow conditions in the public sanitary sewer are not eligible for reimbursement under this program.
- k) Blockages or problems of any nature in the homeowner's private sanitary sewer service are the responsibility of the homeowner and are not eligible for reimbursement under this program.
- 6) Reimbursement shall be limited as follows:
 - a) The maximum amount shall be \$1,200 per backup occurrence.
 - b) Reimbursement for replacement of personal property shall be based on actual cash value not replacement cost.
 - c) The resident shall obtain a minimum of two proposals for any work to be performed. Reimbursement shall be limited to the amount of the lowest proposal.
 - d) Detailed paid invoices for all work performed and detailed receipts for proof of loss must be provided to the District or its designated representatives.
 - Reimbursement will only be allowed for actual costs incurred, and not for payment in lieu of repairs or loss.
- The District reserves the right to administer claims or to use a third-party claims adjuster or claims administrator.
- The District reserves the right to deny and adjust claims in the best interests of the District.

- 9) To be eligible under this program, the following steps shall occur.
 - a) The resident has notified the District that a sanitary sewer backup has been experienced within twenty-four hours of the occurrence.
 - b) District employees or designated representatives shall inspect the building to determine eligibility, extent of damages, appropriateness of costs, etc. This inspection may be in addition to any inspection performed during the initial District response to the sanitary sewer backup.
 - c) Within six months of the date of the sanitary sewer backup occurrence, resident submits a completed and signed Agreement and Claim, along with all necessary documentation as required under these program conditions.
 - d) District shall provide the resident with a notice of determination of eligibility and amount of costs eligible for reimbursement.
 - e) District provides reimbursement in the normal course of business.
- 10) A resident shall be eligible for participation more than once, but in no case shall the maximum amount eligible exceed \$1,200 for any one backup occurrence.
- 11) The program will be evaluated annually and the District may change or eliminate the program.
- 12) The program is limited to the actual costs incurred for cleanup, repair of damages and replacement of personal property.
- 13) The General Manager may, in his discretion, provide a waiver of those program conditions listed above which he deems appropriate based on his evaluation of the individual circumstances related to a request for reimbursement.
- 14) The District shall have the sole authority to determine eligibility for participation and amount of costs eligible for reimbursement.

AGREEMENT AND CLAIM FOR DOWNERS GROVE SANITARY DISTRICT REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

I/We hereby request participation in the Downers Grove Sanitary District Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages, hereinafter called the "Program."

I/We certify that the information provided in this Agreement and Claim is true and correct and all evidence provided as proof of cleanup costs, repairs for damages and loss of personal property are genuine.

I/We agree that the amount requested in this Agreement and Claim constitute my/our entire claim against the District.

I/We have received a copy of the Program Conditions attached to and made a part of this Agreement and Claim.

I/We agree to allow the Downers Grove Sanitary District or its representatives to make any and all inspections as detailed in the Program Conditions.

I/We acknowledge that the Downers Grove Sanitary District has no liability for the damages incurred as a result of the sanitary sewer backup.

I/We hereby agree to release and waive any claim, suit or liability and to indemnify and hold harmless the Downers Grove Sanitary District, its trustees, officers, employees, engineers and agents, from and against all liability, damage, loss, claims, demands and actions of any nature whatsoever which arise out of or are connected with, or are claimed to arise out of or be connected with the sanitary sewer backup which is the subject of this Agreement and any previous sanitary sewer backups or the undersigned's participation in this Program.

Dated this	day of	, 20	
Printed Name		Signature	•
Printed Name		Signature	
Phone Number		***************************************	
		Mailing Address	

DOWNERS GROVE SANITARY DISTRICT REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

Obtaining Professional Assistance with Cleanup

If you determine that you need professional assistance with the cleanup after the sanitary sewer backup, contractors performing such work may generally be found in the yellow pages, or on the internet, under business categories such as carpet and rug cleaners, water damage restoration, janitorial services, or disaster recovery.

Before obtaining proposals from contractors, be sure to review all of the requirements for reimbursement under the District's Program. You must obtain two proposals for any work to be performed and reimbursement is limited to the amount of the lowest proposal. Detailed paid invoices for all work performed are also required. Be sure you understand and the contractor details what services are included and provides a breakdown of all costs.

Keep in mind that the District's Program limits reimbursement to a maximum of \$1,200 in total for the costs incurred for cleanup, damages and loss of personal property.

Appendix N

Historic Backup Maps

Downers Grove Sanitary District, April 18, 2013

