

**BIG RAPIDS CHARTER TOWNSHIP BOARD**  
**REGULAR MEETING TUESDAY, February 6, 2018**  
BIG RAPIDS TOWNSHIP OFFICES, 14212 NORTHLAND DR.  
BIG RAPIDS, MI 49307

**AGENDA**

CALL TO ORDER: 7:00 p.m. ROLL CALL: \_\_ Stanek, \_\_ Fountain, \_\_ Currie,  
\_\_ Bean, \_\_ Everett, \_\_ Geib, \_\_ Williams. Pledge of Allegiance.

PUBLIC COMMENT

ADDITIONS TO AGENDA:

CORRESPONDENCE:

APPROVAL OF: JANUARY 2<sup>ND</sup> AND 9<sup>TH</sup> MEETING MINUTES: **ITEM A/B**

FINANCIAL

1. Treasurer Report: **ITEM C**
2. Financial Report: **ITEM D**

APPROVAL OF BILLS:

1. Accounts Payable: **ITEM E**
2. Payroll: **ITEM F**

MONTHLY REPORTS:

1. Building/Planning Department: **ITEM G**
2. Cemetery and Grounds: **ITEM H**
3. Fire Department : **ITEM I**
4. Sewer Department: **ITEM J**
5. Water Department: **ITEM K**
6. Cemetery Committee: **ITEM L**
7. Cemetery Task Force: **ITEM M**
8. Supervisor: **ITEM N**
9. Other

UNFINISHED BUSINESS:

1. Other:

NEW BUSINESS:

1. Voya ACH authorization: **ITEM O**
2. John Hancock ACH authorization: **ITEM P**
3. User Charge: **ITEM Q**
4. Sale of Mower and Tractor: **ITEM R**
5. Purchase of Mower: **ITEM S**

PUBLIC COMMENT:

ADJOURNMENT:

Big Rapids Charter Township will provide necessary and reasonable auxiliary aids and services, such as signers for the hearing impaired and audiotapes of printed material, if individuals with disabilities, upon five business days notice to the township. Individuals requiring auxiliary aids or services should contact Rene Fountain, Big Rapids Charter Township Clerk, 14212 Northland Drive, Big Rapids, MI 49307- call 231 796 3603 or fax request to 231 796 2533.

**BIG RAPIDS CHARTER TOWNSHIP BOARD  
REGULAR MEETING TUESDAY, JANUARY 2, 2018  
UNAPPROVED**

**Item "A"**

**CALL TO ORDER:** 7:00 p.m.

**ROLL CALL:** Stanek, Fountain, Currie, Bean, Everett, Geib, Williams present. Williams called in from Comfort Suites, 60971 Old US 31 S, South Bend, IN 46614

All lead in the pledge of Allegiance.

**PUBLIC COMMENT:** Chris Vodry – Payments for personal cell phones.

**ADDITIONS TO AGENDA:** approved as printed.

**CORRESPONDENCE:** none.

**APPROVAL OF DECEMBER 5<sup>TH</sup> MEETING MINUTES:** Approved as printed.

**FINANCIAL**

1. **Treasurer Report:** Approved as printed.
2. **Financial Report:** Approved as printed.

**APPROVAL OF BILLS:**

1. **Accounts Payable:** A motion to approve accounts payable in the amount of \$111,649.39 was made by Currie. Seconded by Bean. Motion passed unanimously on a roll call vote.
2. **Payroll:** A motion to approve payroll in the amount of \$21,295.15 was made by Currie. Seconded by Bean. Motion passed unanimously on a roll call vote.

**MONTHLY REPORTS:**

1. **Building Department:**
  2. **Cemetery and Grounds:**
  3. **Fire Department :**
  4. **Sewer Department:**
  5. **Water Department:**
  6. **Board of Review:**
  7. **Planning Commission:**
  8. **Supervisor:**
- Approved as printed.

**UNFINISHED BUSINESS:**

1. **Policy Manual--Chapter 4 & 5:** A motion to approve changes to chapters 4 & 5 of the policy manual as presented was made by Bean. Seconded by Currie. Motion passed unanimously.
2. **Establishment of a restricted fund for donations for Cemetery Entrance Building:** A motion to establish a restricted fund for donations for the renovations and or repair of the Cemetery Entrance Building was made by Bean. Seconded by Everett. Motion passed unanimously.  
A motion to put \$10,000 in the restricted fund for the cemetery building was made by Currie. Seconded by Fountain. Motion passed unanimously on a roll call vote.
3. **Request to bid fire protection for Green Township:** no action.

**NEW BUSINESS:**

1. **Renewal of Water contract with Kevin Cushway:** A motion to renew the Water Plant contract with Kevin Cushway for another year was made by Everett. Seconded by Geib. Motion carried unanimously on a roll call vote.
2. **Set mileage rate for 2018 at \$0.545:** A motion to set the mileage rate of 2018 at \$0.0545 was made by Bean. Seconded by Currie. Motion carried unanimously on a roll call vote.
3. **Resolution Number 2018-1 on Retirement Plan:** A motion to adopt Resolution 2018-1 restatement of the Retirement Plan was made by Currie. Seconded by Bean. Motion carried unanimously on a roll call vote.

**BIG RAPIDS TOWNSHIP  
RESOLUTION NUMBER 2018-1**

The following is a formal record of action taken by the governing body of Big Rapids Township (the "Company").

With respect to the amendment and restatement of the Big Rapids Township Governmental Non-ERISA Retirement Plan (the "Plan"), the following resolutions are hereby adopted:



I, the undersigned, the duly qualified and acting Clerk of Big Rapids Township, Mecosta County, Michigan do hereby certify that the foregoing is a true and complete copy of a Resolution adopted by the Township Board at a regular meeting on January 2, 2018 the original of which is on file in my office. Public notice of said meeting was given pursuant to and in full compliance with Act No 267, Public Acts of Michigan, 1976 as amended, including in the case of a special or rescheduled meeting, notice by posting at least eighteen (18) hours prior to the time set for the meeting.

IN WITNESS WHEREOF, I have hereto affixed by official signature on this 2nd day of January 2018.

\_\_\_\_\_  
Rene Fountain, Clerk  
Big Rapids Township

5. **Request from Fire Department to repair Hydraulic Spreader at a cost not to exceed \$3800.00:** A motion to authorize repair of the Hydraulic Spreader on Engine 1 at a cost not to exceed \$3,800.00 was made by Everett. Seconded by Geib. Motion carried unanimously on a roll call vote.
6. **Request to raise building/zoning rates for 2018:** A motion to raise the zoning rates as presented was made by Fountain. Seconded by Everett. Motion carried 5 – 2, Stanek – yes, Fountain – yes, Currie – yes, Bean – no, Everett – yes, Geib – no, Williams – yes.  
A motion to raise Commercial Building fees as presented was made by Fountain. Seconded by Currie. Motion passed unanimously on a roll call vote.  
A motion to raise the Residential Building fees scale by 10% with the exception of basements which will go to \$30 and increase penalties to \$175 was made by Stanek. Seconded by Currie. Motion passed 4 – 3, Stanek – yes, Fountain – no, Currie – yes, Bean – no, Everett – yes, Geib – no, Williams – yes.
7. **Committee Appointments:** A motion to approve Committee Appointments as presented with the exception of Greg Vodry was made by Bean. Seconded by Everett. Motion passed unanimously.
8. **Acceptance of Planning Commission Annual Report:** A motion to accept the Planning Commission Annual Report was made by Everett. Seconded by Currie. Motion passed unanimously.

**PUBLIC COMMENT:** Carmen Bean – Board items that are a conflict of interest for a Board Member that member should recuse themselves from vote and comment.

**ADJOURNMENT:** 8:15 p.m.

**BIG RAPIDS CHARTER TOWNSHIP BOARD  
REGULAR MEETING TUESDAY, JANUARY 9, 2018  
JOINT MEETING OF BOARD OF TRUSTEES AND PLANNING COMMISSION  
UNAPPROVED**

**CALL TO ORDER: Board of Trustees 7:00 p.m.**

**ROLL CALL: Stanek, Fountain, Bean, Everett, Geib present. Currie, Williams absent.  
All lead in the Pledge of Allegiance.**

**CALL TO ORDER: Planning Commission**

**ROLL CALL: Keating, Bean, Cook, Oliver, Davis, Sweppenheiser, Wethington present.**

**State of the Township Address given by Supervisor Stanek.**

**Visioning Time: Phil Keating – Possibility of need for utilities west of 131; Brandon Maneke – Need for sidewalk on the west side of Northland Dr to connect with Ferris sidewalk; Carmen Bean – MDOT study for stop light at Gilbert Dr; Nancy Lerner – Stop light at 14 Mile and Northland Dr; Jerry Everett a stop light at the fire department entrance; Tony Geib – Internet access to all township residents; Phil Keating – Handling future growth and expansion in township, Need for condominiums in township.**

**Public Comment: none**

**Adjournment: 7:40 p.m.**

Item "C"



EXPENDITURES

POOLED FUNDS

REVENUES

DEC 2017	31-Dec	29-Dec	19-Dec	5-Dec	4-Dec	31-Dec	31-Dec	12/2/2017	11/30/2017	10/31/2017	TOTAL BY FUND	BALANCE ON HAND - BY FUND
101 GENERAL FUND	\$474,944.00	\$57,238.75	\$4,146.16	-\$15,618.81	-\$15,642.21	-\$13,371.94	-\$13,371.94	1,328.88	17,398.74	28,645.87	\$475,206.60	\$614,435.92
591 WATER PLANT	-\$15,642.21	-\$1,146.52	-\$1,146.52	-\$1,146.52	-\$1,146.52	-\$1,146.52	-\$1,146.52	18.96	189.80		\$107.76	-\$151,046.98
301 FUND BALANCE												\$452,588.94
<b>MONEY IN THE GENERAL FUND - DESIGNATED TO OTHER FUND PROJECTS</b>												
203 PERRY ST SPECIAL ASSESS										13817.42		\$92,096.51
204 ROAD MILEAGE									\$18,351.45	\$19,813.25	\$48,214.64	\$51,703.05
206 FIRE DEPT MILEAGE								\$1,207.06	\$18,351.95	\$9,513.29	\$96,513.19	\$92,157.69
212 HONORARY LIC LICENSE											\$0.00	\$0.00
246 PERRY ST											\$0.00	\$0.00
249 BLDG DEPT								\$455.00	\$4,954.00	\$45.00	\$8,418.00	\$96,472.72
254/271 LIBRARY MILEAGE								\$2,448.01	\$1,388.87		\$3,836.88	\$7,922.96
590 SEWER FUND								\$15,359.64	\$14,159.62	\$6,301.40	\$41,805.40	\$690,813.18
593 SEWER											\$0.00	\$0.00
708 METRO FUND											\$0.00	\$38,958.37
711 PEP CARE											\$0.00	\$13,067.55
850 PATROL LIABILITY											\$12,473.59	\$0.00
TOTAL GENERAL FUND BALANCE	\$1,512,634.80							\$31,447.10	\$75,661.37	\$117,344.84	\$214,803.87	\$1,536,778.99

FUNDS HELD IN SEPARATE BANK ACCOUNTS

590-CD SEWER FUND CERT OF DEP	\$151,315.29										\$0.00	\$151,315.29
594 MID PARK DEBT RETIREMENT	\$62,592.30										\$415.84	\$62,592.30
711 CEMETARY NON-EXPENDABLE	\$4,516.66										\$0.19	\$4,516.66
711 CEMETARY (NON-EXPEND)	\$100,000.00										\$0.00	\$100,000.00

INTEREST ONLY IS EXPENDABLE

GL Number	Description	Beginning Balance
101-000-001.000	Cash - Checking	673,968.06
101-000-001.001	Cash Non-Expendable	
203-000-001.000	CASH	74,259.09
204-000-001.000	CASH	3,426.41
206-000-001.000	Cash - Checking	93,965.25
212-000-001.000	Cash - Savings	
246-000-001.000	Cash - Savings	
249-000-001.000	Cash - Savings	97,721.27
271-000-001.000	CASH	1,488.10
301-000-001.000	Cash - Savings	
590-000-001.000	Cash - Savings	673,896.44
591-000-001.000	CASH	(158,133.01)
593-000-001.000	CASH	
701-000-001.000	Cash - Savings	
708-000-001.000	CASH	38,958.37
711-000-001.000	CASH	
711-000-001.100	HVC Cash Expendable	13,067.55
850-000-001.000	Cash - Savings	
Beginning GL Balance:		1,512,617.53
Add: Cash Receipts		241,731.18
Less: Cash Disbursements		(177,744.06)
Less: Payroll Disbursements		(39,825.66)
Ending GL Balance:		1,536,778.99

GL Number	Description	Ending Balance
101-000-001.000	Cash - Checking	614,635.92
101-000-001.001	Cash Non-Expendable	
203-000-001.000	CASH	92,096.51
204-000-001.000	CASH	51,701.05
206-000-001.000	Cash - Checking	92,157.69
212-000-001.000	Cash - Savings	
246-000-001.000	Cash - Savings	
249-000-001.000	Cash - Savings	96,472.72
271-000-001.000	CASH	7,922.98
301-000-001.000	Cash - Savings	
590-000-001.000	Cash - Savings	690,813.18
591-000-001.000	CASH	(161,046.98)
593-000-001.000	CASH	
701-000-001.000	Cash - Savings	
708-000-001.000	CASH	38,958.37
711-000-001.000	CASH	
711-000-001.100	HVC Cash Expendable	13,067.55
850-000-001.000	Cash - Savings	
Ending GL Balance:		1,536,778.99
Ending Bank Balance:		1,544,726.23
Add: Miscellaneous Transactions		117,025.19
Add: Deposits in Transit		0.00
Less: Outstanding Checks		

AP Checks

Check Date	Check Number	Name	Amount
02/04/2015	28726	MECOSTA COUNTY ASSESSOR'S ASSO	50.00
08/05/2015	29089	BIG RAPIDS CITY TREASURER	1.35
05/25/2016	29698	VERIZON WIRELESS	49.02
10/05/2016	29967	AUTO ZONE	19.98
10/05/2016	29992	OSCEOLA COUNTY EMS	200.00
12/07/2016	30139	SIMPLY GREEN OUTDOOR SERVICES	180.00
12/29/2017	30820	ACCIDENT FUND COMPANY	1,534.36
12/29/2017	30821	BIG RAPIDS TWP SEWER REC. FUND	53.08
12/29/2017	30822	BIG RAPIDS AUTO AND TRUCK PARTS	12.66

BANK RECONCILIATION FOR BIG RAPIDS TOWNSHIP  
Bank GEN (GENERAL TOWNSHIP CHECKING)  
FROM 12/01/2017 TO 12/31/2017  
Reconciliation Record ID: 60  
AP Checks

Check Date	Check Number	Name	Amount
12/29/2017	30823	BINNEY AUTO PARTS INC.	21.95
12/29/2017	30824	BIG RAPIDS TOWNSHIP GEN. FUND	937.50
12/29/2017	30825	BIG RAPIDS TAX FUND	49,927.52
12/29/2017	30826	BS&A SOFTWARE	3,033.33
12/29/2017	30827	BIG RAPIDS CITY TREASURER	29,602.42
12/29/2017	30828	CONSUMERS ENERGY	1,153.99
12/29/2017	30829	GEORGE DIETRICH	144.47
12/29/2017	30830	DO ALL DOUG	100.00
12/29/2017	30831	FIRST NATIONAL BANK	1,953.42
12/29/2017	30832	RENE FOUNTAIN	360.00
12/29/2017	30833	GBS INC	67.33
12/29/2017	30834	GRANGER	116.00
12/29/2017	30835	I. T. RIGHT	305.00
12/29/2017	30836	KEVIN CUSHWAY	1,041.67
12/29/2017	30837	MENARDS	366.61
12/29/2017	30838	MICHIGAN OFFICE SOLUTIONS	168.85
12/29/2017	30839	MI STATE FIREMEN'S ASSOCIATION	75.00
12/29/2017	30840	NORTHWEST KENT MECHANICAL CO.	3,483.91
12/29/2017	30841	THE PIONEER GROUP	54.00
12/29/2017	30842	PRINTING SYSTEMS, INC.	120.08
12/29/2017	30843	REPORTING SYSTEMS, INC	2,079.60
12/29/2017	30844	SMALL BUSINESS ADMIN SERVICES LLC	52.50
12/29/2017	30845	BILL STANEK	146.22
12/29/2017	30846	WEST SHORE FIRE, INC.	70.00
12/29/2017	30847	ERIC D. WILLIAMS	187.50
12/29/2017	30848	CHARTER COMMUNICATIONS	481.98
12/29/2017	30849	CITY OF BIG RAPIDS	13.58
12/29/2017	30850	CONSUMERS ENERGY	23.42
12/29/2017	30851	MECOSTA COUNTY ROAD COMMISSION	145.30
12/29/2017	30852	MENARDS	62.61
12/29/2017	30853	XEROX FINANCIAL SERVICES	342.53
12/29/2017	9929987	CHEMICAL BANK CENTRAL	4,926.03
12/29/2017	9929988	STATE OF MICHIGAN	709.19
12/31/2017	1136	RENE FOUNTAIN	62.50
12/31/2017	1137	BILL STANEK	62.50

Payroll Checks

Check Date	Check Number	Name	Amount
03/27/2014	9191	HOYT, ALAN	26.97
03/27/2014	9192	HOYT, ALAN	33.06
09/01/2014	9385	FITZPATRICK, DUSTIN	13.86
09/01/2016	10282	SHELDON, ANDREW	21.70
09/01/2016	10286	MYERS, AARON	43.41
02/01/2017	10495	HANNAH, HUNTER	27.40
03/01/2017	10535	BIRD, RANDY	130.39
06/01/2017	10661	FRYT, CHANDLER	135.66
09/01/2017	10804	FADAYOMI, OLUTEMITOPE	559.38
10/01/2017	10828	PYLMAN, ALEXIS	101.32
12/01/2017	10899	ECKERT, JAN	196.88
12/01/2017	10929	CURRIE, PENNY	1,848.86
12/01/2017	10935	SWEPPENHEISER, MARK	29.56
12/01/2017	10936	DAVIS, MARY	29.56
12/31/2017	10942	MASON, BRENT	2,965.93
12/31/2017	10943	STANEK, WILLIAM	1,024.92
12/31/2017	10944	DOUGLASS, PERRY IV	579.69
12/31/2017	10945	AMBLER, ALLEN	34.84
12/31/2017	10946	TUBBS, JAMES	712.53
12/31/2017	10947	WILLIAMS, TRAVIS	178.56
12/31/2017	10948	JOHNSON, CARMELITA	53.41



BANK RECONCILIATION FOR BIG RAPIDS TOWNSHIP  
Bank GEN (GENERAL TOWNSHIP CHECKING)  
FROM 12/01/2017 TO 12/31/2017  
Reconciliation Record ID: 60  
Payroll Checks

Check Date	Check Number	Name	Amount
12/31/2017	10949	CHAPMAN, JAMES	159.47
12/31/2017	10950	BIRD, RANDY	159.47
12/31/2017	10951	SUGGATE, ALAYNA	35.24
12/31/2017	10952	MILKEY, ANDREW	276.90
12/31/2017	10953	LOWNEY, AUSTIN	39.65
12/31/2017	10954	PRANGER, RYAN	118.93
12/31/2017	10955	SIMPSON, SCOTT	292.90
12/31/2017	10956	KOPF, STEVEN	328.05
12/31/2017	10957	HYDE, DAVID	13.22
12/31/2017	10958	MAKI, BRANDON	88.66
12/31/2017	10959	VANSICKLE, ETHAN	166.07
12/31/2017	10960	YEHLE, NATHANIEL	113.65
12/31/2017	10961	WINDER-RUDD, DOMINIC	79.29
12/31/2017	10962	HAUGER, DRYDEN	132.15
12/31/2017	10963	BRYANT, ELIZABETH	22.37
12/31/2017	10964	WYMA, NICHOLAS	142.72
12/31/2017	10965	JONES, JERRAD	105.72
12/31/2017	10966	FOUNTAIN, RENE	2,174.67
12/31/2017	10967	JACOBS, PHYLLIS	23.09
12/31/2017	10968	VIDETICH, GREGORY	12.55
12/31/2017	10969	BANDSTRA, ALICE	22.03
12/31/2017	10970	BEAN, SUSAN	11.01
12/31/2017	10971	DIETRICH, GEORGE	979.63
12/31/2017	10972	CAMPBELL, STEVEN	468.89
12/31/2017	10973	ANTOR, GERALD	730.31
12/31/2017	10974	CURRIE, PENNY	1,848.85
12/31/2017	10975	BECHAZ, MARY	422.36
12/31/2017	10976	MANEKE, BRANDON	2,277.71
12/31/2017	10977	KEATING, PHILIP	29.54
12/31/2017	10978	OLIVER, GORDON	28.20
12/31/2017	10979	SWEPPENHEISER, MARK	29.54
12/31/2017	10980	COOK, ZACHARY	29.54
12/31/2017	10981	WETHINGTON, AMANDA	28.18
12/31/2017	10982	BEAN, CARMEN	78.34
12/31/2017	10983	GEIB, ANTHONY	128.34
12/31/2017	10984	EVERETT, JERALD	128.34

Total - 101 Outstanding Checks: 124,972.43  
Adjusted Bank Balance 1,536,778.99  
Unreconciled Difference: 0.00

REVIEWED BY: Renz Fountain

DATE: 1/11/2018

Check Date Bank Check # Payee Description Account Dept Amount

Fund: 101 GENERAL OPERATING FUND

01/02/2018	GEN	1138*#	BRENT MASON	MEDICAL 2017	720.000	101	6.25
01/09/2018	GEN	30854	CHARTER COMMUNICATIONS	HVC	850.000	276	69.98
01/09/2018	GEN	30855	GREAT LAKES ENERGY	14 MILE & 215TH	920.000	448	17.23

01/10/2018	GEN	30856*#	JOHN HANCOCK LIFE INSURANCE COMP	JULY - DEC 2017 RETIREMENT	718.000	101	1,777.48
				JULY - DEC 2017 RETIREMENT	874.000	171	1,627.69
				JULY - DEC 2017 RETIREMENT	874.000	215	2,440.46
				JULY - DEC 2017 RETIREMENT	874.000	253	1,413.34
				JULY - DEC 2017 RETIREMENT	874.000	276	1,981.20
				JULY - DEC 2017 RETIREMENT	874.000	721	454.41
				CHECK GEN 30856 TOTAL FOR FUND 101:			9,694.58

01/17/2018	GEN	30866*#	BIG RAPIDS CITY TREASURER	DECEMBER SEWER BILLING, IPP CHGS	920.000	265	1.71
01/17/2018	GEN	30867	CONSUMERS ENERGY	STREET LIGHTS	920.000	448	576.00

01/17/2018	GEN	30868*#	GRANGER	TWP OFFICES, FIRE DEPT	930.000	265	33.00
01/17/2018	GEN	30869	HOPE NETWORK WEST MICHIGAN	TWP OFFICE CLEANING DECEMBER	930.000	265	136.50

01/17/2018	GEN	30870*#	PRIORITY HEALTH	FEBRUARY HEALTH INS PREMIUM	714.000	101	540.92
				FEBRUARY HEALTH INS PREMIUM	801.000	101	46.97
				FEBRUARY HEALTH INS PREMIUM	714.000	253	1,136.52
				FEBRUARY HEALTH INS PREMIUM	714.000	276	607.79
				CHECK GEN 30870 TOTAL FOR FUND 101:			2,332.20

01/23/2018	GEN	30871*#	DTE ENERGY	TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	265	235.29
				TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	276	118.40
				CHECK GEN 30871 TOTAL FOR FUND 101:			353.69

02/06/2018	GEN	30872*#	ACCIDENT FUND COMPANY	FEBRUARY INSTALLMENT	965.000	101	214.82
				FEBRUARY INSTALLMENT	965.000	276	322.22
				CHECK GEN 30872 TOTAL FOR FUND 101:			537.04

02/06/2018	GEN	30874*#	BIG RAPIDS TWP SEWER REC. FUND	TWP OFFICES, FIRE DEPT	920.000	265	17.27
02/06/2018	GEN	30877	BS&A SOFTWARE	DEC 2017 ASSESSING	801.005	257	3,033.33

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
Fund: 101 GENERAL OPERATING FUND							
02/06/2018	GEN	30878*#	CHARTER COMMUNICATIONS	PHONE & INTERENT TWP, FIRE DEPT, HVC	850.000	101	247.38
				PHONE & INTERENT TWP, FIRE DEPT, HVC	850.000	276	69.98
				CHECK GEN 30878 TOTAL FOR FUND 101:			317.36
02/06/2018	GEN	30880*#	CONSUMERS ENERGY	TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	265	243.35
				TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	276	229.70
				INDUSTRIAL PK STREET LIGHTS	920.000	448	42.98
				CHECK GEN 30880 TOTAL FOR FUND 101:			516.03
02/06/2018	GEN	30882	PENNY CURRIE	STAPLES SUPPLIES	727.000	253	61.28
02/06/2018	GEN	30887*#	FIRST NATIONAL BANK	MISC PURCHASES	727.000	101	586.80
				MISC PURCHASES	727.000	215	9.30
				MISC PURCHASES	727.000	253	295.62
				MISC PURCHASES	775.000	265	246.17
				MISC PURCHASES	932.000	265	49.00
				MISC PURCHASES	740.000	276	28.99
				MISC PURCHASES	930.000	276	49.00
				CHECK GEN 30887 TOTAL FOR FUND 101:			1,264.88
02/06/2018	GEN	30888	GREAT LAKES ENERGY	14 MILE AND 215TH STREET LIGHT	920.000	448	19.69
02/06/2018	GEN	30890	KDP RETIREMENT PLAN SVCS, INC.	BASE FEE JULY - DEC 2017	801.000	101	297.50
02/06/2018	GEN	30892	BRANDON MANEKE	CELL PHONE	850.100	276	30.00
02/06/2018	GEN	30893*#	BRENT MASON	CELL PHONE AND MILEAGE	860.000	721	41.96
02/06/2018	GEN	30894*#	MECOSTA COUNTY ROAD COMMISSION	FIRE DEPT, SNOW PLOWING	932.000	265	9.47
				FIRE DEPT, SNOW PLOWING	932.000	265	4.06
				FIRE DEPT, SNOW PLOWING	930.000	276	9.47
				FIRE DEPT, SNOW PLOWING	930.000	276	4.06
				CHECK GEN 30894 TOTAL FOR FUND 101:			27.06
02/06/2018	GEN	30898#	THE PIONEER GROUP	12/7/17 MINUTES, 1/9 PLANNING COMM	900.000	101	64.80
				12/7/17 MINUTES, 1/9 PLANNING COMM	900.000	721	64.80
				CHECK GEN 30898 TOTAL FOR FUND 101:			129.60
02/06/2018	GEN	30900	PRINTING SYSTEMS, INC.	AP CHECKS	740.000	215	173.64
02/06/2018	GEN	30901	SMALL BUSINESS ADMIN SERVICES LT	JAN 2018 HRA FEE	801.000	101	52.50

CHECK DISBURSEMENT REPORT FOR BIG RAPIDS TOWNSHIP

CHECK DATE FROM 01/01/2018 - 02/06/2018

Banks: GEN

Check Date Bank Check # Payee

Description

Account Dept

Amount

Fund: 101 GENERAL OPERATING FUND

02/06/2018 GEN 30902 XEROX FINANCIAL SERVICES

LEASE PYMT FOR COPIER

801.000 101

342.53

Total for fund 101 GENERAL OPERATING FUND

20,082.81

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 User: SHERI  
 DB: Big Rapids Twp

CHECK DISBURSEMENT REPORT FOR BIG RAPIDS TOWNSHIP  
 CHECK DATE FROM 01/01/2018 - 02/06/2018  
 Banks: GEN

Fund: 206 FIRE FUND

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
01/17/2018	GEN	30866*#	BIG RAPIDS CITY TREASURER	DECEMBER SEWER BILLING, IPP CHGS	920.000	336	1.68
01/17/2018	GEN	30868*#	GRANGER	TWP OFFICES, FIRE DEPT	930.000	336	33.00
01/23/2018	GEN	30871*#	DTE ENERGY	TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	336	1,090.44
02/06/2018	GEN	30872*#	ACCIDENT FUND COMPANY	FEBRUARY INSTALLMENT	965.000	336	997.36
02/06/2018	GEN	30873	BIG RAPIDS FLEET & AUTO REPAIR,	REPAIR OF ENG 1 FOR WATER LEAKING FRO	930.000	336	491.57
02/06/2018	GEN	30874*#	BIG RAPIDS TWP SEWER REC. FUND	TWP OFFICES, FIRE DEPT	920.000	336	26.54
02/06/2018	GEN	30875	BIG RAPIDS AUTO AND TRUCK PARTS	CONNECTOR	775.000	336	12.44
				X2 CAR WASH SOLUTION	775.000	336	12.66
				CHECK GEN 30875 TOTAL FOR FUND 206:			25.10
02/06/2018	GEN	30876	BINNEY AUTO PARTS INC.	MEDICAL OXY	740.000	336	22.95
02/06/2018	GEN	30878*#	CHARTER COMMUNICATIONS	PHONE & INTERENT TWP, FIRE DEPT, HVC	850.000	336	231.65
02/06/2018	GEN	30880*#	CONSUMERS ENERGY	TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	336	540.07
02/06/2018	GEN	30884	DINGERS FIRE COMPANY	GLOVES REPLACEMENT BRONSON ST FIRE	740.000	336	171.97
				6 5-GALLON CLASS 'A' FOAM	740.000	336	481.50
				CHECK GEN 30884 TOTAL FOR FUND 206:			653.47
02/06/2018	GEN	30885	EMERGENCY MEDICAL PRODUCTS, INC	1 CASE OF POWDER FREE EXAM GLOVES	740.000	336	112.25
02/06/2018	GEN	30886	PASTENAL COMPANY	PURCHASE OF BATTERIES	740.000	336	38.98
02/06/2018	GEN	30887*#	FIRST NATIONAL BANK	MISC PURCHASES	740.000	336	159.99
				MISC PURCHASES	920.000	336	49.02
				MISC PURCHASES	932.000	336	49.00
				CHECK GEN 30887 TOTAL FOR FUND 206:			258.01
02/06/2018	GEN	30894*#	MECOSTA COUNTY ROAD COMMISSION	FIRE DEPT, SNOW PLOWING	740.000	336	233.99
				FIRE DEPT, SNOW PLOWING	740.000	336	72.80
				FIRE DEPT, SNOW PLOWING	932.000	336	9.47
				FIRE DEPT, SNOW PLOWING	932.000	336	4.06

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
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Fund: 206 FIRE FUND

02/06/2018 GEN 30895 MENARDS

OFFICE SUPPLIES & OPERATING SUPPLIES	727.000	336	8.99
ALUMINUM NOZZLE	740.000	336	6.98
OFFICE SUPPLIES & OPERATING SUPPLIES	740.000	336	44.28
REPAIR & MAINT. SUPPLIES	775.000	336	45.12
OFFICE SUPPLIES & OPERATING SUPPLIES	775.000	336	41.43
OFFICE SUPPLIES & OPERATING SUPPLIES	935.000	336	122.29
CHECK GEN 30895 TOTAL FOR FUND 206:			269.09

02/06/2018 GEN 30896 MIDWEST RESCUE TOOLS, LLC

REPAIRS ON ENG 1	930.000	336	3,591.30
Total for fund 206 FIRE FUND			8,703.78

CHECK GEN 30894 TOTAL FOR FUND 206: 320.32

Check Date Bank Check # Payee Description Account Dept Amount

Fund: 249 BUILDING INSPECTION FUND

01/02/2018	GEN	1138*#	BRENT MASON	MEDICAL 2017	720.000	371	118.75
01/10/2018	GEN	30856*#	JOHN HANCOCK LIFE INSURANCE COMP	JULY - DEC 2017 RETIREMENT	874.000	371	669.66
01/17/2018	GEN	30870*#	PRIORITY HEALTH	FEBRUARY HEALTH INS PREMIUM	714.000	371	66.87
02/06/2018	GEN	30883	GEORGE DIETRICH	MILEAGE, CELLPHONE, SCHOOL & MEMBERSH	850.100	371	15.00
				MILEAGE, CELLPHONE, SCHOOL & MEMBERSH	860.000	371	216.36
				MILEAGE, CELLPHONE, SCHOOL & MEMBERSH	958.000	371	125.00
				MILEAGE, CELLPHONE, SCHOOL & MEMBERSH	960.000	371	62.50
				CHECK GEN 30883 TOTAL FOR FUND 249:			418.86
02/06/2018	GEN	30887*#	FIRST NATIONAL BANK	MISC PURCHASES	727.000	371	886.83
02/06/2018	GEN	30893*#	BRENT MASON	CELL PHONE AND MILEAGE	850.100	371	30.00
				Total for fund 249 BUILDING INSPECTION FUND			2,190.97

Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
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Fund: 590 SEWER FUND

01/10/2018	GEN	30856*#	JOHN HANCOCK LIFE INSURANCE COMP	JULY - DEC 2017 RETIREMENT	874.000	521	577.29
01/17/2018	GEN	30857	AT & T	SEWER LIFT STATION	920.000	521	89.51
01/17/2018	GEN	30858	AT & T	SEWER LIFT STATION	920.000	521	110.08
01/17/2018	GEN	30859	AT & T	SEWER LIFT STATION	920.000	521	80.37
01/17/2018	GEN	30860	AT & T	SEWER LIFT STATION	920.000	521	89.94
01/17/2018	GEN	30861	AT & T	SEWER LIFT STATION	920.000	521	89.94
01/17/2018	GEN	30862	AT & T	SEWER LIFT STATION	920.000	521	89.94
01/17/2018	GEN	30863	AT & T	SEWER LIFT STATION	920.000	521	93.13
01/17/2018	GEN	30864	AT & T	SEWER LIFT STATION	920.000	521	93.03
01/17/2018	GEN	30865	AT & T	SEWER LIFT STATION	920.000	521	89.92
01/17/2018	GEN	30866*#	BIG RAPIDS CITY TREASURER	DECEMBER SEWER BILLING, IPP CHGS	804.000	521	22,639.99
01/17/2018	GEN	30870*#	PRIORITY HEALTH	FEBRUARY HEALTH INS PREMIUM	714.000	521	200.57
01/23/2018	GEN	30871*#	DTE ENERGY	TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	521	175.91
02/06/2018	GEN	30880*#	CONSUMERS ENERGY	14 MILE LIFT STATION	920.000	521	336.46
				TWP OFFICES, FIRE DEPT, HVC, X5 LIFT	920.000	521	1,504.23
				INDUSTRIAL PK SEWER MAINT. BLDG	920.000	521	179.88
				SEWER LIFT STATION	920.000	521	195.05
				CHECK GEN 30880 TOTAL FOR FUND 590:			2,215.62
02/06/2018	GEN	30881	CUMMINS BRIDGEWAY, LLC	REMOVED AND REPLACED BLOCK HEATER	930.000	521	248.59
02/06/2018	GEN	30887*#	FIRST NATIONAL BANK	MISC PURCHASES	930.000	521	49.00
02/06/2018	GEN	30894*#	MECOSTA COUNTY ROAD COMMISSION	FIRE DEPT, SNOW PLOWING	930.000	521	9.47
				FIRE DEPT, SNOWPLOWING	930.000	521	4.06
				CHECK GEN 30894 TOTAL FOR FUND 590:			13.53
02/06/2018	GEN	30897	NORTHWEST KENT MECHANICAL CO.	DEC MAINT, 1 MISS DIG, GILBERT H.S. C	801.050	521	35.00
				DEC MAINT, 1 MISS DIG, GILBERT H.S. C	805.000	521	2,897.92
				DEC MAINT, 1 MISS DIG, GILBERT H.S. C	805.100	521	1,249.25
				DEC MAINT, 1 MISS DIG, GILBERT H.S. C	930.000	521	293.84



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CHECK DISBURSEMENT REPORT FOR BIG RAPIDS TOWNSHIP  
CHECK DATE FROM 01/01/2018 - 02/06/2018  
Banks: GEN

Check Date Bank Check # Payee Description Account Dept Amount

Fund: 590 SEWER FUND

CHECK GEN 30897 TOTAL FOR FUND 590: 4,476.01

02/06/2018 GEN 30899 PROGRESSIVE AE SAW GRANT 967.001 521 6,600.85

Total for fund 590 SEWER FUND 38,023.22

CHECK DISBURSEMENT REPORT FOR BIG RAPIDS TOWNSHIP  
 CHECK DATE FROM 01/01/2018 - 02/06/2018

Banks: GEN

Check Date Bank Check # Payee Description Account Dept Amount

Fund: 591 WATER FUND

02/06/2018	GEN	30880*#	CONSUMERS ENERGY	WATER PLANT	920.000	536	985.37
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02/06/2018	GEN	30887*#	FIRST NATIONAL BANK	MISC PURCHASES	920.000	536	24.95
				MISC PURCHASES	930.000	536	49.00
				CHECK GEN 30887 TOTAL FOR FUND 591:			73.95

02/06/2018	GEN	30889	HACH COMPANY	X2 REAGENT SET	740.000	536	125.79
02/06/2018	GEN	30891	KEVIN CUSHWAY	JANUARY 2018 WATER PLANT SERVICES	805.000	536	1,041.67

02/06/2018	GEN	30894*#	MECOSTA COUNTY ROAD COMMISSION	FIRE DEPT, SNOW PLOWING	930.000	536	9.47
				FIRE DEPT, SNOWPLOWING	930.000	536	4.06
				CHECK GEN 30894 TOTAL FOR FUND 591:			13.53

				Total for fund 591 WATER FUND			2,240.31
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Check Date	Bank	Check #	Payee	Description	Account	Dept	Amount
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Fund: 850 PAYROLL CLEARING FUND							
02/01/2018	GEN	99299900	CHEMICAL BANK CENTRAL	JANUARY FWH,SSW, MWH	212.000	000	1,441.91
				JANUARY FWH,SSW, MWH	214.000	000	3,675.62
				JANUARY FWH,SSW, MWH	215.000	000	859.58
				CHECK GEN 9929990(E) TOTAL FOR FUND 8			<u>5,977.11</u>
02/01/2018	GEN	99299910	STATE OF MICHIGAN	JANUARY PAYROLL	213.000	000	853.15
02/06/2018	GEN	30879	CITY OF BIG RAPIDS	WITHHOLDINGS FOR JANUARY PAYROLL	211.000	000	19.54
				Total for fund 850 PAYROLL CLEARING FUND			6,849.80
				TOTAL - ALL FUNDS			78,090.89

'\*'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND  
 '#'-INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

Check Date	Bank	Check	Vendor	Vendor Name	Amount
Bank GEN GENERAL TOWNSHIP CHECKING					
01/02/2018	GEN	1138	MASON	BRENT MASON	125.00
01/09/2018	GEN	30854	CHA01	CHARTER COMMUNICATIONS	69.98
01/09/2018	GEN	30855	GRE02	GREAT LAKES ENERGY	17.23
01/10/2018	GEN	30856	JHI00	JOHN HANCOCK LIFE INSURANCE COMPANY	10,941.53
01/17/2018	GEN	30857	AME00	AT & T	89.51
01/17/2018	GEN	30858	AME00	AT & T	110.08
01/17/2018	GEN	30859	AME00	AT & T	80.37
01/17/2018	GEN	30860	AME00	AT & T	89.94
01/17/2018	GEN	30861	AME00	AT & T	89.94
01/17/2018	GEN	30862	AME00	AT & T	89.94
01/17/2018	GEN	30863	AME00	AT & T	93.13
01/17/2018	GEN	30864	AME00	AT & T	93.03
01/17/2018	GEN	30865	AME00	AT & T	89.92
01/17/2018	GEN	30866	CIT02	BIG RAPIDS CITY TREASURER	22,643.38
01/17/2018	GEN	30867	CON00	CONSUMERS ENERGY	576.00
01/17/2018	GEN	30868	GRANGER	GRANGER	66.00
01/17/2018	GEN	30869	HOPE	HOPE NETWORK WEST MICHIGAN	136.50
01/17/2018	GEN	30870	PRIORITY H	PRIORITY HEALTH	2,599.64
01/23/2018	GEN	30871	DTE00	DTE ENERGY	1,620.04
02/01/2018	GEN	9929990(E)	CHE00	CHEMICAL BANK CENTRAL	5,977.11
02/01/2018	GEN	9929991(E)	STA00	STATE OF MICHIGAN	853.15
02/06/2018	GEN	30872	ACC00	ACCIDENT FUND COMPANY	1,534.40
02/06/2018	GEN	30873	BIG RAPIDS	BIG RAPIDS FLEET & AUTO REPAIR, INC	491.57
02/06/2018	GEN	30874	BIG01	BIG RAPIDS TWP SEWER REC. FUND	43.81
02/06/2018	GEN	30875	BIG04	BIG RAPIDS AUTO AND TRUCK PARTS	25.10
02/06/2018	GEN	30876	BIN00	BINNEY AUTO PARTS INC.	22.95
02/06/2018	GEN	30877	BS&00	BS&A SOFTWARE	3,033.33
02/06/2018	GEN	30878	CHA01	CHARTER COMMUNICATIONS	549.01
02/06/2018	GEN	30879	CIT00	CITY OF BIG RAPIDS	19.54
02/06/2018	GEN	30880	CON00	CONSUMERS ENERGY	4,257.09
02/06/2018	GEN	30881	CUM00	CUMMINS BRIDGEWAY, LLC	248.59
02/06/2018	GEN	30882	CURRIEP	PENNY CURRIE	61.28
02/06/2018	GEN	30883	DIETRICH	GEORGE DIETRICH	418.86
02/06/2018	GEN	30884	DINGES	DINGES FIRE COMPANY	653.47
02/06/2018	GEN	30885	EMPO0	EMERGENCY MEDICAL PRODUCTS, INC	112.25
02/06/2018	GEN	30886	FAS00	FASTENAL COMPANY	38.98
02/06/2018	GEN	30887	FIR00	FIRST NATIONAL BANK	2,532.67
02/06/2018	GEN	30888	GRE02	GREAT LAKES ENERGY	19.69
02/06/2018	GEN	30889	HAC00	HACH COMPANY	125.79
02/06/2018	GEN	30890	KDP00	KDP RETIREMENT PLAN SVCS, INC.	297.50
02/06/2018	GEN	30891	KEVIN C	KEVIN CUSHWAY	1,041.67
02/06/2018	GEN	30892	MANEKE	BRANDON MANEKE	30.00
02/06/2018	GEN	30893	MASON	BRENT MASON	71.96
02/06/2018	GEN	30894	MEC01	MECOSTA COUNTY ROAD COMMISSION	374.44
02/06/2018	GEN	30895	MEN00	MENARDS	269.09
02/06/2018	GEN	30896	MIDWEST	MIDWEST RESCUE TOOLS, LLC	3,591.30
02/06/2018	GEN	30897	NORTHWEST	NORTHWEST KENT MECHANICAL CO.	4,476.01
02/06/2018	GEN	30898	PIO00	THE PIONEER GROUP	129.60
02/06/2018	GEN	30899	PRO00	PROGRESSIVE AE	6,600.85
02/06/2018	GEN	30900	PSI00	PRINTING SYSTEMS, INC.	173.64
02/06/2018	GEN	30901	SBS00	SMALL BUSINESS ADMIN SERVICES LLC	52.50
02/06/2018	GEN	30902	XEROX	XEROX FINANCIAL SERVICES	342.53

## GEN TOTALS:

Total of 52 Checks:

78,090.89

Less 0 Void Checks:

0.00

Total of 52 Disbursements:

78,090.89

Name	Check Date	Gross	Net
MASON, BRENT	02/01/2018	3,666.67	3,063.74
STANEK, WILLIAM F	02/01/2018	2,650.00	541.06
DOUGLASS, PERRY IV A	02/01/2018	1,126.50	976.05
AMBLER, ALLEN S	02/01/2018	90.00	78.38
TUBBS, JAMES	02/01/2018	1,099.50	1,000.16
WILLIAMS, TRAVIS A	02/01/2018	418.83	368.99
JOHNSON, CARMELITA S.	02/01/2018	345.00	312.44
CHAPMAN, JAMES M	02/01/2018	501.00	441.39
BIRD, RANDY	02/01/2018	418.50	368.69
SUGGATE, ALAYNA	02/01/2018	45.00	39.65
MILKEY, ANDREW	02/01/2018	15.00	13.21
LOWNEY, AUSTIN M	02/01/2018	285.00	251.09
PRANGER, RYAN E	02/01/2018	603.00	501.77
SIMPSON, SCOTT E	02/01/2018	466.50	395.17
KOPF, STEVEN J	02/01/2018	837.00	684.53
HYDE, DAVID D	02/01/2018	270.00	237.86
MAKI, BRANDON T	02/01/2018	231.00	213.33
VANSICKLE, ETHAN T	02/01/2018	241.00	212.33
YEHLE, NATHANIEL J	02/01/2018	396.00	340.11
WINDER-RUDD, DOMINIC D	02/01/2018	195.00	171.79
HAUGER, DRYDEN O	02/01/2018	270.00	237.86
BRYANT, ELIZABETH L	02/01/2018	225.00	205.54
WYMA, NICHOLAS A	02/01/2018	245.00	215.85
JONES, JERRAD C	02/01/2018	600.00	499.43
FOUNTAIN, RENE M	02/01/2018	3,416.67	2,582.88
DIETRICH, GEORGE	02/01/2018	1,750.57	1,530.94
CAMPBELL, STEVEN R.	02/01/2018	638.90	584.64
ANTOR, GERALD A	02/01/2018	814.60	745.99
CURRIE, PENNY M	02/01/2018	3,266.67	897.36
BECHAZ, MARY L	02/01/2018	322.00	283.68
MANEKE, BRANDON K	02/01/2018	2,975.00	2,231.35
DEFEVER, KEVIN J	02/01/2018	40.00	35.24
KEATING, PHILIP	02/01/2018	80.00	73.88
OLIVER, GORDON	02/01/2018	40.00	35.24
ZIMMERMAN JR., JOHN D.	02/01/2018	40.00	36.94
SWEPPENHEISER, MARK A	02/01/2018	40.00	36.94
DAVIS, MARY B	02/01/2018	40.00	36.94
COOK, ZACHARY F	02/01/2018	40.00	36.94
WETHINGTON, AMANDA R	02/01/2018	40.00	35.24
BEAN, CARMEN	02/01/2018	145.83	0.00
GEIB, ANTHONY C	02/01/2018	145.83	128.48
EVERETT, JERALD D	02/01/2018	145.83	128.48
.....			
Totals: 42		29,222.40	20,811.58

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

Payroll: 201

Name	Check Date	Gross	Net
HAUGER, DRYDEN O	02/01/2018	420.00	358.85
Totals: 1		420.00	358.85

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

**Building & Zoning Department Report to the Board of Trustees:**

For the month ending January 31, 2018

Winter has been much busier than expected for the Building and Zoning Department. We have issued 15 building permits during the first month of 2018 totaling \$21,067.00 in fees (see attached).

I have been working with several organizations as they prepare plans for additional development in the commercial and highway interchange districts. Campus Creek Cottages are building 13 additional duplex units (26 – four-bedroom apartments) on their site at 14135 Bulldog Lane (north of Gilbert Drive). Meijer has taken out a building permit for the addition to their gas station. Both Meijer and Walmart are doing store reset projects with some interior alterations at the present time.

Belle Tire will present a site plan at the February 13, 2018 Planning Commission meeting with construction starting soon after. Cellco Partnership (dba Verizon Wireless) placed a Public Notice in the Pioneer on January 25, 2018 requesting comments for a proposed 162-foot monopole communications tower on property at 21050 Madison Avenue. They have not filed any applications with Big Rapids Township yet. I have also had an inquiry about requirements for developing a commercial use in the Agricultural District on the west side of Northland Drive north of 12 Mile Road. The individual decided to purchase the property on January 26 and go ahead with the process of pursuing a special use permit at the March Planning Commission Meeting.

Terry Weaver called on January 16, 2018 to discuss the condition of his investment property, The Hills of Mitchell Creek. He feels that Big Rapids Township is not providing adequate service in patrolling the property, and that this property has become a dumping ground and an area that is attractive to nuisance uses, particularly parties and possible illegal activity that may accompany those uses. He believes that Big Rapids Township has a responsibility to provide for law enforcement patrols in the area and bring these activities to a halt. I have been through the property and will continue to observe the area, as there is substantial evidence that inappropriate activity is taking place. I have contacted the Michigan State Police and the Mecosta County Sheriff's Office to increase patrols, especially after dark in an effort to curb the illicit activity. Hopefully, these efforts will provide enough visibility to control this activity and remedy Mr. Weaver's concern.

Sincerely,

A handwritten signature in cursive script that reads "Brent R. Mason". The signature is written in dark ink and extends across the width of the page with a long, sweeping underline.

Brent R. Mason  
Zoning Administrator,  
Building and Zoning Department

# Monthly Permit List

01/31/2018

## Building

Permit #	Contractor	Job Address	Fee Total	Const. Value
PB18-0001	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 40 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0002	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 41 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0003	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 42 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0004	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 43 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0005	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 44 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0006	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 45 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0007	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 46 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0008	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 47 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0009	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 48 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0010	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 49 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0011	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 64 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0012	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 65 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0013	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$1,398.00	\$178,000
<b>Work Description:</b> Building 66 - COMMERCIAL DUPLEXES FOR STUDENT RENTAL PROJECT				
PB18-0014	MEIJER INC	15375 WALDRON WAY	\$2,516.00	\$172,000
<b>Work Description:</b> 1095 sq. ft. addition and alterations to existing Convenience Store.				
PB18-0015	CHRISTENSEN, ED & TRACY	21160 12 MILE ROAD	\$377.00	\$38,580
<b>Work Description:</b> New 1,286 sq. ft. residential modular home on crawlspace.				



<b>Total Permits For Type:</b>	<b>15</b>
<b>Total Fees For Type:</b>	<b>\$21,067.00</b>
<b>Total Const. Value For Type:</b>	<b>\$2,524,580</b>

## Electrical

Permit #	Contractor	Job Address	Fee Total	Const. Value
PE18-0001	MEIJER INC	15400 WALDRON WAY	\$508.00	\$0
<b>Work Description:</b> 200 - 600 amp service, 42 breakers, 75 lights, 10 - 220v outlets, 4 inspections.				
PE18-0002	MEIJER INC	15400 WALDRON WAY	\$255.00	\$0
<b>Work Description:</b> 36 Circuit Breakers, 1 inspection.				
PE18-0003	COOPER TERRY G & ETOILDA	19945 13 MILE ROAD	\$80.00	\$0
<b>Work Description:</b> Furnace, 1 inspection.				
PE18-0004	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 40 - New Construction Electric for Commercial Duplex.				
PE18-0005	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 41 - New Construction Electric for Commercial Duplex.				
PE18-0006	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 42 - New Construction Electric for Commercial Duplex.				
PE18-0007	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 43 - New Construction Electric for Commercial Duplex.				
PE18-0008	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 44 - New Construction Electric for Commercial Duplex.				
PE18-0009	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 45 - New Construction Electric for Commercial Duplex.				
PE18-0010	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 46 - New Construction Electric for Commercial Duplex.				
PE18-0011	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 47 - New Construction Electric for Commercial Duplex.				
PE18-0012	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 48 - New Construction Electric for Commercial Duplex.				
PE18-0013	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 49 - New Construction Electric for Commercial Duplex.				
PE18-0014	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 64 - New Construction Electric for Commercial Duplex.				

PE18-0015	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 65 - New Construction Electric for Commercial Duplex.				
PE18-0016	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$402.00	\$0
<b>Work Description:</b> Building 66 - New Construction Electric for Commercial Duplex.				
PE18-0017	WAL-MART PROPERTY TAX D	21400 PERRY AVENUE	\$476.00	\$0
<b>Work Description:</b>				
PE18-0018	KLEIN, DENNIS PROPERTY M	12514 183RD AVENUE	\$85.00	\$0
<b>Work Description:</b> New Service pole.				

**Total Permits For Type: 18**  
**Total Fees For Type: \$6,630.00**  
**Total Const. Value For Type: \$0**

## Mechanical

Permit #	Contractor	Job Address	Fee Total	Const. Value
PM18-0001	COOPER TERRY G & ETOILDA	19945 13 MILE ROAD	\$150.00	\$0
<b>Work Description:</b>				
PM18-0002	MENARDS, INC	14777 215TH AVENUE	\$178.75	\$0
<b>Work Description:</b> Fire Suppression System alterations for Menards. Inculdes Garden Center and Mezzanine.				
PM18-0003	WAL-MART PROPERTY TAX D	21400 PERRY AVENUE	\$320.00	\$0
<b>Work Description:</b> 7 furnaces, 7 exhaust fans,1 inspection				
PM18-0005	WAL-MART PROPERTY TAX D	21400 PERRY AVENUE	\$1,387.25	\$0
<b>Work Description:</b> Fire suppression system, 1683 heads. 2 inspections and cert fee.				
PM18-0006	WAL-MART PROPERTY TAX D	21400 PERRY AVENUE	\$205.00	\$0
<b>Work Description:</b> 4 - Refrigeration (split) systems, 1 inspection.				

**Total Permits For Type: 5**  
**Total Fees For Type: \$2,241.00**  
**Total Const. Value For Type: \$0**

## Plumbing

Permit #	Contractor	Job Address	Fee Total	Const. Value
PP18-0001	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 40				
PP18-0002	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 41				

PP18-0003	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 42				
PP18-0004	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 43				
PP18-0005	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 44				
PP18-0006	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 45				
PP18-0007	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 46				
PP18-0008	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 47				
PP18-0009	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 48				
PP18-0010	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 49				
PP18-0011	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 64				
PP18-0012	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 65				
PP18-0013	SGAJ INVESTMENTS LLC	14135 BULLDOG LANE	\$331.00	\$0
<b>Work Description:</b> 32 fixtures, 2 stacks, 1" Water distribution system, 3 inspections for Bldg 66				
PP18-0014	MEIJER INC	15400 WALDRON WAY	\$936.00	\$0
<b>Work Description:</b> 67 Fixtures, 12 stacks, 1 sewer connection, 0.75 inch water distribution system, 13 inspections				
PP18-0015	SEAGER REVOCABLE JOINT T	17830 195TH AVENUE	\$181.00	\$0
<b>Work Description:</b> 10 fixtures, 2 stacks, 1 sewer connection, 1- 0.75" water distribution system, 2 inspections.				
PP18-0016	WAL-MART PROPERTY TAX D	21400 PERRY AVENUE	\$130.00	\$0
<b>Work Description:</b> 11 fixtures, 1 inspection.				

**Total Permits For Type:**

**16**

Total Fees For Type: \$5,550.00  
Total Const. Value For Type: \$0

## Zoning Clearance

Permit #	Contractor	Job Address	Fee Total	Const. Value
PZ18-0001	CHRISTENSEN, ED & TRACY	21160 12 MILE ROAD	\$25.00	\$38,580
<b>Work Description:</b> Construction of a 26.8' x 48' Modular on a 4' crawlspace.				

Total Permits For Type: 1  
Total Fees For Type: \$25.00  
Total Const. Value For Type: \$38,580

## Report Summary

Grand Total Fees: \$35,513.00  
Grand Total Permits: 55  
Grand Total Const. Value: \$2,563,160

Population: All Records  
Permit.DateIssued Between  
1/1/2018 12:00:00 AM AND  
1/31/2018 11:59:59 PM

***Big Rapids Charter Township***

***Cemetery and Grounds Monthly Report***

*January 2018*

**January activity:**

- Total of 1 deceased person interred to cemetery vault
- Total of 0 burials
- Finished township hall LED conversion
- Purchased new computer for grounds department

**Highlights of the month:**

The main highlight of January was completing the township hall LED light conversion. I am excited to find out what the cost savings will amount to over time. One significant purchase was made this month for the grounds department. The old computer that was being used had seen its time. This computer has gone through at least 4 different users over the past decade, and crashed around the middle of the month. Fortunately, we had already planned for, and budgeted for the purchase of a new one. We purchased the new computer through *I.T. Right* for the amount of \$750. Now that our technology has grown within this department, a computer has become a vital tool in our operations. More so than in previous years.

Along with this report, I would like to ask two requests from the board.

Respectfully submitted,

Brandon Maneke  
Cemetery and Grounds Manager

**FIRE DEPARTMENT REPORT**

**February 6, 2018**

**Item "I"**

**General:**

The department continues to run well. 2018 has started with a bang. We responded to 40 calls this month and several were long duration calls. We have set our training schedule for the first six months of 2018 and will work to finalize the schedule in the coming months.

**Call Volume:**

Total calls for the month of January 2018: 40

24 Medical, 8 Structure Fire, 0 Grass Fire/Controlled Burn, 1 Auto Accident, 0 Power Line Down, 0 Vehicle Fire, 1 Smoke/Odor, 0 Dumpster Fire, 1 Standby, 0 Collapse, 0 Gas Leak, 0 Inspection, 0 Airport Emergency, 5 Fire Alarm, 0 Water Rescues, 0 Service Call, 0 Fire Investigation and 1 Drone Activation.

Year to Date Call volume 2018: 40

Year to Date Response Times:

Turnout Time (dispatch to truck en-route): 5 minutes and 46 seconds.

Response Time (dispatch to on scene): 11 minutes and 37 seconds.

Year to Date Call Locations:

Austin	1
Barton	1
BR TWP	28
City of Big Rapids	2
Colfax	1
Green	2

**Personnel:**

Nothing to report.

**Training:**

Training this month consisted of monthly truck checks, SCBA Refresher, First Aid, Gear Inspection/Inventory.

**Repairs Completed:**

Repairs were completed on the pump for Engine 1 hydraulic tools. Drain valves were repaired on Engine 1 as well.

**Station Maintenance:**

None completed.

**Budget/Purchasing over \$2,500.00:**

No purchase requests at this time. The budget tracking spreadsheet is being utilized and seems to continue to fit our needs.



## Northwest Kent Mechanical Co.

Commercial • Industrial • Institutional

P.O. Box 216K • 4095 16 Mile Road

Cedar Springs, MI 49319

(616) 696-9026 • Fax (616) 696-9327

[www.nwkentmech.com](http://www.nwkentmech.com)

January 31, 2018

Mr. Bill Stanek  
Big Rapids Twp.  
14212 Northland Dr.  
Big Rapids, MI 49307

RE: Monthly Lift Station Report

Dear Bill,

January was another quiet month, we had a few temperature calls. We have purchased some more heaters for the stations, so we will have a couple spare heaters. Jim had a call to Perry for low water this month, found nothing wrong and level is reading correctly. And of course, there was the recent manhole situation at the apartment complex.

The stations are all running normally.

Sincerely,

Todd Shank  
Northwest Kent Mechanical Co.

## Big Rapids Charter Township Industrial Park Water Treatment Plant Monthly Report

January 2018

All Operations are normal at the plant. Continuing to maintain around a .50 chlorine residual in the water system. All discharge pumps and Variable Frequency Drives operating normally, well number 2 providing ample water. Sensaphone dial out alarm system working good with no going offline problems. Re-circulation pump has been used in the cold weather to occasionally circulate the water in the reservoir tank back through the plant and keep it moving to avoid any considerable freezeup or ice in reservoir, the weather has been very cold and its necessary to re-circulate on a regular basis. Liquid bleach type chlorine getting low from supply tank, will be needing to order a couple of 5 or 10 gallon containers from one of the chemical companies that sell the NSF 60 liquid chlorine (about twice as strong as regular bleach). Received the Hach Company Chlorine analyzer chemicals from Hach and should last for a few more months.



**Highland View Cemetery Advisory Committee**

**Big Rapids Charter Township**

**Minutes: January 9, 2018**

**Attending: Gordy Telfer, Rose Mary Jennings, Bill Stanek, Rene Fountain,  
Brandon Maneke, Mary Hively**

**Excused: Gary Gawne**

**Meeting called to order: 2pm**

**Moved by Brandon, seconded by Rose Mary to accept the November 2017 minutes.**

**Announcements: Due to health consideration, Chair Person Gordy Telfer has requested to be relieved of his Cemetery Committee leadership position "until possibly next year." In the interim, Gary Gawne was nominated by Bill Stanek to be Chair Person, Gordy Telfer agreed to position of Vice Chair Person, and Mary Hively to be acting Secretary.**

**Public Comments: None**

**Board of Trustees: None**

**Old Business: None**

**New Business: Gary Gawne has gathered and submitted to the Cemetery Committee a compilation, all about gravestones: A historical perspective, descriptive preservation and cleaning of gravestones, as well as the legalities of maintaining a cemetery. The Committee would like to begin discussion of this wealth of information at our next meeting in February.**

**State of the Cemetery:**

**1) Highland View Cemetery ground maintenance is completed for the 2017 fall season. Brandon's prime winter responsibilities are that of plowing and shoveling snow; maintaining the parking lots of both the Township Hall and Fire Department. During interim periods he is proof-reading, editing the cemetery records, data input of our newly installed (May 2017) BS&A grave site computer software add-on program.**

2) Lawn mowing equipment is retired/replaced/updated in a cyclic fashion. Brandon requested that the oldest of current lawnmowers be put up for sale to the public and replaced with new. Three bids are required in the purchase of a new lawn mower.

3) One fresh Christmas wreath and one greens basket were reported missing from Highland View grave sites.

1886 Building & Task Force Committee:

Big Rapids Township Board voted \$10,000 as first donation toward 1886 Building renovation project.

Green Burials: The last 20-minutes of our meeting was devoted to costs of green burials, average size/dimensions of green burial sites, and discussion of "where" green burials, cremain scattering, and urn burials might best be located within the confines of Highland View Cemetery (possibly the NW corner). The water table of Highland View is of great concern. Mary Hively will seek more input on this topic.

\*\*\*Unless otherwise notified, the Next Meeting of the Cemetery Committee will be held on Tuesday, February 13, 2018 at the Big Rapids Charter Township Offices.

**Highlandview Cemetery Task Force  
January, 23, 2018 Meeting**

Call to Order: 5:05

Present: Tom Hogenson, Mark Warba, Brandon Maneke, Bill Stanek, Mark Sweppenheiser, Jeanette Fleury, Phil Keating, Jerry Everett

- I. Tom H. began with a walkthrough of a packet he put together, outlining the process of moving forward with this project.
- II. Mr. Stanek reported to the Task Force that the Big Rapids Township Board had put together a restricted account, specifically for funds to be collected for this project. Additionally, the Township board elected to contribute \$10,000 to this fund as ‘seed money’ to get the ball rolling.
- III. Messrs. Hogenson and Warba added that they expect a contribution from the city either equal to, or slightly less than, the amount put in by the township.
- IV. A key highlight noted from the group was raising the question of what exactly do we name this project/building? Mr. Warba stated that the title of this project should not be affiliated with either municipality by direct name; as this would hinder the full potential of the fundraising campaign.

A small brainstorming session began on this topic; possible suggestions included:

- Highlandview Cemetery Chapel
- Highlandview Reflection Building
- Cemetery Building Restoration Fund

- V. Further down the packet, Mr. Hogenson suggested that a timeline be created in order to see this project through in due course. Anticipating that most of the monies should be collected by the end of 2018, with possible pledges reaching out to three years.
- VI. On discussion of receiving funds, it was brought up that some gesture of thanks should be expressed with each donation. Depending on the donation amount, this could be a card in the mail, or a name on a plaque. No direct decision was made, and this is still open for discussion.

**VII.** Mr. Hogenson talked about if there were any special events that could be held towards fundraising, noting that none specifically had come to mind.

Mrs. Fleury mentioned possibly having Stage-M do graveside presentations next to notable figures interred at the cemetery, as an act of 'bringing history to life'.

**VIII.** Further discussion was made, covering various topics in the whole process of fundraising.

Meeting adjourned: 6:10

Next meeting will be scheduled at a later date

## **Supervisor's Report January 2018**

Thank you for allowing me to share my view of the state of the township. It is always a good time for me to look back and make sure we are doing what the people want. It also requires me to really plan for what we need in the future. Let's use this to continue to positively move ahead in the future.

This month I met with Jim Chapman from Green Township and the city officials on the user charge. We had all supplied our information earlier, and this meeting went very smoothly. There was no game playing like we had to do in the past. It was presented according to the contract, and that was it. It was nice to have a good meeting after all the time we put into the contract. The last third of the user charge is something I would like to work on over the coming years. At this point it is information that none of us use for setting our customer rates. I think with some adjustments in the spread sheet and maybe taking away or adding a little it could be useful. If not, and we talked about this, it could be eliminated. Our rate that we pay the city came down just a little, but our percentage of the usage went up overall which was expected. I sent this to you earlier so you would have more time to look it over.

I have asked for and am still waiting for a price for paving Isabella Drive. Once I have this we will be having a road committee meeting and making a recommendation to you for this year's work.

I am still working to finding a couple more people to serve on our committees and will try to have some names for next month.

The crew working through the SAW grant was able to televise some of our sewer lines. I am still waiting for the reports on this. I hope they were able to see where some of our I & I is coming from.

This month I attended the MEDC meeting, the cemetery task force, and the cemetery committee meetings. I am very excited at the way the task force is moving ahead with planning for fundraising for the reconstruction of the building. Besides this I have had some time that I have been able to dedicate to entering more information to the cemetery program.

I missed almost a week with the flu and also will be taking the last few days of the month off for some vacation. I always take a week or two off around the beginning of February so I can attend the meetings for the Spain camp board I serve on. These usually rotate every year somewhere in the United States. This year we are meeting in Michigan, so my wife does not get to go south, and I will not take off as much time from the township. This year we will be taking off a week and a half to go to Spain in April.

Thanks, Bill



# Authorization for Customer Directed Automated Clearing House (ACH) Debit

Voya Retirement Insurance and Annuity Company  
 Money Collection Automation  
 P.O. Box 990063  
 Hartford, CT 06199-0063  
 Telephone: 800-238-6212  
 Fax: 800-643-8143

*Voya Retirement Insurance and Annuity Company will be defined as "the Company," "we," "us" or "our" in this document.*

<b>Plan Information</b>	Name of Case	Plan's Case No.
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<b>Contact Person</b>	Name	Telephone No.	Fax No.
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**Account Information**

We will access the bank account below upon receipt of remittance data and will process an Automated Clearing House (ACH) debit transaction from the customer account. Funds will be transferred to our Operating Account at Wells Fargo Bank, N.A. in San Francisco, California. In consideration of your participation in this plan we, in the unlikely event of an ACH debit error, agrees to indemnify and hold you the customer, harmless from any loss you may suffer from the above transaction.

This authorization applies to all of the subsidiaries and affiliates of the customer under the above listed Client Number/Contract and is effective immediately. Termination of this agreement must be submitted in writing and will be effective upon receipt of written request by us. Bank account information can be updated by the customer via our approved mediums that have been made available to the customer (*VRU/Internet*) or by contacting us at the number above. We will confirm to the customer when bank account information has been updated.

Upon receipt of your bank account information, we will process a "prenote" \$0.00 transaction to verify account information. This takes approximately 10 business days from the date we receive this completed form. Once all information is acknowledged for accuracy, we will thereafter access customer bank account each time remittance information is sent to us by the customer for an amount, which may vary from time to time. Customer will verify amount through selected remittance medium.

**Bank Name** \_\_\_\_\_

<b>Bank Location</b>	<b>Type of Account</b> <input type="checkbox"/> Checking <input type="checkbox"/> Savings <input type="checkbox"/> Other
----------------------	---

<b>Bank ABA Routing No. (9 digits)</b>	<b>Bank Account No.</b>
--	-------------------------

**Confirmation Election**

Upon receipt of your contribution information, we will return a confirmation of receipt. *Please indicate below your preference for receiving confirmation:*

*If you do not receive your confirmation within 5 business days, please call us immediately at the number above.*

**Fax Back** - Confirmation sent by fax to: (        ) \_\_\_\_\_

**E-Mail** - Confirmation sent via E-Mail to: \_\_\_\_\_

**Authorization**

The person named below hereby authorizes access by the Company to the above referenced customer's bank account for the purpose of executing an ACH debit each time remittance information is received for processing by the Company.

Authorized Name and Title ( <i>print</i> )	Date ( <i>mm/dd/yyyy</i> )
Authorized Signature	



**Banking Authorization for Automated Clearing House (ACH) Transactions**

**Important information about this form**

- Complete this form if you wish to authorize John Hancock Retirement Plan Services to process automated clearing house (ACH) transactions under your group annuity Contract by automated payment from the bank account listed below. ACH Transactions can only be initiated in conjunction with electronic contribution submissions or online bill payments.
- You will need to identify which client contact(s) should have authorization to use this feature. If these individuals are existing Plan Sponsor website user(s), complete Section 3. If you want to authorize an individual who is not an existing client contact with Plan Sponsor website access, you will also need to complete the *Client Contact and Website Access Request* form.

Fax the completed form to our toll free number 1-866-377-9577.

**1. General Information**

The Trustee of

Plan (the "Plan")

Contractholder Name

Contract Number

**2. Adding Banking Authorization for Automated Clearing House (ACH) Transactions**

Complete this section if you wish to authorize John Hancock Retirement Plan Services to process ACH Transactions under your group annuity contract by automated payments from the bank account listed below. If you have additional accounts, complete another copy of this form. It is important to attach a pre-printed voided check OR a letter from the bank with the same information as requested below. If the company name on the check is not the same as the plan sponsor name, please attach an affiliation letter.

Bank Account  Checking Account  Savings Account

Bank Name

Account No.

Transit/Routing Number/ABA Number

Bank Address - Street Address, City, State, Zip Code

Telephone No.

Bank Contact (if available)

Bank Account Description (if applicable)

**3. Existing Client Contacts with Plan Sponsor Website user access authorization to initiate ACH Transactions**

Complete this section to provide authorization to initiate ACH transactions with respect to the bank account listed above to select client contacts already on record for your contract with John Hancock Retirement Plan Services. To access a listing of all current contact(s) on record, refer to the Contact information page on the Plan Sponsor website.

In addition to the individuals listed below, I authorize all existing Trustee Contact users on record for our contract with John Hancock Retirement Plan Services to initiate ACH transactions with respect to the bank account listed above.

If this section is left blank, authorization to initiate ACH transactions with respect to the bank account listed above will be given to existing Trustee Contact users on record for your contract with John Hancock Retirement Plan Services.

Name of Client Contact

Name of Client Contact

Name of Client Contact

Name of Client Contact

**4. Deleting Banking Authorization for Automated Clearing House (ACH) Transactions**

Specify the bank account(s) to be deleted from your contract. When deleting an account, ensure that client contacts continue to have access to active ACH accounts.

Bank Name

Account No.

Transit/Routing Number/ABA Number

Bank Name

Account No.

Transit/Routing Number/ABA Number

## 5. Authorization and Signature

I understand and agree to the following terms and conditions in connection with my selection of the Bank Account for ACH Transactions above.

1. By completing the above, I authorize John Hancock Retirement Plan Services ("JHRPS") to process automated payments from the bank account indicated (the "Account") in connection with my group annuity contract, and to process such bank transactions and/or contribution allocations under the group annuity contract based on instructions received from (a) the individuals I have designated above (or which I have designated on a separate *Client Contact and Website Access Request* form submitted to JHRPS), or (b) the existing Trustee Contact users on file with JHRPS, as the case may be. The bank identified in this agreement is hereby authorized to debit the Account in accordance with the instructions provided to John Hancock Retirement Plan Services.
2. This authorization remains in full force until JHRPS has received notification of its termination or change from the Plan's Trustee or Authorized Named Fiduciary by completing a copy of this form.
3. I understand and acknowledge that if I have elected to make contributions under the group annuity contract by ACH transactions and if instructions for such transactions are transmitted electronically to JHRPS, the use of an appropriate userid and password shall be sufficient authorization for JHRPS to process such transactions, whether or not the individuals submitting the files are authorized to do so.
4. I agree to hold harmless and indemnify JHRPS, its employees, agents or affiliates for any loss or damages to the Plan, its participants and beneficiaries for acting in reliance on instructions provided, whether authorized or unauthorized.

---

Signature of Trustee/Authorized Named Fiduciary

Name - please print

Date



WASTEWATER  
USER CHARGE  
SYSTEM

2018

---

Cost of Operation, Maintenance, and Replacement (OM&R) of the Big Rapids  
Wastewater System and Inter-Governmental Cost Sharing

Big Rapids UCS  
2018

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## FOREWORD

Beginning in late 2010, the Municipalities of Big Rapids, Big Rapids Township and Green Township formed a committee to reorganize and simplify the paperwork involved with the user charge report. The committees' intention was to identify city accounts utilized for the shared expenses in the operation of the Wastewater Treatment Plant and to ensure conformance with the terms of the 1995 contract amendment between the parties. The committee has developed spreadsheets to identify costs shared between the parties and to address the common shared expense portion. This report incorporates the spreadsheets and provides narration to clarify the accounting of these charges.

## A. INTRODUCTION

The United States Environmental Protection Agency (USEPA) mandates that all wastewater systems funded through the federal Clean Water Act (33 USC 1251 et seq) develop a user charge system. Specific requirements of the user charge system are specified in the Congressional Federal Regulations (40 CFR, Part 35, Subsection E, §35.929-2 'General requirements for all user charge systems' as follows:

- ***Biennial review of operation and maintenance charges:*** The grantee shall review not less often than every 2 years the wastewater contribution of users and user classes, the total cost of operation and maintenance of the treatment works, and its approved user charge system. The grantee shall revise the charges for users or user classes to accomplish the following:

Maintain the proportionate distribution of operation and maintenance costs among users and user classes as required herein;

Generate sufficient revenue to pay the total operation and maintenance costs necessary to the proper operation and maintenance (including replacement) of the treatment works, and;

Apply excess revenues collected from a class of users to the costs of operation and maintenance attributable to that class for the next year and adjust the rate accordingly.

- ***Toxic Pollutants:*** The user charge system shall provide that each user which discharges any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge of the grantee's treatment works shall pay for such increased costs.
- ***Charges for operation and maintenance for extraneous flows:*** The user charge system shall provide that the costs of operation and maintenance for all flow not directly attributable to users (i.e., Infiltration/inflow) be distributed among all users of the grantee's treatment works system based upon either of the following:

In the same manner that it distributes the costs of operation and maintenance among users (or user classes) for their actual use, or

Under a system which uses one or any combination of the following factors on a reasonable basis:

Flow volume of the users;

Land area of the users;

Number of hookups or discharges to the users;

- ***Adoption of system:*** One or more municipal legislative enactments or other appropriate authority must incorporate the user charge system. If the project is a regional treatment system accepting wastewaters from other municipalities, the subscribers receiving waste services from the grantee shall adopt user charge systems in accordance with section 204(b)(1)(A) of the Act and §§35.929 through 35.929-3. These user charge systems shall also be incorporated in appropriate municipal legislative enactments or other appropriate authority of all municipalities contributing wastes to the treatment works. The public shall be

informed of the financial impact of the user charge system on them and shall be consulted prior to adoption of the system, in accordance with 40 CFR part 25.

- **Notification:** Each user charge system must provide that each user be notified, at least annually, in conjunction with a regular bill, of the rate and that portion of the user charges which are attributable to wastewater treatment services.
- **Inconsistent agreements:** The grantee may have preexisting agreements which address: (1) The reservation of capacity in the grantee's treatment works, or (2) the charges to be collected by the grantee in providing wastewater treatment services or reserving capacity. The user charge system shall take precedence over any terms or conditions of agreements or contracts of the grantee between the grantee and users (including industrial users, special districts, other municipalities, or Federal agencies or installations) which are inconsistent with the requirements of section 204(b)(1)(A) of the Act and these regulations.
- **Costs of pretreatment program:** A user charge system submitted by a municipality with an approved pretreatment program shall provide that the costs necessary to carry out the program and to comply with any applicable requirements of section 405 of the Act and related regulations are included within the costs of operation and maintenance of the system and paid through user charges, or are paid in whole or in part by other identified sources of funds.

This report meets the requirements by presenting information about the collection system and treatment plant serving the city and surrounding townships.

The fiscal year for the City of Big Rapids is July 1 to June 30. The user charge system will be prepared annually using the city's year end general ledger. Debt service is based on the city's current year amortization schedule (See attached appendix A). Annual user charge reports will begin to be drafted by September 1<sup>st</sup> and made effective by the three affected communities by the October 1<sup>st</sup> billing cycle or one month after the User Charge Report is accepted by the City, Township, and Green Charter Township, whichever is later.

## B. GENERAL INFORMATION

The Big Rapids Wastewater System serves an approximately eleven square mile area encompassing three political jurisdictions. The entities served by the system include the City of Big Rapids, Big Rapids Charter Township, and Green Charter Township. Each of the three communities own and operate their individual wastewater collection systems including gravity sewers, pumping stations, and force mains. The City of Big Rapids operates the Wastewater Treatment Plant.

Agreements between the city and the townships allocate a specified portion of the trunk sewer and treatment plant capacity for use by the townships. The original agreement between the City and Green Township was entered into in 1977. Big Rapids Township entered into a similar agreement with the City in 1978. A new Wastewater Treatment agreement was entered into by the City with both the Charter Township of Big Rapids and the Charter Township of Green in November 2017. The agreement expires November 6, 2042 with periodic reviews to take place in five-year increments.

### **Green Township**

10/1977 Original Agreement - Resolution 7169 & 7170

02/1978 Amendment - Resolution 7264

04/1978 Amendment - Resolution 7322

05/1995 Amendment - Resolution 95-79

09/2005 Amendment - Resolution 05-121

10/2005 Amendment - Resolution 05-140

11/2017 Agreement- Resolution 17-159

### **Big Rapids Township**

12/1978 Original Agreement - Resolution C7615

05/1995 Amendment - Resolution 95-78

04/1996 Amendment - Resolution 96-59

08/1996 Amendment - Resolution 96-123

11/2017 Agreement- Resolution 17-158

The restated agreements required the townships to pay:

- A proportionate share of the WWTP, Collection System, Debt Service, Administration, and Replacement Costs.
- Service charges based on metered readings.
- A proportionate share of any improvements to the treatment plant (excluding improvements needed to accommodate flow from the city).

## C. USER INFORMATION

The wastewater collection and treatment system serves customers in the City of Big Rapids and those sewer portions of Big Rapids and Green Charter Townships. The service area is primarily residential and commercial with some light industry. The service area includes Ferris State University and one (1) categorical industrial user located within the city.

Residential users are typical domestic households discharging primarily residential household type wastewater from sanitary conveniences such as sinks, lavatories, showers, and dishwashers. Residential wastewater is considered to be relatively free of hazardous materials and easily treatable by the wastewater treatment facility. Residential use of the wastewater collection and treatment system is regulated by **Title 52** of the City Ordinance. Residential users are encouraged to dispose of toxic and hazardous materials, medical waste products, and household cooking grease by means other than the sanitary wastewater system.

Non-domestic users include all other types of establishments discharging wastewater of other than domestic origin. These users include commercial establishments, institutions, and industries. These types of uses are regulated under **Title 53** of the City Ordinance. Commercial users such as food service establishments, automobile service facilities, medical facilities, etc. may store, use, or generate materials which could be adverse to the treatment works. Institutional users include schools, government buildings, churches, and entities exempt from property taxes. Industrial users are a special class of users which, by nature of their volume use or special character of wastewater discharged, have a greater potential to have an impact on the wastewater treatment system. Categorical industries are a special class of industry defined by federal regulations based on the nature of their manufacturing processes. These industries require additional regulation because of their greater potential to impact the treatment facility. Table C shows the user classifications of each of the municipalities using the system. Figure C depicts this information graphically. As can be seen, approximately three quarters (75%) of the users are residential.

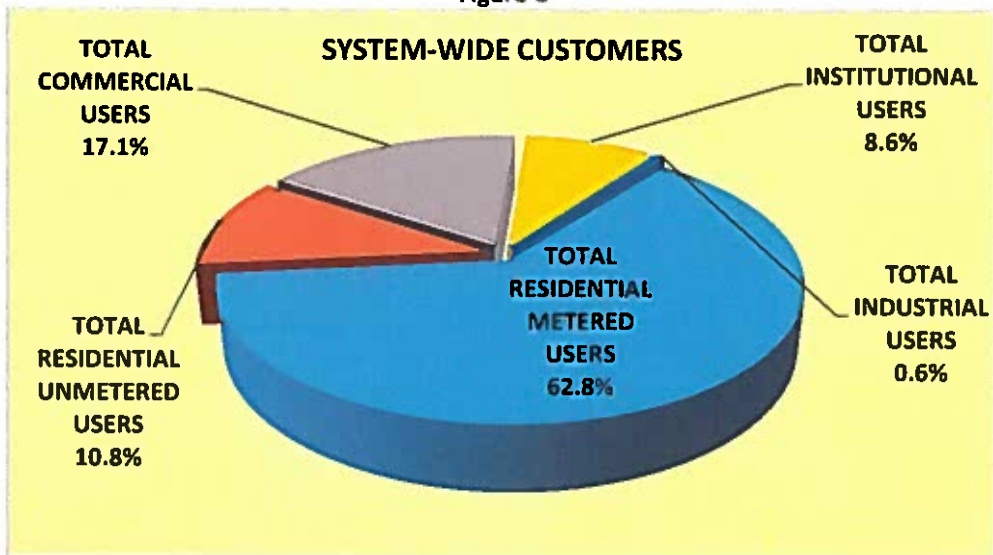
Table C

DESCRIPTION		2015	2016	2017	2018
CITY USERS	City Residential Metered Users	1621	1627	1621	1625
	City Residential Unmetered Users	37	36	40	37
	<b>CITY TOTAL RESIDENTIAL USERS</b>	<b>1658</b>	<b>1663</b>	<b>1661</b>	<b>1662</b>
	City Residential REU's	1658	1663	1661	1662
	City Commercial Users	311	321	320	321
	City Commercial REU's	1606	1609	1680	1636
	City Institutional Users	208	211	211	211
	City Institutional REU's	2395	2264	2253	2185
	City Industrial Users	18	17	17	17
	City Industrial REU's	575	579	592	562
	<b>CITY TOTAL REU's</b>	<b>6234</b>	<b>6115</b>	<b>6186</b>	<b>6045</b>
	<b>CITY TOTAL METERED USERS</b>	<b>2158</b>	<b>2176</b>	<b>2169</b>	<b>2174</b>
	<b>CITY TOTAL USERS</b>	<b>2195</b>	<b>2212</b>	<b>2209</b>	<b>2211</b>

\* Note - Two (2) institutional users and two (2) commercial user are included under residential unmetered and treated in the same manner as residential unmetered. Unmetered flow is determined by dividing the metered flow by the metered users and multiplying the result by the unmetered users.

DESCRIPTION		2015	2016	2017	2018
BR TWP USERS	BR Twp Residential Metered Users	34	33	33	34
	BR Twp Residential Unmetered Users	18	18	15	15
	<b>BR TWP TOTAL RESIDENTIAL USERS</b>	<b>52</b>	<b>51</b>	<b>48</b>	<b>49</b>
	BR Twp Residential REU's	52	51	50	51
	BR Twp Commercial Users	90	89	94	118
	BR Twp Commercial REU's	968	968	898	1028
	BR Twp Institutional Users	19	20	16	16
	BR Twp Institutional REU's	93	93	92	93
	<b>BR TWP TOTAL REU's</b>	<b>1113</b>	<b>1112</b>	<b>1040</b>	<b>1172</b>
	<b>BR TWP TOTAL METERED USERS</b>	<b>143</b>	<b>142</b>	<b>143</b>	<b>168</b>
	<b>BR TWP TOTAL USERS</b>	<b>161</b>	<b>160</b>	<b>158</b>	<b>183</b>
GN TWP USERS	GN Twp Residential Unmetered Users	221	228	236	233
	GN Twp Residential REU's	232	239	247	244
	GN Twp Commercial Users	13	13	13	13
	GN Twp Commercial REU's	20	20	20	19
	GN Twp Institutional Users	1	1	1	1
	GN Twp Institutional REU's	1	1	1	1
	<b>GN TWP TOTAL REU's</b>	<b>258</b>	<b>260</b>	<b>268</b>	<b>264</b>
<b>GN TWP TOTAL USERS</b>	<b>235</b>	<b>242</b>	<b>250</b>	<b>247</b>	
TOTAL USERS	<b>TOTAL RESIDENTIAL METERED USERS</b>	<b>1655</b>	<b>1660</b>	<b>1654</b>	<b>1659</b>
	<b>TOTAL RESIDENTIAL UNMETERED USERS</b>	<b>276</b>	<b>282</b>	<b>291</b>	<b>285</b>
	<b>TOTAL COMMERCIAL USERS</b>	<b>414</b>	<b>423</b>	<b>427</b>	<b>452</b>
	<b>TOTAL INSTITUTIONAL USERS</b>	<b>228</b>	<b>232</b>	<b>228</b>	<b>228</b>
	<b>TOTAL INDUSTRIAL USERS</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>17</b>
	<b>GRAND TOTAL USERS</b>	<b>2591</b>	<b>2614</b>	<b>2617</b>	<b>2641</b>
	<b>CITY TOTAL USERS</b>	<b>2195</b>	<b>2212</b>	<b>2209</b>	<b>2211</b>
	<b>BR TWP TOTAL USERS</b>	<b>161</b>	<b>160</b>	<b>158</b>	<b>183</b>
	<b>GN TWP TOTAL USERS</b>	<b>235</b>	<b>242</b>	<b>250</b>	<b>247</b>
	<b>GRAND TOTAL USERS</b>	<b>2591</b>	<b>2614</b>	<b>2617</b>	<b>2641</b>
	<b>CITY PERCENT OF USERS (%)</b>	<b>84.7%</b>	<b>84.6%</b>	<b>84.4%</b>	<b>83.7%</b>
	<b>BR TWP PERCENT OF USERS (%)</b>	<b>6.2%</b>	<b>6.1%</b>	<b>6.0%</b>	<b>6.9%</b>
	<b>GN TWP PERCENT OF USERS (%)</b>	<b>9.1%</b>	<b>9.3%</b>	<b>9.6%</b>	<b>9.4%</b>

Figure C



## D. SYSTEM USE

Each of the jurisdictional partners sharing use of the wastewater system pays their proportionate share of Operation, Maintenance, and Replacement (OM&R) costs based upon their share of flow contributed to the system. Flow is determined by the sum of metered water use for metered users and estimated water use for unmetered users. Metered water flow is used on a 1:1 ratio to determine sewer flow contribution. One metered unit is equal to 1,000 gallons. Unmetered users within City limits are billed based on a City ordinance which requires unmetered users to be billed at 8.0 units per month. Big Rapids Township and Green Township both bill based on the average use of unmetered users. The average City residential customer use is 3.4 units per month. The average Big Rapids Township residential customer use is 3.7 units per month. Charges to users in Green Township are based on Residential Equivalent Units (REU's). The average Green Township use is 3.3 units per month. The City and Big Rapids Township bill customers monthly. Green Township bills its customers quarterly. City volume is determined by the sum of all water meter readings as well as the total of unmetered use. Big Rapids Township uses a combination of water meter readings and where provided, actual sewer meters. Green Township flow is based on metered wastewater flow at the point of discharge from the Township collection system.

Flow metered at the Wastewater Treatment Plant includes infiltration and inflow (I&I) into the collection system. I&I is calculated by difference between the flow metered at the plant and water sold or billed. Each municipality is responsible for the I&I entering the Collection System of the opposite municipality. The amount of I&I will be determined by the User Charge Report. Payment for I&I can be offset by mutual agreement or can be paid pursuant to the User Charge Report. Plant flow is determined by discharge from a cipoletti weir located downstream of the secondary clarifiers. The average daily effluent flow for fiscal year 2016-2017 was 1.070 MGD (Million Gallons per Day) or 1,070,000 gallons per day. Table D1 shows the allocation of I&I, Table D2 shows the total use by each category of user in each of the three jurisdictions and Figure D1 shows the information graphically. As can be seen, the largest volume consumption is by commercial and institutional users.

Table D1

I&I ALLOCATION	DESCRIPTION	2015	2016	2017	2018
	TOTAL CITY USE (K gal/Yr)	277,056	260,205	259,629	250,192
	CITY I&I (K gal/Yr)	59,967	36,372	67,450	72,682
	TOTAL CITY FLOW CONTRIBUTION (K gal/Yr)	337,023	296,577	327,079	322,874
	TOTAL BR TWP USE (K gal/Yr)	28,825	39,221	52,359	55,984
	CALCULATED BR TWP I&I (K gal/Yr)	7,962	6,373	1,515	1,487
	TOTAL BR TWP CONTRIBUTION (K gal/Yr)	36,787	45,595	53,874	57,471
	GN TWP METERED USE (K gal/yr)	7,382	8,315	9,626	10,065
	CALCULATED GN TWP I&I (K gal/Yr)	2,025	1,351	0	0
	TOTAL GN TWP CONTRIBUTION (K gal/Yr)	9,357	9,666	9,626	10,065
	TOTAL ENTITY CONTRIBUTIONS (K gal/Yr)	323,200	315,466	321,614	316,241
	TOTAL I&I (K gal/Yr)	69,955	44,096	68,965	74,169
	GRAND TOTAL FLOW (K gal/Yr)	393,155	359,562	390,579	390,410

Table D2

CITY OF BIG RAPIDS USE	DESCRIPTION	2015	2016	2017	2018
	CITY RESIDENTIAL METERED USE (K gal/Yr)	72,048	69,232	67,460	66,707
	CITY RESIDENTIAL METERED USE / USER (K gal/Mo)	3.7	3.5	3.5	3.4
	CITY RESIDENTIAL UNMETERED USE (K gal/Yr)	1,645	1,532	3,840	3,552
	CITY TOTAL RESIDENTIAL USE (K gal/Yr)	73,693	70,764	71,300	70,259
	CITY COMMERCIAL USE (K gal/Yr)	71,399	68,474	69,935	67,160
	CITY COMMERCIAL USE / USER (K gal/Mo)	19.1	17.8	18.2	17.4
	CITY INSTITUTIONAL USE (K gal/Yr)	106,429	96,324	93,764	89,690
	CITY INSTITUTIONAL USE / USER (K gal/Mo)	42.6	38.0	37.0	35.4
	CITY INDUSTRIAL USE (K gal/Yr)	25,535	24,643	24,630	23,083
	CITY INDUSTRIAL USE / USER (gal/Mo)	118.2	120.8	120.7	113.2
	TOTAL CITY USE (K gal/Yr)	277,056	260,205	259,629	250,192
	DAILY AVG CITY USE (MG)	0.759	0.713	0.711	0.685



DESCRIPTION		2015	2016	2017	2018
BR TWP USE	BR TWP RESIDENTIAL METERED USE (K gal/Yr)	1,353	1,213	1,165	1,518
	BR TWP RESIDENTIAL METERED USE / USER (K gal/Mo)	3.3	3.1	2.9	3.7
	BR TWP RESIDENTIAL UNMETERED USE (K gal/Yr)	716	662	600	592
	BR TWP TOTAL RESIDENTIAL USE (K gal/Yr)	2,069	1,875	1,765	2,110
	BR TWP COMMERCIAL USE (K gal/Yr)	20,453	5,755	42,280	51,629
	BR TWP COMMERCIAL USE / USER (K gal/Mo)	18.9	5.4	37.5	36.5
	BR TWP INSTITUTIONAL USE (K gal/Yr)	14,265	37,965	8,314	2,245
	BR TWP INSTITUTIONAL USE / USER (K gal/Mo)	62.6	158.2	43.3	11.7
	TOTAL BR TWP USE (K gal/Yr)	36,787	45,595	52,359	55,984
BR TWP DAILY AVG USE (MG)	0.101	0.125	0.143	0.153	
GREEN TWP USE	GREEN TWP RESIDENTIAL USE (K gal/Yr) (est)	8,580	8,885	8,872	9,303
	GREEN TWP RESIDENTIAL USE / USER (K gal/Mo)	3.2	3.2	3.1	3.3
	GREEN TWP COMMERCIAL USE (K gal/Yr) (est)	740	744	718	724
	GREEN TWP COMMERCIAL USE / USER (K gal/Mo)	4.7	4.8	4.6	4.6
	GREEN TWP INSTITUTIONAL USE (K gal/Yr) (est)	37	37	36	38
	GREEN TWP INSTITUTIONAL USE / USER (K gal/Mo)	3.1	3.1	3.0	3.2
	GREEN TWP METERED USE (K gpd)	25.6	26.5	26.4	27.6
	GN TWP METERED USE (K gal/yr)	9,357	9,666	9,626	10,065
GREEN TWP DAILY AVG USE (MG)	0.026	0.026	0.026	0.028	
TOTAL BILLED USE	TOTAL RESIDENTIAL USE (K gal/Yr)	84,342	81,524	81,937	81,672
	TOTAL COMMERCIAL USE (K gal/Yr)	92,592	74,973	112,933	119,513
	TOTAL INSTITUTIONAL USE (K gal/Yr)	120,731	134,326	102,114	91,973
	TOTAL INDUSTRIAL USE (K gal/Yr)	25,535	24,643	24,630	23,083
	GRAND TOTAL BILLED USE (K gal/Yr)	323,200	315,466	321,614	316,241
	DAILY AVG BILLED USE (MG)	0.885	0.864	0.881	0.866
	TOTAL CITY USE (K gal/Yr)	277,056	260,205	259,629	250,192
	TOTAL BR TWP USE (K gal/Yr)	36,787	45,595	52,359	55,984
	GN TWP METERED USE (K gal/Yr)	9,357	9,666	9,626	10,065
	TOTAL OF ALL BILLED USE	323,200	315,466	321,614	316,241
	City Percent of Total Use	85.7%	82.5%	83.7%	82.7%
	BR Twp Percent of Total Use	11.4%	14.4%	13.8%	14.7%
	Green Twp Percent of Total Use	2.9%	3.1%	2.5%	2.6%
TOTAL OF BILLED PERCENT USE	100.0%	100.0%	100.0%	100.0%	

Figure D1

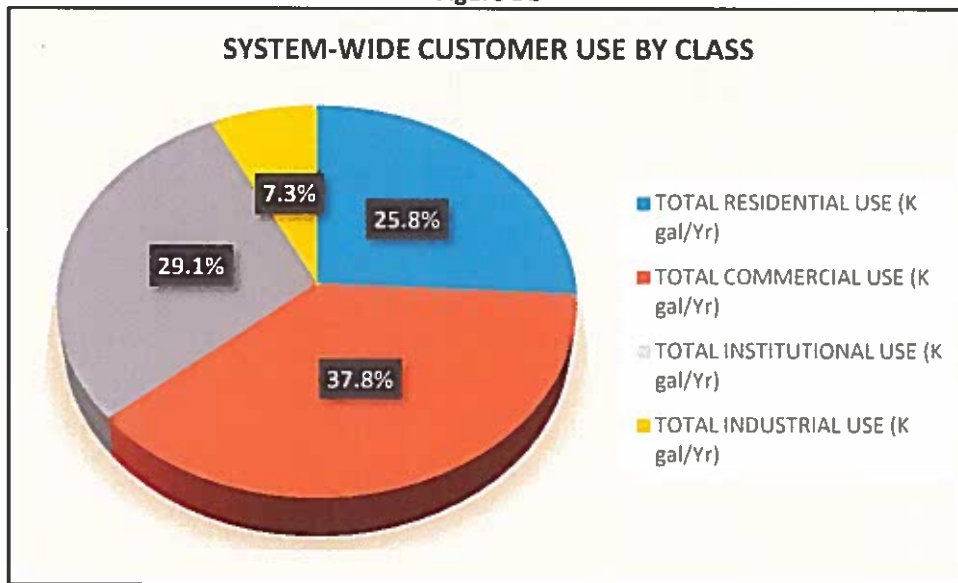


Table D3 shows the total flow contribution from each municipality and the calculation of I&I. The percentage of total flow is the basis of cost sharing between the municipalities. Table D3 also shows the historic relationship between these flow totals.

Table D3

<b>FLOW &amp; COST SPLIT</b>	DESCRIPTION	2015	2016	2017	2018
	ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)	393,155	359,562	390,579	390,410
	ANNUAL EFF AVG DAY FROM PLANT RECORDS (MG)	1.077	0.985	1.070	1.070
	TOTAL CITY USE (K gal/Yr)	277,056	260,205	259,629	250,192
	TOTAL BR TWP USE (K gal/Yr)	36,787	45,595	52,359	55,984
	GN TWP METERED USE (K gal/yr)	9,357	9,668	9,626	10,085
	GRAND TOTAL BILLED USE (K gal/Yr)	323,200	315,466	321,614	316,241
	CALCULATED I&I (K gal/Yr)	69,955	44,096	68,965	74,169
	TOTAL FLOW CONTRIBUTION (K gal/Yr)	393,155	359,562	390,579	390,410
	AVERAGE I&I (MGD)	0.192	0.121	0.189	0.203
	I&I Percent of Total Flow (%)	17.8%	12.3%	17.7%	19.0%
	CITY I&I (K gal/Yr)	59,967	36,372	67,450	72,682
	CALCULATED BR TWP I&I (K gal/Yr)	7,962	6,373	2,045	1,916
	LESS: CITY I&I IN GILBERT METER	0	0	530	428
	CALCULATED BR TWP I&I (K gal/Yr)	0	0	1,515	1,487
	CALCULATED GN TWP I&I (K gal/Yr)	2,025	1,351	0	0
	TOTAL I&I (K gal/Yr)	69,955	44,096	68,965	74,169
	TOTAL PRECIP (in)	37.90	37.30	41.77	40.05
	CITY COST SHARING PERCENTAGE	88.3%	84.6%	83.7%	82.7%
	BR TWP COST SHARING PERCENTAGE	9.3%	12.7%	13.8%	14.7%
GREEN TWP COST SHARING PERCENTAGE	2.4%	2.7%	2.5%	2.6%	
SUM OF SHARED PERCENT USE	100.0%	100.0%	100.0%	100.0%	

## E. WASTEWATER TREATMENT PLANT OM&R

The Wastewater Treatment Plant operates under strict limitations of a National Pollutant Discharge Elimination System (NPDES) permit issued by the Michigan Department of Environmental Quality (MDEQ) under authority from the United States Environmental Protection Agency (USEPA). The NPDES permit regulates the efficiency of operation of the treatment plant and provides fines and penalties for failure to comply with provisions of the permit. Operation of the treatment system requires state certified operators to perform a variety of skilled tasks necessary to ensure proper and efficient operation of the various system components. Major expenses involved in the daily operations necessary to comply with the permit include:

- Labor to operate and maintain equipment, collect and analyze samples, and keep accurate and detailed records for reporting to MDEQ.
- Supplies and chemicals including everything from pencils and lubricants to polymer used for sludge conditioning.
- Contractual services from sophisticated analytical services to biosolids land application management.
- Utilities including electricity and natural gas to operate pumps, blowers, heat exchangers, building heat and light.
- Repair expenses necessary to perform equipment service beyond the capability of the staff.

Table E1

		DESCRIPTION	2015	2016	2017	2018	
590-560 LABOR		702.000 Full Time	234,872.38	260,992.94	265,107.22	267,816.56	
		702.999 Close Out Pay				31,511.68	
		703.000 Part Time	14,183.34	21,898.70	21,565.78	15,197.86	
		705.000 Seasonal			8.67		
		706.100 Comp Buy Out	2,691.41	3,926.78	4,533.15	1,470.95	
		709.000 Overtime	9,378.27	13,493.27	4,992.20	3,544.79	
		710.000 DPW Services	500.04	800.04	900.00	996.00	
		<b>TOTAL LABOR</b>	<b>\$261,625.44</b>	<b>\$301,111.73</b>	<b>\$297,107.02</b>	<b>\$320,537.84</b>	
	590-560 FRINGE BENEFITS		715.000 FICA	20,287.69	23,001.13	24,133.04	24,432.97
			716.200 Dental/Optical	249.99			
			716.300 Health Ins Reimbursement	4,391.49	7,890.00	9,111.50	9,771.36
			717.000 Employer Health Ins Premiums	27,295.70	19,774.12	27,741.56	29,134.72
			717.100 Employer HSA Contributions	10,450.00	3,744.00		
			717.300 Flex Administration Fee	102.85			
		717.400 Michigan Claims Tax	1,097.28				
		718.000 Unemployment	331.87	100.65	62.85	36.36	
		719.000 Workers Comp	4,845.00	4,713.74	3,797.00	4,019.13	
		720.000 DB MERS	83,195.04	26,082.60	51,164.34	63,327.86	
		720.500 Sick Leave Buy-Out	5,248.58				
		720.600 DC AFSCME	13,137.72	16,591.14	16,915.96	13,359.50	
	<b>TOTAL FRINGE BENEFITS</b>	<b>\$170,633.21</b>	<b>\$101,897.38</b>	<b>\$132,926.25</b>	<b>\$144,081.90</b>		
590-560 SUPPLIES		732.000 Operational Supplies	46,415.54	33,171.46	28,737.66	14,434.25	
		732.005 Lab Operational Supplies	6,017.50	16,853.66	18,563.04	19,153.58	
		736.000 Uniforms	537.00	1,101.40	1,084.58	156.42	
		743.000 Chemicals	37,944.63	46,940.94	41,864.00	46,529.43	
		<b>TOTAL SUPPLIES</b>	<b>\$90,914.67</b>	<b>\$98,067.46</b>	<b>\$90,249.28</b>	<b>\$80,273.68</b>	
590-560 CONTR SRV		801.000 Contracted Services	101,905.74	95,780.28	85,182.30	97,953.13	
		801.100 MDEQ Permit Fees	6,581.20	9,970.00	7,485.17	5,500.00	
		801.201 Arcflash Evaluation	30,731.98				
		802.000 Engineering (Minor)	21,613.28	15,135.94	45,941.68	21,612.24	
		808.000 Audit Fees	2,056.00	2,299.73	2,266.32	2,722.96	
	<b>TOTAL CONTRACTED SERVICES</b>	<b>\$162,888.20</b>	<b>\$123,185.95</b>	<b>\$140,875.47</b>	<b>\$127,788.33</b>		

590-560 INS	814.000 Insurance Coverage	13,232.00	13,994.78	14,236.96	14,931.26
	814.100 Insurance Deductible		4,294.48	3,256.00	285.82
	822.200 LTD/Life/ADD	889.04	1,104.06	1,265.45	881.46
	824.600 Operator License Fees	190.00	95.00	441.02	375.00
	<b>TOTAL INSURANCE</b>	<b>\$14,311.04</b>	<b>\$19,488.32</b>	<b>\$19,199.43</b>	<b>\$16,473.54</b>
590-560 TRAVEL	860.000 Travel	1,586.33	1,407.37	1,343.05	895.44
	870.100 Training	6,595.11	7,048.54	1,825.00	1,835.00
	<b>TOTAL TRAVEL</b>	<b>\$8,181.44</b>	<b>\$8,455.91</b>	<b>\$3,168.05</b>	<b>\$2,730.44</b>
590-560 UTILITIES	960.000 Utilities	192,947.37	218,474.65	194,293.54	200,324.23
	<b>TOTAL UTILITIES</b>	<b>\$192,947.37</b>	<b>\$218,474.65</b>	<b>\$194,293.54</b>	<b>\$200,324.23</b>
590-560 R&M	930.000 Operational Repairs & Maintenance	47,770.74	47,748.12	65,902.81	38,711.63
	930.001 Software Maintenance	21,947.34	35,120.12	21,983.00	12,709.00
	930.007 Ultraviolet Lamps	8,641.64	11,689.44	10,336.51	11,970.96
	958.000 Membership Fees	705.34	862.00	796.35	773.33
	961.000 Lunch/Dinner Meetings	339.50	157.53	241.50	73.32
	967.048 Asset Management Program		43,634.47	1,165.53	
	967.049 Ammonia Study		4,669.06		
	967.050 Garage Building		11,632.30	332.90	
	967.077 Wireless		9,258.65		
	967.130 Pictometry Aerial Photos	983.86	795.33		
	967.999 Project Costs Contra		(20,620.30)	(332.90)	(14,243.50)
	968.000 Depreciation	519,286.72	534,694.32	588,324.58	607,138.17
	977.000 Equipment			13,585.99	
	977.051 Main Entrance/Chemical Building		10,470.76		
	977.258 Phone System	13,861.01			
	977.999 Equipment/Contra	(13,861.01)	(10,470.76)	(13,698.78)	(2,000.00)
980.000 Office Equipment & Furniture		1,677.41			
	<b>TOTAL REPAIRS &amp; MAINTENANCE</b>	<b>\$80,388.42</b>	<b>\$146,624.13</b>	<b>\$100,312.91</b>	<b>\$47,994.74</b>
	<b>TOTAL WWTP O&amp;M COST</b>	<b>\$981,889.79</b>	<b>\$1,017,305.53</b>	<b>\$978,131.95</b>	<b>\$940,204.70</b>

Table E2

DESCRIPTION		2015	2016	2017	2018
SUMMARY TOTALS	TOTAL LABOR	261,625.44	301,111.73	297,107.02	320,537.84
	TOTAL FRINGE BENEFITS	170,633.21	101,897.38	132,926.25	144,081.90
	TOTAL SUPPLIES	90,914.67	98,067.46	90,249.28	80,273.68
	TOTAL CONTRACTED SERVICES	162,888.20	123,185.95	140,875.47	127,788.33
	TOTAL INSURANCE	14,311.04	19,488.32	19,199.43	16,473.54
	TOTAL TRAVEL	8,181.44	8,455.91	3,168.05	2,730.44
	TOTAL UTILITIES	192,947.37	218,474.65	194,293.54	200,324.23
	TOTAL REPAIRS & MAINTENANCE	80,388.42	146,624.13	100,312.91	47,994.74
	TOTAL WWTP O&M COST	981,889.79	1,017,305.53	978,131.95	940,204.70
	<b>TOTAL WWTP O&amp;M COST</b>	<b>\$981,889.79</b>	<b>\$1,017,305.53</b>	<b>\$978,131.95</b>	<b>\$940,204.70</b>
	ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)	393,155	359,562	390,579	390,410
	WWTP O&M Unit Cost	\$2.50	\$2.83	\$2.50	\$2.41
	CITY COST SHARING PERCENTAGE	88.3%	84.6%	83.7%	82.7%
	CITY WWTP O&M COST SHARE	\$866,646.16	\$860,957.11	\$819,108.16	\$777,560.39
	TOTAL CITY USE (K gal/Yr)	277,056	260,205	259,629	250,192
	City WWTP O&M Unit Cost	\$3.13	\$3.31	\$3.15	\$3.11
	BR TWP COST SHARING PERCENTAGE	9.3%	12.7%	13.8%	14.7%
	BR TWP WWTP O&M COST SHARE	\$91,874.88	\$129,000.49	\$134,917.28	\$138,405.28
	TOTAL BR TWP USE (K gal/Yr)	36,787	45,595	52,359	55,984
	BR Twp WWTP O&M Unit Cost	\$2.50	\$2.83	\$2.58	\$2.47
	GREEN TWP COST SHARING PERCENTAGE	2.4%	2.7%	2.5%	2.6%
	GN TWP WWTP O&M COST SHARE	\$23,368.75	\$27,347.93	\$24,106.51	\$24,239.03
	GN TWP METERED USE (K gal/yr)	9,357	9,666	9,626	10,065
	GN Twp WWTP O&M Unit Cost	\$2.50	\$2.83	\$2.50	\$2.41
	<b>SUM OF SHARED WWTP O&amp;M COST</b>	<b>\$981,889.79</b>	<b>\$1,017,305.53</b>	<b>\$978,131.95</b>	<b>\$940,204.70</b>

In addition to the daily operation and maintenance expenses, a replacement fund is required to ensure that an equipment failure does not cause a violation of provisions in the NPDES permit. Replacement funds are set aside to ensure timely replacement of worn out equipment. For purposes of the replacement fund equipment generally refers to any item that has a useful life of twenty years or less. This section presents the costs for replacement of equipment at the treatment plant. Costs are based on the existing treatment plant including improvements completed in 2010. A CPI inflationary adjustment of 1.9% has been incorporated to account for changes in the cost of assets over time.

Table E3

2018	ASSET	ACQ'D	LIFE	REM	VALUE	ANN VALUE
WWTP REPLACEMENT	Secondary Influent	1996	15	(7)	6,140.00	0.00
	Sigma All Weather Sampler	2007	7	(4)	5,208.00	0.00
	Sigma Samplers (3)	2007	7	(4)	10,431.00	0.00
	Sensus AR5502 Reader	2009	5	(4)	7,450.00	0.00
	Phone System Upgrade Allowance	2010	7	(1)	1,500.00	0.00
	Computer Allowance	2010	7	(1)	5,000.00	0.00
	Ethernet Switches & Patch Panels	2010	7	(1)	16,600.00	0.00
	UPS Systems	2010	7	(1)	8,000.00	0.00
	Med Voltage Switch	2008	10	0	9,392.00	939.20
	Moyno 2000 Pump	2008	10	0	11,188.00	1,118.80
	Clarifier Upgrade	1999	20	1	117,747.00	5,887.35
	Polyblend Pump	2004	15	1	6,828.00	455.20
	Pumping Equipment	2004	15	1	89,522.00	5,968.13
	Polyblend Polymer	2010	10	2	6,398.00	639.80
	Sludge Transfer Pump	2010	10	2	45,600.00	4,560.00
	HVAC System	2010	10	2	193,150.00	19,315.00
	Dehumidifier	2010	10	2	6,200.00	620.00
	Temperature Controls	2010	10	2	19,950.00	1,995.00
	Moyno Pumps	2010	10	2	82,000.00	8,200.00
	RAS Pumps	2010	10	2	38,800.00	3,880.00
	Tanks – EDI Aeration	2010	10	2	126,000.00	12,600.00
	Switchboards (Dist Equip)	2010	10	2	25,000.00	2,500.00
	Panelboards (Dist Equip)	2010	10	2	4,600.00	460.00
	VFDs (Dist Equip)	2010	10	2	22,800.00	2,280.00
	Motor Control Ctrs (Dist Equip)	2010	10	2	184,800.00	18,480.00
	Transformers (Dist Equip)	2010	10	2	16,000.00	1,600.00
	Enclosed Controller (Dist Equip)	2010	10	2	600.00	60.00
	Safety Switches (Dist Equip)	2010	10	2	2,700.00	270.00
	Field Instruments/Magmeters	2010	10	2	27,600.00	2,760.00
	D.O. & ORP Analyzers	2010	10	2	42,500.00	4,250.00
	Ultrasonic Level/Radar	2010	10	2	7,500.00	750.00
	Gas Detection System	2010	10	2	30,100.00	3,010.00
	Float Switches/ISR Relays	2010	10	2	2,700.00	270.00
	Air Flow Transmitters	2010	10	2	32,550.00	3,255.00
	Equipment	2003	20	5	14,404.00	720.20
	Screw Lift Pump #1	2003	20	5	177,064.00	8,853.20
	Influent/Effluent Piping	2004	20	6	133,228.00	6,661.40
	Trolley Hoist	2010	15	7	4,700.00	313.33
	Gravity Thickener	2010	15	7	12,100.00	806.67
	Spencer Blowers	2010	15	7	328,800.00	21,920.00
	Kaeser Blowers	2010	15	7	220,650.00	14,710.00
	Air Compressor	2010	15	7	12,500.00	833.33
Grit Classifier	2010	15	7	255,000.00	17,000.00	
Generator/ATS	2010	15	7	167,300.00	11,153.33	
Aeration Blower	2006	20	8	73,751.00	3,687.55	
Aeration Walkway Grating	2008	20	10	40,394.00	2,019.70	
KVA 3 Ph Transformer	2008	20	10	23,300.00	1,165.00	
Screw Pump Upgrade	1999	20	1	229,789.00	11,489.45	
Ultraviolet Disinfection	2011	20	13	16,884.00	844.20	
Equipment Ultraviolet Disinfection	2006	30	18	296,983.43	9,899.45	
Garage Building	2015	20	17	11,361.65	568.08	
Shortel Telephone System	2014	10	6	13,861.01	1,386.10	
Dell Poweredge R510 Server	2012	5	(1)	6,140.56	0.00	

WWTP Wireless	2015	5	2	9,258.65	1,851.73
Heating/Ventilation System	2014	10	6	7,445.00	744.50
Chemical Building Gate	2015	10	7	10,470.76	1,047.08
Aerobic Digester Equipment	2013	20	15	21,084.29	1,054.21
Digester Blower	2013	15	10	7,490.00	499.33
Grit Classifier	2013	15	10	11,234.35	748.96
Screw Pump Motor	2013	10	5	5,948.21	594.82
Gorman Rupp Pump	2013	5	0	21,199.97	4,239.99
Electric Actuator	2014	5	1	11,036.00	2,207.20
Standby Pump	2013	5	0	13,526.01	2,705.20
Influent Microscreen	2014	5	1	194,987.72	38,997.54
Refrigerated Sampler	2014	5	1	18,115.02	3,623.00
Kaesser Blower	2015	5	2	15,056.78	3,011.36
Screw Pump Stub Shaft	2015	5	2	19,011.00	3,802.20
Screw Pump Replacement	2015	5	2	36,384.27	7,276.85
Motor Digester Blower	2016	10	8	7,400.00	740.00
Piping/Pump/Weir Gate	2016	10	8	196,454.95	19,645.50
<b>TOTAL WWTP REPLACEMENT COST</b>				<b>\$3,856,867.63</b>	<b>\$312,943.96</b>
<b>AGREED WWTP REPLACEMENT COST CONTRIBUTION (100%)</b>					<b>\$312,943.96</b>
<b>CPI INFLATION ADJUSTMENT CALENDAR YEAR 2016 (1.9%)</b>					<b>\$318,889.90</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>					<b>390,410</b>
				<b>WWTP Replacement Unit Cost</b>	<b>\$0.82</b>

<b>WWTP REPLACEMENT SHARING</b>	<b>CITY COST SHARING PERCENTAGE</b>	<b>82.7%</b>
	<b>CITY WWTP REPLACEMENT COST SHARE</b>	<b>\$263,725.71</b>
	<b>TOTAL CITY USE (K gal/Yr)</b>	<b>250,192</b>
	<b>City WWTP Replacement Unit Cost</b>	<b>\$1.05</b>
	<b>BR TWP COST SHARING PERCENTAGE</b>	<b>14.7%</b>
	<b>BR TWP WWTP REPLACEMENT COST SHARE</b>	<b>\$46,943.02</b>
	<b>TOTAL BR TWP USE (K gal/Yr)</b>	<b>55,984</b>
	<b>BR Twp WWTP Replacement Unit Cost</b>	<b>\$0.84</b>
	<b>GREEN TWP COST SHARING PERCENTAGE</b>	<b>2.8%</b>
	<b>GN TWP WWTP REPLACEMENT COST SHARE</b>	<b>\$8,221.17</b>
<b>GN TWP METERED USE (K gal/Yr)</b>	<b>10,065</b>	
<b>GN Twp WWTP Replacement Unit Cost</b>	<b>\$0.82</b>	

Table E4 shows the calculated distribution of fund balance within the replacement account.

Table E4

<b>BALANCE 598 REPL FUND</b>	<b>DESCRIPTION</b>	<b>ASSET VALUE</b>	<b>SPLIT</b>	<b>2016 BAL</b>	<b>2017 BAL</b>
				<b>6/30/15</b>	<b>6/30/16</b>
	WWTP	3,856,867.63	86.6%	813,603.17	717,626.47
	Collection System	492,568.85	11.0%	103,907.01	91,649.62
	Pumping	105,792.00	2.4%	22,316.74	19,684.14
	<b>TOTAL</b>	<b>4,455,228.48</b>	<b>100.0%</b>	<b>939,826.92</b>	<b>828,960.23</b>

Table E5 shows the projected cash flow for wastewater treatment plant replacement.

Table E5

WWTP REPLACEMENT CASH FLOW				
YR	CONT	EXP	2015 BAL	2016 BAL
			813,603	717,626
2017	285,780	66,470	1,032,914	936,937
2018	302,234	55,306	1,279,842	1,183,865
2019	318,890	668,025	930,707	834,730
2020	318,890	997,259	252,338	156,361
2021	318,890		571,228	475,251
2022	318,890		890,118	794,141
2023	318,890	197,416	1,011,591	915,615
2024	318,890	154,534	1,175,947	1,079,971
2025	318,890	1,011,521	483,316	387,340
2026	318,890	277,606	524,600	428,624
2027	318,890		843,490	747,514
2028	318,890	82,418	1,079,962	983,985
2029	318,890		1,398,852	1,302,875
2030	318,890		1,717,742	1,621,765
2031	318,890	16,884	2,019,748	1,923,771
2032	318,890		2,338,637	2,242,661
2033	318,890	21,084	2,636,443	2,540,466
2034	318,890		2,955,333	2,859,356
2035	318,890	11,362	3,262,861	3,166,885
2036	318,890	296,983	3,284,768	3,188,791
2037	318,890		3,603,658	3,507,681
2038	318,890		3,922,547	3,826,571
2039	318,890		4,241,437	4,145,461

## F. CITY COLLECTION SYSTEM OM&R

The collection system is the network of pipes that convey wastewater to the treatment plant for treatment and discharge. The townships each own and maintain that portion of the collection system within their boundaries and to their connecting points within the city. The city portion of the wastewater collection system consists of approximately thirty-three (33) miles of sanitary sewer pipe varying in diameter from 4" to 30". Most of the collection system is designed to flow by gravity to the treatment plant. Inspection and maintenance of the system is essential to preventing backups and overflow which might otherwise cause a nuisance or environmental problem. Major cleaning and inspection involving specialized equipment is done under contract. The costs associated with the collection system are labor to inspect and clean the system, make repairs as needed, expand the system to meet customer needs, and replace equipment at the end of its' useful life.

Since the Townships utilize a portion of the City's collection system, a proportionate share of the cost of the City's collection system O&M will be allocated to the Townships. This Cost sharing is governed by inter-jurisdictional agreements.

Table F1

DESCRIPTION		2015	2016	2017*	2018*
590-561 COL SYS	702.000 Salaries			17,699.01	11,335.78
	710.000 DPW Overhead	156,900.00	165,399.96	182,199.96	187,200.00
	715.000 Employer FICA			453.98	833.57
	717.000 Employer Health Insurance Premiums			396.96	869.01
	720.000 DB MERS Retirement			8,395.56	4,598.03
	732.000 Supplies	3,748.92	868.07	3,008.20	5,298.66
	Wireless Costs			551.29	
	782.000 Maintenance Materials	3,606.34	1,633.72	2,292.08	1,115.42
	801.000 Contracted Services				135.00
	801.600 Vactor & TV Video	41,836.57	30,474.77	27,676.71	26,378.30
	802.000 Engineering		923.56		
	943.000 Equipment Rental	46,133.78	39,418.07	34,470.60	28,430.69
	967.062 Ives Drain Project				14,499.50
	967.205 DNR Grant Match				7,346.18
	967.306 Connect Hemlock to Riverwalk South		4,383.78		
	967.949 Repair Manhole #204	4,918.69			
977.107 Wireless Meter Reading		26,631.54	72,264.23	95,673.91	
977.999 Equipment/Contra		(18,678.53)	(72,264.23)	(77,765.15)	
<b>TOTAL CITY COLLECTION SYSTEM O&amp;M COST</b>		<b>\$257,144.30</b>	<b>\$251,054.94</b>	<b>\$277,144.35</b>	<b>\$305,948.90</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>
<b>City Collection System O&amp;M Unit Cost</b>		<b>\$0.65</b>	<b>\$0.70</b>	<b>\$0.71</b>	<b>\$0.78</b>
<b>CITY COST SHARING PERCENTAGE</b>		<b>88.3%</b>	<b>84.6%</b>	<b>83.7%</b>	<b>82.7%</b>
<b>CITY COL SYS O&amp;M COST SHARE</b>		<b>\$226,963.48</b>	<b>\$212,470.62</b>	<b>\$232,086.48</b>	<b>\$253,023.35</b>
<b>ADDITION OF CITY SHARE IN BR TWP COLLECTION</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>\$4,135.29</b>	<b>\$5,530.19</b>
<b>CITY COL SYS O&amp;M COST SHARE</b>		<b>\$226,963.48</b>	<b>\$212,470.62</b>	<b>\$236,221.77</b>	<b>\$258,553.54</b>
<b>TOTAL CITY USE (K gal/Yr)</b>		<b>277,056</b>	<b>260,205</b>	<b>259,629</b>	<b>250,192</b>
<b>City Collection System O&amp;M Unit Cost</b>		<b>\$0.82</b>	<b>\$0.82</b>	<b>\$0.91</b>	<b>\$1.03</b>
<b>BR TWP COST SHARING PERCENTAGE</b>		<b>9.3%</b>	<b>12.7%</b>	<b>13.8%</b>	<b>14.7%</b>
<b>BR TWP CITY COL SYS O&amp;M COST SHARE</b>		<b>\$24,060.85</b>	<b>\$31,835.28</b>	<b>\$38,227.52</b>	<b>\$45,038.00</b>
<b>LESS: CITY PORTION OF TWP SYSTEM</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>(\$4,135.29)</b>	<b>(\$5,530.19)</b>
<b>BR TWP CITY COL SYS O&amp;M COST SHARE</b>		<b>\$24,060.85</b>	<b>\$31,835.28</b>	<b>\$34,092.23</b>	<b>\$39,507.82</b>
<b>TOTAL BR TWP USE (K gal/Yr)</b>		<b>36,787</b>	<b>45,595</b>	<b>52,359</b>	<b>55,984</b>
<b>BR Twp City Collection System O&amp;M Unit Cost</b>		<b>\$0.65</b>	<b>\$0.70</b>	<b>\$0.65</b>	<b>\$0.71</b>
<b>GREEN TWP COST SHARING PERCENTAGE</b>		<b>2.4%</b>	<b>2.7%</b>	<b>2.5%</b>	<b>2.6%</b>
<b>GN TWP CITY COL SYS O&amp;M COST SHARE</b>		<b>\$6,119.98</b>	<b>\$6,749.04</b>	<b>\$6,830.35</b>	<b>\$7,887.54</b>
<b>LESS: TWP PORTION OF WIRELESS COSTS</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>(\$13.59)</b>	<b>\$0.00</b>
<b>GN TWP CITY COL SYS O&amp;M COST SHARE</b>		<b>\$6,119.98</b>	<b>\$6,749.04</b>	<b>\$6,816.76</b>	<b>\$7,887.54</b>
<b>GN TWP METERED USE (K gal/yr)</b>		<b>9,357</b>	<b>9,668</b>	<b>9,626</b>	<b>10,065</b>
<b>GN Twp City Collection System O&amp;M Unit Cost</b>		<b>\$0.65</b>	<b>\$0.70</b>	<b>\$0.71</b>	<b>\$0.78</b>
<b>SUM OF SHARED CITY COLLECTION SYSTEM O&amp;M COST</b>		<b>\$257,144.30</b>	<b>\$251,054.94</b>	<b>\$277,144.35</b>	<b>\$305,948.90</b>



The collection system equipment consists of all sanitary sewers, manholes, and service equipment. City collection system replacement cost will be borne exclusively by city customers. No part of the city's collection system replacement cost will be allocated to the townships and no part of any township costs will be allocated to the city.

\*The numbers depicted for salaries and benefits in the 2017 and 2018 column on the previous page reflect the reclassification of a portion of an employee's salary and benefits from customer services.

Table F2

2018	ASSET	ACQ'D	LIFE	REM	VALUE	ANN VALUE	
CITY COL SYS REPL	5 Years or Less	2012	5	(1)	5,375.25	0.00	
	7 Years	2012	7	1		0.00	
	10 Years	2012	10	4		0.00	
	15 Years	2012	15	9		0.00	
	20 Years	2012	20	14	487,193.60	24,359.68	
	<b>TOTAL CITY COL SYS REPLACEMENT COST</b>					<b>\$492,568.85</b>	<b>\$24,359.68</b>
	<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>						<b>390,410</b>
	<b>Collection System Replacement Unit Cost</b>						<b>\$0.06</b>
	<b>TOTAL CITY USE (K gal/Yr)</b>						<b>250,192</b>
	<b>City Collection System Replacement Unit Cost</b>						<b>\$0.10</b>

Table F3

BALANCE 598 REPL FUND	DESCRIPTION	ASSET VALUE	SPLIT	2016 BAL	2017 BAL
				6/30/15	6/30/16
	WWTP	3,856,867.63	86.6%	813,603.17	717,626.47
Collection System	492,568.85	11.0%	103,907.01	91,649.62	
Pumping	105,792.00	2.4%	22,316.74	19,684.14	
<b>TOTAL</b>	<b>4,455,228.48</b>	<b>100.0%</b>	<b>939,826.92</b>	<b>828,960.23</b>	

Table F4 depicts projected cash flow in the city's sewer collection system replacement reserve account.

Table F4

CITY COLL SYS REPLACEMENT CASH FLOW				
YR	CONT	EXP	2015 BAL	2016 BAL
			103,907	91,650
2017	36,300	5,375	134,832	122,574
2018	38,739		173,571	161,313
2019	24,360		197,930	185,673
2020	24,360		222,290	210,033
2021	24,360		246,650	234,392
2022	24,360		271,009	258,752
2023	24,360		295,369	283,112
2024	24,360		319,729	307,471
2025	24,360		344,089	331,831
2026	24,360		368,448	356,191
2027	24,360		392,808	380,550
2028	24,360		417,168	404,910
2029	24,360		441,527	429,270
2030	24,360		465,887	453,630
2031	24,360		490,247	477,989
2032	24,360	487,194	27,413	15,155
2033	24,360		51,772	39,515
2034	24,360		76,132	63,875
2035	24,360		100,492	88,234
2036	24,360		124,851	112,594
2037	24,360		149,211	136,954
2038	24,360		173,571	161,313
2039	24,360		197,930	185,673

## G. BIG RAPIDS TOWNSHIP COLLECTION SYSTEM OM&R

The Big Rapids Charter Township wastewater collection system consists of approximately 4 miles of sanitary sewer and nine (9) pumping stations. The township maintains a replacement reserve account for funding equipment replacement. Big Rapids Charter Township operates on a fiscal year of January 1 to December 31. Costs were summarized on the City's fiscal year (July 1, 2016 to June 30, 2017). The annual cost for Big Rapids Township to operate and maintain its collection system is summarized in the following tables. Big Rapids Townships' rate structure includes a base rate and a volume rate. The base rate covers costs not tied to volume and the volume rate covers costs that vary with use. This methodology helps to stabilize rates and ensures a revenue base when use volume changes.

Table G1

DESCRIPTION		2015	2016	2017	2018	
BR TWP COLLECTION SYSTEM O&M	590-000 COL SYS	702.000 Salary & Wages	7,899.96	7,899.96	7,899.96	7,899.96
		710.000 Twp Share Medicare Withholding	114.60	114.60	114.60	119.89
		714.000 Health Insurance	3,423.65	3,392.81	2,840.36	2,634.35
		715.000 Twp Share Soc Sec Withholding	489.80	489.80	489.80	512.44
		720.000 Medical Reimbursement	375.00	209.70	281.90	
		727.000 Office Supplies	470.07	314.90	322.80	327.85
		740.000 Operating Supplies	995.98	996.75	2,260.99	468.86
		775.000 Repair & Maintenance Supplies	376.68			5,458.20
		801.000 Professional Services	56,855.04	1,902.79	50,483.52	25,799.95
		801.050 Professional Services Miss Dig			3,246.57	5,075.00
		805.000 Contract Services	54,294.97	42,063.65	33,695.04	31,520.26
		805.100 Extra Contract Services from City		9,874.00	33,669.46	15,332.00
		836.000 Refunds			493.61	
		874.000 Retirement	1,020.00	1,020.00	881.01	
		900.000 Printing & Publishing	137.70			197.50
		920.000 Public Utilities	21,891.71	21,475.73	23,423.16	27,170.10
		930.000 Repair & Maintenance	1,976.61	16,439.72	14,812.59	20,354.36
		933.000 Snowplowing	5,716.82	831.58	1,386.19	937.39
		956.000 Miscellaneous			8.30	
		958.000 Membership & Dues		280.00	295.00	310.00
960.000 Education	750.00					
965.000 Insurance & Bonds	2,096.00	2,165.00	2,174.00	4,024.91		
968.000 Depreciation	64,970.00	67,797.12	68,584.04	78,408.00		
975.000 Capital Outlay	27,758.93	8,809.06	17,072.78	14,348.75		
<b>TOTAL BR TWP COLLECTION SYSTEM O&amp;M COST</b>		<b>\$186,643.52</b>	<b>\$118,280.05</b>	<b>\$195,851.64</b>	<b>\$162,491.77</b>	
<b>TOTAL BR TWP USE (K gal/Yr)</b>		<b>36,787</b>	<b>45,595</b>	<b>52,359</b>	<b>55,984</b>	
<b>BR Twp Collection System O&amp;M Unit Cost</b>		<b>\$5.07</b>	<b>\$2.59</b>	<b>\$3.74</b>	<b>\$2.90</b>	

Replacement cost for the Big Rapids Township system includes pumps and controls for the township's pumping stations. Cost estimates for replacement value were furnished by the township's engineer.

Table G2

2018	ASSET	ACQ'D	LIFE	REM	VALUE	ANN VALUE
REPLACEMENT COST BR TWP COL SYS	Sheridan LS Pump 1	1993	22	(3)	5,000.00	0.00
	Sheridan LS Pump 2	1993	22	(3)	5,000.00	0.00
	High School LS Pump 1	1995	22	(1)	5,000.00	0.00
	High School LS Pump 2	1995	22	(1)	5,000.00	0.00
	Truck (shared 30%)	2006	12	0	7,000.00	583.33
	Plow (shared 30%)	2006	12	0	1,500.00	125.00
	Sewer Televising	2015	5	2	5,000.00	1,000.00
	Perry Street LS Pump 2	2000	22	4	15,000.00	681.82
	Hills of Mitchell Creek 1	2006	22	10	5,000.00	227.27
	Hills of Mitchell Creek 2	2006	22	10	5,000.00	227.27
	Industrial Park LS Pump 1	2006	22	10	8,000.00	363.64
	Industrial Park LS Pump 2	2006	22	10	8,000.00	363.64
	University Parke Suites LS Pump 1	2006	22	10	10,000.00	454.55

University Parke Suites LS Pump 2	2006	22	10	10,000.00	454.55
Menards LS Pump 1	2006	22	10	8,000.00	363.64
Menards LS Pump 2	2006	22	10	8,000.00	363.64
Portable Generator	2006	22	10	30,000.00	1,363.64
Portable Pump	2006	22	10	30,000.00	1,363.64
Venlo Place LS Pump 1	2007	22	11	5,000.00	227.27
Venlo Place LS Pump 2	2007	22	11	5,000.00	227.27
Sewer Televising	2011	10	3	5,000.00	500.00
Creeks Edge LS Pump 1	2011	22	15	15,000.00	681.82
Sheridan GenSet	2012	30	24	32,000.00	1,066.67
Perry Street GenSet	2012	30	24	32,000.00	1,066.67
Creeks Edge LS Pump 2	2011	22	15	15,000.00	681.82
Gilbert GenSet	2012	30	24	32,000.00	1,066.67
Perry Street LS Pump 1	2014	22	18	22,560.00	1,025.45
Meters and Endpoints	2016	30	28	30,359.29	1,011.98
Sewer Televising and Lining	2016	10	8	125,686.50	12,568.65
Three Generators	2016	30	28	35,913.50	1,197.12
Cummings Generator	2016	30	28	40,540.00	1,351.33
Generator	2018	30	30	14,348.75	478.29
<b>TOTAL BR TWP COL SYS REPLACEMENT COST</b>				<b>\$566,559.29</b>	<b>\$31,086.61</b>
<b>TOTAL BR TWP USE (K gal/Yr)</b>					<b>55,984</b>
<b>BR Twp Collection System Replacement Unit Cost</b>					<b>\$0.56</b>

Table G3

BR TWP COL SYS REPLACEMENT CASH FLOW				
YR	CONT	EXP	2015 BAL	2016 BAL
			200,000	200,000
2017	30,608	20,000	210,608	210,608
2018	30,608	8,500	232,717	232,717
2019	30,608		263,325	263,325
2020	30,608	5,000	288,933	288,933
2021	30,608		319,542	319,542
2022	30,608	15,000	335,150	335,150
2023	30,608		365,758	365,758
2024	30,608		396,367	396,367
2025	30,608		426,975	426,975
2026	30,608	125,687	331,897	331,897
2027	30,608		362,505	362,505
2028	30,608	122,000	271,113	271,113
2029	30,608	10,000	291,722	291,722
2030	30,608	5,000	317,330	317,330
2031	30,608		347,938	347,938
2032	30,608		378,547	378,547
2033	30,608	15,000	394,155	394,155
2034	30,608		424,763	424,763
2035	30,608		455,372	455,372
2036	30,608	22,560	463,420	463,420
2037	30,608		494,028	494,028
2038	30,608		524,637	524,637
2039	30,608		555,245	555,245
	<b>703,991</b>	<b>348,747</b>		

Big Rapids Township also utilizes a Capital Reserve Fund to buffer the impact of large projects on the user rates. This is currently based on 25% of annual operating expenses. The following tables show funding and cash flow in the capital reserve fund.

Table G4

BR TWP COL SYS CAP RES	DESCRIPTION		2015	2016	2017	2018
	CAP	O&M COST	186,644	118,280	195,852	162,492
		% RESERVE	25%	25%	25%	25%
<b>TOTAL BR TWP CAPITAL RESERVE COST</b>		<b>\$46,661</b>	<b>\$29,570</b>	<b>\$48,963</b>	<b>\$40,623</b>	
<b>TOTAL BR TWP USE (K gal/Yr)</b>		<b>36,787</b>	<b>45,595</b>	<b>52,359</b>	<b>55,984</b>	
<b>BR TWP Capital Reserve Unit Cost</b>		<b>\$1.27</b>	<b>\$0.65</b>	<b>\$0.94</b>	<b>\$0.73</b>	

Table G5

BR TWP CAPITAL RESERVE CASH FLOW				
YR	CONT	EXP	2015 BAL	2016 BAL
			66,516	66,516
2017	40,623		107,139	107,139
2018	40,623		147,762	147,762
2019	40,623		188,385	188,385
2020	40,623		229,008	229,008
2021	40,623		269,631	269,631
2022	40,623		310,254	310,254
2023	40,623		350,877	350,877
2024	40,623		391,500	391,500
2025	40,623		432,122	432,122
2026	40,623		472,745	472,745
2027	40,623		513,368	513,368
2028	40,623		553,991	553,991
2029	40,623		594,614	594,614
2030	40,623		635,237	635,237
2031	40,623		675,860	675,860
2032	40,623		716,483	716,483
2033	40,623		757,106	757,106
2034	40,623		797,729	797,729
2035	40,623		838,352	838,352
2036	40,623		878,975	878,975
2037	40,623		919,598	919,598
2038	40,623		960,221	960,221
2039	40,623		1,000,844	1,000,844

Big Rapids Township has also incurred bonded indebtedness for major infrastructure projects. Most recently, the oldest pumping station was replaced and emergency power supply is being added to the major pumping stations. The current bond debt for Big Rapids Township is shown below.

Table G6

BR TWP COL SYS BOND DEBT	DESCRIPTION		2015	2016	2017	2018
		590-000	992.000 Principal	20,200.00	20,200.00	20,563.71
		996.000 Interest	8,847.60	7,862.95	3,767.30	
	<b>TOTAL BR TWP COLLECTION SYSTEM BOND COST</b>		<b>\$29,047.60</b>	<b>\$28,062.95</b>	<b>\$24,331.01</b>	<b>\$20,200.00</b>
	<b>TOTAL BR TWP USE (K gal/Yr)</b>		<b>36,787</b>	<b>45,595</b>	<b>52,369</b>	<b>55,984</b>
	<b>BR TWP Col Sys Bond Debt Unit Cost</b>		<b>\$0.79</b>	<b>\$0.62</b>	<b>\$0.46</b>	<b>\$0.36</b>

## H. GREEN TOWNSHIP COLLECTION SYSTEM OM&R

The Green Charter Township wastewater collection system consists of approximately 4 miles of sanitary sewer, a single pumping station and a master meter at the point of entrance to the city collection system. The township maintains a replacement reserve account for funding equipment replacement. Green Charter Township operates on a fiscal year of April 1 to March 31. The annual cost for Green Township to operate and maintain its collection system is summarized in the following tables.

Table H1

		DESCRIPTION	2015	2016	2017	2018
GN TWP COLLECTION SYSTEM O&M	COL SYS	702 Salaries – Adm	16,328.46	16,665.57	16,989.00	17,226.71
		703 Salaries – Non Adm	2,861.04	2,918.43	2,976.87	3,052.83
		704 Salary – Non Adm Hourly	84.00	95.00	159.00	50.00
		000 Comp FICA		1,219.36		1,260.62
		000 Comp Mcare		285.00		294.97
		720 Twp Payroll Taxes		566.31	1,539.83	
		726 Office Supplies	465.97		515.48	23.99
		727 Postage	46.00		306.15	377.51
		740 Operating Supplies	2.99			79.98
		800 Professional Fees			460.00	1,625.75
		808 Audit	1,500.00	1,500.00	1,550.00	1,550.00
		818 Contracted Services		3,867.16	487.16	487.16
		818 IPP	1,177.96		777.56	
		820 Computer Support Software	452.00	459.00		464.00
		826 Attorney	175.00			
		850 Telephone	731.34	928.40	1,177.97	555.91
		874 Pension	2,915.22	3,153.39	3,397.89	3,445.46
		910 Insurance & Bonds	3,200.00	3,166.00	2,358.00	1,927.00
		920 Electric	940.43	934.90	950.44	957.84
		921 Gas	329.18	429.38	435.12	449.44
930 Repairs	4,950.96	40.00	1,493.84	3,112.50		
<b>TOTAL GN TWP COLLECTION SYSTEM O&amp;M COST</b>			<b>\$36,160.55</b>	<b>\$36,227.90</b>	<b>\$35,574.31</b>	<b>\$36,941.67</b>
<b>GN TWP METERED USE (K gal/yr)</b>			<b>9,357</b>	<b>9,666</b>	<b>9,626</b>	<b>10,065</b>
<b>GN Twp Collection System O&amp;M Unit Cost</b>			<b>\$3.86</b>	<b>\$3.75</b>	<b>\$3.70</b>	<b>\$3.67</b>

The equipment replacement cost for the Green Township collection system includes pumps, controls and related equipment for the township's sewage pumping station and master meter. Cost estimates for replacement value were furnished by Green Township.

Table H2

2018	ASSET	ACQ'D	LIFE	REM	VALUE	ANN VALUE	
GN TWP COL SYS REPL COST	Dehumidifier	1992	20	(6)	200.00	0.00	
	Exhaust Fan	1992	20	(6)	100.00	0.00	
	Sump Pump	1992	20	(6)	100.00	0.00	
	Air Compressor 1	1992	20	(6)	400.00	0.00	
	Air Compressor 2	1992	20	(6)	400.00	0.00	
	GenSet	1986					
	Auto Dialer	1999	20	1	400.00	20.00	
	Magnetic Flowmeter	2002	20	4	11,000.00	550.00	
	LS Pump 1	2004	20	6	4,600.00	230.00	
	LS Pump 2	2004	20	6	4,600.00	230.00	
	GenSet	2013	30	25	17,297.00	576.57	
	<b>TOTAL GN TWP COL SYS REPLACEMENT COST</b>					<b>\$39,097.00</b>	<b>\$1,606.57</b>
	<b>GN TWP METERED USE (K gal/yr)</b>						<b>10,065</b>
	<b>GN Twp Collection System Replacement Unit Cost</b>						<b>\$0.16</b>

Table H3

GN TWP COL SYS REPLACEMENT CASH FLOW				
YR	CONT	EXP	2015 BAL	2016 BAL
			239,012	241,494
2017	1,667	1,200	239,479	241,961
2018	1,607		241,085	243,567
2019	1,607	400	242,292	244,774
2020	1,607		243,899	246,381
2021	1,607		245,505	247,987
2022	1,607	11,000	236,112	238,594
2023	1,607		237,718	240,200
2024	1,607	9,200	230,125	232,607
2025	1,607		231,731	234,213
2026	1,607		233,338	235,820
2027	1,607		234,945	237,427
2028	1,607		236,551	239,033
2029	1,607		238,158	240,640
2030	1,607		239,764	242,246
2031	1,607		241,371	243,853
2032	1,607		242,977	245,459
2033	1,607		244,584	247,066
2034	1,607		246,191	248,672
2035	1,607		247,797	250,279
2036	1,607		249,404	251,886
2037	1,607		251,010	253,492
2038	1,607		252,617	255,099
2039	1,607		254,223	256,705

## I. CITY PUMPING STATIONS OM&R

Where hydraulics, sewer depth, or terrain interference dictate; pumping stations are installed to elevate the wastewater and continue its' gravity flow to the treatment plant. The city owns, operates and maintains five (5) wastewater pumping stations (N State St, Waterloo, Co Garage, Novak Ln, Tioga Park). Cost of operating, maintaining, and replacing equipment for the stations is borne solely by city users. The City and Big Rapids Township have agreed for the Township to assume responsibility for the N State St pumping station once it has been upgraded by the City.

Table I1

DESCRIPTION		2015	2016	2017	2018
PUMP STATIONS O&M	590-567 PUMPING				
	702.000 Labor				
	710.000 DPW Services	800.04	800.04	900.00	996.00
	720.300 Fringe Benefits				
	732.000 Supplies		1,272.55	272.12	58.38
	920.000 Utilities	5,516.29	5,871.54	5,869.15	6,433.13
	930.000 Operational Repairs & Maintenance		4,780.62	627.68	5,472.58
<b>TOTAL PUMPING STATIONS O&amp;M COST</b>		<b>\$6,316.33</b>	<b>\$12,724.75</b>	<b>\$7,668.95</b>	<b>\$12,960.09</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>
<b>Pumping Stations O&amp;M Unit Cost</b>		<b>\$0.02</b>	<b>\$0.04</b>	<b>\$0.02</b>	<b>\$0.03</b>
<b>TOTAL CITY USE (K gal/Yr)</b>		<b>277,056</b>	<b>260,205</b>	<b>259,629</b>	<b>250,192</b>
<b>City Pumping Stations O&amp;M Unit Cost</b>		<b>\$0.02</b>	<b>\$0.05</b>	<b>\$0.03</b>	<b>\$0.05</b>

Table I2

2018	ASSET	ACQ'D	LIFE	REM	VALUE	ANN VALUE	
CITY PUMP STA REPL	10 Years	2006	10	(2)	15,200.00	0.00	
	20 Years	1997	20	(1)	66,870.00	0.00	
	15 Years	2004	15	1	23,722.00	1,581.47	
	<b>TOTAL CITY PUMP STA REPLACEMENT COST</b>					<b>\$105,792.00</b>	<b>\$1,581.47</b>
	<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>						<b>390,410</b>
	<b>Pumping Stations Replacement Unit Cost</b>						<b>\$0.00</b>
<b>TOTAL CITY USE (K gal/Yr)</b>						<b>250,192</b>	
<b>City Pumping Stations Replacement Unit Cost</b>						<b>\$0.01</b>	

Table I3

BALANCE 598 REPL FUND	DESCRIPTION	ASSET VALUE	SPLIT	2016 BAL	2017 BAL
				6/30/15	6/30/16
	WWTP	3,856,867.63	86.6%	813,603.17	717,626.47
	Collection System	492,568.85	11.0%	103,907.01	91,649.62
	Pumping	105,792.00	2.4%	22,316.74	19,684.14
	<b>TOTAL</b>	<b>4,455,228.48</b>	<b>100.0%</b>	<b>939,826.92</b>	<b>828,960.23</b>

Table I4

CITY PUMP STA REPLACEMENT CASH FLOW				
YR	CONT	EXP	2015 BAL	2016 BAL
			22,317	19,684
2017	7,920	82,070	(51,833)	(54,466)
2018	8,376		(43,457)	(46,090)
2019	1,581	23,722	(65,598)	(68,230)
2020	1,581		(64,016)	(66,649)
2021	1,581		(62,435)	(65,067)
2022	1,581		(60,853)	(63,486)
2023	1,581		(59,272)	(61,905)
2024	1,581		(57,690)	(60,323)
2025	1,581		(56,109)	(58,742)
2026	1,581		(54,528)	(57,160)
2027	1,581		(52,946)	(55,579)
2028	1,581		(51,365)	(53,997)
2029	1,581		(49,783)	(52,416)
2030	1,581		(48,202)	(50,834)
2031	1,581		(46,620)	(49,253)
2032	1,581		(45,039)	(47,671)
2033	1,581		(43,457)	(46,090)

## J. CITY CUSTOMER SERVICES O&M

Customer Services is a portion of water meter reading costs for city users only. The customer services portion of the city's budget includes only the cost to read meters within the city. It does not include any billing costs. None of the costs for customer services are allocated to the Townships.

Table J

DESCRIPTION		2015	2016	2017	2018	
<b>CUSTOMER SERVICE O&amp;M</b>	590-562 CUST SERV	702,000 Labor	19,444.60	15,599.30	18,968.17	32,244.38
		702.999 Close Out Pay				10,051.35
		715.000 Employer FICA	1,321.14	1,047.70	1,956.03	3,232.03
		717.000 Employer Health Ins Premiums	4,798.38	4,198.48	6,579.88	6,151.67
		717.100 Employer HSA Contributions	1,056.00	1,650.31		
		717.400 Michigan Claims Tax	215.62			
		720.000 DB MERS Retirement	6,958.08	6,961.92		
		720.300 Fringe Benefits		1,325.17	1,821.45	2,469.08
		720.300 DC MERS Employer Contributions	942.34			
		732.000 Supplies	5,848.72	5,421.26	4,603.54	4,435.56
		930.001 Operational Maintenance-Software				832.99
		984.000 Software/User			2,000.00	
	<b>TOTAL CUSTOMER SERVICES O&amp;M COST</b>		<b>\$40,584.88</b>	<b>\$36,204.14</b>	<b>\$35,929.07</b>	<b>\$59,417.06</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>	
<b>Customer Services O&amp;M Unit Cost</b>		<b>\$0.10</b>	<b>\$0.10</b>	<b>\$0.09</b>	<b>\$0.15</b>	
<b>TOTAL CITY USE (K gal/Yr)</b>		<b>277,056</b>	<b>260,205</b>	<b>259,629</b>	<b>250,192</b>	
<b>City Customer Services O&amp;M Unit Cost</b>		<b>\$0.15</b>	<b>\$0.14</b>	<b>\$0.14</b>	<b>\$0.24</b>	



## K. INDUSTRIAL PRETREATMENT PROGRAM O&M

An Industrial Pretreatment Program (IPP) is required by the treatment plants' NPDES permit. The purpose of the program is to educate system users on proper use of the system, enforce local sewer use and pretreatment ordinances, and protect the treatment plant from pollutant interference, pass through, or impact on the biosolids land application program. The NPDES permit also requires implementation of a Mercury Pollutant Minimization Program (PMP). IPP program costs are entirely borne by city non-residential users as an added charge. The legal requirement to implement the program throughout the service area is met by separate agreements with the townships.

The goal of the IPP program is to provide judicious enforcement of the city's wastewater ordinances, assist the superintendent in protecting the WWTP's ability to successfully remove pollutants from the waste stream prior to return to the river and its solids by-products prior to land application.

Table K

DESCRIPTION		2015	2016	2017	2018	2017-2018*
		FY 13-14	FY 14-15	FY 15-16	FY 16-17	Budgeted
INDUSTRIAL PRETREATMENT O&M	590-565 IND PRTRMNT					
	702.000 Labor	44,306.55	44,328.75	71,558.67	85,096.06	81,000.00
	706.100 Comp Buy Out					700.00
	709.000 Overtime Pay	1,035.14	2,641.08	2,351.09	4,099.17	2,000.00
	710.000 DPW Services	800.04	800.04	900.00	996.00	900.00
	715.000 Employer FICA	3,258.47	3,401.22	4,260.15	6,361.39	6,400.00
	717.000 Employer Health Ins Premiums	8,647.14	10,826.49	12,537.46	23,058.62	24,500.00
	717.100 Employer HSA Contributions	3,400.00	1,317.00			
	717.300 Flex Administration Fees	8.95				
	717.400 Michigan Claims Tax	380.79				
	718.000 Insurance-Unemployment Comp	46.55	8.55	16.20	10.76	100.00
	720.000 DB MERS Retirement	27,731.64	13,041.24	25,459.44	29,051.38	
	720.600 DC AFSCME Retirement			2,402.47	7,773.53	8,100.00
	732.000 Supplies	2,769.15	5,446.94	163.59	642.93	3,000.00
	801.000 Contracted Services	9,542.50	3,982.08	3,507.64	3,025.00	5,000.00
	802.000 Engineering Services		8,599.08			
822.200 Ltd/Life/Add	50.40	50.40	88.13	498.97	600.00	
860.000 Travel	120.00	125.00		121.08	400.00	
<b>TOTAL IND PRETREATMENT O&amp;M COST</b>		<b>\$102,097.32</b>	<b>\$94,567.87</b>	<b>\$123,244.84</b>	<b>\$160,734.89</b>	<b>\$132,700.00</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>	<b>390,410</b>
<b>Industrial Pretreatment O&amp;M Unit Cost</b>		<b>\$0.26</b>	<b>\$0.26</b>	<b>\$0.32</b>	<b>\$0.41</b>	<b>\$0.34</b>
<b>NDU FLOW</b>		<b>203,363</b>	<b>189,441</b>	<b>188,329</b>	<b>179,933</b>	<b>179,933</b>
<b>Pretreatment Cost / K gal/NDU</b>		<b>\$0.50</b>	<b>\$0.50</b>	<b>\$0.65</b>	<b>\$0.89</b>	<b>\$0.74</b>

\* The numbers depicted in the far-right column are budgeted figures for the 2017-2018 fiscal year. The City of Big Rapids plans to allocate additional resources to the IPP, and the committee agreed to use budgeted figures to prevent residential users from paying the resulting increased costs.

## L. BONDING COSTS

The wastewater treatment plant was originally constructed in 1955. Throughout history various methods were used to fund major upgrades, modernization and renovations. In the mid 1970's the United States Environmental Protection Agency (USEPA) funded a large portion of costs to upgrade all of the treatment plants in the nation. Subsequently, these facilities were expected to become self-funded utility enterprises. Today, the city uses bonds to finance major improvements to the wastewater infrastructure. Most recently, improvements were completed in 2010 using a MDEQ (Michigan Department of Environmental Quality) low interest SRF (State Revolving Fund) loan. The repayment of this debt becomes part of the cost of operation and must be recovered through the utilities' rate structure. Table L shows the current cost of bonded indebtedness. These costs are shared with the township partners on a flow proportioned basis like other costs of operation.

Table L

DESCRIPTION		2015	2016	2017	2018
09 ACT 94	Principal (4/1/09-10/1/30)	335,000.00	345,000.00	355,000.00	360,000.00
	Interest (2.5%)	171,100.00	162,562.50	153,812.50	144,875.00
<b>TOTAL WWTP BOND DEBT COST</b>		<b>\$506,100.00</b>	<b>\$507,562.50</b>	<b>\$508,812.50</b>	<b>\$504,875.00</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>
<b>WWTP Bond Debt Unit Cost</b>		<b>\$1.29</b>	<b>\$1.41</b>	<b>\$1.30</b>	<b>\$1.29</b>
<b>WWTP BOND DEBT</b>	<b>CITY COST SHARING PERCENTAGE</b>	<b>88.3%</b>	<b>84.6%</b>	<b>83.7%</b>	<b>82.7%</b>
	<b>CITY WWTP BOND COST SHARE</b>	<b>\$446,699.44</b>	<b>\$429,555.85</b>	<b>\$426,090.23</b>	<b>\$417,537.59</b>
	<b>TOTAL CITY USE (K gal/Yr)</b>	<b>277,056</b>	<b>260,205</b>	<b>259,629</b>	<b>250,192</b>
	<b>City WWTP Bond Debt Unit Cost</b>	<b>\$1.61</b>	<b>\$1.65</b>	<b>\$1.64</b>	<b>\$1.67</b>
	<b>BR TWP COST SHARING PERCENTAGE</b>	<b>9.3%</b>	<b>12.7%</b>	<b>13.8%</b>	<b>14.7%</b>
	<b>BR TWP WWTP BOND COST SHARE</b>	<b>\$47,355.49</b>	<b>\$64,361.99</b>	<b>\$70,182.35</b>	<b>\$74,321.44</b>
	<b>TOTAL BR TWP USE (K gal/Yr)</b>	<b>36,787</b>	<b>45,595</b>	<b>52,359</b>	<b>55,984</b>
	<b>BR Twp WWTP Bond Debt Unit Cost</b>	<b>\$1.29</b>	<b>\$1.41</b>	<b>\$1.34</b>	<b>\$1.33</b>
	<b>GREEN TWP COST SHARING PERCENTAGE</b>	<b>2.4%</b>	<b>2.7%</b>	<b>2.5%</b>	<b>2.6%</b>
	<b>GN TWP WWTP BOND COST SHARE</b>	<b>\$12,045.07</b>	<b>\$13,644.65</b>	<b>\$12,539.92</b>	<b>\$13,015.98</b>
	<b>GN TWP METERED USE (K gal/yr)</b>	<b>9,357</b>	<b>9,666</b>	<b>9,626</b>	<b>10,065</b>
	<b>GN Twp WWTP Bond Debt Unit Cost</b>	<b>\$1.29</b>	<b>\$1.41</b>	<b>\$1.30</b>	<b>\$1.29</b>
<b>SUM OF SHARED WWTP BOND DEBT COST</b>		<b>\$506,100.00</b>	<b>\$507,562.50</b>	<b>\$508,812.50</b>	<b>\$504,875.00</b>

## M. ADMINISTRATION

The wastewater systems' administrative cost is a portion of the base salaries (no fringes) of the offices of the city manager, treasurer, engineer, and public works director. The sewer system is charged an administrative cost for these individuals in direct proportion to the cost of the sewage system compared to the entire city's budget. That is, the wastewater system accounts for approximately 10% of the city's total budget. (The user charge committee recommends that this figure be updated to 12% and that amount has been used in this report as the basis of cost sharing). Therefore, 12% of the annual cost for the City Manager, Treasurer, Engineer and Public Works Director is charged to the wastewater system as administrative cost.

The administrative costs charged to the wastewater system include costs that are attributable to both the city alone and the city combined with the townships. Administrative costs for the treatment plant and city collection system are proportionately shared by the city and the townships. The administrative costs appear in the city budget as a general fund transfer.

Table M

DESCRIPTION		2015	2016	2017	2018
ADMIN	101.172 City Manager	98,352.00	99,336.00	100,329.00	107,938.00
	101.210 City Attorney	64,158.00	64,800.00	66,119.00	
	101.253 City Treasurer	79,841.00	71,727.00	72,444.00	74,991.00
	101.441 City Engineer				74,702.00
	101.441 City Public Works Director	79,624.00	80,240.00	81,042.00	69,978.00
<b>TOTAL CITY ADMINISTRATION COST</b>		<b>\$321,975.00</b>	<b>\$316,103.00</b>	<b>\$319,934.00</b>	<b>\$327,609.00</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>
<b>ADMIN PERCENTAGE AGREED BY PARTIES</b>		<b>12.0%</b>	<b>12.0%</b>	<b>12.0%</b>	<b>12.0%</b>
<b>ADMIN COST AGREED BY PARTIES</b>		<b>\$38,637.00</b>	<b>\$37,932.36</b>	<b>\$38,392.08</b>	<b>\$39,313.08</b>
<b>ANNUAL EFF TOTAL FROM PLANT RECORDS (MG)</b>		<b>393,155</b>	<b>359,562</b>	<b>390,579</b>	<b>390,410</b>
Administration Unit Cost		\$0.10	\$0.11	\$0.10	\$0.10
<b>CITY COST SHARING PERCENTAGE</b>		<b>88.3%</b>	<b>84.6%</b>	<b>83.7%</b>	<b>82.7%</b>
<b>CITY ADMIN COST SHARE</b>		<b>\$34,102.21</b>	<b>\$32,102.58</b>	<b>\$32,150.33</b>	<b>\$32,512.38</b>
<b>TOTAL CITY USE (K gal/Yr)</b>		<b>277,056</b>	<b>260,205</b>	<b>259,629</b>	<b>250,192</b>
City Administration Unit Cost		\$0.12	\$0.12	\$0.12	\$0.13
<b>BR TWP COST SHARING PERCENTAGE</b>		<b>9.3%</b>	<b>12.7%</b>	<b>13.8%</b>	<b>14.7%</b>
<b>BR TWP CITY ADMIN COST SHARE</b>		<b>\$3,615.24</b>	<b>\$4,810.05</b>	<b>\$5,295.56</b>	<b>\$5,787.18</b>
<b>TOTAL BR TWP USE (K gal/Yr)</b>		<b>36,787</b>	<b>45,595</b>	<b>52,359</b>	<b>55,984</b>
BR Twp City Administration Unit Cost		\$0.10	\$0.11	\$0.10	\$0.10
<b>GREEN TWP COST SHARING PERCENTAGE</b>		<b>2.4%</b>	<b>2.7%</b>	<b>2.5%</b>	<b>2.6%</b>
<b>GN TWP CITY ADMIN COST SHARE</b>		<b>\$919.56</b>	<b>\$1,019.72</b>	<b>\$946.19</b>	<b>\$1,013.51</b>
<b>GN TWP METERED USE (K gal/yr)</b>		<b>9,357</b>	<b>9,666</b>	<b>9,626</b>	<b>10,065</b>
GN Twp City Administration Unit Cost		\$0.10	\$0.11	\$0.10	\$0.10
<b>SUM OF SHARED CITY ADMINISTRATION COST</b>		<b>\$38,637.00</b>	<b>\$37,932.36</b>	<b>\$38,392.08</b>	<b>\$39,313.08</b>

## N. COST SUMMARY

Certain costs are exclusive to each political entity sharing use of the wastewater system. Other costs are shared based upon the inter-jurisdictional agreements. Exclusive costs and shared costs are shown in the following table. These costs determine the revenue requirement to be recovered through rates. Each entity utilizes a somewhat different rate structure to raise the required revenue.

Table N1

DESCRIPTION		2015	2016	2017	2018		
COST SUMMARY	TOTAL SYSTEM-WIDE COSTS	TOTAL WWTP O&M COST	\$981,889.79	\$1,017,305.53	\$978,131.95	\$940,204.70	
		TOTAL PUMPING STATIONS O&M COST	\$6,316.33	\$12,724.75	\$7,668.95	\$12,960.09	
		TOTAL CUSTOMER SERVICES O&M COST	\$40,584.88	\$36,204.14	\$35,929.07	\$59,417.06	
		TOTAL CITY COLLECTION SYSTEM O&M COST	\$257,144.30	\$251,054.94	\$277,144.35	\$305,948.90	
		TOTAL BR TWP COLLECTION SYSTEM O&M COST	\$186,643.52	\$118,280.05	\$195,851.64	\$162,491.77	
		TOTAL GN TWP COLLECTION SYSTEM O&M COST	\$36,160.55	\$36,227.90	\$35,574.31	\$36,941.67	
		ADMIN COST AGREED BY PARTIES	\$38,637.00	\$37,932.36	\$38,392.08	\$39,313.08	
		TOTAL WWTP BOND DEBT COST	\$506,100.00	\$507,562.50	\$508,812.50	\$504,875.00	
		TOTAL BR TWP COLLECTION SYSTEM BOND COST	\$29,047.60	\$28,062.95	\$24,331.01	\$20,200.00	
		TOTAL BR TWP CAPITAL RESERVE COST	\$46,660.88	\$29,570.01	\$48,962.91	\$40,622.94	
		AGREED WWTP REPLACEMENT COST CONTRIBUTION	\$180,832.15	\$298,229.44	\$318,614.93	\$318,889.90	
		TOTAL CITY COL SYS REPLACEMENT COST	\$25,434.73	\$25,434.73	\$25,434.73	\$24,359.68	
		TOTAL CITY PUMP STA REPLACEMENT COST	\$6,444.97	\$6,444.97	\$4,924.97	\$1,581.47	
		TOTAL BR TWP COL SYS REPLACEMENT COST	\$15,388.33	\$15,388.33	\$31,062.86	\$31,086.61	
		TOTAL GN TWP COL SYS REPLACEMENT COST	\$1,666.57	\$1,666.57	\$1,666.57	\$1,606.57	
		<b>TOTAL SYSTEM-WIDE COSTS</b>		<b>\$2,358,951.60</b>	<b>\$2,422,089.16</b>	<b>\$2,532,502.83</b>	<b>\$2,500,499.43</b>
		<b>TOTAL BILLED FLOW</b>		<b>323,200</b>	<b>315,466</b>	<b>321,614</b>	<b>316,241</b>
<b>System Wide Unit Cost</b>		<b>\$7.30</b>	<b>\$7.68</b>	<b>\$7.87</b>	<b>\$7.91</b>		

Table N2

DESCRIPTION	2015	2016	2017	2018
WWTP O&M Unit Cost	\$2.50	\$2.83	\$2.58	\$2.47
City Collection System Unit Cost	\$0.65	\$0.70	\$0.65	\$0.71
WWTP Replacement Unit Cost	\$0.46	\$0.83	\$0.84	\$0.84
WWTP Bond Debt Unit Cost	\$1.29	\$1.41	\$1.34	\$1.33
Administration Unit Cost	\$0.10	\$0.11	\$0.10	\$0.10
<b>BR TWP UNIT COST</b>	<b>\$5.00</b>	<b>\$5.88</b>	<b>\$5.51</b>	<b>\$5.45</b>

Table N3

DESCRIPTION	2015	2016	2017	2018
WWTP O&M Unit Cost	\$2.50	\$2.83	\$2.50	\$2.41
City Collection System O&M Unit Cost	\$0.65	\$0.70	\$0.71	\$0.78
WWTP Replacement Unit Cost	\$0.46	\$0.83	\$0.82	\$0.82
WWTP Bond Debt Unit Cost	\$1.29	\$1.41	\$1.30	\$1.29
Administration Unit Cost	\$0.10	\$0.11	\$0.10	\$0.10
<b>GN TWP UNIT COST</b>	<b>\$5.00</b>	<b>\$5.88</b>	<b>\$5.43</b>	<b>\$5.40</b>

## O. RATE STRUCTURE

The City and Big Rapids Township each collect a portion of their rate revenue in a “base” or “customer per month” fixed charge. The city’s rate structure consists of a base rate which varies by meter size, and a volumetric rate which varies with usage. Big Rapids Township’s rate structure consists of a base rate which varies by the REU factor, and a volumetric rate which varies with usage. Green Township does not have a base charge and collects all of its’ rate revenue through usage charges which vary by the REU factor.

Table O1

		DESCRIPTION	2015	2016	2017	2018
<b>CITY COST DETAILS</b>		TOTAL PUMPING STATIONS O&M COST	6,316.33	12,724.75	7,668.95	12,960.09
		TOTAL CUSTOMER SERVICES O&M COST	40,584.88	36,204.14	35,929.07	59,417.06
		TOTAL CITY COL SYS REPLACEMENT COST	25,434.73	25,434.73	25,434.73	24,359.68
		TOTAL CITY PUMP STA REPLACEMENT COST	6,444.97	6,444.97	4,924.97	1,581.47
		CITY WWTP O&M COST SHARE	866,646.16	860,957.11	819,108.16	777,560.39
		CITY COL SYS O&M COST SHARE	226,963.48	212,470.62	236,221.77	258,553.54
		CITY ADMIN COST SHARE	34,102.21	32,102.58	32,150.33	32,512.38
		CITY WWTP BOND COST SHARE	446,699.44	429,555.85	426,090.23	417,537.59
		CITY WWTP REPLACEMENT COST SHARE	159,608.02	252,394.92	266,814.81	263,725.71
		<b>TOTAL CITY EXCLUSIVE COSTS</b>	<b>78,780.91</b>	<b>80,808.59</b>	<b>73,957.72</b>	<b>98,318.30</b>
	<b>TOTAL CITY SHARED COSTS</b>	<b>1,734,019.30</b>	<b>1,787,481.09</b>	<b>1,780,385.30</b>	<b>1,749,889.61</b>	
	<b>CITY TOTAL REVENUE REQUIREMENT (\$)</b>	<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,854,343.01</b>	<b>\$1,848,207.91</b>	
	<b>TOTAL CITY USE (K gal/Yr)</b>	<b>277,201</b>	<b>260,545</b>	<b>259,629</b>	<b>250,192</b>	
	<b>City Unit Cost</b>	<b>\$6.54</b>	<b>\$7.17</b>	<b>\$7.14</b>	<b>\$7.39</b>	
<b>CITY REV REQ BY CLS (\$)</b>		RESIDENTIAL REVENUE REQUIREMENT (\$)	\$481,898.92	\$500,034.52	\$509,244.56	\$519,014.35
		COMMERCIAL REVENUE REQUIREMENT (\$)	\$467,299.72	\$494,559.80	\$499,495.35	\$496,121.55
		INDUSTRIAL REVENUE REQUIREMENT (\$)	\$166,990.11	\$177,986.35	\$175,914.36	\$170,517.77
		INSTITUTIONAL REVENUE REQUIREMENT (\$)	\$696,611.46	\$695,709.00	\$669,688.74	\$662,554.23
	<b>CITY TOTAL REVENUE REQUIREMENT (\$)</b>	<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,854,343.01</b>	<b>\$1,848,207.91</b>	
<b>TOTAL REV REQ BY METER SIZE</b>		UNMETERED REVENUE REQUIREMENT	\$32,989.99	\$32,940.01	\$33,608.39	\$30,928.85
		5/8" METER REVENUE REQUIREMENT	\$1,565,375.25	\$1,612,371.15	\$1,560,269.59	\$1,557,309.51
		3/4" METER REVENUE REQUIREMENT	\$12,371.25	\$12,669.23	\$52,933.22	\$53,498.56
		1" METER REVENUE REQUIREMENT	\$101,444.23	\$106,421.56	\$105,866.43	\$106,161.20
		1 1/2" METER REVENUE REQUIREMENT	\$34,639.49	\$35,473.85	\$34,448.60	\$32,600.68
		2" METER REVENUE REQUIREMENT	\$43,711.74	\$44,764.63	\$44,531.12	\$45,975.32
		3" METER REVENUE REQUIREMENT	\$18,969.25	\$19,426.16	\$18,484.62	\$17,554.21
		4" METER REVENUE REQUIREMENT	\$2,474.25	\$3,378.46	\$3,360.84	\$3,343.66
		6" METER REVENUE REQUIREMENT	\$824.75	\$844.62	\$840.21	\$835.91
	<b>TOTAL REVENUE REQUIREMENT (\$)</b>	<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,854,343.01</b>	<b>\$1,848,207.91</b>	

Fixed rates are designed to recover the portion of costs that are not related to volume. For example, bond principle and interest on debt must be paid irrespective of flow volume treated. Chemical costs however, will vary depending on how much volume is treated.

Table O2

		DESCRIPTION	2015	2016	2017	2018
FIXED – VARIABLE REVENUE REQ (\$)	CITY FIXED COST (\$)	TOTAL PUMPING STATIONS O&M COST	\$0.00	\$0.00	\$0.00	\$0.00
		TOTAL CUSTOMER SERVICES O&M COST	\$0.00	\$0.00	\$0.00	\$0.00
		TOTAL CITY COL SYS REPLACEMENT COST	\$0.00	\$0.00	\$0.00	\$0.00
		TOTAL CITY PUMP STA REPLACEMENT COST	\$0.00	\$0.00	\$0.00	\$0.00
		CITY WWTP O&M COST SHARE	\$0.00	\$0.00	\$0.00	\$0.00
		CITY COL SYS O&M COST SHARE	\$0.00	\$0.00	\$0.00	\$0.00
		CITY ADMIN COST SHARE	\$34,102.21	\$32,102.58	\$32,150.33	\$32,512.38
		CITY WWTP BOND COST SHARE	\$113,014.96	\$108,677.63	\$426,090.23	\$417,537.59
		CITY WWTP REPLACEMENT COST SHARE	\$0.00	\$0.00	\$0.00	\$0.00
	<b>TOTAL FIXED COST (\$)</b>	<b>\$147,117.16</b>	<b>\$140,780.21</b>	<b>\$458,240.56</b>	<b>\$450,049.97</b>	
	<b>FIXED PORTION OF TOTAL COST (%)</b>	<b>8.1%</b>	<b>7.5%</b>	<b>24.7%</b>	<b>24.4%</b>	
	CITY VARIABLE COST (\$)	TOTAL PUMPING STATIONS O&M COST	\$6,316.33	\$12,724.75	\$7,668.95	\$12,960.09
		TOTAL CUSTOMER SERVICES O&M COST	\$40,584.88	\$36,204.14	\$35,929.07	\$59,417.06
		TOTAL CITY COL SYS REPLACEMENT COST	\$25,434.73	\$25,434.73	\$25,434.73	\$24,359.68
		TOTAL CITY PUMP STA REPLACEMENT COST	\$6,444.97	\$6,444.97	\$4,924.97	\$1,581.47
		CITY WWTP O&M COST SHARE	\$866,646.16	\$860,957.11	\$819,108.16	\$777,560.39
		CITY COL SYS O&M COST SHARE	\$226,963.48	\$212,470.62	\$236,221.77	\$258,553.54
		CITY ADMIN COST SHARE	\$0.00	\$0.00	\$0.00	\$0.00
		CITY WWTP BOND COST SHARE	\$333,684.48	\$320,878.22	\$0.00	\$0.00
CITY WWTP REPLACEMENT COST SHARE		\$159,608.02	\$252,394.92	\$266,814.81	\$263,725.71	
<b>TOTAL VARIABLE COST (\$)</b>	<b>\$1,665,683.04</b>	<b>\$1,727,509.46</b>	<b>\$1,396,102.45</b>	<b>\$1,398,157.94</b>		
<b>VARIABLE PORTION OF TOTAL COST (%)</b>	<b>91.9%</b>	<b>92.5%</b>	<b>75.3%</b>	<b>75.6%</b>		
<b>TOTAL COST (\$)</b>		<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,854,343.01</b>	<b>\$1,848,207.91</b>	
<b>TOTAL COST (%)</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

The equitable base revenue and appropriate rates by meter size are shown in the following table.

Table O3

		DESCRIPTION	2015	2016	2017	2018
FIXED REVENUE REQUIREMENT	FIXED REVENUE BY METER SIZE	FLAT RATE – BASE PORTION (\$)	\$950.09	\$1,011.50	\$6,777.53	\$6,389.40
		5/8" METERS (\$)	\$46,170.29	\$45,347.71	\$142,105.78	\$142,255.95
		3/4" METERS (\$)	\$1,240.83	\$1,362.71	\$9,036.71	\$7,211.46
		1" METERS (\$)	\$14,040.94	\$14,204.19	\$48,300.50	\$50,203.22
		1 1/2" METERS (\$)	\$7,907.25	\$7,891.52	\$26,141.15	\$23,981.85
		2" METERS (\$)	\$35,919.89	\$33,121.67	\$104,515.19	\$101,759.16
		3" METERS (\$)	\$32,422.96	\$28,935.20	\$98,120.66	\$104,435.80
		4" METERS (\$)	\$5,887.85	\$6,851.92	\$14,635.23	\$6,432.57
		6" METERS (\$)	\$2,575.07	\$2,053.79	\$8,607.82	\$7,380.55
	<b>TOTAL FIXED REVENUE (\$)</b>	<b>\$147,117.16</b>	<b>\$140,780.21</b>	<b>\$458,240.56</b>	<b>\$450,049.97</b>	
	BASE RATE BY METER SIZE	FLAT RATE – BASE PORTION (\$/Mo)	\$1.98	\$2.16	\$14.12	\$14.39
		5/8" METERS (\$/Mo)	\$2.03	\$1.98	\$6.38	\$6.36
		3/4" METERS (\$/Mo)	\$6.89	\$7.57	\$11.95	\$9.39
		1" METERS (\$/Mo)	\$9.51	\$9.39	\$31.94	\$32.94
		1 1/2" METERS (\$/Mo)	\$15.69	\$15.66	\$53.13	\$51.24
		2" METERS (\$/Mo)	\$56.48	\$52.08	\$164.33	\$154.18
		3" METERS (\$/Mo)	\$117.47	\$104.84	\$371.67	\$414.43
		4" METERS (\$/Mo)	\$163.55	\$142.75	\$304.90	\$134.01
		6" METERS (\$/Mo)	\$214.59	\$171.15	\$717.32	\$615.05

The remaining portion of revenue is collected through volumetric rates.

Table O4

CITY VOLUME REVENUE REQUIREMENT	DESCRIPTION	2015	2016	2017	2018
	REVENUE REQUIREMENT	TOTAL REVENUE REQUIREMENT (\$)	\$1,812,800.21	\$1,868,289.67	\$1,854,343.01
CITY TOTAL BASE REVENUE (\$)		\$250,703.52	\$345,431.64	\$438,808.92	\$528,688.08
VOLUME REVENUE REQUIREMENT (\$)		\$1,562,096.69	\$1,522,858.03	\$1,415,534.09	\$1,319,519.83
TOTAL CITY USE (K gal/Yr)		277,201	260,545	259,629	250,192
VOLUME RATE REQUIREMENT (\$/K gal)		\$5.64	\$5.84	\$5.45	\$5.27
RESIDENTIAL VOL REVENUE	FLAT RATE – VOLUME PORTION (\$)	\$9,245.91	\$10,099.98	\$18,842.60	\$16,708.12
	5/8" METERS (\$)	\$404,571.19	\$403,689.33	\$356,848.13	\$342,564.00
	3/4" METERS (\$)	\$1,436.99	\$964.41	\$10,953.35	\$9,250.65
COMMERCIAL VOL REVENUE	FLAT RATE – VOLUME PORTION (\$)	\$323.00	\$280.55	\$1,046.81	\$1,012.61
	5/8" METERS (\$)	\$65,892.93	\$68,017.04	\$64,722.37	\$58,736.86
	3/4" METERS (\$)	\$6,920.08	\$6,990.49	\$5,844.70	\$5,595.74
	1" METERS (\$)	\$61,266.39	\$63,609.99	\$65,883.68	\$64,090.00
	1 1/2" METERS (\$)	\$48,959.01	\$51,575.35	\$49,145.61	\$40,884.27
	2" METERS (\$)	\$184,661.36	\$180,279.93	\$160,538.31	\$155,198.85
	3" METERS (\$)	\$7,308.91	\$7,534.07	\$8,570.77	\$8,058.72
	6" METERS (\$)	\$27,342.21	\$22,216.44	\$26,590.09	\$21,639.34
INDUSTRIAL VOL REVENUE	5/8" METERS (\$)	\$2,902.15	\$3,080.26	\$2,780.59	\$2,246.74
	1" METERS (\$)	\$8,700.82	\$9,661.61	\$9,404.94	\$9,614.55
	1 1/2" METERS (\$)	\$2,299.18	\$2,308.73	\$2,028.20	\$2,346.94
	2" METERS (\$)	\$1,572.23	\$2,969.21	\$5,610.25	\$2,019.95
	3" METERS (\$)	\$128,421.61	\$126,015.93	\$114,462.26	\$105,512.22
INSTITUTIONAL VOL REVENUE	FLAT RATE – VOLUME PORTION (\$)	\$519.14	\$561.11	\$1,046.81	\$1,012.61
	5/8" METERS (\$)	\$16,871.93	\$15,751.99	\$14,622.64	\$13,538.43
	3/4" METERS (\$)	\$4,818.14	\$6,785.92	\$11,116.92	\$6,297.19
	1" METERS (\$)	\$79,141.39	\$80,378.99	\$73,914.68	\$73,488.32
	1 1/2" METERS (\$)	\$32,701.33	\$31,480.60	\$29,577.87	\$27,082.14
	2" METERS (\$)	\$195,165.46	\$175,037.06	\$156,705.46	\$141,133.01
	3" METERS (\$)	\$208,537.90	\$179,449.95	\$180,067.88	\$192,628.63
	4" METERS (\$)	\$62,517.41	\$74,119.11	\$45,209.16	\$18,859.93
	6" METERS (\$)	\$0.00	\$0.00	\$0.00	\$0.00
<b>CITY TOTAL VOLUME REVENUE REQUIREMENT (\$)</b>		<b>\$1,562,096.69</b>	<b>\$1,522,858.03</b>	<b>\$1,415,534.09</b>	<b>\$1,319,519.83</b>

Table O5

		DESCRIPTION	2015	2016	2017	2018
<b>CITY TOTAL RATE REVENUE REQUIREMENT</b>	<b>TOTAL RATE REVENUE BY CLASS (\$)</b>	RESIDENTIAL TOTAL RATE REVENUE (\$)	\$462,426.09	\$480,900.83	\$386,644.08	\$486,947.17
		COMMERCIAL TOTAL RATE REVENUE (\$)	\$483,581.99	\$509,701.10	\$382,342.34	\$515,087.95
		INDUSTRIAL TOTAL RATE REVENUE (\$)	\$153,703.24	\$156,898.29	\$134,286.25	\$141,113.57
		INSTITUTIONAL TOTAL RATE REVENUE (\$)	\$713,088.89	\$720,789.45	\$512,261.42	\$705,059.22
	<b>CITY TOTAL RATE REVENUE REQUIREMENT (\$)</b>		<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,415,534.09</b>	<b>\$1,848,207.91</b>
	<b>TOTAL RATE REVENUE BY CLASS (%)</b>	RESIDENTIAL TOTAL RATE REVENUE (%)	25.5%	25.7%	27.3%	26.3%
		COMMERCIAL TOTAL RATE REVENUE (%)	26.7%	27.3%	27.0%	27.9%
		INDUSTRIAL TOTAL RATE REVENUE (%)	8.5%	8.4%	9.5%	7.6%
		INSTITUTIONAL TOTAL RATE REVENUE (%)	39.3%	38.6%	36.2%	38.2%
	<b>CITY TOTAL RATE REVENUE REQUIREMENT (%)</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>VOLUME REVENUE % OF TOTAL REVENUE</b>		<b>86.2%</b>	<b>81.5%</b>	<b>77.1%</b>	<b>71.4%</b>	
<b>TOTAL RATE REVENUE BY METER SIZE (\$)</b>	FLAT RATE REVENUE (\$)	\$11,220.85	\$12,486.04	\$23,005.02	\$21,130.95	
	5/8" METER REVENUE (\$)	\$543,989.55	\$566,135.01	\$535,017.78	\$537,808.42	
	3/4" METER REVENUE (\$)	\$15,230.80	\$17,527.22	\$42,709.89	\$39,352.86	
	1" METER REVENUE (\$)	\$178,968.08	\$194,368.75	\$199,704.11	\$207,604.23	
	1 1/2" METER REVENUE (\$)	\$108,806.72	\$117,812.20	\$119,196.55	\$112,643.95	
	2" METER REVENUE (\$)	\$449,349.30	\$449,959.23	\$438,230.78	\$442,693.81	
	3" METER REVENUE (\$)	\$394,663.27	\$380,992.54	\$384,946.19	\$400,379.53	
	4" METER CHARGE (\$)	\$83,229.41	\$106,792.23	\$84,942.60	\$64,954.81	
	6" METER CHARGE (\$)	\$27,342.21	\$22,216.44	\$26,590.09	\$21,639.34	
	<b>CITY TOTAL RATE REVENUE (\$)</b>		<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,854,343.01</b>	<b>\$1,848,207.91</b>
<b>TOTAL RATE REVENUE BY METER SIZE (%)</b>	FLAT RATE REVENUE (%)	0.6%	0.7%	1.2%	1.1%	
	5/8" METER REVENUE (%)	30.0%	30.3%	28.9%	29.1%	
	3/4" METER REVENUE (%)	0.8%	0.9%	2.3%	2.1%	
	1" METER REVENUE (%)	9.9%	10.4%	10.8%	11.2%	
	1 1/2" METER REVENUE (%)	6.0%	6.3%	6.4%	6.1%	
	2" METER REVENUE (%)	24.8%	24.1%	23.6%	24.0%	
	3" METER REVENUE (%)	21.8%	20.4%	20.8%	21.7%	
	4" METER CHARGE (%)	4.6%	5.7%	4.6%	3.5%	
	6" METER CHARGE (%)	1.5%	1.2%	1.4%	1.2%	
	<b>CITY TOTAL RATE REVENUE (%)</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>CITY BASE RATE % OF TOTAL RATE</b>		<b>13.8%</b>	<b>18.5%</b>	<b>23.7%</b>	<b>28.6%</b>	
<b>CITY VARIABLE RATE % OF TOTAL RATE</b>		<b>86.2%</b>	<b>81.5%</b>	<b>76.3%</b>	<b>71.4%</b>	
<b>BALANCE</b>	<b>CITY TOTAL REVENUE REQUIREMENT (\$)</b>		<b>\$1,812,800.21</b>	<b>\$1,868,289.67</b>	<b>\$1,854,343.01</b>	<b>\$1,848,207.91</b>
	<b>CITY RATE REVENUE - REVENUE REQUIREMENT</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
	<b>CITY EXCESS REVENUE (%)</b>		<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>



Table O7

		DESCRIPTION	2015	2016	2017	2018
<b>BR TWP REVENUE REQUIREMENT (\$)</b>	<b>BR TWP COST DETAILS (\$)</b>	TOTAL BR TWP COLLECTION SYSTEM O&M COST	186,643.52	118,280.05	195,851.64	162,491.77
		TOTAL BR TWP COLLECTION SYSTEM BOND COST	29,047.60	28,062.95	24,331.01	20,200.00
		TOTAL BR TWP CAPITAL RESERVE COST	46,660.88	29,570.01	48,962.91	40,622.94
		TOTAL BR TWP COL SYS REPLACEMENT COST	15,388.33	15,388.33	31,062.86	31,086.61
		BR TWP WWTP O&M COST SHARE	91,874.88	129,000.49	134,917.28	138,405.28
		BR TWP CITY COL SYS O&M COST SHARE	24,060.85	31,835.28	34,092.23	39,507.82
		BR TWP CITY ADMIN COST SHARE	3,615.24	4,810.05	5,295.56	5,787.18
		BR TWP WWTP BOND COST SHARE	47,355.49	64,361.99	70,182.35	74,321.44
		BR TWP WWTP REPLACEMENT COST SHARE	16,920.36	37,817.30	43,947.71	46,943.02
	<b>BR TWP EXCLUSIVE COST (\$)</b>		<b>\$277,740.33</b>	<b>\$191,301.35</b>	<b>\$300,208.42</b>	<b>\$254,401.32</b>
	<b>BR TWP SHARED COSTS (\$)</b>		<b>\$183,826.83</b>	<b>\$267,825.12</b>	<b>\$288,435.13</b>	<b>\$304,964.73</b>
	<b>BR TWP REVENUE REQUIREMENT (\$)</b>		<b>\$461,567.16</b>	<b>\$459,126.47</b>	<b>\$588,643.55</b>	<b>\$559,366.06</b>
	<b>TOTAL BR TWP USE (K gal/Yr)</b>		<b>36,787</b>	<b>45,595</b>	<b>52,359</b>	<b>55,984</b>
<b>BR Twp Unit Cost</b>		<b>\$12.55</b>	<b>\$10.07</b>	<b>\$11.24</b>	<b>\$9.99</b>	
<b>BR TWP FIXED COSTS</b>	<b>BR TWP FIXED COST (%)</b>	TOTAL BR TWP COLLECTION SYSTEM O&M COST	25%	25%	25%	25%
		TOTAL BR TWP COLLECTION SYSTEM BOND COST	100%	100%	100%	100%
		TOTAL BR TWP CAPITAL RESERVE COST	20%	20%	20%	20%
		TOTAL BR TWP COL SYS REPLACEMENT COST	0%	0%	0%	0%
		BR TWP WWTP O&M COST SHARE	0%	0%	0%	0%
		BR TWP CITY COL SYS O&M COST SHARE	0%	0%	0%	0%
		BR TWP CITY ADMIN COST SHARE	0%	0%	0%	0%
		BR TWP WWTP BOND COST SHARE	100%	100%	100%	100%
	BR TWP WWTP REPLACEMENT COST SHARE	50%	50%	50%	50%	
	<b>BR TWP FIXED COST (\$)</b>	TOTAL BR TWP COLLECTION SYSTEM O&M COST	46,660.88	29,570.01	48,962.91	40,622.94
		TOTAL BR TWP COLLECTION SYSTEM BOND COST	29,047.60	28,062.95	24,331.01	20,200.00
		TOTAL BR TWP CAPITAL RESERVE COST	9,332.18	5,914.00	9,792.58	8,124.59
		TOTAL BR TWP COL SYS REPLACEMENT COST	0.00	0.00	0.00	0.00
		BR TWP WWTP O&M COST SHARE	0.00	0.00	0.00	0.00
		BR TWP CITY COL SYS O&M COST SHARE	0.00	0.00	0.00	0.00
		BR TWP CITY ADMIN COST SHARE	0.00	0.00	0.00	0.00
		BR TWP WWTP BOND COST SHARE	47,355.49	64,361.99	70,182.35	74,321.44
		BR TWP WWTP REPLACEMENT COST SHARE	8,460.18	18,908.65	21,973.86	23,471.51
		<b>BR TWP EXCLUSIVE FIXED COST (\$)</b>		<b>\$85,040.66</b>	<b>\$63,546.97</b>	<b>\$83,086.50</b>
<b>BR TWP SHARED FIXED COST (\$)</b>		<b>\$55,815.68</b>	<b>\$83,270.64</b>	<b>\$92,156.20</b>	<b>\$97,792.95</b>	
<b>BR TWP FIXED COST (\$)</b>		<b>\$140,856.33</b>	<b>\$146,817.61</b>	<b>\$175,242.71</b>	<b>\$166,740.48</b>	
<b>BR TWP TOTAL REU's</b>		<b>1113</b>	<b>1112</b>	<b>1040</b>	<b>1172</b>	
<b>BR Twp Base Rate</b>		<b>\$10.55</b>	<b>\$11.00</b>	<b>\$14.04</b>	<b>\$11.86</b>	
<b>BR Twp Exclusive Base Rate (\$)</b>		<b>\$6.37</b>	<b>\$4.76</b>	<b>\$6.66</b>	<b>\$4.90</b>	
<b>BR Twp Shared Base Rate (\$)</b>		<b>\$4.18</b>	<b>\$6.24</b>	<b>\$7.38</b>	<b>\$6.95</b>	

Table O8

DESCRIPTION		2015	2016	2017	2018
BR TWP VARIABLE COST (%)	TOTAL BR TWP COLLECTION SYSTEM O&M COST	75%	75%	75%	75%
	TOTAL BR TWP COLLECTION SYSTEM BOND COST	0%	0%	0%	0%
	TOTAL BR TWP CAPITAL RESERVE COST	80%	80%	80%	80%
	TOTAL BR TWP COL SYS REPLACEMENT COST	100%	100%	100%	100%
	BR TWP WWTP O&M COST SHARE	100%	100%	100%	100%
	BR TWP CITY COL SYS O&M COST SHARE	100%	100%	100%	100%
	BR TWP CITY ADMIN COST SHARE	100%	100%	100%	100%
	BR TWP WWTP BOND COST SHARE	0%	0%	0%	0%
	BR TWP WWTP REPLACEMENT COST SHARE	50%	50%	50%	50%
BR TWP VARIABLE COST (\$)	TOTAL BR TWP COLLECTION SYSTEM O&M COST	139,982.64	88,710.04	146,888.73	121,868.83
	TOTAL BR TWP COLLECTION SYSTEM BOND COST	0.00	0.00	0.00	0.00
	TOTAL BR TWP CAPITAL RESERVE COST	37,328.70	23,656.01	39,170.33	32,498.35
	TOTAL BR TWP COL SYS REPLACEMENT COST	15,388.33	15,388.33	31,062.86	31,086.61
	BR TWP WWTP O&M COST SHARE	91,874.88	129,000.49	134,917.28	138,405.28
	BR TWP CITY COL SYS O&M COST SHARE	24,060.85	31,835.28	34,092.23	39,507.82
	BR TWP CITY ADMIN COST SHARE	3,615.24	4,810.05	5,295.56	5,787.18
	BR TWP WWTP BOND COST SHARE	0.00	0.00	0.00	0.00
	BR TWP WWTP REPLACEMENT COST SHARE	8,460.18	18,908.65	21,973.86	23,471.51
<b>BR TWP EXCLUSIVE VARIABLE COST (\$)</b>		<b>\$192,699.68</b>	<b>\$127,754.38</b>	<b>\$217,121.92</b>	<b>\$185,453.79</b>
<b>BR TWP SHARED VARIABLE COST (\$)</b>		<b>\$128,011.15</b>	<b>\$184,554.48</b>	<b>\$196,278.92</b>	<b>\$207,171.79</b>
<b>BR TWP VARIABLE COST (\$)</b>		<b>\$320,710.83</b>	<b>\$312,308.86</b>	<b>\$413,400.85</b>	<b>\$392,625.58</b>
TOTAL BR TWP USE (K gal/Yr)		36,787	45,595	52,359	55,984
BR Twp Variable Rate		\$8.72	\$6.85	\$7.90	\$7.01
BR Twp Exclusive Variable Rate		\$5.24	\$2.80	\$4.15	\$3.31
BR Twp Shared Variable Rate		\$3.48	\$4.05	\$3.75	\$3.70

Table O9

DESCRIPTION		2015	2016	2017	2018
<b>BR TWP FLAT RATE</b>		<b>\$39.46</b>	<b>\$31.98</b>	<b>\$40.37</b>	<b>\$34.92</b>
BR TWP BASE REVENUE (\$)	FLAT RATE - BASE PORTION (\$)	\$2,278.00	\$2,376.54	\$2,527.54	\$2,134.05
	RESIDENTIAL BASE REVENUE (\$)	\$4,302.89	\$4,357.00	\$5,560.59	\$4,837.18
	COMMERCIAL BASE REVENUE (\$)	\$122,505.78	\$127,805.26	\$151,315.34	\$146,253.59
	INSTITUTIONAL BASE REVENUE (\$)	\$11,769.67	\$12,278.81	\$15,502.24	\$13,231.11
	<b>BR TWP BASE REVENUE (\$)</b>	<b>\$140,856.33</b>	<b>\$146,817.61</b>	<b>\$174,905.70</b>	<b>\$166,455.94</b>
BR TWP VOLUME REVENUE (\$)	FLAT RATE - VOLUME PORTION (\$)	\$6,244.64	\$4,532.00	\$4,738.49	\$4,151.80
	RESIDENTIAL VOLUME REVENUE (\$)	\$11,795.42	\$8,308.67	\$9,198.24	\$10,646.00
	COMMERCIAL VOLUME REVENUE (\$)	\$178,308.81	\$39,419.93	\$333,821.07	\$362,083.20
	INSTITUTIONAL VOLUME REVENUE (\$)	\$124,361.96	\$260,048.26	\$65,643.05	\$15,744.58
	<b>BR TWP VOLUME REVENUE (\$/Mo)</b>	<b>\$320,710.83</b>	<b>\$312,308.86</b>	<b>\$413,400.85</b>	<b>\$392,625.58</b>
BR TWP TOTAL RATE REVENUE (\$)	FLAT RATE REVENUE (\$)	\$8,522.64	\$6,908.54	\$7,266.03	\$6,285.85
	RESIDENTIAL REVENUE (\$)	\$16,098.31	\$12,665.66	\$14,758.82	\$15,483.18
	COMMERCIAL REVENUE (\$)	\$300,814.59	\$167,225.19	\$485,136.40	\$508,336.79
	INSTITUTIONAL REVENUE (\$)	\$136,131.63	\$272,327.07	\$81,145.29	\$28,975.69
	<b>BR TWP TOTAL RATE REVENUE (\$)</b>	<b>\$461,567.16</b>	<b>\$459,126.47</b>	<b>\$588,306.55</b>	<b>\$559,081.52</b>
BR TWP TOTAL RATE REVENUE (%)	FLAT RATE REVENUE (%)	1.8%	1.5%	1.2%	1.1%
	RESIDENTIAL REVENUE (%)	3.5%	2.8%	2.5%	2.8%
	COMMERCIAL REVENUE (%)	65.2%	36.4%	82.5%	90.9%
	INSTITUTIONAL REVENUE (%)	29.5%	59.3%	13.8%	5.2%
	<b>BR TWP TOTAL RATE REVENUE (%)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>BR TWP BASE RATE % OF TOTAL RATE</b>		<b>30.5%</b>	<b>32.0%</b>	<b>29.7%</b>	<b>29.8%</b>
<b>BR TWP VARIABLE RATE % OF TOTAL RATE</b>		<b>69.5%</b>	<b>68.0%</b>	<b>70.3%</b>	<b>70.2%</b>
BALANCE	<b>BR TWP REVENUE REQUIREMENT (\$)</b>	<b>\$461,567.16</b>	<b>\$459,126.47</b>	<b>\$588,643.55</b>	<b>\$559,366.06</b>
	<b>BR TWP RATE REVENUE - REVENUE REQUIREMENT</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>(\$337.01)</b>	<b>(\$284.54)</b>
	<b>BR TWP EXCESS REVENUE (%)</b>	<b>0.0%</b>	<b>0.0%</b>	<b>-0.1%</b>	<b>0.0%</b>

Table O10

		DESCRIPTION	2015	2016	2017	2018
		<b>GN TWP USERS &amp; USE</b>				
<b>GN TWP USERS</b>	GN Twp Residential Unmetered Users	221	228	236	233	
	GN Twp Commercial Users	13	13	13	13	
	GN Twp Institutional Users	1	1	1	1	
	<b>GN TWP TOTAL USERS</b>	<b>235</b>	<b>242</b>	<b>250</b>	<b>247</b>	
<b>GN TWP REU's</b>	GN Twp Residential REU's	232	239	247	244	
	GN Twp Commercial REU's	20	20	20	19	
	GN Twp Institutional REU's	1	1	1	1	
	<b>GN TWP TOTAL REU's</b>	<b>253</b>	<b>260</b>	<b>268</b>	<b>264</b>	
<b>GN TWP USE</b>	GREEN TWP RESIDENTIAL USE (K gal/Yr) (est)	8,580	8,885	8,872	9,303	
	GREEN TWP COMMERCIAL USE (K gal/Yr) (est)	740	744	718	724	
	GREEN TWP INSTITUTIONAL USE (K gal/Yr) (est)	37	37	36	38	
	<b>GN TWP METERED USE (K gal/yr)</b>	<b>9,357</b>	<b>9,666</b>	<b>9,626</b>	<b>10,065</b>	
<b>GN TWP REVENUE REQUIREMENT (\$)</b>						
		DESCRIPTION	2015	2016	2017	2018
<b>GN TWP COST DETAILS (\$)</b>	TOTAL GN TWP COLLECTION SYSTEM O&M COST	\$36,160.55	\$36,227.90	\$35,574.31	\$36,941.67	
	TOTAL GN TWP COL SYS REPLACEMENT COST	\$1,666.57	\$1,666.57	\$1,666.57	\$1,606.57	
	GN TWP WWTP O&M COST SHARE	\$23,368.75	\$27,347.93	\$24,106.51	\$24,239.03	
	GN TWP CITY COL SYS O&M COST SHARE	\$6,119.98	\$6,749.04	\$6,830.35	\$7,887.54	
	GN TWP CITY ADMIN COST SHARE	\$919.55	\$1,019.72	\$946.19	\$1,013.51	
	GN TWP WWTP BOND COST SHARE	\$12,045.07	\$13,644.65	\$12,539.92	\$13,015.98	
	GN TWP WWTP REPLACEMENT COST SHARE	\$4,303.76	\$8,017.21	\$7,852.41	\$8,221.17	
	<b>GN TWP EXCLUSIVE COST (\$)</b>	<b>\$37,827.12</b>	<b>\$37,894.47</b>	<b>\$37,240.88</b>	<b>\$38,548.24</b>	
<b>GN TWP SHARED COST (\$)</b>	<b>\$46,757.11</b>	<b>\$56,778.56</b>	<b>\$52,275.39</b>	<b>\$54,377.23</b>		
<b>GN TWP REVENUE REQUIREMENT (\$)</b>	<b>\$84,584.23</b>	<b>\$94,673.02</b>	<b>\$89,516.26</b>	<b>\$92,925.47</b>		
<b>GN TWP METERED USE (K gal/yr)</b>	<b>9,357</b>	<b>9,666</b>	<b>9,626</b>	<b>10,065</b>		
<b>GN Twp Unit Cost</b>	<b>\$9.04</b>	<b>\$9.79</b>	<b>\$9.30</b>	<b>\$9.23</b>		
<b>GN TWP FIXED COSTS</b>						
<b>GN TWP FIXED COST (%)</b>	TOTAL GN TWP COLLECTION SYSTEM O&M COST	0%	0%	0%	0%	
	TOTAL GN TWP COL SYS REPLACEMENT COST	0%	0%	0%	0%	
	GN TWP WWTP O&M COST SHARE	0%	0%	0%	0%	
	GN TWP CITY COL SYS O&M COST SHARE	0%	0%	0%	0%	
	GN TWP CITY ADMIN COST SHARE	0%	0%	0%	0%	
	GN TWP WWTP BOND COST SHARE	0%	0%	0%	0%	
	GN TWP WWTP REPLACEMENT COST SHARE	0%	0%	0%	0%	
<b>GN TWP FIXED COST (\$)</b>	TOTAL GN TWP COLLECTION SYSTEM O&M COST	0.00	0.00	0.00	0.00	
	TOTAL GN TWP COL SYS REPLACEMENT COST	0.00	0.00	0.00	0.00	
	GN TWP WWTP O&M COST SHARE	0.00	0.00	0.00	0.00	
	GN TWP CITY COL SYS O&M COST SHARE	0.00	0.00	0.00	0.00	
	GN TWP CITY ADMIN COST SHARE	0.00	0.00	0.00	0.00	
	GN TWP WWTP BOND COST SHARE	0.00	0.00	0.00	0.00	
	GN TWP WWTP REPLACEMENT COST SHARE	0.00	0.00	0.00	0.00	
	<b>GN TWP EXCLUSIVE FIXED COST (\$)</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	
<b>GN TWP SHARED FIXED COST (\$)</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		
<b>GN TWP FIXED COST (\$)</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		
<b>GN TWP TOTAL REU's</b>	<b>253</b>	<b>260</b>	<b>268</b>	<b>264</b>		
<b>GN Twp Base Rate</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		
<b>GN Twp Exclusive Base Rate (\$)</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		
<b>GN Twp Shared Base Rate (\$)</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		

Table O11

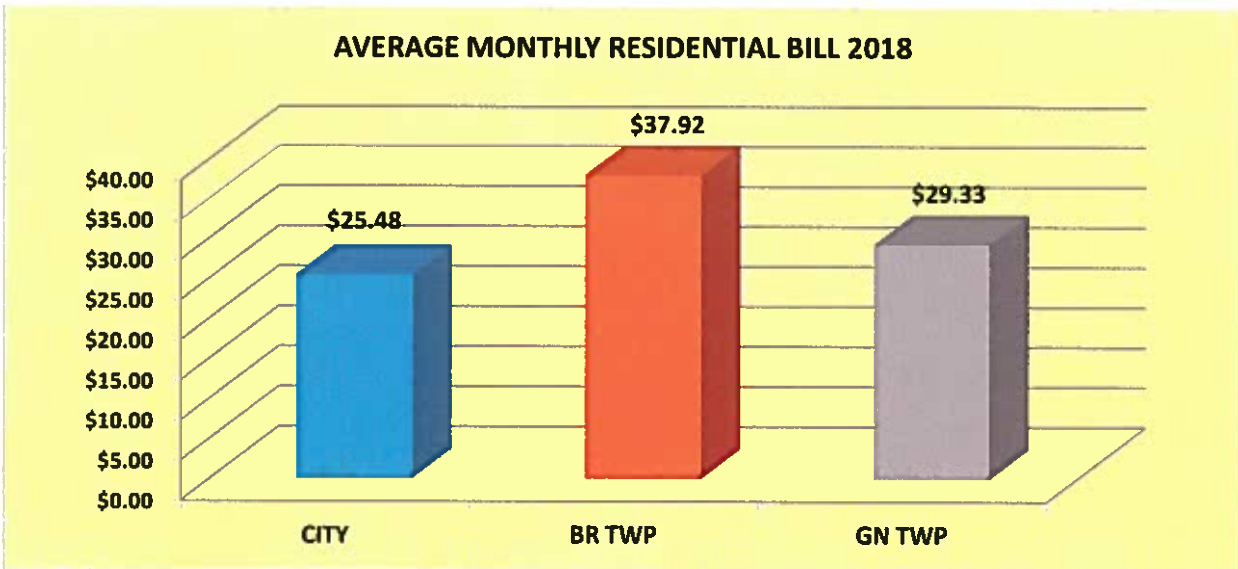
DESCRIPTION		2015	2016	2017	2018
GN TWP FLAT RATE		\$27.86	\$30.34	\$27.83	\$29.33
GN TWP QUARTERLY BILL		\$83.58	\$91.03	\$83.50	\$88.00
GN TWP BASE REVENUE	FLAT RATE - BASE PORTION (\$)				
	RESIDENTIAL BASE REVENUE (\$)				
	COMMERCIAL BASE REVENUE (\$)				
	INSTITUTIONAL BASE REVENUE (\$)				
	GN TWP BASE REVENUE (\$)	\$0.00	\$0.00	\$0.00	\$0.00
GN TWP VOLUME REVENUE	FLAT RATE - VOLUME PORTION (\$)				
	RESIDENTIAL VOLUME REVENUE (\$)	77,563.40	87,026.36	82,501.93	85,885.66
	COMMERCIAL VOLUME REVENUE (\$)	6,686.50	7,282.54	6,680.32	6,687.82
	INSTITUTIONAL VOLUME REVENUE (\$)	334.33	364.13	334.02	351.99
	GN TWP VOLUME REVENUE (\$/Mo)	\$84,584.23	\$94,673.02	\$89,516.26	\$92,925.47
GN TWP TOTAL RATE REVENUE (\$)	FLAT RATE REVENUE (\$)				
	RESIDENTIAL REVENUE (\$)	77,563.40	87,026.36	82,501.93	85,885.66
	COMMERCIAL REVENUE (\$)	6,686.50	7,282.54	6,680.32	6,687.82
	INSTITUTIONAL REVENUE (\$)	334.33	364.13	334.02	351.99
	GN TWP RATE REVENUE (\$)	\$84,584.23	\$94,673.02	\$89,516.26	\$92,925.47
GN TWP TOTAL RATE REVENUE (%)	RESIDENTIAL REVENUE (%)	91.7%	91.9%	92.2%	92.4%
	COMMERCIAL REVENUE (%)	7.9%	7.7%	7.4%	7.2%
	INSTITUTIONAL REVENUE (%)	0.4%	0.4%	0.4%	0.4%
	GN TWP TOTAL RATE REVENUE (%)	100.0%	100.0%	100.0%	100.0%
GN TWP BASE RATE % OF TOTAL RATE		0.0%	0.0%	0.0%	0.0%
GN TWP VARIABLE RATE % OF TOTAL RATE		100.0%	100.0%	100.0%	100.0%
BALANCE	GN TWP EXCLUSIVE COST (\$)	\$37,827.12	\$37,894.47	\$37,240.88	\$38,548.24
	GN TWP RATE REVENUE - REVENUE REQUIREMENT	\$0.00	\$0.00	\$0.00	\$0.00
	GN TWP EXCESS REVENUE (%)	0.0%	0.0%	0.0%	0.0%

## P. BILL IMPACTS

Table P shows the impact of the rates on various customer classes for various use quantities. Figure P shows the average monthly residential bill for each of the contributing jurisdictions.

Table P

RATES	CITY	Average Residential Use (K gal/Mo)	3.7	3.5	3.5	3.4
		Base Rate (\$/Mo)	\$2.03	\$1.98	\$4.31	\$5.40
		Variable Rate (\$/K gal)	\$6.01	\$6.63	\$5.45	\$7.00
	BR TWP	Average Residential Use (K gal/Mo)	3.3	3.1	2.9	3.7
Base Rate (\$/Mo)	\$10.55	\$11.00	\$14.04	\$11.86		
Variable Rate (\$/K gal)	\$8.72	\$6.85	\$7.90	\$7.00		
GN TWP	Flat Rate	\$27.86	\$30.34	\$27.83	\$29.33	
MONTHLY BILL IMPACTS	DESCRIPTION		2015	2016	2017	2018
	CITY RESIDENTIAL	2000 Gallons	\$14.05	\$15.24	\$17.13	\$17.54
		Average	\$24.28	\$25.49	\$25.03	\$25.48
		4000 Gallons	\$26.06	\$28.50	\$27.89	\$28.72
		6000 Gallons	\$38.08	\$41.76	\$38.64	\$39.89
		8000 Gallons	\$50.10	\$55.02	\$49.40	\$51.07
	BR TWP RESIDENTIAL	2000 Gallons	\$27.98	\$24.70	\$29.83	\$25.88
		Average	\$39.46	\$31.98	\$37.27	\$37.92
		4000 Gallons	\$45.42	\$38.40	\$45.62	\$39.91
		6000 Gallons	\$62.85	\$52.10	\$61.41	\$53.93
		8000 Gallons	\$80.29	\$65.80	\$77.21	\$67.96
	GN TWP RESIDENTIAL	2000 Gallons	\$27.86	\$30.34	\$27.83	\$29.33
		4000 Gallons	\$27.86	\$30.34	\$27.83	\$29.33
		Average	\$27.86	\$30.34	\$27.83	\$29.33
		6000 Gallons	\$27.86	\$30.34	\$27.83	\$29.33
		8000 Gallons	\$27.86	\$30.34	\$27.83	\$29.33



## Q. SURCHARGES

The domestic background wastewater strength for the Big Rapids wastewater treatment plant is:

Table Q1

DOMESTIC BACKGROUND WASTEWATER STRENGTH	
POLLUTANT	CONCENTRATION (mg/l)
Ammonia	37
Biochemical Oxygen Demand (BOD)	220
Total Suspended Solids (TSS)	165
Phosphorus (P)	6.4
Fats, Oils, Grease (FOG)	90
Domestic Background values are based on domestic sampling from 2017, with the exception of the domestic FOG value, which is based on typical medium strength domestic wastewater (Metcalf & Eddy, 4 <sup>th</sup> edition).	

The cost of wastewater treatment at the Big Rapids wastewater treatment plant is proportioned as follows:

Table Q2

OM&R SURCHARGE COST PORTIONING		
POLLUTANT	PORTION OF OM&R (%)	OM&R COST (K \$)
pFlow	20%	\$188.04
Ammonia	18%	\$169.24
Biochemical Oxygen Demand (BOD)	27%	\$253.85
Total Suspended Solids (TSS)	21%	\$197.44
Phosphorus (P)	10%	\$94.02
Fats, Oils, Grease (FOG)	4%	\$37.61
<b>TOTAL WWTP OM&amp;R COST</b>	<b>100%</b>	<b>\$940.20</b>

Table Q3

SURCHARGE CALCULATION				
POLLUTANT	Flow (MGD)	mg/l	lbs/day	COST/lb
Ammonia	0.946	30	237	\$1.96
Biochemical Oxygen Demand (BOD)		296	2,335	\$0.30
Total Suspended Solids (TSS)		289	2,280	\$0.24
Phosphorus (P)		8.3	65	\$3.96
Fats, Oils, Grease (FOG)		44	347	\$0.30

### AFTERWORD

As stated in our report, a spreadsheet method has been utilized in documenting the various cost components with the operation of the Wastewater Treatment Plant. The various costs have been identified to the city's accounting method and the shared cost between the parties determined. A narrative has been presented to inform the customers on how and where the monies collected for the service has been spent. Also, a comparative dialog has been established to show service cost between the three communities.

The recently restated contract serves as the basis of these efforts and we believe are better tracked through this process than before. The committee used two different styles of spreadsheet mathematics and found them in agreement and verifiable.

The User Charge Report is very close in achieving an accurate status of shared charges due to the cohesiveness of the Committee.

Committee members will oversee the next user charge review starting July 2018 with final report by January 1, 2019.

Accepted by:

\_\_\_\_\_  
Mayor Thomas Hogenson  
City of Big Rapids

\_\_\_\_\_  
Supervisor Bill Stanek  
Big Rapids Charter Township

\_\_\_\_\_  
Supervisor Jim Chapman  
Green Charter Township

Appendix A

2009 ACT 94 WASTEWATER SRF BOND AMORTIZATION							
YR	DATE	Principle	Interest	Debt Service	Annual Debt Service	Disbursements	Balance
2009	05/07			\$0.00	\$16,057.77	\$590,859.00	\$590,859.00
	05/21			\$0.00		\$339,306.00	\$930,165.00
	06/18			\$0.00		\$714,066.00	\$1,644,231.00
	07/23			\$0.00		\$418,963.00	\$2,063,194.00
	08/20			\$0.00		\$387,952.00	\$2,451,146.00
	09/24			\$0.00		\$619,164.00	\$3,070,310.00
	10/01		\$16,057.77	\$16,057.77		\$0.00	\$3,070,310.00
	12/10			\$0.00		\$1,333,303.00	\$4,403,613.00
2010	01/07			\$0.00	\$132,235.71	\$341,580.00	\$4,745,193.00
	02/04			\$0.00		\$285,647.00	\$5,030,840.00
	03/04			\$0.00		\$206,162.00	\$5,237,002.00
	03/25			\$0.00		\$213,066.00	\$5,450,068.00
	04/01		\$53,185.23	\$53,185.23		\$0.00	\$5,450,068.00
	05/06			\$0.00		\$513,082.00	\$5,963,150.00
	06/24			\$0.00		\$657,369.00	\$6,620,519.00
	07/22			\$0.00		\$277,579.00	\$6,898,098.00
	08/26			\$0.00		\$248,199.00	\$7,146,297.00
	09/23			\$0.00		\$339,479.00	\$7,485,776.00
	10/01		\$79,050.48	\$79,050.48		\$0.00	\$7,485,776.00
	10/21			\$0.00		\$420,355.00	\$7,906,131.00
	12/02			\$0.00		\$58,869.00	\$7,965,000.00
2011	04/01		\$98,917.90	\$98,917.90	\$508,480.40	\$0.00	\$7,965,000.00
	10/01	\$310,000.00	\$99,562.50	\$409,562.50		\$7,655,000.00	
2012	04/01		\$95,687.50	\$95,687.50	\$511,375.00		\$7,655,000.00
	10/01	\$320,000.00	\$95,687.50	\$415,687.50		\$7,335,000.00	
2013	04/01		\$91,687.50	\$91,687.50	\$508,375.00		\$7,335,000.00
	10/01	\$325,000.00	\$91,687.50	\$416,687.50		\$7,010,000.00	
2014	04/01		\$87,625.00	\$87,625.00	\$510,250.00		\$7,010,000.00
	10/01	\$335,000.00	\$87,625.00	\$422,625.00		\$6,675,000.00	
2015	04/01		\$83,437.50	\$83,437.50	\$511,875.00		\$6,675,000.00
	10/01	\$345,000.00	\$83,437.50	\$428,437.50		\$6,330,000.00	
2016	04/01		\$79,125.00	\$79,125.00	\$513,250.00		\$6,330,000.00
	10/01	\$355,000.00	\$79,125.00	\$434,125.00		\$5,975,000.00	
2017	04/01		\$74,687.50	\$74,687.50	\$509,375.00		\$5,975,000.00
	10/01	\$360,000.00	\$74,687.50	\$434,687.50		\$5,615,000.00	
2018	04/01		\$70,187.50	\$70,187.50	\$510,375.00		\$5,615,000.00
	10/01	\$370,000.00	\$70,187.50	\$440,187.50		\$5,245,000.00	
2019	04/01		\$65,562.50	\$65,562.50	\$511,125.00		\$5,245,000.00
	10/01	\$380,000.00	\$65,562.50	\$445,562.50		\$4,865,000.00	
2020	04/01		\$60,812.50	\$60,812.50	\$511,625.00		\$4,865,000.00
	10/01	\$390,000.00	\$60,812.50	\$450,812.50		\$4,475,000.00	
2021	04/01		\$55,937.50	\$55,937.50	\$511,875.00		\$4,475,000.00
	10/01	\$400,000.00	\$55,937.50	\$455,937.50		\$4,075,000.00	
2022	04/01		\$50,937.50	\$50,937.50	\$511,875.00		\$4,075,000.00
	10/01	\$410,000.00	\$50,937.50	\$460,937.50		\$3,665,000.00	
2023	04/01		\$45,812.50	\$45,812.50	\$511,625.00		\$3,665,000.00
	10/01	\$420,000.00	\$45,812.50	\$465,812.50		\$3,245,000.00	
2024	04/01		\$40,562.50	\$40,562.50	\$511,125.00		\$3,245,000.00
	10/01	\$430,000.00	\$40,562.50	\$470,562.50		\$2,815,000.00	
2025	04/01		\$35,187.50	\$35,187.50	\$510,375.00		\$2,815,000.00
	10/01	\$440,000.00	\$35,187.50	\$475,187.50		\$2,375,000.00	
2026	04/01		\$29,687.50	\$29,687.50	\$509,375.00		\$2,375,000.00
	10/01	\$450,000.00	\$29,687.50	\$479,687.50		\$1,925,000.00	
2027	04/01		\$24,062.50	\$24,062.50	\$513,125.00		\$1,925,000.00
	10/01	\$465,000.00	\$24,062.50	\$489,062.50		\$1,460,000.00	
2028	04/01		\$18,250.00	\$18,250.00	\$511,500.00		\$1,460,000.00
	10/01	\$475,000.00	\$18,250.00	\$493,250.00		\$985,000.00	
2029	04/01		\$12,312.50	\$12,312.50	\$509,625.00		\$985,000.00
	10/01	\$485,000.00	\$12,312.50	\$497,312.50		\$500,000.00	
2030	04/01		\$6,250.00	\$6,250.00	\$512,500.00		\$500,000.00
	10/01	\$500,000.00	\$6,250.00	\$506,250.00		\$0.00	
TOTAL		\$7,965,000.00	\$2,402,398.88	\$10,367,398.88	\$10,367,398.88	\$7,965,000.00	





## Item "R"

### **Grounds Request #1: Sale of One (1) Zero-Turn Mower and One (1) Garden Tractor**

In accordance with our equipment rotation schedule that has been in place for several years, it is time to phase out a couple of machines. The first machine is one of the current zero-turn mowers in our fleet. A Husqvarna PZ54. This particular mower is a 2010 model and is the oldest of the three that we have.

The second piece of equipment is a Kubota G1800 diesel garden tractor. This tractor was purchased sometime in the mid 1990's. It serves no operational purpose to us now, and is only taking up space. I would like to ask from the board that we advertise the sale of these machines through sealed bid.

My recommendations would be that we have a minimum bid of \$1,000 placed on the zero-turn. I value this machine between \$1,200-\$1,800.

The Kubota garden tractor, would hold a value of around \$800, and would recommend a minimum bid of \$500.

## Item "S"

### Grounds Request #2: New Zero-Turn Mower Purchase

Keeping with our capital improvement plan, we have placed on this years' schedule and budget the purchase of a new zero-turn mower. We have \$12,000 budgeted for our capital outlay for 2018. At this time, I am presenting three (3) quotes on three (3) different machines. The attached machine quotes are as follows (in no particular order):

- John Deere Z915E ZTrak Commercial
- Husqvarna Z554X
- Gravely Pro-Turn 452

These three machines are very comparable and would do us well. I would place a personal recommendation, however, of choosing the Gravely Pro-Turn 452 model. This machine has a larger fuel capacity of 13.4 gal. while the others have a capacity of 11 gal. Also, the Gravely has a 'Constant Belt Tensioning System'. This system ensures constant tension on the mower belts that never need to be adjusted. In turn, this keeps a consistent cut through the lifespan of the belt. It is also shortest in length among competitors. This results in us being able to turn around in tighter areas, and get more done in less time.

The biggest highlight of this mower is Gravely's introduction of the air-ride suspension seat. Similar to a semi-truck, the seat on this mower has a pocket of air to cushion vertical forces when mowing over rough terrain. While this seat may sound like a luxury, it is an item that would be greatly appreciated. Anyone who has spent anytime at Highlandview Cemetery knows how uneven the grade is, the large roots sticking out, and many other various bumps and ruts throughout. On occasion, Scott and myself have had to take breaks from mowing because of the back pain that these large bumps create.

The combination of larger fuel capacity and a more user friendly seat, equals to higher productivity, and less downtime.

A few walk-around specifications of this machine include:

- 7- gauge fabricated steel mowing deck
- Ease of access systems for mowing height
- Enhanced visibility of rear wheels and cutting edge



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**Quote Summary**

**Prepared For:**  
Big Rapids Charter Township  
Brandon Maneke  
14212 Northland Dr  
Big Rapids, MI 49307  
Business: 231-796-6969  
bkl\_maneke@hotmail.com

**Prepared By:**  
David Vanalstine  
Bader & Sons Co.  
18880 Northland Drive  
Big Rapids, MI 49307  
Phone: 231-796-6302  
dvanalstine@greentractors.com

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**Quote Id:** 16728360  
**Created On:** 29 January 2018  
**Last Modified On:** 29 January 2018  
**Expiration Date:** 28 February 2018

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<b>Equipment Summary</b>	<b>Suggested List</b>	<b>Selling Price</b>	<b>Qty</b>	<b>Extended</b>
JOHN DEERE Z915E Commercial ZTrak	\$ 8,525.08	\$ 7,134.88 X	1 =	\$ 7,134.88
Never Stop	Included, Value of \$ 249.00	\$ 0.00 X	1 =	\$ 0.00
<b>Equipment Total</b>				<b>\$ 7,134.88</b>

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**Quote Summary**

Equipment Total	\$ 7,134.88
SubTotal	\$ 7,134.88
Est. Service Agreement Tax	\$ 0.00
Total	\$ 7,134.88
Down Payment	(0.00)
Rental Applied	(0.00)
<b>Balance Due</b>	<b>\$ 7,134.88</b>

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Salesperson : X \_\_\_\_\_

Accepted By : X \_\_\_\_\_



**JOHN DEERE**

# Selling Equipment

Quote Id: 16728360

Customer: BIG RAPIDS CHARTER TOWNSHIP

<b>JOHN DEERE Z915E Commercial ZTrak</b>				
<b>Hours:</b>				<b>Suggested List</b>
<b>Stock Number:</b>				\$ 8,525.08
				<b>Selling Price</b>
				\$ 7,134.88
Code	Description	Qty	Unit	Extended
2501TC	Z915E Commercial ZTrak	1	\$ 8,459.00	\$ 8,459.00
<b>Standard Options - Per Unit</b>				
001A	United States/Canada	1	\$ 0.00	\$ 0.00
1036	24x12x12 Pneumatic Turf Tire for 54 In. and 60 In. Decks	1	\$ 0.00	\$ 0.00
1502	54 In. Side Discharge Mower Deck	1	\$ 270.00	\$ 270.00
2000	Deluxe Comfort Seat with Armrests	1	\$ 0.00	\$ 0.00
<b>Standard Options Total</b>				<b>\$ 270.00</b>
<b>Dealer Attachments</b>				
UCNV0023	GOV DISC	1	\$ -785.61	\$ -785.61
<b>Dealer Attachments Total</b>				<b>\$ -785.61</b>
<b>Value Added Services</b>				
	Never Stop	1	\$ 0.00	\$ 0.00
<b>Value Added Services Total</b>				<b>\$ 0.00</b>
<b>Other Charges</b>				
	Freight	1	\$ 366.69	\$ 366.69
	EnviroCrate	1	\$ 40.00	\$ 40.00
	Setup	1	\$ 175.00	\$ 175.00
<b>Other Charges Total</b>				<b>\$ 581.69</b>
<b>Suggested Price</b>				<b>\$ 8,525.08</b>
<b>Customer Discounts</b>				
<b>Customer Discounts Total</b>			<b>\$ -1,390.20</b>	<b>\$ -1,390.20</b>
<b>Total Selling Price</b>				<b>\$ 7,134.88</b>

State Street Hardware, Inc. Outdoor Power  
 Equipment  
 614 N State Street  
 Big Rapids, Michigan 49307  
 StateStreetHardware.com  
 231-796-8122

Quote # 34  
 Quote Date 01-30-18  
 Total **\$9,039.20**

Big Rapids Township  
 14212 Northland Drive  
 Big Rapids, MI 49307 231-796-6969

Item	Description	Unit Cost	Quantity	Line Total
Small Engine Parts, Gravelly Equipment	PRO-TURN 452-992273-27 HP KAWASAKI FX850-52" X FACTOR DECK-ZT5400	\$11,299.00	1.0	\$11,299.00
Bid Assist	Husqvarna/Gravelly Bid Assist	-\$2,259.80	1.0	-\$2,259.80

**THIS IS AN EQUIPMENT QUOTE**

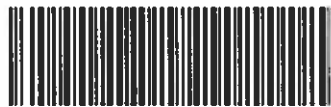
Subtotal **\$9,039.20**  
 Tax \$0.00  
 Quote Total **\$9,039.20**

**Disclaimer**

This is an equipment quote for the listed units only, freight and/or shipping and handling costs may be included and are subject to change. Sale is subject to a 3% office charge fee added on all equipment sales. All equipment quotes valid for 30 days.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_



State Street Hardware, Inc. Outdoor Power  
Equipment  
614 N State Street  
Big Rapids, Michigan 49307  
StateStreetHardware.com  
231-796-8122

Quote # 32  
Quote Date 01-29-18  
Total **\$8,639.96**

Big Rapids Township  
14212 Northland Drive  
Big Rapids, MI 49307 231-796-6969

Item	Description	Unit Cost	Quantity	Line Total
Small Engine	Z554X-967678601-25.5 KAWASAKI FX751V, 54"	\$10,799.95	1.0	\$10,799.95
Parts, Husqvarna Equipment	COMMERCIAL FAB DECK-ZT5400-SUSPENSION SEAT			
Bid Assist	Husqvarna/Gravely Bid Assist	-\$2,159.99	1.0	-\$2,159.99

## THIS IS AN EQUIPMENT QUOTE

Subtotal **\$8,639.96**  
Tax \$0.00

### Disclaimer

Quote Total **\$8,639.96**

This is an equipment quote for the listed units only, freight and/or shipping and handling costs may be included and are subject to change. Sale is subject to a 3% office charge fee added on all equipment sales. All equipment quotes valid for 30 days.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

