

City of Grand Rapids, Michigan

Water/Sewer Rate Study

2011

Final

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: February 6, 2012

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2011 WATER/SEWER RATE REVIEW – CALENDAR YEAR 2012 RATES

This is the final report for water and sewer rates effective January 1, 2012 for Grand Rapids and all customer communities. The report continues to be two-tiered in nature, calculating recommended rates for customer communities based upon: (a) adherence to the rate-making methodology established in 1976-1977 for customer communities not party to the uniform water and sewer service agreements; (b) rate methodology changes, based upon the uniform service agreements with our UAB partners.

This rate review continues to incorporate provisions of the third amendment to the uniform service agreements with our Utility Partners; specifically, the elimination of penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker. That provision generated \$167,859 to support the ICB, the program aimed at addressing retail users requiring assistance in payment of their water/sewer bills, an increase of \$9,853 from the 2010 Rate Study. The third amendment also provides a funding mechanism, if sufficient funding is available, to limit each retail service area revenue requirement change to a level in line with the overall systems' initial average change, i.e., the City and Customer Community Circuit Breaker. Adequate funds were available to achieve that goal in the water system and full relief was provided to Grand Rapids, Walker and Tallmadge Township. Adequate funds were also available in the sewage system and full relief was provided to Grand Rapids, Kentwood and Tallmadge Township.

The 2012 water rates reflect increases resulting from capital projects put in service and from decreased revenue credits; decreases were seen from personal services and contractual services related to Comprehensive Master Plan work and the new Customer Information System. Sewer rates for 2012 reflect increases for CSO and other capital projects, biosolids, and the impact of the judgment awarded in the CTE lawsuit, which was reflected in the 2011 rates as a credit; decreases were seen from personal services and surcharge and other revenue credits. Both systems saw increases as a result of declining billed volume and the phase-in of the provision for using a three year average to smooth billed flow first used in the 2010 Rate Study.

Summaries of proposed overall revisions for the systems are as follows:

1. Water Supply System revenue requirements increased \$2,047,970 or 5.15% more than revenues generated by existing rates and charges.
2. Sewage Disposal System revenue requirements increased \$1,408,639 or 2.89% more than revenues generated by existing rates and charges.

Attached is a schedule of comparative 2011/2012 water/sewer approximate quarterly billings based on system consumption averages for a typical domestic user in Grand Rapids and retail customer communities. That schedule also includes a comparison of the approximate 2011/2012 monthly charges for Wright Township's REU (Residential Equivalent Unit) rate structure. Comparative rate adjustments are also noted for our wholesale customer communities.

Announcement of proposed 2012 water and sewer rates to our UAB partners and other customer communities was made on Thursday, November 10, 2011. The City Commission approved customer community rates by resolution (file #81000) on December 20, 2011.

Public hearings for water and sewer rates and charges in Grand Rapids were held on December 6, 2011 (file #80948 and #80949). The City Commission approved final adoption of water and sewer rate ordinances (2011-58 & 2011-59) on December 20, 2011 (file #80964 and #80965).

LW

Attachment

**CITY OF GRAND RAPIDS, MICHIGAN
2011 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
December 13, 2011**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2011</u>	<u>2012</u>	<u>DOLLARS</u>	<u>PERCENT</u>
GRAND RAPIDS				
WATER	\$ 70.07	\$ 73.74	\$ 3.67	5.24%
SEWER	95.61	99.18	3.57	3.73%
	<u>\$ 165.68</u>	<u>\$ 172.92</u>	<u>\$ 7.24</u>	4.37%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 74.29	\$ 78.55	\$ 4.26	5.73%
SEWER	138.96	139.98	1.02	0.73%
	<u>\$ 213.25</u>	<u>\$ 218.53</u>	<u>\$ 5.28</u>	2.48%
RATIO TO GR	1.29	1.26		
KENTWOOD				
WATER	\$ 84.50	\$ 87.17	\$ 2.67	3.16%
SEWER	61.14	63.36	2.22	3.63%
	<u>\$ 145.64</u>	<u>\$ 150.53</u>	<u>\$ 4.89</u>	3.36%
RATIO TO GR	0.88	0.87		
CASCADE TWP				
WATER	\$ 111.92	\$ 116.60	\$ 4.68	4.18%
SEWER	139.05	143.49	4.44	3.19%
	<u>\$ 250.97</u>	<u>\$ 260.09</u>	<u>\$ 9.12</u>	3.63%
RATIO TO GR	1.51	1.50		
GRAND RAPIDS TWP- Contribution of \$0 for 2011, \$7,200 for 2012.				
WATER	\$ 90.79	\$ 92.61	\$ 1.82	2.00%
SEWER	132.12	132.27	0.15	0.11%
	<u>\$ 222.91</u>	<u>\$ 224.88</u>	<u>\$ 1.97</u>	0.88%
RATIO TO GR	1.35	1.30		
TALLMADGE TWP- Contribution of \$18,295 for 2011, \$17,758 for 2012.				
WATER	\$ 112.87	\$ 112.60	\$ (0.27)	-0.24%
SEWER	284.16	284.22	0.06	0.02%
	<u>\$ 397.03</u>	<u>\$ 396.82</u>	<u>\$ (0.21)</u>	-0.05%
RATIO TO GR	2.40	2.29		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER QUARTERLY CONSUMPTION OF: WATER- 23.00 UNITS OR 17,204 GALLONS
SEWER - 18.00 UNITS OR 13,464 GALLONS
NO. OF MONTHS: 3

Note: The average water consumption depicted above reflects a decrease of one (1) unit from last year's rate study. (The average quarterly consumption for water & sewer last year was 24 and 18 units, respectively).

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$5,000 for 2011, \$5,000 for 2012.

SEWER (No. of REU 1.00)	<u>\$ 184.92</u>	<u>\$ 187.02</u>	<u>\$ 2.10</u>	1.14%
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CITY OF GRAND RAPIDS, MICHIGAN
2011 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
December 13, 2011

	<u>2011</u>	<u>2012</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$ 16,119.00	\$ 17,894.00	11.01%
- COMMODITY (100 CF)	1.19	1.24	4.20%
SEWER - SERVICE (MONTHLY)	1,775.00	1,679.00	-5.41%
- COMMODITY (MG)	1,614.00	1,534.00	-4.96%
ADA TWP			
WATER - SERVICE	\$ 35,517.00	\$ 37,090.00	4.43%
- COMMODITY	1.30	1.36	4.62%
SEWER - SERVICE	48,827.00	49,052.00	0.46%
- COMMODITY	1,996.00	1,918.00	-3.91%
OTTAWA COUNTY			
WATER - SERVICE	\$ -	\$ 231.00	N/A
- COMMODITY	1.28	1.31	2.34%
GAINES TWP			
SEWER - SERVICE	\$ 1,486.00	\$ 1,468.00	-1.21%
- COMMODITY	1,361.00	1,384.00	1.69%

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ANNUAL RATE REVIEW**

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ANNUAL RATE REVIEW**

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**CITY OF GRAND RAPIDS, MICHIGAN
FINAL CONSIDERATIONS
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**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 SYSTEM ADDITIONS AND IMPROVEMENTS
 FOR THE YEAR ENDED JUNE 30, 2011
 TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		INTERMEDIATE		PRIMARY		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	37,070	7.02	24,299	4.60	17	0.00	61,386	11.62
Abandonment	(44,660)	(8.46)	(16,773)	(3.18)	(1,792)	(0.34)	(63,225)	(11.98)
CSO Construction	13,464	2.55	2,262	0.43	0	0.00	15,726	2.98
CSO Abandonment	(12,817)	(2.43)	(2,338)	(0.44)	0	0.00	(15,155)	(2.87)
	<u>(6,943)</u>	<u>(1.32)</u>	<u>7,450</u>	<u>1.41</u>	<u>(1,775)</u>	<u>(0.34)</u>	<u>(1,268)</u>	<u>(0.25)</u>
Kentwood								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	(28)	(0.01)	0	0.00	(28)	(0.01)
	<u>0</u>	<u>0.00</u>	<u>(28)</u>	<u>(0.01)</u>	<u>0</u>	<u>0.00</u>	<u>(28)</u>	<u>(0.01)</u>
Cascade Twp.								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
G.R. Twp.								
Construction	672	0.13	839	0.16	0	0.00	1,511	0.29
Abandonment	0	0.00	(669)	(0.13)	0	0.00	(669)	(0.13)
	<u>672</u>	<u>0.13</u>	<u>170</u>	<u>0.03</u>	<u>0</u>	<u>0.00</u>	<u>842</u>	<u>0.16</u>
Tallmadge Twp.								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Walker								
Construction	17	0.00	3,950	0.75	0	0.00	3,967	0.75
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>17</u>	<u>0.00</u>	<u>3,950</u>	<u>0.75</u>	<u>0</u>	<u>0.00</u>	<u>3,967</u>	<u>0.75</u>
TOTAL	<u>(6,254)</u>	<u>(1.19)</u>	<u>11,542</u>	<u>2.18</u>	<u>(1,775)</u>	<u>(0.34)</u>	<u>3,513</u>	<u>0.65</u>

WATER COSTS-CONTRIBUTIONS

COMMUNITY	COMMUNITY COST
Grand Rapids	\$ 131
Kentwood	0
Cascade Twp.	0
Grand Rapids Twp.	56,441
Tallmadge Twp.	0
Walker	63,794
TOTAL	<u>\$ 120,366</u>

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
FISCAL YEAR ENDED JUNE 30, 2011**

ACTIVITY CODE	ACTIVITY	EXPENSE BY ACTIVITY	PUMPING STATIONS			WATERMAINS			RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
			FILTRATION PLANT	PRIMARY	INTERM.	PRIMARY TRANSPORT	INTERMED. TRANSPORT	LOCAL DISTRIBUTION			
0430	TREASURER-CUSTOMER SERVICE	\$ 321,557						\$ 321,557			
4312	WATER-CUSTOMER SERVICE *	3,035,313						3,035,313			
4315	ENGINEERING	1,002,589							1,002,589		
4320	COLDBROOK CONTROL	1,419,675		1,419,675							
4322	COLDBROOK DISTRIBUTION	2,216,497		624,060	1,592,437						
4331	FIELD OPERATIONS	6,206,198				311,489	1,589,469				
4342	FILTRATION	6,915,346	6,915,346								
	SUBTOTAL OPERATING EXPENSE	21,117,175	6,915,346	2,043,735	1,592,437	311,489	1,589,469	3,356,870	1,002,589	-	
4311	ADMINISTRATION	2,392,012								2,392,012	
	TOTAL	\$ 23,509,187	\$ 6,915,346	\$ 2,043,735	\$ 1,592,437	\$ 311,489	\$ 1,589,469	\$ 3,356,870	\$ 1,002,589	\$ 2,392,012	

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

0430	TREASURER-CUSTOMER SERVICE	100.000%						100.000%		
4312	WATER-CUSTOMER SERVICE	100.000%						100.000%		
4315	ENGINEERING	100.000%							100.000%	
4320	COLDBROOK CONTROL	100.000%		100.000%						
4322	COLDBROOK DISTRIBUTION	100.000%		28.160%	71.840%					
4331	FIELD OPERATIONS	100.000%		5.019%	25.611%			69.370%		
	TOTAL MILES OF MAIN	1,161.10		58.28	297.37			805.45		
4342	FILTRATION	100.000%	100.000%							
4311	ADMINISTRATION	100.000%								100.000%

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL					WHOLESALE					
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
FILTRATION PLANT	\$ 6,915,346	\$ 6,915,346											
PUMPING STATIONS:													
A. PRIMARY TRANSPORT	2,043,735	2,043,735											
B. INTERMEDIATE TRANSPORT	1,592,437		1,215,069	45,775	331,593	-	-	-	-	-	-	-	-
WATERMAINS:													
A. PRIMARY TRANSPORT	311,489		255,957	17,210	24,371	8,980	4,971						
B. INTERMEDIATE TRANSPORT	1,589,469		607,780	334,981	287,885	207,712	129,192	21,919					
C. LOCAL DISTRIBUTION	4,305,240		3,178,300	335,120	292,498	230,373	256,119	12,830					
RETAIL CUSTOMER METERING	3,356,870		2,547,226	266,905	223,400	143,271	169,052	7,016					
SUBTOTAL OPERATING EXPENSE	20,114,586	8,959,081	7,804,332	999,991	1,159,747	590,336	559,334	41,765					
ENGINEERING SERVICES	1,002,589	446,553	388,995	49,839	57,809	29,426	27,882	2,085					
ADMINISTRATIVE EXPENSE	2,392,012	1,065,402	928,077	118,907	137,923	70,206	66,522	4,975					
TOTAL	\$ 23,509,187	\$ 10,471,036	\$ 9,121,404	\$ 1,168,737	\$ 1,355,479	\$ 689,968	\$ 653,738	\$ 48,825	\$ -	\$ -	\$ -	\$ -	\$ -

METHOD OF DISTRIBUTION

FILTRATION PLANTS	100.00%	100.00%											
PUMPING STATIONS													
A. PRIMARY TRANSPORT	100.00%	100.00%											
B. INTERMEDIATE TRANSPORT	100.00%	100.00%	76.302%	2.875%	20.823%								
MEMO													
WATERMAINS													
TOTAL MILES:	1,161.10												
A. PRIMARY TRANSPORT	58.28		82.172%	5.525%	7.824%	2.883%	1.596%						
MILES	297.37		47.89	3.22	4.56	1.68	0.93						
B. INTERMEDIATE TRANSPORT	805.45		38.238%	21.075%	18.112%	13.068%	8.128%	1.379%					
MILES	80,477.00		113.71	62.67	53.86	38.86	24.17	4.10					
C. LOCAL DISTRIBUTION			73.824%	7.784%	6.794%	5.351%	5.949%	0.298%					
MILES			594.61	62.70	54.72	43.10	47.92	2.40					
RETAIL CUSTOMER METERING (1)			75.881%	7.951%	6.655%	4.268%	5.036%	0.209%					
NUMBER OF METERS			61,066.00	6,399.00	5,356.00	3,435.00	4,053.00	168.00					
ENGINEERING SERVICES (2)			38.799%	4.971%	5.766%	2.935%	2.781%	0.208%					
ADMINISTRATIVE EXPENSE (3)			38.799%	4.971%	5.766%	2.935%	2.781%	0.208%					

NOTES:
 (1) ALLOCATION BASED ON NUMBER OF METERS.
 (2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.
 (3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
 FISCAL YEAR ENDED JUNE 30, 2011

ACTIVITY CODE	ACTIVITY	ADJUSTED EXPENSE BY ACTIVITY	PUMPING STATIONS		WATERMAINS		RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
			PRIMARY	INTERM.	PRIMARY TRANSPORT	INTERMED. TRANSPORT			
0430	TREASURER-CUSTOMER SERVICE	\$ 331,505					\$ 331,505		
4312	WATER-CUSTOMER SERVICE *	3,021,235					3,021,235		
4315	ENGINEERING	1,200,898						1,200,898	
4320	COLDBROOK CONTROL	1,479,291	1,479,291						
4322	COLDBROOK DISTRIBUTION	2,249,948	633,479	1,616,469					
4331	FIELD OPERATIONS	6,332,603			317,833	1,621,843			
4342	FILTRATION	7,067,279		7,067,279					
	SUBTOTAL OPERATING EXPENSE	21,682,759	2,112,770	1,616,469	317,833	1,621,843	3,352,740	1,200,898	-
4311	ADMINISTRATION	2,403,260							2,403,260
	TOTAL	\$ 24,086,019	\$ 2,112,770	\$ 1,616,469	\$ 317,833	\$ 1,621,843	\$ 3,352,740	\$ 1,200,898	\$ 2,403,260

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

0430	TREASURER-CUSTOMER SERVICE	100.000%					100.000%		
4312	WATER-CUSTOMER SERVICE	100.000%					100.000%		
4315	ENGINEERING	100.000%						100.000%	
4320	COLDBROOK CONTROL	100.000%	100.000%						
4322	COLDBROOK DISTRIBUTION	100.000%	28.160%	71.840%					
4331	FIELD OPERATIONS	100.000%	5.019%	25.611%	69.370%				
	TOTAL MILES OF MAIN	1,161.10	58.28	297.37	805.45				
4342	FILTRATION	100.000%							
4311	ADMINISTRATION	100.000%							100.000%

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL					WHOLESALE					
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
FILTRATION PLANT	\$ 7,067,279	\$ 7,067,279											
PUMPING STATIONS:													
A. PRIMARY TRANSPORT	2,112,770	2,112,770											
B. INTERMEDIATE TRANSPORT	1,616,469		1,233,406	46,466	336,597								
WATERMAINS:													
A. PRIMARY TRANSPORT	317,833		261,170	17,560	24,867		9,163	5,073					
B. INTERMEDIATE TRANSPORT	1,621,843		620,162	341,803	293,748		211,942	131,823		22,365			
C. LOCAL DISTRIBUTION	4,392,927		3,243,035	341,945	298,455		235,066	261,335		13,091			
RETAIL CUSTOMER METERING	3,352,740		2,544,093	266,576	223,125		143,095	168,844		7,007			
SUBTOTAL OPERATING EXPENSE	20,481,861	9,180,049	7,901,866	1,014,350	1,176,792		599,266	567,075		42,463			
ENGINEERING SERVICES	1,200,898		463,306	59,468	69,004		35,138	33,253		2,486			
ADMINISTRATIVE EXPENSE	2,403,260		927,178	119,009	138,091		70,319	66,546		4,975			
TOTAL	\$ 24,086,019	\$ 10,795,434	\$ 9,292,350	\$ 1,192,827	\$ 1,383,887		\$ 704,723	\$ 666,874		\$ 49,924			\$ -

METHOD OF DISTRIBUTION

FILTRATION PLANTS	100.00%												
PUMPING STATIONS		100.00%											
A. PRIMARY TRANSPORT	100.00%												
B. INTERMEDIATE TRANSPORT	100.00%		76.302%	2.875%	20.823%								

MEMO

WATERMAINS													
TOTAL MILES:	1,161.10												
A. PRIMARY TRANSPORT		100.000%	82.172%	5.525%	7.824%		2.883%	1.596%					
MILES	58.28		47.89	3.22	4.56		1.68	0.93					
B. INTERMEDIATE TRANSPORT		100.000%	38.238%	21.075%	18.112%		13.068%	8.128%		1.379%			
MILES	297.37		113.71	62.67	53.86		38.86	24.17		4.10			
C. LOCAL DISTRIBUTION		100.000%	73.824%	7.784%	6.794%		5.351%	5.949%		0.298%			
MILES	805.45		594.61	62.70	54.72		43.10	47.92		2.40			
RETAIL CUSTOMER METERING (1)		100.000%	75.881%	7.951%	6.655%		4.268%	5.036%		0.209%			
NUMBER OF METERS	80,477.00		61,066.00	6,399.00	5,356.00		3,435.00	4,053.00		168.00			
ENGINEERING SERVICES (2)		100.000%	38.580%	4.952%	5.746%		2.926%	2.769%		0.207%			
ADMINISTRATIVE EXPENSE (3)		100.000%	38.580%	4.952%	5.746%		2.926%	2.769%		0.207%			

NOTES:

- (1) ALLOCATION BASED ON NUMBER OF METERS.
- (2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.
- (3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2011
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4301, 4311 & 4480 - ADMINISTRATION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 80,540.95	\$ 22,454.82	\$ 102,995.77
706	PERMANENT EMPLOYEES	472,228.64	-	472,228.64
709	TIME & ONE-HALF	736.80	-	736.80
712	UNEMPLOYMENT COMPENSATION	674.87	-	674.87
715	EMPLOYERS SOCIAL SECURITY	35,786.52	-	35,786.52
717	SPECIAL PENSION BENEFITS	9,561.53	-	9,561.53
719	HOSPITALIZATION INSURANCE	63,395.60	13,978.73	77,374.33
721	LONGEVITY PAY	1,512.63	-	1,512.63
722	RETIREMENT FUND CONTRIBUTION	42,240.16	22,319.70	64,559.86
725	FOOD/CLEAN/CAR ALLOWANCE	2,496.00	-	2,496.00
xxx	LABOR NEGOTIATION IMPACT		(38,396.35)	(38,396.35)
	TOTAL PERSONAL SERVICES	<u>709,173.70</u>	<u>20,356.90</u>	<u>729,530.60</u>
728	SUPPLIES	1,866.37	-	1,866.37
785	PAVEMENT REPAIR	549.43	-	549.43
	TOTAL SUPPLIES	<u>2,415.80</u>	<u>-</u>	<u>2,415.80</u>
810	BAD DEBT WRITE-OFFS	22,437.32	-	22,437.32
814	COMPUTER SERVICES	157,641.94	-	157,641.94
818	CONTRACTUAL SERVICES	185,411.02	-	185,411.02
847	ADMINISTRATIVE SERVICES	150.48	-	150.48
872	PROFESSIONAL DEVELOPMENT	13,903.62	-	13,903.62
873	OTHER TRAVEL AND TRAINING	12,921.83	-	12,921.83
875	MEMBERSHIPS	16,680.67	-	16,680.67
876	PUBLICATIONS AND SUBSCRIPTIONS	2,238.50	-	2,238.50
880	COMMUNITY PROMOTION	10,161.18	-	10,161.18
900	PRINTING & PUBLISHING	2,721.79	-	2,721.79
912	CLAIMS/GENERAL INSURANCE	339,101.00	33,134.00	372,235.00
919	INSURANCE PREMIUMS	146,800.00	-	146,800.00
928	TELEPHONE	1,891.13	-	1,891.13
930	MAINTENANCE REPAIR	180.00	-	180.00
945	LAND RENTAL OR LEASE	1,640.21	-	1,640.21
947	VEHICLE RENTAL/CAR MILEAGE	4,072.00	-	4,072.00
	TOTAL OTHER SERVICES & CHARGES	<u>917,952.69</u>	<u>33,134.00</u>	<u>951,086.69</u>
982	EQUIPMENT	2,816.96	-	2,816.96
986	CONSTRUCTION IN PROGRESS	(45.64)	-	(45.64)
	TOTAL CAPITAL	<u>2,771.32</u>	<u>-</u>	<u>2,771.32</u>
999	OPERATING TRANSFERS OUT	759,698.00	(42,242.00)	717,456.00
	TOTAL TRANSFERS/FEEES	<u>759,698.00</u>	<u>(42,242.00)</u>	<u>717,456.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,392,011.51</u>	<u>\$ 11,248.90</u>	<u>\$ 2,403,260.41</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2011
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4312- CUSTOMER SERVICES

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 362,534.72	\$ 101,074.68	\$ 463,609.40
706	PERMANENT EMPLOYEES	2,149,417.10	-	2,149,417.10
707	TEMPORARY EMPLOYEES	33,280.45	-	33,280.45
708	SHIFT DIFFERENTIAL	924.20	-	924.20
709	TIME & ONE-HALF	100,262.30	-	100,262.30
710	ACT.ASSIGNMENT	7,809.39	-	7,809.39
712	UNEMPLOYMENT COMPENSATION	4,265.23	-	4,265.23
715	EMPLOYERS SOCIAL SECURITY	170,155.38	-	170,155.38
719	HOSPITALIZATION INSURANCE	542,668.84	119,658.48	662,327.32
721	LONGEVITY PAY	25,035.92	-	25,035.92
722	RETIREMENT FUND CONTRIBUTION	285,856.17	151,046.40	436,902.57
725	FOOD/CLEAN/CAR ALLOWANCE	37.56	-	37.56
xxx	LABOR NEGOTIATION IMPACT		(202,701.34)	(202,701.34)
	TOTAL PERSONAL SERVICES	<u>3,682,247.26</u>	<u>169,078.22</u>	<u>3,851,325.48</u>
728	SUPPLIES	49,878.46	-	49,878.46
730	POSTAGE	212,261.45	-	212,261.45
780	INVENTORY - COST OF GOODS SOLD	111,879.21	-	111,879.21
	TOTAL SUPPLIES	<u>374,019.12</u>	<u>-</u>	<u>374,019.12</u>
814	COMPUTER SERVICES	283,243.46	293,034.00	576,277.46
818	CONTRACTUAL SERVICES	444,485.79	192,833.00	637,318.79
835	FEES	190.00	-	190.00
847	ADMINISTRATIVE SERVICES	231,166.00	(231,166.00)	-
874	LOCAL BUSINESS EXPENSE	450.00	-	450.00
900	PRINTING & PUBLISHING	2,662.95	-	2,662.95
928	TELEPHONE	11,746.26	-	11,746.26
930	MAINTENANCE REPAIR	479,891.35	-	479,891.35
943	EQUIPMENT RENTALS OR LEASE	155,886.61	-	155,886.61
947	VEHICLE RENTAL/CAR MILEAGE	11,899.35	-	11,899.35
	TOTAL OTHER SERVICES & CHARGES	<u>1,621,621.77</u>	<u>254,701.00</u>	<u>1,876,322.77</u>
981	FURNITURE	1,522.94	-	1,522.94
982	EQUIPMENT	5,451.06	-	5,451.06
	TOTAL CAPITAL	<u>6,974.00</u>	<u>-</u>	<u>6,974.00</u>
	ORGANIZATIONAL UNIT TOTAL (GROSS)	\$ 5,684,862.15	\$ 423,779.22	\$ 6,108,641.37
	LESS: SDSF CONTRIBUTION *	(2,649,549.00)	(437,856.96)	(3,087,405.96)
	ORGANIZATIONAL UNIT TOTAL (NET)	<u>\$ 3,035,313.15</u>	<u>\$ (14,077.74)</u>	<u>\$ 3,021,235.41</u>

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4315- ENGINEERING

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 79,082.69	\$ 22,048.25	\$ 101,130.94
706	PERMANENT EMPLOYEES	486,442.11	-	486,442.11
707	TEMPORARY EMPLOYEES	23,738.74	-	23,738.74
709	TIME & ONE-HALF	5,049.23	-	5,049.23
710	ACT.ASSIGNMENT	1,602.37	-	1,602.37
712	UNEMPLOYMENT COMPENSATION	1,542.06	-	1,542.06
714	REGULAR HOURLY RATE	50.56	-	50.56
715	EMPLOYERS SOCIAL SECURITY	37,112.95	-	37,112.95
719	HOSPITALIZATION INSURANCE	94,391.40	20,813.30	115,204.70
721	LONGEVITY PAY	3,350.84	-	3,350.84
722	RETIREMENT FUND CONTRIBUTION	63,265.05	33,429.25	96,694.30
xxx	LABOR NEGOTIATION IMPACT		(43,595.94)	(43,595.94)
	TOTAL PERSONAL SERVICES	<u>795,628.00</u>	<u>32,694.86</u>	<u>828,322.86</u>
728	SUPPLIES	5,767.78	-	5,767.78
	TOTAL SUPPLIES	<u>5,767.78</u>	<u>-</u>	<u>5,767.78</u>
814	COMPUTER SERVICES	74,576.13	-	74,576.13
818	CONTRACTUAL SERVICES	26,587.76	165,614.00	192,201.76
900	PRINTING & PUBLISHING	470.40	-	470.40
928	TELEPHONE	4,723.60	-	4,723.60
930	MAINTENANCE REPAIR	7,098.30	-	7,098.30
943	EQUIPMENT RENTALS OR LEASE	45,880.54	-	45,880.54
947	VEHICLE RENTAL/CAR MILEAGE	1,522.50	-	1,522.50
	TOTAL OTHER SERVICES & CHARGES	<u>160,859.23</u>	<u>165,614.00</u>	<u>326,473.23</u>
982	EQUIPMENT	8,570.23	-	8,570.23
	TOTAL CAPITAL	<u>8,570.23</u>	<u>-</u>	<u>8,570.23</u>
999	OPERATING TRANSFERS OUT	31,764.00	-	31,764.00
	TOTAL TRANSFERS/FEEES	<u>31,764.00</u>	<u>-</u>	<u>31,764.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,002,589.24</u>	<u>\$ 198,308.86</u>	<u>\$ 1,200,898.10</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2011
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4320- COLDBROOK CONTROL

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 136,883.36	\$ 38,163.08	\$ 175,046.44
706	PERMANENT EMPLOYEES	804,916.37	-	804,916.37
707	TEMPORARY EMPLOYEES	4,923.55	-	4,923.55
708	SHIFT DIFFERENTIAL	7,268.74	-	7,268.74
709	TIME & ONE-HALF	37,518.19	-	37,518.19
710	ACT.ASSIGNMENT	25.58	-	25.58
712	UNEMPLOYMENT COMPENSATION	1,307.50	-	1,307.50
714	REGULAR HOURLY RATE	5,304.67	-	5,304.67
715	EMPLOYERS SOCIAL SECURITY	63,667.69	-	63,667.69
719	HOSPITALIZATION INSURANCE	174,986.30	38,584.48	213,570.78
721	LONGEVITY PAY	9,197.52	-	9,197.52
722	RETIREMENT FUND CONTRIBUTION	108,425.57	57,292.07	165,717.64
xxx	LABOR NEGOTIATION IMPACT		(74,423.23)	(74,423.23)
	TOTAL PERSONAL SERVICES	<u>1,354,425.04</u>	<u>59,616.40</u>	<u>1,414,041.44</u>
728	SUPPLIES	3,942.54	-	3,942.54
768	CLOTHING/CLEANING ALLOWANCE	619.78	-	619.78
	TOTAL SUPPLIES	<u>4,562.32</u>	<u>-</u>	<u>4,562.32</u>
814	COMPUTER SERVICES	11,785.01	-	11,785.01
928	TELEPHONE	22,607.71	-	22,607.71
930	MAINTENANCE REPAIR	6,773.07	-	6,773.07
943	EQUIPMENT RENTALS OR LEASE	18,951.51	-	18,951.51
947	VEHICLE RENTAL/CAR MILEAGE	570.00	-	570.00
	TOTAL OTHER SERVICES & CHARGES	<u>60,687.30</u>	<u>-</u>	<u>60,687.30</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,419,674.66</u>	<u>\$ 59,616.40</u>	<u>\$ 1,479,291.06</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2011
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4322- COLDBROOK DISTRIBUTION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 73,145.89	\$ 20,393.07	\$ 93,538.96
706	PERMANENT EMPLOYEES	436,398.03	-	436,398.03
709	TIME & ONE-HALF	7,494.25	-	7,494.25
712	UNEMPLOYMENT COMPENSATION	596.46	-	596.46
715	EMPLOYERS SOCIAL SECURITY	32,175.16	-	32,175.16
719	HOSPITALIZATION INSURANCE	96,504.65	21,279.28	117,783.93
721	LONGEVITY PAY	5,137.50	-	5,137.50
722	RETIREMENT FUND CONTRIBUTION	58,486.09	30,904.05	89,390.14
xxx	LABOR NEGOTIATION IMPACT		(39,125.72)	(39,125.72)
	TOTAL PERSONAL SERVICES	<u>709,938.03</u>	<u>33,450.68</u>	<u>743,388.71</u>
728	SUPPLIES	56,198.58	-	56,198.58
768	CLOTHING/CLEANING ALLOWANCE	409.87	-	409.87
	TOTAL SUPPLIES	<u>56,608.45</u>	<u>-</u>	<u>56,608.45</u>
814	COMPUTER SERVICES	688.99	-	688.99
818	CONTRACTUAL SERVICES	6,862.14	-	6,862.14
921	ELECTRICITY	1,280,890.89	-	1,280,890.89
922	WATER	4,170.64	-	4,170.64
923	GAS	79,003.97	-	79,003.97
930	MAINTENANCE REPAIR	11,298.15	-	11,298.15
943	EQUIPMENT RENTALS OR LEASE	62,438.06	-	62,438.06
959	REFUSE COLLECTION CHARGES	4,446.21	-	4,446.21
	TOTAL OTHER SERVICES & CHARGES	<u>1,449,799.05</u>	<u>-</u>	<u>1,449,799.05</u>
982	EQUIPMENT	105.88	-	105.88
986	CONSTRUCTION IN PROGRESS	45.64	-	45.64
	TOTAL CAPITAL	<u>151.52</u>	<u>-</u>	<u>151.52</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,216,497.05</u>	<u>\$ 33,450.68</u>	<u>\$ 2,249,947.73</u>

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4331- FIELD OPERATIONS

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 293,462.22	\$ 81,817.27	\$ 375,279.49
706	PERMANENT EMPLOYEES	1,740,432.33	-	1,740,432.33
708	SHIFT DIFFERENTIAL	1,550.63	-	1,550.63
709	TIME & ONE-HALF	229,940.79	-	229,940.79
710	ACT.ASSIGNMENT	1,150.54	-	1,150.54
712	UNEMPLOYMENT COMPENSATION	2,431.24	-	2,431.24
715	EMPLOYERS SOCIAL SECURITY	149,706.97	-	149,706.97
719	HOSPITALIZATION INSURANCE	409,213.61	90,231.60	499,445.21
721	LONGEVITY PAY	18,003.29	-	18,003.29
722	RETIREMENT FUND CONTRIBUTION	232,869.85	123,048.43	355,918.28
xxx	LABOR NEGOTIATION IMPACT		(168,692.94)	(168,692.94)
	TOTAL PERSONAL SERVICES	<u>3,078,761.47</u>	<u>126,404.36</u>	<u>3,205,165.83</u>
728	SUPPLIES/INVENTORY	11,394.56	-	11,394.56
785	PAVEMENT REPAIR	1,165,404.32	-	1,165,404.32
	TOTAL SUPPLIES	<u>1,176,798.88</u>	<u>-</u>	<u>1,176,798.88</u>
814	COMPUTER SERVICES	24,157.99	-	24,157.99
818	CONTRACTUAL SERVICES	16,103.83	-	16,103.83
880	COMMUNITY PROMOTION	1,717.57	-	1,717.57
921	ELECTRICITY	49,727.99	-	49,727.99
922	WATER	1,181.09	-	1,181.09
923	GAS	33,221.64	-	33,221.64
928	TELEPHONE	21,323.18	-	21,323.18
930	MAINTENANCE REPAIR	888,692.94	-	888,692.94
943	EQUIPMENT RENTALS OR LEASE	889,825.03	-	889,825.03
947	VEHICLE RENTAL/CAR MILEAGE	2,042.50	-	2,042.50
	TOTAL OTHER SERVICES & CHARGES	<u>1,927,993.76</u>	<u>-</u>	<u>1,927,993.76</u>
982	EQUIPMENT	22,644.16	-	22,644.16
	TOTAL CAPITAL	<u>22,644.16</u>	<u>-</u>	<u>22,644.16</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 6,206,198.27</u>	<u>\$ 126,404.36</u>	<u>\$ 6,332,602.63</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2011
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4342- LAKE MI. FILTRATION

<u>EXPENDITURE SUB-OBJECT</u>		<u>OPERATING</u>	<u>ADJUSTED</u>	<u>ADJUSTED</u>
<u>NO.</u>	<u>DESCRIPTION</u>	<u>EXPENSES</u>	<u>COST</u>	<u>CURRENT</u>
			<u>FACTORS</u>	<u>ANNUAL</u>
				<u>EXPENSES</u>
703	RETIREE HEALTH CARE	\$ 334,834.49	\$ 93,351.86	\$ 428,186.35
706	PERMANENT EMPLOYEES	1,945,752.77	-	1,945,752.77
708	SHIFT DIFFERENTIAL	7,701.74	-	7,701.74
709	TIME & ONE-HALF	46,714.34	-	46,714.34
710	ACT.ASSIGNMENT	1,651.14	-	1,651.14
712	UNEMPLOYMENT COMPENSATION	2,775.13	-	2,775.13
714	REGULAR HOURLY RATE	3,370.40	-	3,370.40
715	EMPLOYERS SOCIAL SECURITY	152,562.22	-	152,562.22
719	HOSPITALIZATION INSURANCE	442,105.28	97,484.21	539,589.49
721	LONGEVITY PAY	16,288.40	-	16,288.40
722	RETIREMENT FUND CONTRIBUTION	261,796.56	138,333.30	400,129.86
xxx	LABOR NEGOTIATION IMPACT		(177,236.09)	(177,236.09)
	TOTAL PERSONAL SERVICES	3,215,552.47	151,933.28	3,367,485.75
728	SUPPLIES	1,239,239.98	-	1,239,239.98
730	POSTAGE	104.71	-	104.71
768	CLOTHING/CLEANING ALLOWANCE	400.90	-	400.90
780	INVENTORY - COST OF GOODS SOLD	26,088.07	-	26,088.07
	TOTAL SUPPLIES	1,265,833.66	-	1,265,833.66
814	COMPUTER SERVICES	66,319.01	-	66,319.01
818	CONTRACTUAL SERVICES	212,766.12	-	212,766.12
835	FEES	2,000.00	-	2,000.00
875	MEMBERSHIPS	2,538.36	-	2,538.36
921	ELECTRICITY	1,579,878.12	-	1,579,878.12
923	GAS	339,899.75	-	339,899.75
928	TELEPHONE	15,790.13	-	15,790.13
930	MAINTENANCE REPAIR	104,527.03	-	104,527.03
943	EQUIPMENT RENTALS OR LEASE	96,704.78	-	96,704.78
947	VEHICLE RENTAL/CAR MILEAGE	1,271.62	-	1,271.62
959	REFUSE COLLECTION CHARGES	1,669.88	-	1,669.88
	TOTAL OTHER SERVICES & CHARGES	2,423,364.80	-	2,423,364.80
982	EQUIPMENT	10,595.00	-	10,595.00
	TOTAL CAPITAL	10,595.00	-	10,595.00
	ORGANIZATIONAL UNIT TOTAL	\$ 6,915,345.93	\$ 151,933.28	\$ 7,067,279.21

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2011
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 0430- TREASURER- CUSTOMER SERV'S

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 23,058.04	\$ 6,428.58	\$ 29,486.62
706	PERMANENT EMPLOYEES	128,313.38	-	128,313.38
707	TEMPORARY EMPLOYEES	9,865.85	-	9,865.85
710	ACT.ASSIGNMENT	160.74	-	160.74
712	UNEMPLOYMENT COMPENSATION	563.83	-	563.83
715	EMPLOYERS SOCIAL SECURITY	10,837.96	-	10,837.96
719	HOSPITALIZATION INSURANCE	29,819.11	6,575.11	36,394.22
721	LONGEVITY PAY	873.99	-	873.99
722	RETIREMENT FUND CONTRIBUTION	17,187.86	9,082.07	26,269.93
xxx	LABOR NEGOTIATION IMPACT		(12,138.33)	(12,138.33)
	TOTAL PERSONAL SERVICES	220,680.76	9,947.43	230,628.19
728	SUPPLIES	3,857.86	-	3,857.86
	TOTAL SUPPLIES	3,857.86	-	3,857.86
814	COMPUTER SERVICES	28,939.01	-	28,939.01
818	CONTRACTUAL SERVICES	6,537.31	-	6,537.31
835	FEES	36,705.10	-	36,705.10
912	CLAIMS	4,985.00	-	4,985.00
930	MAINTENANCE REPAIR	2,078.18	-	2,078.18
942	BUILDINGS RENTALS OR LEASE	8,233.82	-	8,233.82
947	VEHICLE RENTAL/CAR MILEAGE	4,870.08	-	4,870.08
	TOTAL OTHER SERVICES & CHARGES	92,348.50	-	92,348.50
982	EQUIPMENT	4,670.02	-	4,670.02
	TOTAL CAPITAL	4,670.02	-	4,670.02
	ORGANIZATIONAL UNIT TOTAL	\$ 321,557.14	\$ 9,947.43	\$ 331,504.57

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2011
TO: Eric R. DeLong
Deputy City Manager
FROM: Scott Saindon 
Financial Analyst

SUBJECT: 2011 WATER RATE STUDY- TASK #4- BACKGROUND INFORMATION

The following are the Water System's operating expenses for the test period, as reported in the City's adjusted expenditure ledger for the period ended June 30, 2011.

NON-INTEGRATED

4311- Administration	\$2,392,012
4312- Customer Services	6,006,419
4315- Engineering	1,002,589
4331- Field Operations	6,206,198

INTEGRATED

4342- Lake Mi. Filtration	6,915,346
---------------------------	-----------

INTEGRATED & NON-INTEGRATED

4320- Coldbrook Control	1,419,675
4322- Coldbrook Distribution	2,216,497

Attached is the calculation of integrated and non-integrated adjusted expenses for Coldbrook Distribution (4322) for 2011.

SS

Attachment

wrs\wtask4 2011

ALLOCATION OF COLDBROOK PUMPING TO WATER PUMPING FACILITIES

STATION	ENERGY COST	PERCENT	EXPENDITURE ALLOCATION	
			ACTUAL	ADJUSTED
ALGER	\$ 51,710	4.03%	\$ 89,481	\$ 90,831
BOOSTER A	10,212	0.80%	17,671	17,938
BOOSTER D	19,938	1.56%	34,501	35,022
BRISTOL	26,453	2.07%	45,775	46,466
COLDBROOK	303,936	23.73%	525,942	533,879
COVELL	34,317	2.68%	59,383	60,280
EAST PARIS	191,624	14.96%	331,593	336,597
FRANKLIN	341,844	26.69%	591,538	600,466
LEFFINGWELL	2,130	0.17%	3,686	3,741
LIVINGSTON	178,946	13.97%	309,654	314,327
WILSON	43,990	3.43%	76,122	77,271
BURTON	12,712	0.99%	21,997	22,329
DEAN LAKE	63,079	4.92%	109,154	110,801
TOTAL	<u>\$ 1,280,891</u>	<u>100.00%</u>	<u>\$ 2,216,497</u>	<u>\$ 2,249,948</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 31, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Buhner 
Chief Financial Officer

SUBJECT: 2011 WATER RATE STUDY ANNUAL EXPENSE ADJUSTMENTS-TASK #5

Attached are adjustments to test period actual operating expenses to be included in Task #5 of the Water Rate Study.

Attachment

**CITY OF GRAND RAPIDS
WATER SUPPLY SYSTEM FUND
RATE STUDY TASK NO. 5
NOTES TO ADJUSTED CURRENT ANNUAL EXPENSES
FOR THE YEAR ENDED JUNE 30, 2011**

Sub-Object - 703

The factor to establish calendar year 2012 retiree health care cost is 27.88%. Increase total of fiscal year 2011's retiree health care (sub-object 703) by this percent to establish the cost for calendar year 2012.

Sub-Object - 704, 705, 706, 707, 709, 710, 713, 714, 718, 723, 724

The wage increase factor to translate FY2011 actual costs to estimated calendar 2012 will be 0.0%. No wage increases are anticipated.

Sub-Object - 715

Increase FY2011 actual FICA expense by 0.0% to account for the effect of the wage increases.

Sub-Object - 719

Increase FY2011 health insurance actual by 22.05% to reflect rate changes effective in calendar year 2012 and calendar year 2013.

Sub-Object - 722

Increase FY2011 actual expense by 52.84% to reflect the effect of a General Pension rate change increase from FY2011 13.62% to calendar year rate of 20.82% and an estimated wage increase of 0.0%.

Sub-Object - 912/999

Administration - Adjust FY2011 actual cost to reflect adjustments in charges for central services rendered by the Insurance Payment Fund and the General Operating Fund.

Personal Generally

Labor negotiations are projected to save 8.2% annualized. Other initiatives are projected to save additional amounts. These changes will occur at different points in time. The result is that overall personal costs (total cost of compensation) should be reduced by 5%.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson 
Water System Manager

SUBJECT: 2011 WATER RATE STUDY - TASK #5-KNOWN COST INCREASES/DECREASES

Known cost increases by which to adjust FY11 operating costs include fund carry-forwards for the GIS project and training/support & maintenance costs related to the CIS project plan that were not completed prior to June 30, 2011, as detailed below. In addition to the below carry-forwards, the computer services account (4312-814) within Customer Services has been adjusted by \$293,034 for depreciation and return on investment (ROI) related to the August 22, 2011 CIS implementation.

<u>ACCOUNT</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
4312-818	EMA, Inc. (CIS)	\$104,633
4312-818	Cayenta/Harris (CIS)	88,200
4315-818	EMA, Inc. (GIS)	165,614

JT/SS

wrs\wtask5 2011

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2011

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2011 WATER RATE STUDY - TASK #6

Attached are the Water Supply System Fund's revenues and volumes by governmental unit for the year ended June 30, 2011, and volume comparisons for the past five (5) years by governmental unit and for the total system.

LW

Attachment

wrs\wtask6 2011

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
TASK NO. 6**

DETERMINE WATER VOLUME AND REVENUE BY GOVERNMENTAL ENTITY FOR THE YEAR ENDED JUNE 30, 2011

RETAIL:	SALES REVENUE		3 YR AVE VOL BILLED
	<u>A</u>	<u>B</u>	<u>(GALLONS)</u>
CITY OF GRAND RAPIDS (1)	\$ 23,316,969.72		6,481,036,276
CITY OF WALKER	3,018,676.18		893,315,456
CITY OF KENTWOOD	4,184,561.88		1,192,800,444
CASCADE TOWNSHIP	2,935,744.59	38,960.00	604,768,472
GRAND RAPIDS TOWNSHIP	2,090,962.47		487,381,840
TALLMADGE TOWNSHIP	112,807.41	16,704.00	18,333,480
SUB-TOTAL RETAIL (2)	<u>\$ 35,659,722.25</u>	<u>\$ 55,664.00</u>	<u>9,677,635,968</u>
WHOLESALE:			
CITY OF E. GRAND RAPIDS	\$ 951,870.85		435,810,980
OTTAWA CO. (3)	1,174,843.86	5,760.00	666,164,312
ADA TOWNSHIP	1,335,886.18		494,360,680
SUB-TOTAL WHOLESALE	<u>\$ 3,462,600.89</u>	<u>\$ 5,760.00</u>	<u>1,596,335,972</u>
TOTAL	<u>\$ 39,122,323.14</u>	<u>\$ 61,424.00</u>	<u>11,273,971,940</u>

REVENUE CLASSIFICATION:

A) 4311 - 642008 OTTAWA COUNTY WATER SALES	\$ 1,174,843.86
4311 - 642011 RETAIL METERED WATER SALES	35,646,323.91
4311 - 642012 E. GRAND RAPIDS WATER SALES	951,870.85
4311 - 642013 WYOMING WATER SALES	13,398.34
4311 - 642021 ADA WATER SALES	1,335,886.18
	<u>SUB-TOTAL \$ 39,122,323.14</u>
B) 4311 - 607048 FIRE HYDRANT BILLINGS	61,424.00
	<u>TOTAL \$ 39,183,747.14</u>

- (1) THE VOLUME & DOLLAR AMOUNT FOR THE CITY OF WYOMING ARE INCLUDED IN THE GRAND RAPIDS TOTALS.
- (2) A REVENUE ACCRUAL OF (\$940,009) HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2011.
- (3) THE VOLUME EXCLUDES BILLINGS (2,989,756 GALLONS) FOR THE SUPPLEMENTAL AGREEMENT, DATED 5/13/2004 (aka , NOWS AGREEMENT), WITH OTTAWA FOR THE PERIOD JULY 1, 2010 TO JUNE 30, 2011.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
2011 RATE STUDY TASK NO. 6**

VOLUME COMPARISONS FOR FIVE (5) YEARS BY GOVERNMENTAL UNIT *
VOLUME = 1,000 GALLONS

MUNICIPALITY	FY07		FY08		FY09		FY10		FY11		FY07 - FY11 % CHANGE
	VOL BILLED	% CHANGE									
GRAND RAPIDS	7,413,896	-0.48%	7,378,202	-8.79%	6,729,621	-8.79%	6,488,180	-3.59%	6,225,309	-4.05%	-16.03%
WALKER	1,038,999	2.05%	1,060,320	-10.06%	953,606	-10.06%	875,586	-8.18%	850,755	-2.84%	-18.12%
KENTWOOD	1,362,597	1.13%	1,377,939	-13.00%	1,198,808	-13.00%	1,164,972	-2.82%	1,214,620	4.26%	-10.86%
CASCADE TWP	712,707	5.22%	749,885	-12.57%	655,587	-12.57%	576,850	-12.01%	581,868	0.87%	-18.36%
GRAND RAPIDS TWP	541,764	6.30%	575,872	-8.42%	527,389	-8.42%	479,671	-9.05%	455,087	-5.13%	-16.00%
TALLMADGE TWP	17,143	12.80%	19,337	5.53%	20,407	5.53%	17,420	-14.64%	17,173	-1.42%	0.17%
EAST GRAND RAPIDS	460,521	9.50%	504,268	-12.99%	438,786	-12.99%	418,797	-4.56%	449,849	7.41%	-2.32%
OTTAWA COUNTY	716,087	3.05%	737,951	-7.78%	680,543	-7.78%	706,518	3.82%	666,164	-5.71%	-6.97%
ADA TWP	542,697	2.62%	556,923	-6.08%	523,082	-6.08%	479,072	-8.41%	480,928	0.39%	-11.38%
TOTAL	12,806,411	1.20%	12,960,697	-9.51%	11,727,829	-9.51%	11,207,066	-4.44%	10,941,753	-2.37%	-14.56%
VOLUME PUMPED % BILLED TO PUMPED	14,705,000 87.1%		14,419,000 89.9%		13,172,000 89.0%		12,480,000 89.8%		12,488,000 87.6%		
GRAND RAPIDS VOLUME COMPARED TO CUSTOMER COMMUNITIES											
VOLUME = 1,000 GALLONS	FY07	% OF TOTAL	FY08	% OF TOTAL	FY09	% OF TOTAL	FY10	% OF TOTAL	FY11	% OF TOTAL	
GRAND RAPIDS	57.89%		7,378,202	56.93%	6,729,621	57.38%	6,488,180	57.89%	6,225,309	56.89%	
CUSTOMER COMMUNITIES	42.11%		5,582,495	43.07%	4,998,208	42.62%	4,718,886	42.11%	4,716,444	43.11%	
TOTAL	100.00%		12,960,697	100.00%	11,727,829	100.00%	11,207,066	100.00%	10,941,753	100.00%	

* Volumes were restated from previous Rate Studies to reflect actual billings without adjustment for accrued revenues.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 7**

OPERATING REVENUES OTHER THAN FROM SALES OF WATER:

4311-451006	CONTRACTOR UNDERGROUND LICENSE	\$ 7,080.00
4311-476012	TAPPING PERMITS	17,290.00
4311-607001	MISCELLANEOUS SERVICE FEES	42,813.22
4311-607027	INSPECTION FEES - UTILITIES	33,452.75
4311-607034	MONTHLY STATEMENT SERVICE FEES *	-
4311-607043	PRELIM/DESIGN/CONSTR ENGINEERING	5,839.20
4311-607049	SERVICES FOR CONTRACTORS	143,223.93
4311-607052	METER SETTING FEES	27,065.00
4311-642024	UNMETERED WATER	53,618.72
4311-659002	PENALTY FINES **	-
		<u>\$ 330,382.82</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR \$ 33,078.00

OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION & LAKELINE CREDIT

4311-607051	WATER FRONT FOOTAGE	\$ 23,058.50
4311-607053	INTEGRATED WATER CONNECTION	548,364.00
		<u>\$ 571,422.50</u>

OFFSETTING CREDIT TO CUSTOMER ACCOUNTING ACTIVITY EXPENSES:

4311-699001	BILLABLE EXPENSE - SEWAGE DISPOSAL SYSTEM *	<u>\$ 2,649,549.00</u>
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* Reflects discontinuance of monthly payment option fee.

** Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson *JCT*
Water System Manager

SUBJECT: 2011 WATER RATE STUDY- TASK #8

Although we continue to reduce expenditures, no significant changes in operating levels are anticipated to take effect by January 1, 2012, which would require adjustments to operating costs for the test period.

JT\SS

wrs\wtask8 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson 
Water System Manager

SUBJECT: 2011 WATER RATE STUDY- TASK #9

No significant changes in water revenues are anticipated to take effect by January 1, 2012, which would require an adjustment to operating revenue estimates as a whole.

JTSS

wrslwtask9 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 25, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg *WJS*
Assistant Water System Manager

SUBJECT: 2011 WATER RATE STUDY- TASK #10

The following are major water system projects that for rate study purposes should be considered operative as of January 1, 2012.

<u>Description</u>	<u>Location</u>	<u>Amount</u>
Seward Ave extension	Grand Rapids	359,731
College & Cottage Grove	Grand Rapids	204,207
Madison-Wealthy to Cherry	Grand Rapids	171,036
S Walker Water System Ph2-Wilson & Burton	Walker	1,126,553
Eastside CSO-Contract No. 16	Grand Rapids	488,146
Eastside CSO-Contract No. 17	Grand Rapids	154,432
Fuller Ave water main replacement at I-196	Grand Rapids	51,614
Coit-Kendalwood to North Park	Grand Rapids	71,018
Reconstruct College Ave-Fulton to Fountain	Grand Rapids	185,351
Reconstruct Grandville-Oakes to Weston	Grand Rapids	343,570
North Park St & Eastern Ave	Grand Rapids	365,528
Broadway Alley; Clover Ct; Turner Ave	Grand Rapids	98,381
Plymouth-Burton to Boston	Grand Rapids	434,086
Lafayette NE-Wealthy/State	Grand Rapids	258,171
Seward-Watson/Fulton; Lexington; Butterworth	Grand Rapids	243,228
Water System-site security improvements	Grand Rapids	54,977

WJSS

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**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
TASK NO. 11**

"COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2011"

INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 2,507,974	\$ -	\$ -
LAND IMPROVEMENTS	1,987,789	1,170,921	88,067
BUILDINGS & STRUCTURES	46,991,540	20,034,233	893,551
STORAGE	7,584,993	4,905,248	208,204
PROCESS EQUIPMENT	56,478,102	28,491,139	1,728,617
AUXILIARY EQUIPMENT	14,701,826	11,762,251	273,675
METERS	7,375,481	7,375,481	-
MACHINERY & EQUIPMENT	2,961,961	2,385,812	106,782
OFFICE EQUIPMENT & FURNITURE	622,184	622,184	-
WATERMAINS	55,592,968	15,815,214	741,240
	<u>\$ 196,804,818</u>	<u>\$ 92,562,483</u>	<u>\$ 4,040,136</u>

NON-INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 1,444,412	\$ -	\$ -
LAND IMPROVEMENTS	1,192,503	738,849	41,033
BUILDINGS & STRUCTURES	11,298,470	2,693,487	233,991
STORAGE	9,461,759	4,508,114	213,079
PROCESS EQUIPMENT	4,476,690	2,395,176	122,116
AUXILIARY EQUIPMENT	1,955,656	1,725,422	25,906
MACHINERY & EQUIPMENT	2,187,324	2,029,861	63,163
OFFICE EQUIPMENT & FURNITURE	533,805	418,444	25,522
WATERMAINS - GRAND RAPIDS	118,102,954	25,356,175	1,505,293
WATERMAINS - WALKER	21,301,436	5,781,337	283,652
WATERMAINS - KENTWOOD	24,430,442	6,351,756	325,751
WATERMAINS - CASCADE TWP	20,150,425	4,581,712	269,889
WATERMAINS - GRAND RAPIDS TWP	16,875,610	3,334,391	222,619
WATERMAINS - TALLMADGE TWP	2,014,737	252,964	26,863
	<u>\$ 235,426,223</u>	<u>\$ 60,167,688</u>	<u>\$ 3,358,877</u>
TOTAL	<u>\$ 432,231,041</u>	<u>\$ 152,730,171</u>	<u>\$ 7,399,013</u>

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2011.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 12**

TASK 12A DETERMINE WORKING CAPITAL NEEDS FOR MATERIALS AND SUPPLIES ON HAND.

MATERIALS AND SUPPLIES INVENTORY AS OF JUNE 30, 2011: \$ 2,306,071

TASK 12B DETERMINE WORKING CAPITAL NEEDS FOR PREPAYMENT OF OPERATING COSTS.

NO REQUIREMENT FOR PREPAYMENT OF OPERATING COSTS IS CALLED FOR IN THE ORDINARY CYCLE OF BUSINESS.

TASK 12C DETERMINE CASH WORKING CAPITAL NEEDS & DETERMINE TOTAL WORKING CAPITAL NEEDS.

MINIMUM CASH WORKING CAPITAL IS DEFINED AS THE SUM OF 90 DAYS ADJUSTED OPERATING EXPENSES.

ADJUSTED CURRENT ANNUAL EXPENSES = \$ 24,086,019 @ 90/365 = \$ 5,939,018

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$ 2,306,071
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	<u>5,939,018</u>
	<u>\$ 8,245,089</u>

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
ZONEGATED FACILITIES
TASK #13
November 3, 2011**

Lengths and cost of all primary and intermediate transmission mains that are jointly used were prorated based on billed flow. Jointly used storage tanks and pumping stations were also prorated based on billed flow. All zonegating work papers are on file at Oak Industrial Drive and a revised map is also on file there.

LW

wrs\wtask13 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg, P.E. *WJ*
Assistant Water System Manager

SUBJECT: 2011 WATER RATE STUDY- TASK #14

Base maps and zoned maps for the water rate study, adjusted and revised to reflect changes are presently being updated to reflect 2011 zoned information. The water maps will be completely updated by the end of calendar year 2011.

WJ/SS

wrs\wtask14 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 6, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Saindon 
Financial Analyst

**SUBJECT: 2011 WATER RATE STUDY TASK #15A
INTEGRATED WATER CONNECTION FEES**

Attached is the Integrated Water Connection Fee Schedule as currently provided for in Chapter 26 of the City Code, with the addition of rates to be effective on January 1, 2012. The City Commission on June 27, 2000 established fees through calendar year 2004. Beginning January 1, 2005, the integrated water connection fees are to be calculated on a yearly basis as part of the annual Water/Sewer Rate Study. The Consumer Price Index used to determine rates effective January 1, 2012 is as follows:

August, 2011 Index	226.545
August, 2010 Index	218.312
Increase (decrease)	8.233
Percentage increase (decrease)	3.77%

SS

Attachment

wrs\wtask15a 2011

Section 2.35 Integrated Water Connection Fee Schedule

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Connection Base Fee Schedule

Water Meter Size (inches)	<u>1/01/11</u>	<u>1/01/12</u>
3/4 or less	\$ 2,680	\$ 2,780
1	4,480	4,640
1 ½	8,920	9,260
2	14,280	14,820
3	31,280	32,440
4	56,280	58,380
6 and over	125,080	129,740

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be

constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were totaled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 16**

INCLUDE PROJECT COST FOR SYSTEM IMPROVEMENTS (NON-INTEGRATED)

THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED WATER SYSTEM IMPROVEMENTS ARE SUMMARIZED IN THE FOLLOWING TABLE.

ITEM NO.	DESCRIPTION	ESTIMATED COST
1	PATTERSON TANK	3,241,000
2	WILSON PUMP STATION IMPROVEMENTS	682,000
3	FOUR MILE ROAD WATER MAIN AND ELEVATED TANK	8,245,000
4	DEAN LAKE SERVICE CENTER EXPANSION	940,000
5	PATTERSON TANK WATERMAIN	604,000
6	EAST PARIS PUMP STATION EXPANSION	3,780,000
7	CASCADE NORTH RIVER CROSSING	3,250,000
8	LIVINGSTON DISCHARGE LINE	10,970,000
		<u>\$ 31,712,000</u>

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2012. COSTS SHOWN ARE IN 2011 DOLLARS.

SOURCE: WAYNE JERNBERG, ASSISTANT WATER SYSTEM MANAGER
 OCTOBER 2011

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 17**

**BONDS - PRINCIPAL & INTEREST PAYMENTS
1993, 2005 & 2010 BONDS**

FISCAL YEAR ENDING JUNE 30,	CASH BASIS		
	PRINCIPAL	INTEREST	PRIN & INT
2012	\$ 8,545,000	\$ 4,375,438	\$ 12,920,438
2013	8,935,000	4,164,688	13,099,688
2014	9,280,000	3,823,538	13,103,538
2015	9,735,000	3,463,088	13,198,088
2016	10,110,000	3,079,750	13,189,750
2017	10,635,000	2,616,450	13,251,450
2018	11,185,000	2,123,350	13,308,350
2019	4,505,000	1,590,500	6,095,500
2020	4,755,000	1,384,500	6,139,500
2021	1,105,000	1,169,350	2,274,350
2022	1,160,000	1,114,100	2,274,100
2023	1,215,000	1,056,100	2,271,100
2024	1,280,000	995,350	2,275,350
2025	1,340,000	931,350	2,271,350
2026	1,410,000	864,350	2,274,350
2027	1,480,000	793,850	2,273,850
2028	1,555,000	719,850	2,274,850
2029	1,625,000	649,875	2,274,875
2030	1,695,000	576,750	2,271,750
2031	1,780,000	492,000	2,272,000
2032	1,870,000	403,000	2,273,000
2033	1,965,000	309,500	2,274,500
2034	2,060,000	211,250	2,271,250
2035	2,165,000	108,250	2,273,250
	\$ 101,390,000	\$ 37,016,227	\$ 138,406,227

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 18**

DETERMINE WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE BY
SUBTRACTING DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

CONSTRUCTION COST RATE BASE - TASK NO. 15	\$ 231,523,637
LESS: BONDED INDEBTEDNESS - TASK NO. 17/20	(123,028,270)
NET WATER SYSTEM EQUITY	<u>\$ 108,495,367</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 RATE OF RETURN ON EQUITY - TASK NO. 19**

AT THE APRIL 5, 1977, COMMITTEE OF THE WHOLE MEETING, THE CITY COMMISSION DECIDED THE LEVEL OF RETURN ON WATER SYSTEM EQUITY. THE LEVEL DECIDED UPON WAS ONE PERCENT MORE THAN THE AVERAGE BOND BUYER'S INDEX OF MUNICIPAL BONDS FOR THE PREVIOUS TWELVE MONTH PERIOD.

BOND BUYER'S INDEX OF 20 MUNICIPAL BONDS

<u>DATE</u>	<u>RATE</u>	<u>DATE</u>	<u>RATE</u>
07-Oct-10	3.840%	07-Apr-11	5.040%
14-Oct-10	3.820%	14-Apr-11	5.060%
21-Oct-10	3.840%	21-Apr-11	4.980%
28-Oct-10	3.960%	28-Apr-11	4.860%
04-Nov-10	4.020%	05-May-11	4.690%
11-Nov-10	4.240%	12-May-11	4.610%
18-Nov-10	4.720%	19-May-11	4.550%
25-Nov-10	4.600%	26-May-11	4.520%
02-Dec-10	4.650%	02-Jun-11	4.510%
09-Dec-10	4.860%	09-Jun-11	4.490%
16-Dec-10	5.150%	16-Jun-11	4.490%
23-Dec-10	5.000%	23-Jun-11	4.460%
30-Dec-10	4.950%	30-Jun-11	4.590%
06-Jan-11	5.080%	07-Jul-11	4.650%
13-Jan-11	5.390%	14-Jul-11	4.510%
20-Jan-11	5.410%	21-Jul-11	4.460%
27-Jan-11	5.250%	28-Jul-11	4.470%
03-Feb-11	5.250%	04-Aug-11	4.190%
10-Feb-11	5.290%	11-Aug-11	3.970%
17-Feb-11	5.100%	18-Aug-11	3.830%
24-Feb-11	4.950%	25-Aug-11	4.090%
03-Mar-11	4.900%	01-Sep-11	4.140%
10-Mar-11	4.910%	08-Sep-11	4.050%
17-Mar-11	4.860%	15-Sep-11	4.070%
24-Mar-11	4.910%	22-Sep-11	3.850%
31-Mar-11	5.000%	29-Sep-11	3.930%
		<u>52 WEEKS</u>	<u>4.596%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 20**

DETERMINE COMPOSITE RATE OF RETURN AND DOLLARS OF RETURN ON A CONSTRUCTION COST RATE BASE.

	RATE BASE	RATE OF RETURN	RETURN ON INVESTMENT
WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE (CCR) BASE	\$ 108,495,367	@ 5.596%	= \$ 6,071,401
WATER SYSTEM INDEBTEDNESS IN THE CCR BASE -1993 Bonds (<i>Fixed Rate Conversion</i>)	26,700,000	@ 5.330%	= 1,423,110
-2000 Bonds	-	@ 5.750%	= -
-2005 Bonds	31,665,000	@ 4.850%	= 1,535,753
-2009 Bonds (Amt in CCRB)	20,511,717	@ 4.980%	= 1,021,484
-2010 Bonds (Refunded 2000 bonds)	43,025,000	@ 4.590%	= 1,974,848
-2011 DWRF Bonds	1,126,553	@ 2.500%	= 28,164
LESS: INTEREST EARNED DURING THE TEST PERIOD ON BOND RESERVE & REPLACEMENT ACCOUNTS			8,473
	\$ 231,523,637		\$ 12,063,233
COMPOSITE RATE OF RETURN ON INVESTMENT		$\frac{\$12,063,233}{231,523,637}$	= 5.210%

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONSTRUCTION COST RATE BASE & RETURN ON INVESTMENT- TASK NO. 21- PART 1
FISCAL YEAR ENDED JUNE 30, 2011**

PHYSICAL LOCATION

DESCRIPTION	RETAIL										WHOLESALE			TOTAL
	INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP				
COST	\$ 196,804,818	\$ 138,631,620	\$ 22,808,130	\$ 22,878,806	\$ 20,145,423	\$ 15,221,932	\$ 2,014,737	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 418,505,466	
LESS: ACCUMULATED DEPRECIATION	92,562,483	35,449,458	5,896,683	6,951,714	4,580,512	3,029,474	252,964	-	-	-	-	-	148,723,298	
NET BOOK VALUE	\$ 104,242,335	\$ 103,182,162	\$ 16,911,437	\$ 15,927,092	\$ 15,564,911	\$ 12,192,458	\$ 1,761,773	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 269,782,168	
WORKING CAPITAL REQUIREMENT	3,695,531	2,960,811	409,761	484,399	365,034	256,340	18,799	26,137	-	38,257	-	-	8,245,089	
CONTRIBUTIONS	\$ 107,937,866	\$ 105,142,973	\$ 17,321,218	\$ 16,411,491	\$ 15,919,945	\$ 12,448,798	\$ 1,780,572	\$ 26,137	\$ -	\$ 38,257	\$ -	\$ -	\$ 278,027,257	
LESS AMORTIZATION	-	23,001,276	17,160,761	16,516,989	16,244,651	11,590,142	2,014,737	-	-	-	-	-	86,526,566	
	-	(10,307,424)	(4,545,133)	(4,025,624)	(3,965,893)	(2,597,251)	(257,517)	-	-	-	-	-	(25,698,842)	
CONSTRUCTION COST RATE BASE	\$ -	\$ (12,693,852)	\$ (12,615,628)	\$ (12,491,365)	\$ (12,278,758)	\$ (8,992,891)	\$ (1,757,220)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (60,829,714)	
	\$ 107,937,866	\$ 93,449,121	\$ 4,705,590	\$ 3,920,126	\$ 3,641,187	\$ 3,455,907	\$ 23,352	\$ 26,137	\$ -	\$ 38,257	\$ -	\$ -	\$ 217,197,543	
RETURN ON INVESTMENT- TASK 20	\$ 5,623,563	\$ 4,868,699	\$ 245,161	\$ 204,239	\$ 189,706	\$ 180,053	\$ 1,217	\$ 1,362	\$ -	\$ 1,993	\$ -	\$ -	\$ 11,315,993	

ZONEGATED

COST	\$ -	\$ (4,649,303)	\$ 501,774	\$ 6,592,914	\$ 6,852,006	\$ 3,321,322	\$ 171,898	\$ 1,481,464	\$ -	\$ 3,963,529	\$ -	\$ -	\$ 18,335,604
LESS: ACCUMULATED DEPRECIATION	-	(2,351,188)	431,500	1,314,207	2,175,021	991,896	75,783	337,933	-	1,031,721	-	-	4,006,673
NET BOOK VALUE	\$ -	\$ (2,298,115)	\$ 170,274	\$ 5,278,707	\$ 4,676,985	\$ 2,329,426	\$ 96,115	\$ 1,143,531	\$ -	\$ 2,931,808	\$ -	\$ -	\$ 14,328,931
WORKING CAPITAL REQUIREMENT	-	-	-	-	-	-	-	-	-	-	-	-	-
CONTRIBUTIONS	\$ -	\$ (2,298,115)	\$ 170,274	\$ 5,278,707	\$ 4,676,985	\$ 2,329,426	\$ 96,115	\$ 1,143,531	\$ -	\$ 2,931,808	\$ -	\$ -	\$ 14,328,931
LESS AMORTIZATION	-	-	-	14,420	3,456	21,632	-	-	-	11,418	-	-	50,926
	-	-	-	(13,673)	(3,277)	(20,512)	-	-	-	(10,827)	-	-	(48,289)
CONSTRUCTION COST RATE BASE	\$ -	\$ -	\$ -	\$ (747)	\$ (179)	\$ (1,120)	\$ -	\$ -	\$ -	\$ (591)	\$ -	\$ -	\$ (2,637)
	\$ -	\$ (2,298,115)	\$ 170,274	\$ 5,277,960	\$ 4,676,806	\$ 2,328,306	\$ 96,115	\$ 1,143,531	\$ -	\$ 2,931,217	\$ -	\$ -	\$ 14,326,094
RETURN ON INVESTMENT- TASK 19/20	\$ -	\$ (208,037)	\$ 15,488	\$ 480,063	\$ 425,402	\$ 211,793	\$ 8,743	\$ 104,016	\$ -	\$ 266,623	\$ -	\$ -	\$ 1,303,101
RETURN ON INVESTMENT- TASK 19/20	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	5.210%	9.096%	-	-	9.096%
TOTAL RETURN ON INVESTMENT	\$ 5,623,563	\$ 4,639,662	\$ 260,649	\$ 684,322	\$ 615,108	\$ 391,836	\$ 9,960	\$ 105,378	\$ -	\$ 268,616	\$ -	\$ -	\$ 12,619,094

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART 2
FISCAL YEAR ENDED JUNE 30, 2011**

CONSTRUCTION COST

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL					WHOLESALE				TOTAL	
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
BY PHYSICAL LOCATION- TASK 11		\$ 196,804,818	\$ 148,930,071	\$ 21,914,136	-	\$ 26,141,244	\$ 20,150,425	\$ 16,875,610	\$ 2,014,737	-	-	-	\$ 432,231,041
IN SERVICE- TASK 10		-	3,483,476	1,126,553	-	-	-	-	-	-	-	-	4,610,029
PUMPING STATIONS:													
KNAPP SERVICE CENTER	\$ 2,416,066		(1,067,113)	-	302,156	72,410	-	453,282	-	-	-	-	-
LIVINGSTON	1,952,850		(333,156)	-	94,459	22,497	-	141,523	-	-	-	-	239,265
FRANKLIN	6,949,487		(3,890,948)	-	1,562,801	801,971	-	334,270	-	-	661,313	-	74,677
LEFFINGWELL	141,009		(62,280)	-	17,635	4,226	-	26,455	-	-	-	-	530,593
BRISTOL	612,700		-	-	-	-	-	-	-	-	-	-	13,964
EAST PARIS	1,710,802		-	-	(807,567)	807,567	-	-	-	-	-	-	-
STORAGE TANKS:													
ELKS	236,335		(179,135)	173,739	-	-	-	-	5,396	-	-	-	-
KNAPP	118,570		(20,228)	-	5,735	1,366	-	8,593	-	-	-	4,534	-
CAMBRIDGE	116,070		(89,254)	-	72,898	5,826	-	-	-	10,530	-	-	-
WATERMANS													
ADJUSTED BY ZONEGATING		\$ 196,804,818	\$ 133,982,317	\$ 23,409,904	\$ 29,471,720	\$ 26,897,429	\$ 18,543,254	\$ 3,321,322	\$ 171,888	\$ 1,481,464	\$ 3,963,529	\$ 436,841,070	
LESS: ZONEGATING ADJUSTMENT		-	\$ (4,649,303)	\$ 601,774	\$ 6,592,914	\$ 6,852,006	\$ 3,321,322	\$ 171,888	\$ 1,481,464	\$ 3,963,529	\$ 18,335,604	\$ 18,335,604	
PHYSICAL LOCATION		\$ 196,804,818	\$ 138,631,620	\$ 22,808,130	\$ 22,878,806	\$ 20,145,423	\$ 15,221,932	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 418,505,466	

ACCUMULATED DEPRECIATION

BY PHYSICAL LOCATION- TASK 11		\$ 92,562,463	\$ 38,162,873	\$ 6,003,510	\$ 7,632,238	\$ 4,581,712	\$ 3,334,391	\$ 252,964	\$ -	\$ -	\$ -	\$ 152,730,171
IN SERVICE- TASK 10		-	-	-	-	-	-	-	-	-	-	-
PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 1,754,260		(774,804)	-	219,388	52,575	-	329,117	-	-	-	173,724
LIVINGSTON	701,357		(119,652)	-	33,925	8,080	-	50,827	-	-	-	26,820
FRANKLIN	2,238,823		(1,253,494)	-	503,467	258,360	-	107,687	-	213,046	-	170,934
LEFFINGWELL	133,744		(59,071)	-	16,726	4,008	-	25,092	-	-	-	13,245
BRISTOL	222,173		-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,480,482		-	-	(698,847)	698,847	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	236,335		(179,135)	173,739	-	-	-	-	5,396	-	-	-
KNAPP	118,570		(19,802)	-	5,614	1,337	-	8,412	-	-	4,439	-
CAMBRIDGE	116,070		(89,254)	-	72,898	5,826	-	-	-	10,530	-	-
WATERMANS												
ADJUSTED BY ZONEGATING		\$ 92,562,463	\$ 33,098,270	\$ 6,328,193	\$ 8,265,921	\$ 6,755,533	\$ 4,021,370	\$ 328,747	\$ 337,933	\$ 1,031,721	\$ 152,730,171	
LESS: ZONEGATING ADJUSTMENT		-	\$ (2,351,188)	\$ 431,500	\$ 1,314,207	\$ 2,175,021	\$ 991,896	\$ 75,783	\$ 337,933	\$ 1,031,721	\$ 4,006,873	
PHYSICAL LOCATION		\$ 92,562,463	\$ 35,449,458	\$ 5,896,693	\$ 6,951,714	\$ 4,580,512	\$ 3,029,474	\$ 252,964	\$ -	\$ -	\$ -	\$ 148,723,288

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART 3
FISCAL YEAR ENDED JUNE 30, 2011**

CONTRIBUTIONS BY OTHERS

COST CENTER - LOCATION	AMOUNT	RETAIL						WHOLESALE			TOTAL	
		INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA		ADA TOWNSHIP
2010 RATE STUDY- LOCATION			\$ 23,785,768	\$ 17,096,967	\$ 16,509,330	\$ 16,234,201	\$ 11,533,701	\$ 2,014,737				\$ 87,174,704
ADDITIONS:												
FRONT FOOT FEES		4,950			7,659	10,450						23,059
FIXED ASSET CONTRIBUTIONS		(789,442)	63,794				56,441					(669,207)
PUMPING STATIONS: LEFFINGWELL	\$ 115,303	23,001,276	17,160,761	16,516,989	16,244,651	11,590,142	2,014,737					86,528,556
ADJUSTED BY ZONEGATING				14,420	3,456	21,632					11,418	
LESS: ZONEGATING ADJUSTMENT		23,001,276	17,160,761	16,531,409	16,248,107	11,611,774	2,014,737				11,418	86,528,556
PHYSICAL LOCATION				14,420	3,456	21,632					11,418	
		23,001,276	17,160,761	16,516,989	16,244,651	11,590,142	2,014,737					86,528,556

AMORTIZED CONTRIBUTIONS

2010 RATE STUDY- LOCATION		\$ 9,972,996	\$ 4,312,881	\$ 3,802,915	\$ 3,748,014	\$ 2,441,074	\$ 230,854				\$ 24,508,534
CURRENT YEAR ADJUSTMENTS		334,428	232,252	222,709	217,879	156,177	26,863				1,190,308
PUMPING STATIONS: LEFFINGWELL	109,331	10,307,424	4,545,133	4,025,624	3,965,893	2,597,251	257,517				25,698,842
ADJUSTED BY ZONEGATING				13,673	3,277	20,512				10,827	
LESS: ZONEGATING ADJUSTMENT		10,307,424	4,545,133	4,039,297	3,969,170	2,617,763	257,517			10,827	25,698,842
PHYSICAL LOCATION				13,673	3,277	20,512				10,827	
		10,307,424	4,545,133	4,025,624	3,965,893	2,597,251	257,517				25,698,842

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2011**

CONSTRUCTION COST-BY PHYSICAL LOCATION

COST CENTER	AMOUNT	RETAIL					WHOLESALE					TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
COST BY PHYSICAL LOCATION-TASK 11		\$ 150,633,573	\$ 21,301,436	\$ 24,430,442	\$ 20,150,425	\$ 18,875,610	\$ 2,014,737	\$ -	\$ -	\$ -	\$ -	\$ 432,231,041
IN SERVICE-TASK 10		3,483,476	1,126,553	-	-	-	-	-	-	-	-	4,610,029
BRISTOL		(612,700)	612,700	-	-	-	-	-	-	-	-	-
EAST PARIS		(1,710,802)	1,710,802	-	-	-	-	-	-	-	-	-
WATERMANS		(20,303,627)	(725,425)	(6,451,824)	(6,200)	(2,208,247)	-	-	-	-	-	(29,695,323)
LESS: WATERMANS-TOTAL SUBS-HOME COMM		7,121,698	492,866	3,189,396	1,198	554,569	-	-	-	-	-	11,359,717
ADD: WATERMANS-TOTAL ADDS-HOME COMM		-	-	-	-	-	-	-	-	-	-	-
TOTAL-PHYSICAL LOCATION COST		\$ 136,631,618	\$ 22,808,130	\$ 22,878,806	\$ 20,145,423	\$ 15,221,932	\$ 2,014,737	\$ -	\$ -	\$ -	\$ -	\$ 418,505,484

CONSTRUCTION COST-ZONEGATING

PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 2,416,086	\$ (1,067,113)	\$ 302,156	\$ 72,410	\$ 453,282	\$ -	\$ -	\$ -	\$ 239,285	\$ -	\$ -	\$ -
LIVINGSTON	1,952,850	(333,156)	94,459	22,497	141,523	-	-	-	74,577	-	-	-
FRANKLIN	6,949,487	(3,890,948)	1,562,801	801,971	394,270	-	-	661,313	530,593	-	-	-
LEFFINGWELL	141,009	(82,280)	17,635	4,226	26,455	-	-	-	13,964	-	-	-
BRISTOL	612,700	-	-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,710,802	-	(807,567)	807,567	-	-	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	236,335	(179,135)	173,739	-	-	5,396	-	-	-	-	-	-
KNAPP	118,570	(20,228)	5,735	1,366	8,593	-	-	-	4,534	-	-	-
CAMBRIDGE	116,070	(89,254)	72,898	5,826	-	-	-	10,530	-	-	-	-
WATERMANS-ZONEGATED COST		992,811	428,035	5,344,797	5,136,143	2,357,199	166,502	809,621	3,100,496	-	-	18,335,604
TOTAL-ZONEGATED COST		\$ (4,649,303)	\$ 6,017,774	\$ 6,592,914	\$ 6,652,006	\$ 3,321,322	\$ 171,898	\$ 1,481,464	\$ 3,963,529	\$ 18,335,604	\$ -	\$ 18,335,604
GRAND TOTAL-COST		\$ 133,982,315	\$ 23,409,904	\$ 29,471,720	\$ 26,997,429	\$ 18,543,254	\$ 2,186,635	\$ 1,481,464	\$ 3,963,529	\$ 438,841,068	\$ -	\$ 438,841,068

ACCUMULATED DEPRECIATION-BY PHYSICAL LOCATION

ACC DEPREC BY PHYSICAL LOCATION-TASK 11		\$ 39,865,528	\$ 5,781,337	\$ 6,351,756	\$ 4,581,712	\$ 3,334,391	\$ 252,964	\$ -	\$ -	\$ -	\$ -	\$ 152,730,171
BRISTOL		(222,173)	222,173	-	-	-	-	-	-	-	-	-
EAST PARIS		(1,480,482)	1,480,482	-	-	-	-	-	-	-	-	-
WATERMANS		(4,217,808)	(357,458)	(1,779,399)	(1,488)	(457,376)	-	-	-	-	-	(6,813,532)
LESS: WATERMANS-TOTAL SUBS-HOME COMM		1,504,393	290,641	898,876	288	152,461	-	-	-	-	-	2,806,559
ADD: WATERMANS-TOTAL ADDS-HOME COMM		-	-	-	-	-	-	-	-	-	-	-
TOTAL-PHYSICAL LOCATION ACC DEP		\$ 35,449,458	\$ 5,896,692	\$ 6,951,715	\$ 4,580,512	\$ 3,029,474	\$ 252,964	\$ -	\$ -	\$ -	\$ -	\$ 148,723,296

ACCUMULATED DEPRECIATION-ZONEGATING

PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 1,754,260	\$ (774,804)	\$ 219,388	\$ 52,575	\$ 329,117	\$ -	\$ -	\$ -	\$ 173,724	\$ -	\$ -	\$ -
LIVINGSTON	701,357	(119,652)	33,925	8,080	50,827	-	-	-	26,820	-	-	-
FRANKLIN	2,238,823	(1,253,494)	503,467	298,360	107,687	-	-	213,046	170,994	-	-	-
LEFFINGWELL	133,744	(69,071)	16,726	4,008	25,092	-	-	-	13,245	-	-	-
BRISTOL	222,173	-	-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,480,482	-	(698,847)	698,847	-	-	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	236,335	(179,135)	173,739	-	-	5,396	-	-	-	-	-	-
KNAPP	116,070	(19,802)	5,614	1,337	8,412	-	-	-	4,439	-	-	-
CAMBRIDGE	116,070	(89,254)	72,898	5,826	-	-	-	10,530	-	-	-	-
WATERMANS-ZONEGATED ACC DEP		144,024	257,761	1,161,036	1,145,988	470,761	70,387	114,357	642,589	-	-	4,006,873
TOTAL-ZONEGATED ACC DEP		\$ (2,351,188)	\$ 431,500	\$ 1,314,207	\$ 2,175,021	\$ 981,896	\$ 75,783	\$ 337,933	\$ 1,031,721	\$ 4,006,873	\$ -	\$ 4,006,873
GRAND TOTAL- ACC DEP		\$ 33,098,270	\$ 6,328,192	\$ 8,265,922	\$ 6,755,533	\$ 4,021,370	\$ 328,747	\$ 337,933	\$ 1,031,721	\$ 152,730,171	\$ -	\$ 152,730,171

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ZONEGATED BY GOVERNMENTAL UNIT - TASK #22
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL						WHOLESALE				
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
FILTRATION PLANT	\$ 7,067,279	\$ 7,067,279											
PUMPING STATIONS:													
A. PRIMARY TRANSPORT	2,112,770	2,112,770											
B. INTERMEDIATE TRANSPORT	1,616,469		799,223	40,240	342,272		235,235	73,150			57,140		69,209
WATERMAINS:													
A. PRIMARY TRANSPORT	317,833		165,133	31,030	56,879		32,667	12,106		655	7,746		11,617
B. INTERMEDIATE TRANSPORT	1,621,843		603,552	338,138	282,671		235,881	121,298		26,014	114		14,175
C. LOCAL DISTRIBUTION	4,392,927		3,243,035	341,945	298,455		235,066	261,335		13,091	-		-
RETAL CUSTOMER METERING *	3,352,740		2,544,093	266,576	223,125		143,095	168,844		7,007			
SUBTOTAL OPERATING EXPENSE	20,481,861	9,180,049	7,355,086	1,017,929	1,203,402		881,944	636,733		46,767	65,000		95,001
ENGINEERING SERVICES	1,200,888	538,254	431,242	59,685	70,553		51,711	37,336		2,738	3,807		5,572
ADMINISTRATIVE EXPENSE	2,403,280	1,077,166	863,011	119,442	141,192		103,484	74,717		5,479	7,618		11,151
TOTAL	\$ 24,086,019	\$ 10,795,469	\$ 8,649,289	\$ 1,197,066	\$ 1,415,147		\$ 1,037,139	\$ 748,786		\$ 54,984	\$ 76,425		\$ 111,724

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

FILTRATION PLANTS		100.00%												
PUMPING STATIONS														
A. PRIMARY TRANSPORT		100.00%												
B. INTERMEDIATE TRANSPORT		100.00%	49.444%	2.489%	21.174%		14.552%	4.525%			3.535%		4.281%	
MEMO														
WATERMAINS														
TOTAL MILES:	1,161.10													
A. PRIMARY TRANSPORT		100.000%	51.956%	9.763%	17.896%		10.278%	3.809%		0.206%	2.437%		3.655%	
MILES	58.28		30.28	5.69	10.43		5.99	2.22		0.12	1.42		2.13	
B. INTERMEDIATE TRANSPORT	297.37		37.214%	20.849%	17.429%		14.544%	7.479%		1.604%	0.007%		0.874%	
MILES	805.45		110.66	62.00	51.83		43.25	22.24		4.77	0.02		2.60	
C. LOCAL DISTRIBUTION		100.000%	73.824%	7.784%	6.794%		5.351%	5.949%		0.298%	-		-	
MILES	80,477.00		594.61	62.70	54.72		43.10	47.92		2.40	-		-	
RETAL CUSTOMER METERING (1)		100.000%	75.881%	7.951%	6.655%		4.268%	5.036%		0.209%	0.317%		0.464%	
NUMBER OF METERS		100.000%	61,066.00	6,399.00	5,356.00		3,435.00	4,053.00		168.00	0.228%		0.464%	
ENGINEERING SERVICES (2)		100.000%	35.910%	4.970%	5.875%		4.306%	3.109%		0.228%	0.317%		0.464%	
ADMINISTRATIVE EXPENSE (3)		100.000%	35.910%	4.970%	5.875%		4.306%	3.109%		0.228%	0.317%		0.464%	

NOTES:
 (1) ALLOCATION BASED ON NUMBER OF METERS.
 (2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.
 (3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 23**

ASSIGN OTHER OPERATING REVENUES TO EACH GOVERNMENTAL ENTITY. *

BASIS OF ALLOCATION: RETAIL BILLINGS BY GOVERNMENTAL ENTITY - TASK NO. 6 & 7

	<u>RETAIL BILLINGS</u>	<u>PERCENTAGE OF TOTAL</u>	<u>ALLOCATION *</u>
CITY OF GRAND RAPIDS	\$ 23,316,970	65.3874%	\$ 237,657
CITY OF WALKER	3,018,676	8.4652%	30,768
CITY OF KENTWOOD	4,184,562	11.7347%	42,651
CASCADE TOWNSHIP	2,935,745	8.2327%	29,923
GRAND RAPIDS TOWNSHIP	2,090,962	5.8637%	21,312
TALLMADGE TOWNSHIP	112,807	0.3163%	1,150
	<u>\$ 35,659,722</u>	<u>100.0000%</u>	<u>\$ 363,461</u>

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER BY PHYSICAL LOCATION- TASK 11 IN SERVICE- TASK 10	DEPRECIATION EXPENSE	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
	\$	4,040,136	2,189,571	299,522	350,413	269,889	222,619	26,863	-	-	-	7,399,013
		-	51,211	32,042	-	-	-	-	-	-	-	83,253
PUMPING STATIONS:	\$											
KNAPP SERVICE CENTER	50,043		(22,103)	-	6,258	1,500	9,389	-	-	-	4,956	-
LIVINGSTON	42,634		(7,273)	-	2,062	491	3,090	-	-	-	1,630	-
FRANKLIN	208,505		(116,739)	-	46,889	24,061	10,029	-	-	-	15,919	-
LEFFINGWELL	908		(401)	-	114	27	170	-	-	-	90	-
BRISTOL	15,870		-	-	-	-	-	-	-	-	-	-
EAST PARIS	24,662		-	-	(11,641)	11,641	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	-		-	-	-	-	-	-	-	-	-	-
KNAPP	-		-	-	-	-	-	-	-	-	-	-
CAMBRIDGE	-		-	-	-	-	-	-	-	-	-	-
WATERMANS												
ADJUSTED BY ZONEGATING		4,040,136	(162,089)	2,606	27,574	68,400	9,380	2,220	-	-	41,340	7,482,266
LESS CONTRIBUTIONS AMORTIZED		-	1,932,177	334,170	421,669	376,009	254,677	29,083	-	-	63,935	-
TASK NO. 21		-	(334,428)	(232,252)	(222,709)	(217,879)	(156,177)	(26,863)	-	-	-	(1,190,308)
TOTAL		\$ 4,040,136	\$ 1,597,749	\$ 101,918	\$ 198,950	\$ 158,130	\$ 98,500	\$ 2,220	\$ -	\$ -	\$ 63,935	\$ 6,291,958

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	INTEGRATED SYSTEM	RETAIL						WHOLESALE				TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
OPERATION & MAINTENANCE EXPENSE- TASK NO. 22	\$ 10,795,469	\$ 8,649,289	\$ 1,197,056	\$ 1,415,147	\$ 1,037,139	\$ 748,786	\$ 54,984	\$ 76,425	\$ -	\$ 111,724	\$ 24,086,019	
DEPRECIATION EXPENSE TASK NO. 24	4,040,136	1,597,749	101,918	198,960	158,130	98,500	2,220	30,410	-	63,935	6,291,958	
RETURN ON SYSTEM INVESTMENT TASK NO. 21	5,623,563	4,659,662	260,649	684,322	615,108	391,836	9,960	105,378	-	268,616	12,619,094	
REVENUE CREDITS- TASK NO. 23	-	(237,657)	(30,768)	(42,651)	(29,923)	(21,312)	(1,150)	-	-	-	(363,461)	
ALLOCATE:												
INTEG CONN. FEE CREDIT (A)	-	(312,249)	(56,067)	(61,310)	(40,155)	(28,592)	(2,455)	(21,213)	-	(26,323)	(548,364)	
INTEGRATED SYSTEM (A)	(20,459,168)	10,983,912	1,972,280	2,156,691	1,412,540	1,005,774	86,364	748,189	1,169,450	925,968	-	
LESS: CIRCUIT BREAKER (B)		(154,178)	(123,947)	-	-	-	(4,717)	-	-	-	(282,842)	
	\$ -	\$ 25,786,528	\$ 3,321,121	\$ 4,351,159	\$ 3,152,839	\$ 2,194,992	\$ 145,206	\$ 937,189	\$ 1,169,450	\$ 1,343,920	\$ 41,802,404	

(A) ALLOCATED ON THE BASIS OF RELATIVE BILLED VOLUME & LAND AREA TO UAB PARTNERS. OTTAWA'S ALLOCATION IS BASED ON OLD CONTRACT AND EXCLUDES ANY COST OF COLDBROOK PUMPING.
 (B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 25a**

REVIEW THE REVENUE REQUIREMENTS TO ASSURE COMPLIANCE WITH THE APPLICABLE BOND ORDINANCE PROVISIONS.

	<u>YEAR ENDED 6/30/11</u>	<u>PRO FORMA *</u>
REVENUES:		
RETAIL/WHOLESALE WATER SALES	\$ 39,183,747	\$ 38,748,161
CONNECTION FEES/FRONT FOOT FEES	571,423	650,000
BILLABLE TO SDS FUND	1,895,126	2,024,711
OTHER OPERATING REVENUES	1,884,327	1,675,000
INTEREST ON INVESTMENTS	238,908	360,000
MISCELLANEOUS	719,595	613,730
TOTAL REVENUES	<u><u>\$ 44,493,126</u></u>	<u><u>\$ 44,071,602</u></u>
OPERATING EXPENSES:		
OPERATIONS & MAINTENANCE	\$ 26,158,736	\$ 25,874,186
DEPRECIATION	7,399,012	7,399,012
TOTAL EXPENSES	<u><u>\$ 33,557,748</u></u>	<u><u>\$ 33,273,198</u></u>
ADDITIONS: DEPRECIATION	<u>7,399,012</u>	<u>7,399,012</u>
NET EARNINGS OF THE SYSTEM	<u><u>\$ 18,334,390</u></u>	<u><u>\$ 18,197,416</u></u>
DEBT SERVICE (CASH BASIS)		
SERIES 1993 BONDS	\$ 3,313,250	\$ 3,349,450
SERIES 2000 BONDS	6,882,319	-
SERIES 2005 BONDS	2,273,650	2,217,188
SERIES 2009 BONDS	1,968,440	1,972,090
SERIES 2010 BONDS	437,126	7,353,800
	<u><u>\$ 14,874,785</u></u>	<u><u>\$ 14,892,528</u></u>
COVERAGE RATIO	<u><u>1.23</u></u>	<u><u>1.22</u></u>

* METERED SALES ADJUSTED FOR RATE REVISIONS OF -6.27% AND 5.15% EFFECTIVE 1/1/11 AND 1/1/12, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2012 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS AND ELIMINATION OF MONTHLY SERVICE STATEMENT FEES.

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SUMMARY

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INITIAL SYSTEM REVENUE REQUIREMENTS		\$ 42,085,246
REVENUES FROM CURRENT RATES		
MONTHLY METER CHARGE	\$ 10,225,293	
MONTHLY BILLING CHARGE	3,543,710	
COMMODITY CHARGE	25,171,230	
MONTHLY FIRE PROTECTION	758,537	
ANNUAL HYDRANT CHARGE	<u>55,664</u>	<u>(39,754,434)</u>
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		<u>\$ 2,330,812</u>
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>5.86%</u>
INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE		\$ 42,085,246
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL		<u>(282,842)</u>
SYSTEM REVENUE REQUIREMENTS		<u>\$ 41,802,404</u>
ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)		<u>\$ 2,047,970</u>
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>5.15%</u>

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 26**

METER SIZE	EQUIV. FACTOR	CITY OF GR		CITY OF WALKER		CITY OF KENTWOOD		CASCADE TWP		GR TWP		TALLMADGE TWP	
		METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.
A 3/4" or less	1.0000	54,636	54,636	5,213	5,213	3,444	3,444	2,428	2,428	3,446	3,446	110	110
B 1"	1.7778	2,628	4,672	474	843	642	1,141	331	588	308	548	19	34
C 1 1/4"	2.7778	-	-	-	-	-	-	-	-	-	-	-	-
D 1 1/2"	4.0000	1,139	4,556	209	836	398	1,592	240	960	109	436	4	16
E 2"	7.1111	992	7,054	103	732	196	1,394	105	747	47	334	2	14
F 3"	16.0000	92	1,472	11	176	20	320	8	128	7	112	2	32
G 4"	28.4444	93	2,645	9	256	14	398	2	57	4	114	1	28
H 6" and over	64.0000	19	1,216	1	64	3	192	-	-	-	-	-	-
		59,599	76,251	6,020	8,120	4,717	8,481	3,114	4,908	3,921	4,990	138	234

FIRE PROTECTION SERVICE

H 6"	1,125	262	338	167	110	25
I 8"	304	90	265	127	21	2
J 10"	16	6	9	2	-	-
K 12"	22	21	27	25	1	3
	1,467	379	639	321	132	30
TOTAL	61,066	6,399	5,356	3,435	4,053	168
TOTAL						80,477

Source: Water/Sewage Meter/User Quantity Report, dated June 30, 2011.

CITY OF GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS * \$ 25,186,528

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

76,251 meter equivalents x \$ 6.36 x 12 = \$ 5,819,476

MONTHLY BILLING CHARGE

59,599 meters x \$ 3.81 x 12 = 2,724,866

COMMODITY CHARGE

8,664,487 units (100 CF) x \$ 1.72 = 14,902,918

MONTHLY FIRE PROTECTION

345,039

ANNUAL HYDRANT CHARGE

- (23,792,299)

REQUIRED REVENUE INCREASE (DECREASE)

\$ 1,394,229

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

5.86%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 154,178

CITY OF GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

$$\frac{\text{COMMODITY CHARGE @ 64\%}}{\text{BILLED UNITS}} = \frac{\$16,119,378}{8,664,487} = \underline{\underline{\$ 1.86 /100 \text{ CF}^*}}$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 25,186,528

NEW COMMODITY CHARGE
8,664,487 x \$ 1.86 \$ 16,115,946

NEW MONTHLY BILLING CHARGE
59,599 x \$ 3.60 x 12 2,574,677

MONTHLY FIRE PROTECTION CHARGE 345,039

ANNUAL HYDRANT CHARGE - (19,035,662)

\$ 6,150,866

$$\text{MONTHLY METER CHARGE} = \frac{\$6,150,866}{76,251 \times 12} = \underline{\underline{\$ 6.72 \text{ MONTHLY}}}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 6.72	\$ 3.60	\$ 10.32	\$ 10.17
1"	1.7778	11.95	3.60	15.55	15.12
1 1/4"	2.7778	18.67	3.60	22.27	21.48
1 1/2"	4.0000	26.88	3.60	30.48	29.25
2"	7.1111	47.79	3.60	51.39	49.04
3"	16.0000	107.52	3.60	111.12	105.57
4"	28.4444	191.15	3.60	194.75	184.72
6" and over	64.0000	430.08	3.60	433.68	410.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 154,178

CITY OF WALKER, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS * \$ 3,321,121

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
8,120	meter equivalents	x \$ 8.61	x 12 = \$ 838,958
MONTHLY BILLING CHARGE			
6,020	meters	x \$ 3.81	x 12 = 275,234
COMMODITY CHARGE			
1,194,272	units (100 CF)	x \$ 1.61	= 1,922,778
MONTHLY FIRE PROTECTION			100,307
ANNUAL HYDRANT CHARGE			-
			<u>(3,137,277)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ 183,844</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>5.86%</u>

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 123,947

CITY OF KENTWOOD, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS \$ 4,351,159

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,481 meter equivalents x \$ 11.86 x 12 = \$ 1,207,016

MONTHLY BILLING CHARGE

4,717 meters x \$ 3.81 x 12 = 215,661

COMMODITY CHARGE

1,594,653 units (100 CF) x \$ 1.63 = 2,599,284

MONTHLY FIRE PROTECTION

180,748

ANNUAL HYDRANT CHARGE

- (4,202,709)

REQUIRED REVENUE INCREASE (DECREASE)

\$ 148,450

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

3.53%

CITY OF KENTWOOD, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.69 /100 CF *
\$ 1.63 x 103.53%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 4,351,159
NEW COMMODITY CHARGE		
1,594,653 x \$ 1.69		\$ 2,694,964
NEW MONTHLY BILLING CHARGE		
4,717 x \$ 3.60 x 12		203,774
MONTHLY FIRE PROTECTION CHARGE		180,748
ANNUAL HYDRANT CHARGE		-
		<u>(3,079,486)</u>
		<u>\$ 1,271,673</u>

MONTHLY METER CHARGE = $\frac{\$1,271,673}{8,481 \times 12}$ = \$ 12.50 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 12.50	\$ 3.60	\$ 16.10	\$ 15.67
1"	1.7778	22.22	3.60	25.82	24.89
1 1/4"	2.7778	34.72	3.60	38.32	36.75
1 1/2"	4.0000	50.00	3.60	53.60	51.25
2"	7.1111	88.89	3.60	92.49	88.15
3"	16.0000	200.00	3.60	203.60	193.57
4"	28.4444	355.56	3.60	359.16	341.16
6" and over	64.0000	800.00	3.60	803.60	762.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

CASCADE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS \$ 3,152,839

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
4,908 meter equivalents	x	\$ 16.86	x 12 = \$ 992,987
MONTHLY BILLING CHARGE			
3,114 meters	x	\$ 3.81	x 12 = 142,372
COMMODITY CHARGE			
808,514 units (100 CF)	x	\$ 2.17	= 1,754,475
MONTHLY FIRE PROTECTION			95,613
ANNUAL HYDRANT CHARGE			<u>38,960</u>
			<u>(3,024,407)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ 128,432</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>4.25%</u>

CASCADE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.26 /100 CF *
 \$ 2.17 x 104.25%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 3,152,839
NEW COMMODITY CHARGE		
808,514 x \$ 2.26		\$ 1,827,242
NEW MONTHLY BILLING CHARGE		
3,114 x \$ 3.60 x 12		134,525
MONTHLY FIRE PROTECTION CHARGE		95,613
ANNUAL HYDRANT CHARGE		<u>38,960</u>
		<u>(2,096,340)</u>
		<u>\$ 1,056,499</u>

MONTHLY METER CHARGE = $\frac{\$1,056,499}{4,908 \times 12} = \underline{\underline{\$ 17.94 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 17.94	\$ 3.60	\$ 21.54	\$ 20.67
1"	1.7778	31.89	3.60	35.49	33.78
1 1/4"	2.7778	49.83	3.60	53.43	50.64
1 1/2"	4.0000	71.76	3.60	75.36	71.25
2"	7.1111	127.57	3.60	131.17	123.70
3"	16.0000	287.04	3.60	290.64	273.57
4"	28.4444	510.29	3.60	513.89	483.38
6" and over	64.0000	1,148.16	3.60	1,151.76	1,082.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

GRAND RAPIDS TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS \$ 2,194,992

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
4,990 meter equivalents	x	\$ 12.27	x 12 = \$ 734,728
MONTHLY BILLING CHARGE			
3,921 meters	x	\$ 3.81	x 12 = 179,268
COMMODITY CHARGE			
651,580 units (100 CF)	x	\$ 1.85	= 1,205,423
MONTHLY FIRE PROTECTION			29,045
ANNUAL HYDRANT CHARGE			-
			<u>(2,148,464)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ 46,528</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>2.17%</u>

GRAND RAPIDS TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.89 /100 CF *
 \$ 1.85 x 102.17%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 2,194,992
NEW COMMODITY CHARGE	
651,580 x \$ 1.89	\$ 1,231,486
NEW MONTHLY BILLING CHARGE	
3,921 x \$ 3.60 x 12	169,387
MONTHLY FIRE PROTECTION CHARGE	29,045
ANNUAL HYDRANT CHARGE	<u>-</u>
	<u>(1,429,918)</u>
	<u>\$ 765,074</u>

MONTHLY METER CHARGE = $\frac{\$765,074}{4,990 \times 12} = \underline{\underline{\$ 12.78 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 12.78	\$ 3.60	\$ 16.38	\$ 16.08
1"	1.7778	22.72	3.60	26.32	25.62
1 1/4"	2.7778	35.50	3.60	39.10	37.89
1 1/2"	4.0000	51.12	3.60	54.72	52.89
2"	7.1111	90.88	3.60	94.48	91.06
3"	16.0000	204.48	3.60	208.08	200.13
4"	28.4444	363.52	3.60	367.12	352.82
6" and over	64.0000	817.92	3.60	821.52	789.09

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

TALLMADGE TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS *	\$ 145,206
LESS: CASH CONTRIBUTION	(8,038)
SYSTEM REVENUE REQUIREMENTS	<u>\$ 137,168</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE					
234 meter equivalents	x	\$ 4.45	x	12 =	\$ 12,496
MONTHLY BILLING CHARGE					
138 meters	x	\$ 3.81	x	12 =	6,309
COMMODITY CHARGE					
24,510 units (100 CF)	x	\$ 3.83	=		93,873
MONTHLY FIRE PROTECTION					7,786
ANNUAL HYDRANT CHARGE					<u>16,704</u>
					<u>(137,168)</u>
REQUIRED REVENUE INCREASE (DECREASE)					<u>\$ 0</u>

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 0.00%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 4,717

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INTEGRATED SYSTEM REVENUE REQUIREMENTS *		\$	724,976
COMMODITY CHARGE			
(100CF) 582,635 units	x	\$ 1.19	693,336
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>31,640</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	212,213
MONTHLY SERVICE CHARGE			
\$16,119	x	12 MONTHS	193,428
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>18,785</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>5.69%</u>

* NET OF INTEGRATED CONNECTION FEE CREDIT.

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 937,189
NEW COMMODITY CHARGE *	
582,635 x \$1.24 =	(722,467)
	<hr/>
	<u>\$ 214,722</u>

MONTHLY SERVICE CHARGE * = \$214,722 / 12 = \$17,894

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

ADA TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INTEGRATED SYSTEM REVENUE REQUIREMENTS *		\$	899,645
COMMODITY CHARGE			
(100CF) 660,910 units	x	\$ 1.30	859,183
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>40,462</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	444,275
MONTHLY SERVICE CHARGE			
\$35,517	x	12 MONTHS	426,204
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>18,071</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>4.55%</u>

* NET OF INTEGRATED CONNECTION FEE CREDIT.

ADA TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,343,920
NEW COMMODITY CHARGE *	
660,910 x \$1.36 =	(898,838)
	<hr/>
	<u>\$ 445,082</u>

MONTHLY SERVICE CHARGE * = \$445,082 / 12 = \$37,090

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ 1,169,450
COMMODITY CHARGE	
(100CF) 890,594 units x \$ 1.28	1,139,960

REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	<u>\$ 29,490</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ -
MONTHLY SERVICE CHARGE	
\$0 x 12 MONTHS	-

REQUIRED SERVICE REVENUE INCREASE (DECREASE)	<u>\$ -</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	<u>2.59%</u>

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,169,450
NEW COMMODITY CHARGE *	
890,594 x \$1.31 =	(1,166,678)
	<hr/>
	<u>\$ 2,772</u>

MONTHLY SERVICE CHARGE * = \$ 2,772 / 12 = \$231

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM:  Rick DeVries, P.E.
Assistant City Engineer

SUBJECT: **WATER RATE STUDY - TASK NO. 28 AND 29**

Enclosed are the *revised* Front Foot Rates for Watermain (Task 28) and the costs for the Water Service Pipes (Task 29), for the Fiscal Year 2011.

RDV/dv

Enclosures

cc: Jack Stegehuis
Mark Garvey

WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RE-EVALUATE FRONT FOOT CHARGES
TASK NO. 28

The City Engineer's Office has reviewed current construction costs for water facilities and recommends the following front foot assessment rates:

	<u>2011</u>	<u>2012</u>	<u>% Increase</u>
Domestic Water User	\$ 53.00	\$ 61.00	15.09%
Commercial - Industrial User (Watermain over 8 in. diameter)	\$ 80.00	\$ 94.00	17.50%

The rates are based on an average of prices quoted in bid proposals which have been received by the City Engineer's Office during the period July, 2010 through June, 2011. Calculations of the rates are on file in the City Engineer's Office.

WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
EVALUATE WATER SERVICE CHARGES
TASK NO. 29

The City Engineer's Office has evaluated the cost for water services and recommends the following water service charges:

		<u>50 Ft. R.O.W.</u>	<u>60 Ft. R.O.W.</u>	<u>66 Ft. R.O.W.</u>	<u>80 Ft. R.O.W.</u>	<u>100 Ft. R.O.W.</u>
Cost for 1" Water Service	2011	\$ 1,500	\$ 1,700	\$ 1,800	\$ 2,100	\$ 2,500
	2012	\$ 1,700	\$ 1,950	\$ 2,100	\$ 2,450	\$ 2,950
Cost for 1-1/2" Water Service	2011	\$ 2,100	\$ 2,300	\$ 2,450	\$ 2,800	\$ 3,300
	2012	\$ 2,400	\$ 2,650	\$ 2,850	\$ 3,250	\$ 3,800
Cost for 2" Water Service	2011	\$ 2,500	\$ 2,800	\$ 3,000	\$ 3,400	\$ 3,950
	2012	\$ 2,950	\$ 3,300	\$ 3,500	\$ 4,000	\$ 4,700

The percent increases of the water service pipe charges are as shown below:

	<u>50 Ft. R.O.W.</u>	<u>60 Ft. R.O.W.</u>	<u>66 Ft. R.O.W.</u>	<u>80 Ft. R.O.W.</u>	<u>100 Ft. R.O.W.</u>
Increase for 1" Water Service	13.33%	14.71%	16.67%	16.67%	18.00%
Increase for 1-1/2" Water Service	14.29%	15.22%	16.33%	16.07%	15.15%
Increase for 2" Water Service	18.00%	17.86%	16.67%	17.65%	18.99%

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 30, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Eileen L. Pierce *Eileen L. Pierce*
Water Customer Service Administrator

SUBJECT: 2011 Water Rate Study – Task #30

Miscellaneous rates and charges contained within the Water System Rules and Regulations have been reviewed with staff.

The monthly payment option service fee of \$1 is recommended to be discontinued.

All other fees and charges are recommended to remain the same.

ELP/ep

cc: Joellen Thompson
Wayne Jernberg
Pamela Ritsema
Scott

FEES AND CHARGES

FIRE PROTECTION CHARGES

<u>Pipe Size</u>	<u>Monthly</u>	<u>Quarterly</u>
6"	\$16.00	\$48.00
8"	28.40	85.20
10"	44.48	133.44
12"	64.00	192.00

HYDRANT USE PERMITS

	<u>Fee</u>
Weekly Pool Filling Permit	\$75/wk + \$300 refundable deposit
Contractor Seasonal (Winter or Summer) Hydrant Connection Permit	\$75/wk + \$300 non-refundable fee
Tanker Hydrant Connection Permit.....	\$25/week + metered volume (based on average retail commodity rate) + \$300 non-refundable fee
Hydrant Flow Test Fee.....	\$200

TAPPING PERMITS

<u>Connection Size</u>	<u>Fee</u>
2" and smaller	\$225.00
3" and larger	Cost

METER INSTALLATION & SEASONAL TURN OFF/ON FEES

<u>Meter Size</u>	<u>Fee</u>
3/4" or smaller	\$40.00
1"	45.00
1-1/2"	55.00
2"	60.00
3"	100.00
4"	200.00
6" and larger	250.00

FROZEN/DAMAGED/MISSING METER CHARGES

<u>Meter Size</u>	<u>Fee</u>
3/4" or smaller	\$150.00
1"	200.00
1-1/2" ECR	350.00
1-1/2" Turbo	500.00
2" ECR	450.00
2" Turbo	575.00
3" Turbo	750.00
4"	1400.00
6" and larger	2350.00

METER SERVICES

	<u>Fee</u>
Final reading	\$35.00
Meter Testing Fee (paid by customer if meter is accurate, no charge to customer if meter is faulty)	
5/8 – 1” Meter	50.00
1-1/2 – 2” Meter	75.00
3-6” Meter	Cost

WATER AND SEWER RATES

Chapter 26 and 27, Grand Rapids City Code

SECURITY DEPOSIT

	<u>Minimum Charge</u>
Three (3) times average quarterly bill (\$187.20)	\$577.86

MISCELLANEOUS PERMITS

	<u>Fee</u>
Street opening permit	\$30.00
Water inspection permit (each inspection within the City)	40.00
Water inspection permit (each inspection outside the City)	55.00
Sanitary Service line inspection permit (each inspection within city)	40.00
Sanitary Service line inspection permit (each outside city)	55.00
Storm service line inspection permit (each inspection within city)	40.00
Storm Service line inspection permit (each outside City)	55.00
Plumbing service re-inspection fee	40.00
Cross Connection re-inspection fee	75.00
Sewer Lateral service Demolition/Cap off inspection fee (each within city)	40.00
Sewer Lateral Service Demolition/Cap off inspection fee (each outside city)	55.00
Footing Drain Lateral Inspection Permit (each within City)	40.00
Footing Drain Lateral Inspection Permit (each outside City)	55.00

SERVICE FEE

Customer-requested on-site service (non-scheduled appointment-customer issue only)	\$55.00
Turn-on/turn-off water for real-estate inspections	110.00

PENALTIES

	<u>Fee</u>
Late-payment penalty	10% of net
Processing for shut-off (non-payment, cross connection)	\$55.00
Penalty for failure to keep appointment	35.00
Penalty for each missed appointment thereafter (related to same service)	50.00
Unauthorized operation of valves	100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized use of connection pipes for fire protection	100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized opening of by-pass valve/tampering	100.00*
(plus double the commodity rate for estimated volume)	

Unauthorized use of a hydrant/water	500.00
Use of illegal connection on hydrant	500.00
(including loss of connection)	
Failure to return hydrant connection equipment	500.00
(plus number of weeks equipment used/missing)	
Return of damaged hydrant connection equipment	500.00
Lost/non-returned hydrant wrench.....	50.00
Permit infractions/violations.....	100.00*
(plus double with each subsequent infraction)	
Returned check charge (verified with City Treasurer 8/23/10)	30.00
Unauthorized service tap of watermain	500.00
(fine per tap plus tapping permit fee for each tap)	

*Penalty will double with each subsequent infraction.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 31**

THERE IS NO TASK 31 FOR THE WATER PORTION OF THE RATE STUDY

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg ^{WJ}
Assistant Water System Manager

SUBJECT: 2011 WATER RATE STUDY - TASK #32, WATERMAIN OVERSIZING
RATES

Watermain oversizing rates are established for this year as noted below:

8 inch to 12 inch	\$14.84 per lineal foot
12 inch to 16 inch	\$20.51 per lineal foot
8 inch to 16 inch	\$35.35 per lineal foot

These rates have been determined in accordance with the Water System Rules and Regulations, and are approved for use from January 1, 2012 through December 31, 2012. Background information and calculations to establish these rates are on file in the Water Engineering, Distribution and Collection office.

These costs will be reviewed and may be adjusted again next year. If you have any questions regarding this matter, please call me at 456-4055.

WJ/SS

Cc: Scott Saindon
Joellen Thompson
Mark DeClercq
Rick DeVries
Vaughn Umphrey

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 33**

SERVICE AREA MAPS AND SERVICE AREA LAND MASS SUMMARIES

The following summarizes Utility Services Districts (USD) land mass square miles for UAB partner communities, per information on file as of October 10, 2011:

<u>UAB Partners</u>	<u>Sq. Miles of USD by CC</u>	<u>Percent</u>
Grand Rapids	45.36	35.127%
Walker	25.43	19.693%
Kentwood	14.00	10.842%
Cascade	20.45	15.837%
Grand Rapids Township	10.93	8.464%
Tallmadge Township	2.44	1.890%
East Grand Rapids	3.37	2.610%
Ada	7.15	5.537%
Total	<u>129.13</u>	<u>100.000%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 TASK NO. 34**

INDIVIDUAL CIRCUIT BREAKER AND CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER

The Third Amendment to the Water and Sanitary Sewer Agreements stipulates penalty fees shall be used to fund the circuit breaker provisions noted above. The following summarizes those values:

<u>Description</u>	<u>AMOUNT</u>	<u>PERCENT</u>
Individual Circuit Breaker	\$ 73,556	12.50%
City & Customer Community Circuit Breaker	514,888	87.50%
Total	<u>\$ 588,444</u>	<u>100.00%</u>

The following summarizes the amount, if any, of the City & Customer Community Circuit Breaker to be applied as a revenue credit in next year's Rate Study:

<u>Description</u>	<u>AMOUNT</u>	<u>PERCENT</u>
City & Customer Community Circuit Breaker Amount- Above	\$ 514,888	100.00%
Less: Amount Applied in Current Rate Study	(282,842)	-54.93%
Total Revenue Credit- Next Year's Rate Study	<u>\$ 232,046</u>	<u>45.07%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
SYSTEM ADDITIONS AND IMPROVEMENTS
FOR THE YEAR ENDED JUNE 30, 2011
TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		TRUNK		INTERCEPTOR		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	8,026	1.52	11,939	2.26	6,033	1.14	25,998	4.92
Abandonment	(6,801)	(1.29)	(6,358)	(1.20)	(11,942)	(2.26)	(25,101)	(4.75)
CSO Construction	5,434	1.03	4,833	0.92	5,283	1.00	15,550	2.95
CSO Abandonment	(3,519)	(0.67)	(4,616)	(0.87)	(7,329)	(1.39)	(15,464)	(2.93)
	<u>3,140</u>	<u>0.59</u>	<u>5,798</u>	<u>1.11</u>	<u>(7,955)</u>	<u>(1.51)</u>	<u>983</u>	<u>0.19</u>
Kentwood								
Construction		0.00		0.00		0.00	0	0.00
Abandonment	(1,324)	(0.25)		0.00		0.00	(1,324)	(0.25)
	<u>(1,324)</u>	<u>(0.25)</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>(1,324)</u>	<u>(0.25)</u>
Cascade Twp.								
Construction	78	0.01	27	0.01		0.00	105	0.02
Abandonment		0.00		0.00		0.00	0	0.00
	<u>78</u>	<u>0.01</u>	<u>27</u>	<u>0.01</u>	<u>0</u>	<u>0.00</u>	<u>105</u>	<u>0.02</u>
G.R. Twp.								
Construction	993	0.19		0.00		0.00	993	0.19
Abandonment	(944)	(0.18)		0.00		0.00	(944)	(0.18)
	<u>49</u>	<u>0.01</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>49</u>	<u>0.01</u>
Tallmadge Twp.								
Construction		0.00		0.00		0.00	0	0.00
Abandonment		0.00		0.00		0.00	0	0.00
	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
Walker								
Construction	75	0.01	3,830	0.73	167	0.03	4,072	0.77
Abandonment	(3,935)	(0.75)		0.00		0.00	(3,935)	(0.75)
	<u>(3,860)</u>	<u>(0.74)</u>	<u>3,830</u>	<u>0.73</u>	<u>167</u>	<u>0.03</u>	<u>137</u>	<u>0.02</u>
Wright Twp								
Construction		0.00		0.00		0.00	0	0.00
Abandonment		0.00		0.00		0.00	0	0.00
	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>
TOTAL	<u>(1,917)</u>	<u>(0.38)</u>	<u>9,655</u>	<u>1.85</u>	<u>(7,788)</u>	<u>(1.48)</u>	<u>(50)</u>	<u>(0.01)</u>

SEWER COSTS

COMMUNITY	COMMUNITY COST
Grand Rapids	\$ 34,411
Kentwood	
Cascade Twp.	
Grand Rapids Twp.	19,464
Tallmadge Twp.	
Walker	74,244
Wright Twp.	-
TOTAL	<u>\$ 128,119</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
FISCAL YEAR ENDED JUNE 30, 2011**

ACTIVITY CODE	ACTIVITY	WASTEWATER TREATMENT PLANT		WASTEWATER LIFT STATIONS			SEWER LINES			BULK METERING STATIONS	CUSTOMER ACCOUNTING	INDUSTRIAL PRETREAT.	ADMIN. EXPENSE
		EXPENSE BY ACTIVITY	TREATMENT PLANT	INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR				
4423	WASTEWATER TREATMENT (LESS 442305)	\$ 15,060,007	\$ 14,061,889	\$ 369,335	\$ 136,793	\$ 480,306			\$ 11,684				
4425	SEWER MAINTENANCE	4,630,631					249,267	527,105	3,854,259		2,649,549		
4413	CUSTOMER SERVICE *	2,649,549											
442305	INDUSTRIAL PRETREATMENT	505,984									505,984		
	SUBTOTAL OPERATING EXPENSE	22,846,171	14,061,889	369,335	136,793	480,306	249,267	527,105	3,854,259	11,684	2,649,549	505,984	
4410	ADMINISTRATION	2,123,746										2,123,746	
	TOTAL	\$ 24,969,917	\$ 14,061,889	\$ 369,335	\$ 136,793	\$ 480,306	\$ 249,267	\$ 527,105	\$ 3,854,259	\$ 11,684	\$ 2,649,549	\$ 505,984	

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

4423	WASTEWATER TREATMENT	100.000%										
	A. TREATMENT PLANT	93.372%										
	B. LIFT & METER STATIONS	6.628%	(58)	(8)	(45)				(4)			
	NO. OF STATIONS											
4425	SEWER MAINTENANCE	100.000%	903.97									
	TOTAL MILES											
	A. INTERCEPTOR	5.383%	48.66				5.383%					
	MILES											
	B. TRUNK LINES	11.383%	102.80				11.383%					
	MILES											
	C. LOCAL COLLECTOR	83.234%	752.41				83.234%					
	MILES											
4413	CUSTOMER SERVICE	100.000%								100.000%		
442305	INDUSTRIAL PRETREATMENT	100.000%									100.000%	
4410	ADMINISTRATION	100.000%										100.000%

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
FISCAL YEAR ENDED JUNE 30, 2011**

ACTIVITY CODE	ACTIVITY	WASTEWATER TREATMENT PLANT			WASTEWATER LIFT STATIONS			SEWER LINES			BULK METERING STATIONS	CUSTOMER ACCOUNTING	INDUSTRIAL PRETREAT.	ADMIN. EXPENSE
		ADJUSTED EXPENSE BY ACTIVITY	INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK				
4423	WASTEWATER TREATMENT (LESS 442305)	\$ 14,810,237	\$ 379,391	\$ 140,517	\$ 493,381						\$ 12,003			
4425	SEWER MAINTENANCE	5,174,368												
4413	CUSTOMER SERVICE *	3,087,406				278,536	588,997	4,306,825				3,087,406		
442305	INDUSTRIAL PRETREATMENT	525,153											525,153	
	SUBTOTAL OPERATING EXPENSE	23,597,154	379,391	140,517	493,381	278,536	588,997	4,306,825			12,003	3,087,406	525,153	-
4410	ADMINISTRATION	1,694,025												1,694,025
	TOTAL	\$ 25,291,179	\$ 379,391	\$ 140,517	\$ 493,381	\$ 278,536	\$ 588,997	\$ 4,306,825			\$ 12,003	\$ 3,087,406	\$ 525,153	\$ 1,694,025

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

4423	WASTEWATER TREATMENT	100.000%													
	A. TREATMENT PLANT	93.077%													
	B. LIFT & METER STATIONS	6.923%	(1)	(8)	(45)						(4)				
	NO. OF STATIONS	(58)													
4425	SEWER MAINTENANCE	100.000%													
	TOTAL MILES	903.97													
	A. INTERCEPTOR MILES	48.66				5.383%									
	B. TRUNK LINES MILES	102.90				11.383%				11.383%					
	C. LOCAL COLLECTOR MILES	752.41				83.234%				83.234%					
4413	CUSTOMER SERVICE	100.000%										100.000%			
442305	INDUSTRIAL PRETREATMENT	100.000%											100.000%		
4410	ADMINISTRATION	100.000%												100.000%	

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL					WHOLESALE												
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	N. KENT AREA	ADA TOWNSHIP	GAINES TOWNSHIP	MEIER-ALGOMA						
WASTEWATER TREATMENT	\$ 13,784,945	\$ 13,784,945																		
LIFT STATIONS:																				
A. INTERCEPTOR	379,391		379,391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. TRUNK	140,517		38,122	59,328	-	43,067	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C. LOCAL COLLECTOR	493,381		78,282	91,879	-	84,644	180,978	34,909	6,718	-	15,971	-	-	-	-	-	-	-	-	-
SEWER LINES:																				
A. INTERCEPTOR	278,636		167,144	39,555	65,083	6,754	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. TRUNK	588,997		198,564	152,774	138,921	152,774	31,770	16,197	689	-	-	-	-	-	-	-	-	-	-	-
C. LOCAL COLLECTOR	4,306,825		2,705,977	533,013	417,719	255,998	320,385	47,978	25,755	-	-	-	-	-	-	-	-	-	-	-
BULK METERING STATIONS	12,003		-	-	2,970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CUSTOMER ACCOUNTING	3,087,406		2,442,601	229,518	182,887	71,288	146,343	5,218	9,571	-	-	-	-	-	-	-	-	-	-	-
INDUSTRIAL PRETREATMENT	525,153																			
SUBTOTAL OPERATING EXPENSE	23,597,154	14,310,098	6,010,081	1,105,067	807,560	511,833	679,476	104,302	42,733	2,780	19,441	2,783	-	-	-	-	-	-	-	-
ADMINISTRATIVE EXPENSE	1,694,025	1,027,312	431,460	79,404	57,974	36,744	48,779	7,488	3,068	200	1,386	200	-	-	-	-	-	-	-	-
TOTAL	\$ 25,291,179	\$ 15,337,410	\$ 6,441,541	\$ 1,184,471	\$ 865,534	\$ 548,577	\$ 728,255	\$ 111,790	\$ 45,801	\$ 2,980	\$ 20,827	\$ 2,983	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT	A. TREATMENT PLANT	B. LIFT & METER STATIONS (1)	NO. OF STATIONS (58)	(14)	(6)	(1)	(10)	(17)	(5)	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
TOTAL MILES:	903.97																			
A. INTERCEPTOR	100.000%	100.000%	100.000%	60.008%	14.201%	23.366%	2.425%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	48.66	29.20	6.91	11.37	1.18	1.18	8.503%	5.364%	2.750%	0.117%	0.117%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
B. TRUNK LINES	100.000%	100.000%	100.000%	33.712%	25.938%	23.586%	8.75	5.55	2.83	0.12	0.12	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	102.90	34.69	26.69	24.27	8.75	8.75	5.944%	7.439%	1.114%	0.598%	0.598%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
C. LOCAL COLLECTOR	100.000%	100.000%	100.000%	62.830%	12.376%	9.699%	5.944%	55.97	8.33	4.50	4.50	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	752.41	472.74	33.12	72.98	33.12	72.98	44.72	55.97	8.33	4.50	4.50	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
CUSTOMER ACCTG (2)	100.000%	100.000%	100.000%	79.115%	7.434%	5.923%	2.309%	4.740%	0.169%	0.310%	0.310%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
NO. OF METERS	74,117.00	58,638.00	5,510.00	4,390.00	5,510.00	4,390.00	1,711.00	3,513.00	125.00	236.00	236.00	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
INDUSTRIAL PRETREATMENT	100.000%	100.000%	100.000%	25.470%	4.687%	3.422%	2.169%	2.879%	0.442%	0.181%	0.181%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
ADMINISTRATIVE EXPENSE (3)	100.000%	100.000%	100.000%	60.644%	6.687%	3.422%	2.169%	2.879%	0.442%	0.181%	0.181%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

NOTES:
 (1) ADJUSTED DIRECT COSTS PER SCHEDULE.
 (2) ALLOCATION BASED ON NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP.
 (3) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4401, 4410 & 4480 - ADMINISTRATION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST FACTORS	CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 31,685.94	\$ 8,834.04	\$ 40,519.98
706	PERMANENT EMPLOYEES	181,035.30	-	181,035.30
712	UNEMPLOYMENT COMPENSATION	264.65	-	264.65
715	EMPLOYERS SOCIAL SECURITY	13,862.63	-	13,862.63
717	SPECIAL PENSION BENEFITS	9,167.75	-	9,167.75
719	HOSPITALIZATION INSURANCE	23,654.06	5,215.72	28,869.78
721	LONGEVITY PAY	543.00	-	543.00
722	RETIREMENT FUND CONTRIBUTION	12,397.41	6,550.79	18,948.20
724	FOOD/CLEAN/CAR ALLOW	2,418.00	-	2,418.00
xxx	LABOR NEGOTIATION IMPACT		(14,781.46)	(14,781.46)
	TOTAL PERSONAL SERVICES	275,028.74	5,819.09	280,847.83
728	SUPPLIES	3,123.69	-	3,123.69
	TOTAL SUPPLIES	3,123.69	-	3,123.69
810	BAD DEBT WRITE-OFFS	9,193.78	-	9,193.78
814	COMPUTER SERVICES	97,536.68	-	97,536.68
818	CONTRACTUAL SERVICES	270,316.99	-	270,316.99
872	PROFESSIONAL DEVELOPMENT	676.33	-	676.33
873	OTHER TRAVEL AND TRAINING	4,040.42	-	4,040.42
874	LOCAL BUSINESS EXPENSE	3,098.81	-	3,098.81
875	MEMBERSHIPS	3,209.12	-	3,209.12
876	PUBLICATIONS AND SUBSCRIPTIONS	176.81	-	176.81
900	PRINTING & PUBLISHING	1,326.99	-	1,326.99
912	CLAIMS/GENERAL INSURANCE	262,394.00	(8,550.00)	253,844.00
919	INSURANCE PREMIUMS	157,329.00	-	157,329.00
928	TELEPHONE	2,879.17	-	2,879.17
942	BUILDINGS RENTALS OR LEASE	22,625.14	-	22,625.14
943	EQUIPMENT RENTALS OR LEASE	1,420.15	-	1,420.15
947	VEHICLE RENTAL/CAR MILEAGE	5,782.33	-	5,782.33
	TOTAL OTHER SERVICES & CHARGES	842,005.72	(8,550.00)	833,455.72
982	EQUIPMENT	3,366.45	-	3,366.45
	TOTAL CAPITAL	3,366.45	-	3,366.45
999	OPERATING TRANSFERS OUT	1,000,221.00	(426,990.00)	573,231.00
	TOTAL TRANSFERS/FEES	1,000,221.00	(426,990.00)	573,231.00
	ORGANIZATIONAL UNIT TOTAL	\$ 2,123,745.60	\$ (429,720.91)	\$ 1,694,024.69

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4413- SDSF- CUST.SERV'S

<u>EXPENDITURE SUB-OBJECT</u>		<u>OPERATING EXPENSES</u>	<u>ADJUSTED COST FACTORS</u>	<u>ADJUSTED CURRENT ANNUAL EXPENSES</u>
<u>NO.</u>	<u>DESCRIPTION</u>			
999	OPERATING TRANSFERS OUT *	\$ 2,649,549.00	\$ 437,856.96	\$ 3,087,405.96
	TOTAL TRANSFERS/FEEES	<u>2,649,549.00</u>	<u>437,856.96</u>	<u>3,087,405.96</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,649,549.00</u>	<u>\$ 437,856.96</u>	<u>\$ 3,087,405.96</u>

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4423- WASTEWATER

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 601,046.91	\$ 167,571.88	\$ 768,618.79
706	PERMANENT EMPLOYEES	3,508,117.50	-	3,508,117.50
707	TEMPORARY EMPLOYEES	9,173.55	-	9,173.55
708	SHIFT DIFFERENTIAL	11,526.55	-	11,526.55
709	TIME & ONE-HALF	72,350.05	-	72,350.05
710	ACT.ASSIGNMENT	5,576.63	-	5,576.63
712	UNEMPLOYMENT COMPENSATION	5,302.96	-	5,302.96
714	REGULAR HOURLY RATE	4,738.03	-	4,738.03
715	EMPLOYERS SOCIAL SECURITY	271,313.74	-	271,313.74
719	HOSPITALIZATION INSURANCE	787,684.08	173,684.34	961,368.42
721	LONGEVITY PAY	33,716.04	-	33,716.04
722	RETIREMENT FUND CONTRIBUTION	477,190.89	252,147.67	729,338.56
xxx	LABOR NEGATION IMPACT		(319,057.04)	(319,057.04)
	TOTAL PERSONAL SERVICES	<u>5,787,736.93</u>	<u>274,346.85</u>	<u>6,062,083.78</u>
728	SUPPLIES	994,209.45	-	994,209.45
730	POSTAGE	361.26	-	361.26
768	CLOTHING/CLEANING ALLOWANCE	5,169.59	-	5,169.59
780	INVENTORY - COST OF GOODS SOLD	116,750.97	-	116,750.97
	TOTAL SUPPLIES	<u>1,116,491.27</u>	<u>-</u>	<u>1,116,491.27</u>
814	COMPUTER SERVICES	144,313.44	-	144,313.44
818	CONTRACTUAL SERVICES	4,983,497.44	(524,116.78)	4,459,380.66
835	FEES	20,247.00	-	20,247.00
872	PROFESSIONAL DEVELOPMENT	5,957.11	-	5,957.11
873	OTHER TRAVEL AND TRAINING	10,385.37	-	10,385.37
874	LOCAL BUSINESS EXPENSE	24.95	-	24.95
875	MEMBERSHIPS	7,664.00	-	7,664.00
876	PUBLICATIONS AND SUBSCRIPTIONS	250.00	-	250.00
900	PRINTING & PUBLISHING	5,513.90	-	5,513.90
921	ELECTRICITY	2,232,650.85	-	2,232,650.85
922	WATER	31,028.84	-	31,028.84
923	GAS	233,851.93	-	233,851.93
928	TELEPHONE	107,418.12	-	107,418.12
930	MAINTENANCE REPAIR	150,920.04	-	150,920.04
943	EQUIPMENT RENTALS OR LEASE	208,035.96	-	208,035.96
947	VEHICLE RENTAL/CAR MILEAGE	4,557.25	-	4,557.25
959	REFUSE COLLECTION CHARGES	3,295.51	-	3,295.51
	TOTAL OTHER SERVICES & CHARGES	<u>8,149,611.71</u>	<u>(524,116.78)</u>	<u>7,625,494.93</u>
981	FURNITURE	1,425.00	-	1,425.00
982	EQUIPMENT	4,742.41	-	4,742.41
	TOTAL CAPITAL	<u>6,167.41</u>	<u>-</u>	<u>6,167.41</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 15,060,007.32</u>	<u>\$ (249,769.93)</u>	<u>\$ 14,810,237.39</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 442305- IND. PRETREATMENT

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 44,511.42	\$ 12,409.78	\$ 56,921.20
706	PERMANENT EMPLOYEES	271,340.54	-	271,340.54
708	SHIFT DIFFERENTIAL	6.95	-	6.95
709	TIME & ONE-HALF	4,693.05	-	4,693.05
710	ACT.ASSIGNMENT	173.48	-	173.48
712	UNEMPLOYMENT COMPENSATION	379.66	-	379.66
715	EMPLOYERS SOCIAL SECURITY	20,510.80	-	20,510.80
719	HOSPITALIZATION INSURANCE	53,584.91	11,815.47	65,400.38
721	LONGEVITY PAY	77.10	-	77.10
722	RETIREMENT FUND CONTRIBUTION	35,221.69	18,611.14	53,832.83
xxx	LABOR NEGOTIATION IMPACT		(23,666.80)	(23,666.80)
	TOTAL PERSONAL SERVICES	<u>430,499.60</u>	<u>19,169.59</u>	<u>449,669.19</u>
728	SUPPLIES	32,996.82	-	32,996.82
730	POSTAGE	1,508.12	-	1,508.12
	TOTAL SUPPLIES	<u>34,504.94</u>	<u>-</u>	<u>34,504.94</u>
818	CONTRACTUAL SERVICES	7,842.55	-	7,842.55
873	OTHER TRAVEL AND TRAINING	500.00	-	500.00
874	LOCAL BUSINESS EXPENSE	255.00	-	255.00
875	MEMBERSHIPS	462.00	-	462.00
900	PRINTING & PUBLISHING	2,755.50	-	2,755.50
930	MAINTENANCE REPAIR	7,725.00	-	7,725.00
943	EQUIPMENT RENTALS OR LEASE	21,438.96	-	21,438.96
	TOTAL OTHER SERVICES & CHARGES	<u>40,979.01</u>	<u>-</u>	<u>40,979.01</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 505,983.55</u>	<u>\$ 19,169.59</u>	<u>\$ 525,153.14</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2011
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4425- REPAIR & MAINTENANCE

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 204,345.62	\$ 56,971.56	\$ 261,317.18
706	PERMANENT EMPLOYEES	1,229,046.18	-	1,229,046.18
707	TEMPORARY EMPLOYEES	55,289.89	-	55,289.89
708	SHIFT DIFFERENTIAL	212.85	-	212.85
709	TIME & ONE-HALF	79,999.36	-	79,999.36
710	ACT.ASSIGNMENT	3,073.37	-	3,073.37
712	UNEMPLOYMENT COMPENSATION	3,862.73	-	3,862.73
714	REGULAR HOURLY RATE	832.87	-	832.87
715	EMPLOYERS SOCIAL SECURITY	101,255.61	-	101,255.61
719	HOSPITALIZATION INSURANCE	300,533.48	66,267.63	366,801.11
721	LONGEVITY PAY	9,512.93	-	9,512.93
722	RETIREMENT FUND CONTRIBUTION	161,187.59	85,171.52	246,359.11
xxx	LABOR NEGOTIATION IMPACT		(117,878.16)	(117,878.16)
	TOTAL PERSONAL SERVICES	<u>2,149,152.48</u>	<u>90,532.55</u>	<u>2,239,685.03</u>
728	SUPPLIES	195,665.84	-	195,665.84
768	CLOTHING/CLEANING ALLOWANCE	4,535.88	-	4,535.88
785	PAVEMENT REPAIR	60,055.94	-	60,055.94
	TOTAL SUPPLIES	<u>260,257.66</u>	<u>-</u>	<u>260,257.66</u>
814	COMPUTER SERVICES	17,525.01	-	17,525.01
818	CONTRACTUAL SERVICES	825,314.42	172,549.48	997,863.90
873	OTHER TRAVEL AND TRAINING	973.00	-	973.00
875	MEMBERSHIPS	98.00	-	98.00
900	PRINTING & PUBLISHING	484.19	-	484.19
912	CLAIMS	19,355.19	280,644.81	300,000.00
921	ELECTRICITY	11,852.73	-	11,852.73
922	WATER	6,229.17	-	6,229.17
923	GAS	12,788.32	-	12,788.32
928	TELEPHONE	7,069.58	-	7,069.58
930	MAINTENANCE REPAIR	62,992.20	-	62,992.20
931	HOME REPAIR	31,133.43	-	31,133.43
943	EQUIPMENT RENTALS OR LEASE	1,004,371.64	-	1,004,371.64
945	LAND RENTAL OR LEASE	4,207.17	-	4,207.17
947	VEHICLE RENTAL/CAR MILEAGE	1,170.00	-	1,170.00
952	CAPITAL CONTRIBUTIONS	152,000.00	-	152,000.00
959	REFUSE COLLECTION CHARGES	39,407.43	-	39,407.43
	TOTAL OTHER SERVICES & CHARGES	<u>2,196,971.48</u>	<u>453,194.29</u>	<u>2,650,165.77</u>
982	EQUIPMENT	916.71	-	916.71
	TOTAL CAPITAL	<u>916.71</u>	<u>-</u>	<u>916.71</u>
999	OPERATING TRANSFERS OUT	23,333.00	-	23,333.00
	TOTAL TRANSFERS/FEES	<u>23,333.00</u>	<u>-</u>	<u>23,333.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 4,630,631.33</u>	<u>\$ 543,726.84</u>	<u>\$ 5,174,358.17</u>

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 3, 2011

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: FY 2011 OPERATING EXPENSES- SEWAGE PUMPING STATIONS

The attached schedule allocates the direct cost for operating and maintaining system pumping and metering stations. The operating expense consists of direct labor, utilities, operating and maintenance supplies, repairs and maintenance and vehicle rental.

The overflow regulators are components of the integrated system and subsequently not included herein.

LW

Attachment

srs\stask4 2011

**CITY OF GRAND RAPIDS, MICHIGAN
INVENTORY OF SEWAGE PUMPING/METER STATIONS
FOR THE YEAR ENDED JUNE 30, 2011**

<u>Station</u>	<u>Physical Location</u>	<u>Type</u>	<u>FY'11 Expenses</u>
Market Avenue	Grand Rapids	Interceptor	\$ 369,335
Millbank	Grand Rapids	Local	3,311
Eastlake	Grand Rapids	Local	6,776
Eastern	Grand Rapids	Trunk	7,123
Middleboro	Grand Rapids	Trunk	70
Oak Hollow	Grand Rapids Twmsp	Local	19,714
Kingsbury	Walker	Trunk	15,046
Bona Vista	Grand Rapids	Trunk	13,568
Aberdeen	Grand Rapids	Local	12,361
O'Brien	Walker	Trunk	28,636
Leonard Heights	Walker	Trunk	14,073
Guild	Grand Rapids	Local	17,158
Orchard Vista	Cascade Twmsp	Local	4,857
Brookview	Grand Rapids	Trunk	16,351
Remembrance Road	Walker	Local	62,255
Kraft Avenue	Cascade Twmsp	Local	7,546
Thornapple	Cascade Twmsp	Trunk	41,926
Thornhills	Cascade Twmsp	Local	8,341
Greenbrier	Grand Rapids Twmsp	Local	8,950
Shore Haven	Grand Rapids Twmsp	Local	11,826
Ada	Ada	Local	15,548
Robinhood	Grand Rapids Twmsp	Local	15,590
Lincoln School	Grand Rapids Twmsp	Local	5,923
Reeds Lake Blvd.	Grand Rapids Twmsp	Local	6,981
6000 28th Street	Cascade Twmsp	Local	8,418
Ada	Ada	Meter	3,378
East Grand Rapids	East Grand Rapids	Meter	2,706
Gaines Township	Gaines Township	Meter	2,709
Kentwood	Kentwood	Meter	2,891
Rickman Avenue	Grand Rapids	Local	11,447
Michigan Street	Grand Rapids	Local	8,032
Eagle Crest	Grand Rapids Twmsp	Local	10,085
East Paris	Grand Rapids Twmsp	Local	9,513
Alpine Estates	Walker	Local	17,062
Elmdale	Grand Rapids	Local	5,312
Collindale	Walker	Local	10,126
Saddleback	Grand Rapids Twmsp	Local	6,309
Arbor Hills Lift Station	Grand Rapids Twmsp	Local	5,714
Cypress Trails	Grand Rapids Twmsp	Local	4,726
Bird Avenue	Grand Rapids Twmsp	Local	46,332
Valentine	Grand Rapids Twmsp	Local	3,136
Cascade Springs	Cascade Twmsp	Local	9,869
Churchill Downs	Grand Rapids	Local	7,064
Woodsboro Court	Grand Rapids Twmsp	Local	2,438
Meadowood Trails	Cascade Twmsp	Local	9,371
Stonebridge	Grand Rapids Twmsp	Local	5,623
Burton/Cacade	Cascade Twmsp	Local	20,213
Crahen	Grand Rapids Twmsp	Local	7,875
Jonathan Woods	Cascade Twmsp	Local	6,219
Watermark	Cascade Twmsp	Local	7,568
Mountain Ash	Tallmadge Twmsp	Local	11,054
Reeds Hollow	Grand Rapids Twmsp	Local	5,447
16th Avenue Lift Station	Marne	Local	6,540
Hayes West Lift Station	Tallmadge	Local	7,051
Hayes East Lift Station	Tallmadge	Local	4,335
8th & Leonard LS	Tallmadge	Local	4,745
Summit Ridge LS	Grand Rapids	Local	4,746
Lake Michigan Estates	Tallmadge	Local	6,799
			\$ 998,118

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 31, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Buhrer 
Chief Financial Officer

SUBJECT: 2011 SEWER RATE STUDY ANNUAL EXPENSE ADJUSTMENTS-TASK #5

Attached are adjustments to test period actual operating expenses to be included in Task #5 of the Sewer Rate Study.

Attachment

**CITY OF GRAND RAPIDS
SEWER DISPOSAL SYSTEM FUND
RATE STUDY TASK NO. 5
NOTES TO ADJUSTED CURRENT ANNUAL EXPENSES
FOR THE YEAR ENDED JUNE 30, 2011**

Sub-Object - 703

The factor to establish calendar year 2012's retiree health care cost is 27.88%. Increase the total of fiscal year 2011's retiree health care (subobject 703) by this percent to establish the cost for calendar year 2012.

Sub-Object - 704, 705, 706, 707, 709, 710, 713, 714, 718, 723, 724

The wage increase factor to translate FY2011 actual costs to estimated calendar 2012 will be 0.0%. No wage increases are anticipated.

Sub-Object - 715

Increase FY2011 actual FICA expense by 0.0% to account for the effect of the wage increases.

Sub-Object - 719

Increase FY2011 health insurance actual by 22.05% to reflect rate changes effective in calendar year 2012 and calendar year 2013.

Sub-Object - 722

Increase FY2011 actual pension expense by 52.84% to reflect the effect of a General Pension rate change increase from FY2011 13.62% to calendar year rate of 20.82% and an estimated wage increase of 0.0%.

Sub-Object - 912/999

Administration - Adjust FY2011 actual cost to reflect adjustments in charges for central services rendered by the Insurance Payment Fund and the General Operating Fund.

Personal Generally

Labor negotiations are projected to save 8.2% annualized. Other initiatives are projected to save additional amounts. These changes will occur at different points in time. The result is that overall personal costs (total cost of compensation) should be reduced by 5%.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Mike Lunn
Environmental Services Manager

SUBJECT: **2011 SEWER RATE STUDY - TASK #5-KNOWN COST INCREASES/DECREASES**

Known cost increases by which to adjust FY11 operating costs include fund carry-forwards for GIS and Maximo support services that were not fully performed prior to June 30, 2011, as detailed below. In addition to the below carry-forwards, the contractual services account (WWTP-4423-818) within Wastewater has been decreased by \$626,372 for GVRBA expense reimbursements.

<u>ACCOUNT</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
WWTP-4423-818	EMA, Inc. (Maximo support)	\$102,255
R&M -4425-818	EMA, Inc. (GIS support)	172,549

ML/SS

srs\stask5 2011

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2011

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2011 SEWER RATE STUDY- TASK #6

The Sewage Disposal System Fund's revenues and volumes by governmental unit for the year ended June 30, 2011 are disclosed on the following page. In addition, actual volume comparisons for the past five (5) years by governmental unit are included herein.

LW/SS

Attachment

srs\stask6 2011

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 6**

DETERMINE SEWAGE VOLUME AND REVENUE BY GOVERNMENTAL ENTITY FOR THE YEAR ENDED JUNE 30, 2011:

RETAIL:	<u>SALES REVENUE</u>	<u>3 YR AVE BILLED VOL (GALLONS)</u>
CITY OF GRAND RAPIDS (1)	\$ 32,631,152.61	5,293,506,240
CITY OF WALKER	4,715,670.35	643,515,620
CITY OF KENTWOOD	3,510,881.42	961,412,628
CASCADE TOWNSHIP	1,945,318.61	299,697,420
GRAND RAPIDS TOWNSHIP	2,432,620.11	301,859,140
TALLMADGE TOWNSHIP	287,520.73	13,434,080
WRIGHT TOWNSHIP (2)	266,059.07	15,757,282
SUB-TOTAL RETAIL (3)	<u>\$ 45,789,222.90</u>	<u>7,529,182,410</u>
 WHOLESALE:		
CITY OF E. GRAND RAPIDS	\$ 735,503.74	473,253,200
ADA TOWNSHIP	1,005,452.15	320,669,019
GAINES TOWNSHIP (4)	152,812.97	101,030,000
SUB-TOTAL WHOLESALE	<u>\$ 1,893,768.86</u>	<u>894,952,219</u>
TOTAL	<u>\$ 47,682,991.76</u>	<u>8,424,134,629</u>

REVENUE CLASSIFICATION:

4410 - 607054 ADA SEWAGE SERVICE CHARGE	\$ 1,005,452.15
4410 - 607055 RETAIL SEWAGE SERVICE CHARGE	45,703,261.33
4410 - 607056 WYOMING SEWAGE SERVICE CHARGE	85,961.57
4410 - 607060 E. GRAND RAPIDS SEWAGE SERVICE CHARGE	735,503.74
4410 - 607062 GAINES TWP SEWAGE SERVICE CHARGE	152,812.97
	<u>\$ 47,682,991.76</u>

- (1) THE VOLUME & DOLLAR AMOUNT FOR THE CITY OF WYOMING ARE INCLUDED IN THE GRAND RAPIDS TOTALS.
- (2) CHARGES TO USERS IN WRIGHT TOWNSHIP ARE BASED ON A REU (RESIDENTIAL EQUIVALENT UNIT) CHARGE, IN LIEU OF COMMODITY & MONTHLY SERVICE CHARGES, AND AS SUCH DOES NOT RECORD ANY BILLED VOLUME IN RETAIL SERVICE CHARGES TO WRIGHT TOWNSHIP. THE AMOUNT INCLUDED ABOVE REFLECTS THE ESTIMATED BILLED VOLUME BASED ON THE WWTP'S LIFT STATION PUMPING REPORT FOR FY 2011.
- (3) A NEGATIVE REVENUE ACCRUAL OF (\$1,079,110) HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2011, AND ADJUST FOR PREVIOUS FISCAL YEAR ACCRUAL.
- (4) GAINES TWP RATES ARE CALCULATED BASED ON MOST RECENT FISCAL YEAR BILLED VOLUME PER CONTRACT.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
2011 RATE STUDY TASK NO. 6**

VOLUME COMPARISONS FOR FIVE (5) YEARS BY GOVERNMENTAL UNIT (INCLUDING NORTH KENT & MEIJER-ALGOMA) *
VOLUME = 1,000 GALLONS

MUNICIPALITY	FY07		FY08		FY09		FY10		FY11		FY07-FY11	
	VOL BILLED	% CHANGE	VOL BILLED	% CHANGE	VOL BILLED	% CHANGE	VOL BILLED	% CHANGE	VOL BILLED	% CHANGE	VOL BILLED	% CHANGE
GRAND RAPIDS	5,824,277	-2.43%	5,682,778	-2.43%	5,422,022	-4.59%	5,327,753	-1.74%	5,130,744	-3.70%	5,130,744	-11.91%
WALKER	719,050	-1.33%	709,490	-1.33%	671,946	-5.29%	630,592	-6.15%	628,009	-0.41%	628,009	-12.66%
KENTWOOD	1,088,979	-3.76%	1,048,020	-3.76%	935,212	-10.76%	938,707	0.37%	1,010,318	7.63%	1,010,318	-7.22%
CASCADE	351,116	-2.33%	342,924	-2.33%	324,838	-5.27%	287,725	-11.43%	286,529	-0.42%	286,529	-18.39%
GRAND RAPIDS TWP	309,851	0.67%	311,922	0.67%	307,379	-1.46%	300,605	-2.20%	297,595	-1.00%	297,595	-3.96%
TALLMADGE	11,833	9.35%	12,939	9.35%	14,558	12.51%	13,005	-10.67%	12,739	-2.05%	12,739	7.66%
WRIGHT TWP	18,511	-6.79%	17,254	-6.79%	19,523	13.15%	14,379	-26.35%	13,370	-7.02%	13,370	-27.77%
EAST GRAND RAPIDS	470,257	-8.58%	429,912	-8.58%	518,933	20.71%	456,699	-11.99%	444,128	-2.75%	444,128	-5.56%
NORTH KENT AREA *	1,487,393	-100.00%	*	-100.00%	*	N/A	*	N/A	*	N/A	*	N/A
ADA TWP	316,064	1.42%	320,565	1.42%	337,356	5.24%	309,321	-8.31%	315,329	1.94%	315,329	-0.23%
GAINES TWP	106,535	-2.74%	103,612	-2.74%	112,141	8.23%	94,689	-15.56%	101,030	6.70%	101,030	-5.17%
MEIJER - ALGOMA *	7,528	-100.00%	*	-100.00%	*	N/A	*	N/A	*	N/A	*	N/A
TOTAL	10,711,394	-16.17%	8,979,416	-16.17%	8,663,908	-3.51%	8,373,475	-3.35%	8,239,791	-1.60%	8,239,791	-23.07%

* Service ended 11/08.

GRAND RAPIDS VOLUME COMPARED TO CUSTOMER COMMUNITIES	FY07		FY08		FY09		FY10		FY11	
	% OF TOTAL	VOL BILLED								
VOLUME = 1,000 GALLONS	54.37%	5,682,778	63.29%	5,422,022	62.58%	5,327,753	63.63%	5,130,744	62.27%	5,130,744
GRAND RAPIDS	45.63%	3,296,638	36.71%	3,241,886	37.42%	3,045,722	36.37%	3,109,047	37.73%	3,109,047
TOTAL	100.00%	8,979,416	100.00%	8,663,908	100.00%	8,373,475	100.00%	8,239,791	100.00%	8,239,791

* Volumes were restated from previous Rate Studies to reflect actual billings without adjustment for accrued revenues.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 7**

OPERATING REVENUES OTHER THAN WASTEWATER RECEIPTS:

4423-476009	INDUSTRIAL PRETREATMENT PERMITS	\$ 70,528.69
4410-607027	INSPECTION FEES - UTILITIES	360.00
4410-607043	PRELIM/DESIGN/CONSTR ENG	5,462.22
4410-607057	INDUSTRIAL DISCHARGE AUTHORIZATION	47,457.59
		<u>\$ 123,808.50</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR	<u>\$ 243,618.00</u>
---	----------------------

OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION

4410-607061	SEWAGE FRONT FOOTAGE	\$ (18,037.26)
	AUDITOR'S ADJUSTMENT	-
		<u>\$ (18,037.26)</u>

INTEGRATED SYSTEM CREDITS

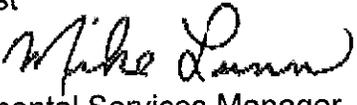
4410-607059	INTEGRATED SEWER CONNECTION	\$ 541,602.00
4423-607074	SEWAGE SURCHARGE	1,648,582.18
		<u>\$ 2,190,184.18</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 3, 2011

TO: Linda Wagenmaker
Financial Analyst

FROM: Mike Lunn 
Acting Environmental Services Manager

SUBJECT: 2011 SEWER RATE STUDY- TASK #8

No significant changes in operating levels are anticipated to take effect by January 1, 2012, which would require adjustments to operating costs for the test period.

MLLW

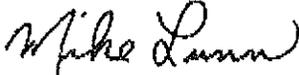
srs\stask8 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 3, 2011

TO: Linda Wagenmaker
Financial Analyst

FROM: Mike Lunn 
Acting Environmental Services Manager

SUBJECT: 2011 SEWER RATE STUDY- TASK #9

No significant changes in sewer revenues are anticipated to take effect by January 1, 2012, which would require an adjustment to operating revenue estimates as a whole.

MLLW

srs\stask9 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 25, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE *CS*
Assistant Environmental Services Manager

SUBJECT: 2011 SEWER RATE STUDY- TASK #10

The following are major sewage system projects that for rate study purposes should be considered operative as of January 1, 2012.

<u>Description</u>	<u>Location</u>	<u>Amount</u>
Saddleback Trunk Sewer Contract No. 2	Kentwood	\$ 327,097
Lafayette-Wealthy/State	Grand Rapids	250,932
Seward Avenue Extension	Grand Rapids	85,277
College-Fulton/Fountain	Grand Rapids	35,824
Maryland Estates	Grand Rapids	148,500
Maryland Estates District SSES	Grand Rapids	475,305
East Leonard Heights	Grand Rapids	150,000
East Leonard Heights District SSES	Grand Rapids	1,200,000
Coit-Kendalwood to North Park	Grand Rapids	148,948
Seward-Watson/Fulton; Lexington/Butterworth	Grand Rapids	43,784
Michigan Street Lift Station	Grand Rapids	796,885
Michigan Street Lift Station Renovation	Grand Rapids	87,194
CSO Contract #16	Grand Rapids	2,487,670
CSO Contract #17	Grand Rapids	2,705,967
WWTP-Groundwater Wells	Integrated	226,551

CRS\SS

srs\stask10 2011

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 11**

"COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2011"

INTEGRATED SYSTEM

	<u>ORIGINAL COST</u>	<u>ACCUMULATED DEPRECIATION</u>	<u>DEPRECIATION EXPENSE</u>
LAND	\$ 1,633,122	\$ -	\$ -
LAND IMPROVEMENTS	16,032,519	12,105,632	737,976
BUILDINGS & STRUCTURES	47,778,004	26,822,252	878,206
PROCESS EQUIPMENT	61,598,774	28,903,296	1,480,102
AUXILIARY EQUIPMENT	26,439,312	22,941,036	350,666
MACHINERY & EQUIPMENT	4,867,536	4,502,338	128,902
OFFICE EQUIPMENT & FURNITURE	628,067	618,574	235
	<u>\$ 158,977,334</u>	<u>\$ 95,893,128</u>	<u>\$ 3,576,087</u>

NON-INTEGRATED SYSTEM

	<u>ORIGINAL COST</u>	<u>ACCUMULATED DEPRECIATION</u>	<u>DEPRECIATION EXPENSE</u>
LAND	\$ 2,704,296	\$ -	\$ -
LAND IMPROVEMENTS	3,209,514	668,229	160,209
BUILDINGS & STRUCTURES	9,787,155	2,069,707	203,544
PROCESS EQUIPMENT	16,251,635	4,493,954	484,289
AUXILIARY EQUIPMENT	3,830,549	1,952,474	205,342
MACHINERY & EQUIPMENT	1,646,924	794,732	158,277
OFFICE EQUIPMENT & FURNITURE	68,632	68,632	-
SERVICEMAINS - GRAND RAPIDS	305,504,217	76,899,890	5,738,857
SERVICEMAINS - WALKER	38,547,018	12,180,399	764,133
SERVICEMAINS - KENTWOOD	39,738,535	11,634,218	711,832
SERVICEMAINS - CASCADE TWP	19,840,773	6,401,221	386,878
SERVICEMAINS - GRAND RAPIDS TWP	17,136,897	5,565,801	337,334
SERVICEMAINS - TALLMADGE TWP	5,661,019	904,467	113,963
SERVICEMAINS - WRIGHT TWP	125,288	13,782	2,506
	<u>\$ 464,052,452</u>	<u>\$ 123,647,506</u>	<u>\$ 9,267,164</u>
TOTAL	<u><u>\$ 623,029,786</u></u>	<u><u>\$ 219,540,634</u></u>	<u><u>\$ 12,843,251</u></u>

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2011.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 12**

TASK 12A DETERMINE WORKING CAPITAL NEEDS FOR MATERIALS AND SUPPLIES ON HAND.

MATERIALS AND SUPPLIES INVENTORY AS OF JUNE 30, 2011: \$ 1,157,488

TASK 12B DETERMINE WORKING CAPITAL NEEDS FOR PREPAYMENT OF OPERATING COSTS.

NO REQUIREMENT FOR PREPAYMENT OF OPERATING COSTS IS CALLED FOR IN THE ORDINARY CYCLE OF BUSINESS.

TASK 12C DETERMINE CASH WORKING CAPITAL NEEDS & DETERMINE TOTAL WORKING CAPITAL NEEDS.

MINIMUM CASH WORKING CAPITAL IS DEFINED AS THE SUM OF 90 DAYS ADJUSTED OPERATING EXPENSES.

ADJUSTED CURRENT ANNUAL EXPENSES = \$ 25,291,179 @ 90/365 = \$ 6,236,181

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$ 1,157,488
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	6,236,181
	\$ 7,393,669

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
ZONEGATED FACILITIES
TASK #13
November 3, 2011**

Lengths and cost of all interceptor and trunk sewer mains that are jointly used were allocated according to the percentage of flow from contributing communities per the "Report on Sewage Flow Allocation and Zoning of the Sewage System for Fiscal Year 2002" (B&V zoning report), as adjusted for FY11 characteristics. Jointly used pumping stations were also prorated based on B&V zoning report. All zoning work papers are on file at the Oak Industrial Drive Administration building. Maps are on file in the City Engineer's Office.

LW

srs\stask13 2011

CITY OF GRAND RAPIDS, MICHIGAN
 SEWER RATE STUDY
 SEWAGE DISPOSAL SYSTEM FUND
 METHODOLOGY FOR I/I & OTHER FLOW APPORTIONMENT - TASK NO. 13

	MILLION GALLONS
1.) ANNUAL WASTEWATER TREATMENT PLANT FLOW	15,321.57
LESS: WHOLESALE BILLED FLOW	(860.49)
LESS: RETAIL BILLED FLOW	<u>(7,379.30)</u>
TOTAL RETAIL I/I & OTHER FLOW	<u>7,081.78</u>
2.) RETAIL INFLOW FROM SEPARATED AREAS (A)	627.66
RETAIL INFLOW FROM COMBINED AREAS - AMOUNT ESTIMATED (A)	886.52
LESS: ANNUAL BYPASS FROM (3) PUMPING STATIONS	-
LESS: IN-SYSTEM BYPASS & RETENTION BASIN OVERFLOW	<u>(50.05)</u>
TOTAL RETAIL INFLOW	<u>1,464.13</u>
3.) RETAIL INFILTRATION:	
TOTAL RETAIL I/I & OTHER FLOW	7,081.78
LESS: TOTAL RETAIL INFLOW (#2)	<u>(1,464.13)</u>
	5,617.65
LESS: MARKET AVE RETENTION BASIN (MARB) CAPTURE	<u>(99.41)</u>
TOTAL RETAIL INFILTRATION & OTHER FLOW	<u>5,518.24</u>
4.) ALLOCATION OF RETAIL INFILTRATION & OTHER FLOW	
- APPORTIONED ON THE BASIS OF B&V SUMMARY OF	
1997 MONITORED FLOW DATA (B)	
	MILLION
	GALLONS
PRORATA SHARE OF	
RETAIL INFILTRATION & OTHER	5,518.24
100.0000%	<u>5,518.24</u>
100.0000%	<u>5,518.24</u>
TOTAL	
GOVERNMENTAL UNIT(S)	
UTILITY PARTNERS	
TOTAL	

(A) BASED ON RECORDED RAINFALL @ WWTP & APPORTIONED PER BLACK & VEATCH'S SUMMARY OF 1997 MONITORED FLOW DATA.
 (B) BASED ON INFILTRATION & OTHER FLOW APPORTIONED IN PREVIOUS YEAR & ADJUSTED FOR SYSTEM ADDITIONS & IMPROVEMENTS IN EACH CUSTOMER COMMUNITY.

CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
METHODOLOGY FOR I/I & OTHER FLOW APPORTIONMENT - TASK NO. 13 (CONTINUED)

5.) SUMMARY: (IN MILLION GALLONS)								
	BILLED FLOW (TASK #6)	INFLOW (#2 ABOVE)	INFILTRATION & OTHER FLOW (#4 ABOVE)	MARB (A) (#3 ABOVE)	TOTAL PLANT FLOW	PERCENT OF TOTAL	TOTAL PLANT FLOW (MGD)	
GOVERNMENTAL UNIT(S)	8,138.76	1,464.13	5,518.24	98.19	15,219.32	99.3326%	41.6968	
UTILITY PARTNERS	101.03	-	-	1.22	102.25	0.6674%	0.2801	
GAINES TWP								
TOTAL	8,239.79	1,464.13	5,518.24	99.41	15,321.57	100.0000%	41.9769	

(A) BASED ON BILLED FLOW (TASK #6).

MEMORANDUM

CITY OF GRAND RAPIDS

Date: August 29, 2011

To: Linda Wagenmaker, Utility Financial Officer

From: Mike Lunn *Mike Lunn*
Environmental Services Manager

Subject: 2011 Sewer Rate Study - Wastewater Plant Flow Data

Listed below is the flow data measured in million gallons (MG) for the last two completed fiscal years. Plant flow decreased by 2.05% from 15,641.58 MG treated in FY10 to 15,321.57 MG treated in FY11.

Month	FY 2010	FY 2011	% incr (decr)
July	1,178.67	1,343.33	13.97
August	1,294.03	1,169.94	-9.59
September	1,072.35	1,078.00	.53
October	1,356.18	1,041.49	-23.20
November	1,327.26	997.41	-24.85
December	1,336.85	1,049.53	-21.49
January	1,235.45	1,034.32	-16.28
February	1,051.07	1,032.11	-1.80
March	1,397.47	1,636.36	17.09
April	1,406.38	1,671.09	18.82
May	1,383.83	1,851.22	33.78
June	1,602.04	1,416.77	-11.56
Total	15,641.58	15,321.57	-2.05

Data measured	FY 2010	FY 2011	% incr (decr)
Wastewater Treatment Plan (WWTP) avg. daily flow (MG)	42.854	41.977	-2.05
Rainfall recorded at WWTP (inches)	37.0	38.2	3.24
In-system overflows (MG) (report attached)	2.599	1.579	-39.25
Market Avenue Retention Basin (MARB) inflow (MG)	237.78	147.88	-37.81
Market Avenue Retention Basin (MARB) overflow (MG)	35.848	48.474	35.22

cc: Mark DeClercq, City Engineer

CITY OF GRAND RAPIDS, MICHIGAN
 RATE STUDY MONITORING REPORT
 OVERFLOW VOLUME SUMMARY
 SUMMARY FOR FY12

Overflow Date	Rainfall Inches(1)	Pumping Station Overflows			West Side Ditch MG	In-System Overflows MG	Total Overflow Volume MG
		MAPS(2) MG(4)	MARB(3) MG	Total MG			
7/20/2010	0.83	0.000	0.000	0.000	0.000	0.091	0.091
7/22/2010	1.86	0.000	0.000	0.000	0.000	0.730	0.730
8/11/2010	0.84	0.000	0.000	0.000	0.000	0.251	0.251
4/23/2011	1.03	0.000	0.000	0.000	0.000	0.060	0.060
4/27/2011	3.63	0.000	10.220	10.220	0.000	0.000	10.220
4/28/2011	3.63	0.000	37.740	37.740	0.000	0.000	37.740
4/29/2011	3.63	0.000	0.514	0.514	0.000	0.000	0.514
5/11/2011	0.71	0.000	0.000	0.000	0.000	0.056	0.056
5/23/2011	0.77	0.000	0.000	0.000	0.000	0.054	0.054
5/25/2011	0.47	0.000	0.000	0.000	0.000	0.008	0.008
6/21/2011	2.22	0.000	0.000	0.000	0.000	0.329	0.329
Totals				48,474		1.579	50.053

- (1) Rain gauge at WWTP
- (2) Market Avenue Pumping Station
- (3) Market Avenue Retention Basin
- (4) MG = Million Gallons

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Assistant Environmental Services Manager

SUBJECT: 2011 SEWER RATE STUDY – TASK14

Zonegating maps for the sewage system are included in the "Report on Sewage Flow Allocation and Zonegating of the Sewage System" from Black & Veatch, Ltd dated September 2003. The report also contains comprehensive information with respect to the basis for zonegating service mains and other system components, such as lift stations, that service more than one community.

CRS:SS

srs\stask14 2011

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 15**

COMPUTE CONSTRUCTION COST RATE BASE (DEPRECIATED PLANT, PLUS WORKING CAPITAL, LESS CSO REVENUE REQUIREMENTS FOR CSO FIXED ASSETS INCLUDED IN TASK #11/21, LESS CONTRIBUTIONS BY OTHERS).

ORIGINAL CONSTRUCTION COST	- TASK #10	\$ 9,169,933	
	- TASK #11	622,224,786	
	- TASK #16/21	<u>(187,363,456)</u>	\$ 444,031,263
LESS: ACCUMULATED DEPRECIATION	- TASK #10	\$ 48,066	
	TASK #11	219,402,629	
	TASK #16/21	<u>(36,634,627)</u>	<u>(182,816,068)</u>
			261,215,195
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 7,393,669	
			<u>7,393,669</u>
			268,608,864
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 183,281,998	
LESS: AMORTIZATION		(113,572,277)	
			<u>(69,709,721)</u>
CONSTRUCTION COST RATE BASE			<u><u>\$ 198,899,143</u></u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 6, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Saindon 
Financial Analyst

SUBJECT: **2011 SEWER RATE STUDY TASK #15A
INTEGRATED SEWER CONNECTION FEES**

Attached is the Integrated Sewer Connection Fee Schedule as currently provided for in Chapter 27 of the City Code, with the addition of rates to be effective on January 1, 2012. The City Commission on June 27, 2000 established fees through calendar year 2004. Beginning January 1, 2005, the integrated sewer connection fees are to be calculated on a yearly basis as part of the annual Water/Sewer Rate Study. The Consumer Price Index used to determine rates effective January 1, 2012 is as follows:

August, 2011 Index	226.545
August, 2010 Index	218.312
Increase (decrease)	8.233
Percentage increase (decrease)	3.77%

SS

Attachment

srs\stask15a 2011

Section 2.96 Integrated Sewer Connection Fee Schedule

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Connection Base Fee Schedule

Water Meter Size (inches)	<u>1/01/11</u>	<u>1/01/12</u>
3/4 or less	\$ 2,680	\$ 2,780
1	4,480	4,640
1 ½	8,920	9,260
2	14,280	14,820
3	31,280	32,440
4	56,280	58,380
6 and over	125,080	129,740

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be

constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

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CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
CSO REVENUE REQUIREMENTS - TASK 16
PRINCIPAL & INTEREST ON REVENUE BONDS & SRF
DEBT FOR CALENDAR YEAR 2012 - ACCRUAL BASIS

DATE	SRF/REVENUE REFERENCE SERIES	REVENUE BONDS			STATE REVOLVING FUNDS			TOTAL			TOTAL PRINCIPAL & INTEREST
		PRINCIPAL	INTEREST	EST. FEES	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	
07/01/12	N/A	1998 (1)	\$ 558,483.21	\$ 1,250.00							\$ 559,733.21
01/01/13	N/A	1998 (1)	\$ 1,598,289.00	1,250.00							\$ 1,598,289.00
07/01/12	N/A	2004 (2)	704,250.00	600.00							704,850.00
01/01/13	N/A	2004 (2)	704,250.00	600.00							704,850.00
07/01/12	N/A	2005 (3)	524,400.00	800.00							525,200.00
01/01/13	N/A	2005 (3)	524,400.00	800.00							525,200.00
07/01/12	N/A	2008 (4)	564,337.50	900.00							565,237.50
01/01/13	N/A	2008 (4)	564,337.50	900.00							1,055,237.50
07/01/12	N/A	2010A (5)	306,852.00	0.00							306,852.00
01/01/13	N/A	2010A (5)	306,852.00	0.00							306,852.00
04/01/12	01	1991 SRF				\$ 700.00 (6)					700.00
10/01/12						1,400.00					1,400.00
04/01/13						350.00 (6)					350.00
04/01/12	02/03	1992A SRF				8,475.00 (6)					8,475.00
10/01/12						16,950.00					16,950.00
04/01/13						4,275.00 (6)					4,275.00
04/01/12	04	1992B SRF				1,025.00 (6)					1,025.00
10/01/12						2,050.00					2,050.00
04/01/13						525.00 (6)					525.00
04/01/12	06	1993A SRF				6,175.00 (6)					6,175.00
10/01/12						12,350.00					12,350.00
04/01/13						3,125.00 (6)					3,125.00
04/01/12	07	1993B SRF				7,075.00 (6)					7,075.00
10/01/12						14,150.00					14,150.00
04/01/13						4,525.00 (6)					4,525.00
04/01/12	09	1994A SRF				9,150.00 (6)					9,150.00
10/01/12						18,300.00					18,300.00
04/01/13						6,100.00 (6)					6,100.00
04/01/12	10	1994B SRF				6,200.00 (6)					6,200.00
10/01/12						9,000.00					9,000.00
04/01/13						4,500.00 (6)					4,500.00
04/01/12	11	1995A SRF				5,695.26 (6)					5,695.26
10/01/12						8,676.10					8,676.10
04/01/13						4,338.05 (6)					4,338.05
04/01/12	12	1995B SRF				5,681.25 (6)					5,681.25
10/01/12						11,362.50					11,362.50
04/01/13						4,612.55 (6)					4,612.55
									\$5,584,493.96	\$5,500,511.13	\$11,085,005.09

(1) PRORATED AMOUNT OF 1998 ISSUE RELATED TO CSO DEBT
 (2) DS ON ES CSO PORTION OF 2004 ISSUE. (\$28.17M)
 (3) DS ON ES CSO PORTION OF 2005 ISSUE. (\$21.355M)
 (4) DS ON ES CSO PORTION OF 2008 ISSUE. (\$24.805M)
 (5) DS ON ES CSO PORTION OF 2010A&B ISSUE. (\$14.05M)
 (6) PRORATED FOR APPLICABLE THREE (3) MONTH PERIOD IN CALENDAR YEAR 2012

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 16A**

INCLUDE PROJECT COST ESTIMATES FOR UPCOMING SYSTEM IMPROVEMENTS (NON-INTEGRATED)

THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED SEWAGE SYSTEM IMPROVEMENTS ARE SUMMARIZED IN THE FOLLOWING TABLE.

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
1	KINGSBURY LIFT STATION REPLACEMENT	1,200,000
2	SOUTH WALKER SANITARY LIFT STATION	400,000
		<u>\$ 1,600,000</u>

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2012.

*SOURCE: CHUCK SCHROEDER, ASSISTANT ENVIRONMENTAL SERVICES MANAGER
OCTOBER 2011.*

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 17**

BONDS - PRINCIPAL & INTEREST PAYMENTS (SENIOR)

FISCAL YEAR ENDING JUNE 30,	CASH BASIS		
	PRINCIPAL	INTEREST	PRIN & INT
2012	\$ 4,715,000	\$ 11,779,970	\$ 16,494,970
2013	4,955,000	11,522,177	16,477,177
2014	5,190,000	11,296,577	16,486,577
2015	5,430,000	11,055,845	16,485,845
2016	5,685,000	10,796,108	16,481,108
2017	5,960,000	10,529,227	16,489,227
2018	6,255,000	10,237,752	16,492,752
2019	6,590,000	9,912,327	16,502,327
2020	6,925,000	9,568,752	16,493,752
2021	7,225,000	9,215,052	16,440,052
2022	10,100,000	8,841,502	18,941,502
2023	10,635,000	8,321,152	18,956,152
2024	11,175,000	7,792,070	18,967,070
2025	11,730,000	7,234,452	18,964,452
2026	12,320,000	6,648,670	18,968,670
2027	12,945,000	6,035,636	18,980,636
2028	13,585,000	5,391,805	18,976,805
2029	8,445,000	4,715,030	13,160,030
2030	8,870,000	4,295,359	13,165,359
2031	9,315,000	3,854,542	13,169,542
2032	9,785,000	3,391,580	13,176,580
2033	10,280,000	2,905,258	13,185,258
2034	10,800,000	2,394,290	13,194,290
2035	10,730,000	1,857,461	12,587,461
2036	5,630,000	1,357,472	6,987,472
2037	5,900,000	1,087,537	6,987,537
2038	6,185,000	804,608	6,989,608
2039	3,710,000	507,998	4,217,998
2040	3,875,000	345,946	4,220,946
2041	4,045,000	176,686	4,221,686

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 18**

DETERMINE SEWER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE BY
SUBTRACTING NON-CSO DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

CONSTRUCTION COST RATE BASE - TASK NO. 15	\$ 198,899,143
LESS: BONDED INDEBTEDNESS (ACCRUAL) - TASK NO. 17 / 20	(127,649,154)
NET SEWER SYSTEM EQUITY	<u>\$ 71,249,989</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE OF RETURN ON EQUITY - TASK NO. 19**

AT THE APRIL 5, 1977, COMMITTEE OF THE WHOLE MEETING, THE CITY COMMISSION DECIDED THE LEVEL OF RETURN ON SEWER SYSTEM EQUITY. THE LEVEL DECIDED UPON WAS ONE PERCENT MORE THAN THE AVERAGE BOND BUYER'S INDEX OF MUNICIPAL BONDS FOR THE PREVIOUS TWELVE MONTH PERIOD.

BOND BUYER'S INDEX OF 20 MUNICIPAL BONDS

<u>DATE</u>	<u>RATE</u>	<u>DATE</u>	<u>RATE</u>
07-Oct-10	3.840%	07-Apr-11	5.040%
14-Oct-10	3.820%	14-Apr-11	5.060%
21-Oct-10	3.840%	21-Apr-11	4.980%
28-Oct-10	3.960%	28-Apr-11	4.860%
04-Nov-10	4.020%	05-May-11	4.690%
11-Nov-10	4.240%	12-May-11	4.610%
18-Nov-10	4.720%	19-May-11	4.550%
25-Nov-10	4.600%	26-May-11	4.520%
02-Dec-10	4.650%	02-Jun-11	4.510%
09-Dec-10	4.860%	09-Jun-11	4.490%
16-Dec-10	5.150%	16-Jun-11	4.490%
23-Dec-10	5.000%	23-Jun-11	4.460%
30-Dec-10	4.950%	30-Jun-11	4.590%
06-Jan-11	5.080%	07-Jul-11	4.650%
13-Jan-11	5.390%	14-Jul-11	4.510%
20-Jan-11	5.410%	21-Jul-11	4.460%
27-Jan-11	5.250%	28-Jul-11	4.470%
03-Feb-11	5.250%	04-Aug-11	4.190%
10-Feb-11	5.290%	11-Aug-11	3.970%
17-Feb-11	5.100%	18-Aug-11	3.830%
24-Feb-11	4.950%	25-Aug-11	4.090%
03-Mar-11	4.900%	01-Sep-11	4.140%
10-Mar-11	4.910%	08-Sep-11	4.050%
17-Mar-11	4.860%	15-Sep-11	4.070%
24-Mar-11	4.910%	22-Sep-11	3.850%
31-Mar-11	5.000%	29-Sep-11	3.930%
		<u>52 WEEKS</u>	<u>4.596%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 20**

DETERMINE COMPOSITE RATE OF RETURN ON CONSTRUCTION COST RATE BASE

	RATE BASE	@	RATE OF RETURN	=	RETURN ON INVESTMENT
SEWER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE (CCR) BASE	\$ 71,249,989	@	5.596%	=	\$ 3,987,149
SEWER SYSTEM INDEBTEDNESS (NON-CSO) IN THE CONSTRUCTION COST RATE BASE					
1998 ISSUE (REFIN. AMT. OF 1990 ISSUE)	13,636,984	@	5.06%	=	690,031
2004 ISSUE	7,995,000	@	4.97%	=	397,352
2005 ISSUE	26,570,000	@	4.90%	=	1,301,930
2008 ISSUE (amount in CCRB)	40,252,508	@	4.92%	=	1,980,423
2010 ISSUE	29,625,000	@	5.00%	=	1,481,250
2011A&B ISSUE (amount in CCRB)	8,474,277	@	4.04%	=	342,361
2011 SRF (amount in CCRB)	1,095,385	@	2.50%	=	27,385
LESS INTEREST ON BOND RESERVE AND REPLACEMENT ACCOUNTS					(9,818)
	\$ 198,899,143				\$ 10,198,063
COMPOSITE RATE OF RETURN ON INVESTMENT			\$10,198,063	=	5.127%
			198,899,143		

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONSTRUCTION COST RATE BASE & RETURN ON SYSTEM INVESTMENT- TASK NO. 21- PART1
FISCAL YEAR ENDED JUNE 30, 2011**

PHYSICAL LOCATION

DESCRIPTION	RETAIL										WHOLESALE			TOTAL
	INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP			
COST	\$ 191,203,885	\$ 144,643,821	\$ 39,270,572	\$ 29,871,832	\$ 18,486,787	\$ 19,810,665	\$ 4,911,989	\$ 118,230	\$ -	\$ -	\$ -	\$ -	\$ 416,317,781	
LESS: ACCUMULATED DEPRECIATION	95,900,680	45,041,631	12,516,194	10,334,998	6,464,939	5,726,287	898,574	44,060	-	-	-	-	178,929,363	
NET BOOK VALUE	\$ 63,303,205	\$ 59,602,190	\$ 26,754,378	\$ 19,536,834	\$ 12,021,848	\$ 14,082,378	\$ 4,013,415	\$ 74,170	\$ -	\$ -	\$ -	\$ -	\$ 239,388,418	
WORKING CAPITAL REQUIREMENT	4,483,742	1,821,430	389,240	245,396	171,090	230,313	28,392	22,846	4,435	12,865	3,919	3,919	7,393,669	
CONTRIBUTIONS	\$ 67,786,947	\$ 101,423,620	\$ 27,123,618	\$ 19,782,230	\$ 12,192,938	\$ 14,312,691	\$ 4,041,807	\$ 97,016	\$ 4,435	\$ 12,865	\$ 3,919	\$ 3,919	\$ 246,782,087	
LESS AMORTIZATION	47,596,435	62,630,363	22,984,308	22,486,224	16,592,805	13,609,370	4,660,073	-	-	-	-	-	180,495,579	
	(40,170,377)	(40,847,632)	(9,158,544)	(9,904,109)	(6,257,188)	(5,938,583)	(796,607)	-	-	-	-	-	(112,172,960)	
CONSTRUCTION COST RATE BASE	\$ 60,360,889	\$ 11,782,731	\$ 13,825,765	\$ 12,632,115	\$ 10,335,617	\$ 9,570,837	\$ 3,763,466	\$ 97,016	\$ 4,435	\$ 12,865	\$ 3,919	\$ 3,919	\$ 65,286,589	
RETURN ON INVESTMENT- TASK 20	\$ 3,094,703	\$ 4,595,888	\$ 681,781	\$ 369,150	\$ 95,225	\$ 294,385	\$ 14,271	\$ 4,974	\$ 227	\$ 660	\$ 201	\$ 201	\$ 9,151,465	
	5.127%													

ZONEGATED

COST	\$ -	\$ (2,023,077)	\$ 8,577,311	\$ 2,744,726	\$ 4,600,309	\$ 5,246,207	\$ 719,634	\$ 1,246,142	\$ 265,234	\$ 5,431,748	\$ 905,248	\$ 27,713,482
LESS: ACCUMULATED DEPRECIATION	-	(779,964)	1,831,568	1,337,052	934,767	1,072,642	59,576	224,611	244,880	540,885	420,688	5,866,705
NET BOOK VALUE	\$ -	\$ (1,243,113)	\$ 6,745,743	\$ 1,407,674	\$ 3,665,542	\$ 4,173,565	\$ 660,058	\$ 1,021,531	\$ 20,354	\$ 4,890,863	\$ 484,560	\$ 21,846,777
WORKING CAPITAL REQUIREMENT	\$ -	\$ (1,243,113)	\$ 6,745,743	\$ 1,407,674	\$ 3,665,542	\$ 4,173,565	\$ 660,058	\$ 1,021,531	\$ 20,354	\$ 4,890,863	\$ 484,560	\$ 21,846,777
CONTRIBUTIONS	-	-	10,476	1,372,137	306,144	117,514	152	159	-	204,956	810,881	2,822,419
LESS AMORTIZATION	-	-	(10,476)	(713,511)	(159,136)	(62,081)	(152)	(159)	-	(106,577)	(347,136)	(1,399,287)
CONSTRUCTION COST RATE BASE	\$ -	\$ (1,243,113)	\$ 6,745,743	\$ 749,048	\$ 3,518,593	\$ 4,118,132	\$ 660,058	\$ 1,021,531	\$ 20,354	\$ 4,792,484	\$ 20,815	\$ 20,403,645
RETURN ON INVESTMENT- TASK 19/21	\$ -	\$ (113,074)	\$ 613,593	\$ 68,133	\$ 320,051	\$ 374,585	\$ 60,039	\$ 92,918	\$ 1,851	\$ 435,924	\$ 1,067	\$ 1,855,087
RETURN ON INVESTMENT- TASK 19/21	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	9.096%	5.127%	
TOTAL RETURN ON INVESTMENT	\$ 3,094,703	\$ 4,482,814	\$ 1,295,374	\$ 437,283	\$ 415,276	\$ 668,970	\$ 74,310	\$ 97,892	\$ 2,078	\$ 436,584	\$ 1,268	\$ 11,006,592

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	AMOUNT	RETAIL				WHOLESALE				TOTAL		
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR		ADA TOWNSHIP	GAINES TOWNSHIP
CONSTRUCTION COST-BY PHYSICAL LOCATION:												
BY PHYSICAL LOCATION- TASK 11												
IN SERVICE- TASK 10	\$ 158,977,334	\$ 345,002,892	\$ 38,547,018	\$ 39,736,535	\$ 19,840,773	\$ 17,136,897	\$ 5,861,019	\$ 125,288	\$ -	\$ -	\$ -	\$ 623,093,786
MARNE CONNECTOR AGREEMENT	226,551	7,228,804	66,840	1,442,804	138,294	66,840	(915,311)	(78,116)	-	-	-	9,169,933
TASK 11/1821- CSO COST		(187,363,456)										(655,000)
ORBIEN		(546,532)	546,532									
VANPORTLIET		(64,816)	44,816									
REMEMBRANCE / 3 MILE		(71,058)	1,213,244									
184 AVENUE		(141,105)										
HAYES- WEST		(215,841)										
HAYES- EAST		(323,154)	323,154									
KINGSBURY		(122,964)	122,964									
LEONARD HEIGHTS		(224,216)										
THORNAPPLE		(111,401)			224,216							
6000 28TH ST (NEW CAS)		(118,407)			111,401							
THORNHILLS		(178,389)			118,407							
ROBINHOOD		(65,478)			65,478							
CASCADE SPRINGS		(72,602)				72,602						
SHOREHAVEN		(152,332)				152,332						
EAGLECREST		(46,496)				46,496						
GREENBRIER (NEW GRT)		(153,651)				153,651						
LINCOLN SCHOOL (NEW GRT)		(962,898)				962,898						
REEDS LAKE (NEW GRT-110)		(72,602)			72,602							
KRAFT		(39,712)			39,712							
ORCHARD VISTA (NEW CAS)		(855,372)				855,372						
BIRD AVE-ALPINE ESTATES		(323,478)				323,478						
EAST PARIS		(22,302,253)	(13,640,328)	(19,811,913)	(2,296,254)	(140,457)	(690,665)	-	-	-	-	(58,981,830)
SERVICE MAINS		10,347,324	12,246,332	8,502,406	172,138	187						31,269,387
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.												
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.												
TOTAL- PHYSICAL LOCATION COST	\$ 159,203,885	\$ 144,843,820	\$ 39,270,572	\$ 29,871,832	\$ 18,466,787	\$ 19,810,865	\$ 4,911,989	\$ 119,230	\$ -	\$ -	\$ -	\$ 416,317,790

COST CENTER	AMOUNT	RETAIL				WHOLESALE				TOTAL		
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR		ADA TOWNSHIP	GAINES TOWNSHIP
CONSTRUCTION COST-ZONEGATING:												
LIFT STATIONS / CHAMBERS:												
FULLER-BROOKVIEW	\$ 1,252,863	(506,655)										
FULTON- MIDDLEBORROW	37,983	(37,407)										
WEALTHY ST EXT. CHAMBER	458,953	(90,106)	85,448				4,659					
WEALTHY MARKET	20,444	(12,504)	12,214				60	230				
MARKET	12,605,387	(2,283,085)	1,865,351				21,102	28,382				
VANPORTLIET	44,816	5,889	(5,889)									
REMEMBRANCE / 3 MILE	1,213,244	(141,195)	(141,195)									
184 AVENUE	71,058											
HAYES- WEST	141,105											
HAYES- EAST	215,841											
ORBIEN	546,532											
KINGSBURY	323,154	23,178	(50,526)									
LEONARD HEIGHTS	122,964											
THORNAPPLE	224,216											
6000 28TH ST (NEW CAS)	111,401											
THORNHILLS	118,407											
ROBINHOOD	178,389											
CASCADE SPRINGS	65,478											
SHOREHAVEN	72,602											
EAGLECREST	152,332											
GREENBRIER (NEW GRT)	48,496											
LINCOLN SCHOOL (NEW GRT)	153,651											
REEDS LAKE (NEW GRT-110)	962,898											
KRAFT	72,602											
ORCHARD VISTA (NEW CAS)	39,712											
BIRD AVE-ALPINE ESTATES	855,372											
EAST PARIS	323,478											
SERVICE MAINS- ZONEGATED COST		877,853	6,810,911	2,744,726	4,600,309	4,340,835	772,465	964,353	295,234	5,431,748	905,248	27,713,682
TOTAL- ZONEGATED COST		\$ (2,023,077)	\$ 8,577,311	\$ 2,744,726	\$ 4,600,309	\$ 5,246,207	\$ 719,634	\$ 1,246,142	\$ 285,234	\$ 5,431,748	\$ 905,248	\$ 27,713,682
GRAND TOTAL- COST	\$ 159,203,885	\$ 142,820,743	\$ 47,847,883	\$ 32,616,558	\$ 23,087,096	\$ 25,056,872	\$ 5,631,623	\$ 1,354,372	\$ 285,234	\$ 5,431,748	\$ 905,248	\$ 444,031,282

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2011

COST CENTER	AMOUNT	INTEGRATED SYSTEM					RETAIL					WHOLESALE			TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP				
BY PHYSICAL LOCATION- TASK 11	\$ 85,893,128	\$ 86,947,618	\$ 12,180,389	\$ 11,634,218	\$ 8,401,221	\$ 5,565,801	\$ 904,487	\$ 13,782	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 219,540,634	
IN SERVICE- TASK 10	7,552	(6,884)	2,228	39,085	3,857	2,228	(27,196)	(6,239)	-	-	-	-	-	40,088	
MARINE CONNECTOR AGREEMENT	-	(104,810)	-	-	-	-	-	-	-	-	-	-	-	(138,009)	
TASK 11/1621-CSO ACC. DEPRECIATION	-	(36,834,827)	-	-	-	-	-	-	-	-	-	-	-	(38,834,827)	
OPRIEN	-	203,674	-	-	-	-	-	-	-	-	-	-	-	-	
VANPORTFLEET	-	(44,816)	-	-	-	-	-	-	-	-	-	-	-	-	
REMEMBRANCE / 3 MILE	-	(250,587)	-	-	-	-	-	-	-	-	-	-	-	-	
186 AVENUE	-	(86,317)	-	-	-	-	-	-	-	-	-	-	-	-	
HAYES- WEST	-	(90,414)	-	-	-	-	-	-	-	-	-	-	-	-	
HAYES- EAST	-	(89,355)	-	-	-	-	-	-	-	-	-	-	-	-	
KINGSBURY	-	(42,576)	-	-	-	-	-	-	-	-	-	-	-	-	
LEONARD HEIGHTS	-	(16,395)	-	-	-	-	-	-	-	-	-	-	-	-	
THORNAPPLE	-	(81,387)	-	-	-	-	-	-	-	-	-	-	-	-	
6000 28TH ST (NEW CAS)	-	(7,427)	-	-	-	-	-	-	-	-	-	-	-	-	
THORNHILLS	-	(15,788)	-	-	-	-	-	-	-	-	-	-	-	-	
ROBINHOOD	-	(29,733)	-	-	-	-	-	-	-	-	-	-	-	-	
CASCADE SPRINGS	-	(26,191)	-	-	-	-	-	-	-	-	-	-	-	-	
SHOREHAVEN	-	(12,100)	-	-	-	-	-	-	-	-	-	-	-	-	
EAGLECREST	-	(20,311)	-	-	-	-	-	-	-	-	-	-	-	-	
GREENBRIER (NEW GRT)	-	(4,849)	-	-	-	-	-	-	-	-	-	-	-	-	
LINCOLN SCHOOL (NEW GRT)	-	(11,652)	-	-	-	-	-	-	-	-	-	-	-	-	
REEDS LAKE (NEW GRT-T10)	-	(74,936)	-	-	-	-	-	-	-	-	-	-	-	-	
KRAFT	-	(12,100)	-	-	-	-	-	-	-	-	-	-	-	-	
ORCHARD VISTA (NEW CAS)	-	(3,971)	-	-	-	-	-	-	-	-	-	-	-	-	
BIRD AVE-ALPINE ESTATES	-	(43,430)	-	-	-	-	-	-	-	-	-	-	-	-	
EAST PARIS	-	(75,478)	-	-	-	-	-	-	-	-	-	-	-	-	
SERVICE MAINS	-	(8,968,845)	-	-	-	-	-	-	-	-	-	-	-	-	
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.	-	4,618,427	(1,892,859)	(2,394,357)	74,528	(112,366)	(94,505)	-	-	-	-	-	-	(13,304,243)	
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.	-	\$ 45,041,632	\$ 12,516,194	\$ 10,334,938	\$ 8,464,939	\$ 5,728,298	\$ 898,574	\$ 44,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,417,558	
		\$ 85,900,680	\$ 12,516,194	\$ 10,334,938	\$ 8,464,939	\$ 5,728,298	\$ 898,574	\$ 44,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 176,629,383	

ACCUMULATED DEPRECIATION- BY PHYSICAL LOCATION:	AMOUNT	INTEGRATED SYSTEM					RETAIL					WHOLESALE			TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP				
BY PHYSICAL LOCATION- TASK 11	\$ 513,137	(207,523)	-	-	-	-	-	-	-	-	-	-	-	-	
IN SERVICE- TASK 10	36,888	(86,328)	-	-	-	-	-	-	-	-	-	-	-	-	
MARINE CONNECTOR AGREEMENT	101,987	(20,003)	-	-	-	-	-	-	-	-	-	-	-	-	
TASK 11/1621-CSO ACC. DEPRECIATION	20,444	(12,504)	-	-	-	-	-	-	-	-	-	-	-	-	
OPRIEN	3,735,040	(676,490)	-	-	-	-	-	-	-	-	-	-	-	-	
VANPORTFLEET	44,816	5,888	-	-	-	-	-	-	-	-	-	-	-	-	
REMEMBRANCE / 3 MILE	250,587	-	-	-	-	-	-	-	-	-	-	-	-	-	
186 AVENUE	36,517	-	-	-	-	-	-	-	-	-	-	-	-	-	
HAYES- WEST	58,414	-	-	-	-	-	-	-	-	-	-	-	-	-	
HAYES- EAST	59,355	-	-	-	-	-	-	-	-	-	-	-	-	-	
O'BRIEN	203,674	-	-	-	-	-	-	-	-	-	-	-	-	-	
KINGSBURY	42,576	-	-	-	-	-	-	-	-	-	-	-	-	-	
LEONARD HEIGHTS	16,395	-	-	-	-	-	-	-	-	-	-	-	-	-	
THORNAPPLE	81,387	-	-	-	-	-	-	-	-	-	-	-	-	-	
6000 28TH ST (NEW CAS)	7,427	-	-	-	-	-	-	-	-	-	-	-	-	-	
THORNHILLS	15,788	-	-	-	-	-	-	-	-	-	-	-	-	-	
ROBINHOOD	29,733	-	-	-	-	-	-	-	-	-	-	-	-	-	
CASCADE SPRINGS	28,191	-	-	-	-	-	-	-	-	-	-	-	-	-	
SHOREHAVEN	12,100	-	-	-	-	-	-	-	-	-	-	-	-	-	
EAGLECREST	20,311	-	-	-	-	-	-	-	-	-	-	-	-	-	
GREENBRIER (NEW GRT)	4,849	-	-	-	-	-	-	-	-	-	-	-	-	-	
LINCOLN SCHOOL (NEW GRT)	11,652	-	-	-	-	-	-	-	-	-	-	-	-	-	
REEDS LAKE (NEW GRT-T10)	74,938	-	-	-	-	-	-	-	-	-	-	-	-	-	
KRAFT	12,100	-	-	-	-	-	-	-	-	-	-	-	-	-	
ORCHARD VISTA (NEW CAS)	3,971	-	-	-	-	-	-	-	-	-	-	-	-	-	
BIRD AVE-ALPINE ESTATES	43,430	-	-	-	-	-	-	-	-	-	-	-	-	-	
EAST PARIS	75,478	-	-	-	-	-	-	-	-	-	-	-	-	-	
SERVICE MAINS-ZONEGATED ACC. DEPRECIATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL - ZONEGATED ACC. DEPRECIATION	\$ -	\$ (779,984)	\$ 1,831,568	\$ 1,337,652	\$ 934,787	\$ 1,072,642	\$ 58,576	\$ 224,611	\$ -	\$ 420,688	\$ -	\$ -	\$ -	\$ 5,886,705	
GRAND TOTAL- ACC. DEPRECIATION	\$ 85,900,680	\$ 44,261,688	\$ 14,347,762	\$ 11,672,850	\$ 7,399,708	\$ 6,800,928	\$ 958,150	\$ 268,671	\$ 244,880	\$ 420,688	\$ 540,885	\$ 540,885	\$ 420,688	\$ 182,816,068	

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ZONEGATING ALLOCATION BY GOVERNMENTAL UNIT - TASK #22
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL					WHOLESALE					
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	
WASTEWATER TREATMENT	\$ 13,784,945	\$ 13,784,945											
LIFT STATIONS:													
A. INTERCEPTOR	379,391		56,173					10,873	816		854		
B. TRUNK	140,517		54,708				43,067	6,864	1,472				
C. LOCAL COLLECTOR	493,381		84,437				84,644	180,978	29,200		19,869	15,971	
SEWER LINES:													
A. INTERCEPTOR	278,536		39,555		65,083		6,754						
B. TRUNK	588,997		152,774		138,921		50,082	31,770	15,197		689		
C. LOCAL COLLECTOR	4,306,825		533,013		417,719		255,998	320,385	47,978		25,755		
D. ZONEGATING			(124,384)		(24,384)		34,287	37,836	(10,246)		16,199		9,674
BULK METERING STATIONS	12,003				2,970								2,780
CUSTOMER ACCOUNTING *	3,087,406		229,518		182,867		71,288	146,343	5,218		9,571		3,470
INDUSTRIAL PRETREATMENT	525,153												
SUBTOTAL OPERATING EXPENSE	23,597,154	14,310,088	1,178,388	783,176	546,120	735,049	90,635	72,937	14,056	40,963	12,457		
ADMINISTRATIVE EXPENSE	1,694,025	1,027,312	417,331	84,596	56,224	39,206	6,507	5,236	1,009	2,941	894		
TOTAL	\$ 25,291,179	\$ 15,337,410	\$ 6,230,596	\$ 1,282,994	\$ 639,400	\$ 585,326	\$ 787,818	\$ 97,142	\$ 78,173	\$ 43,904	\$ 13,351		

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT	100.000%	100.000%											
LIFT STATIONS:													
A. INTERCEPTORS (54)													
B. TRUNK (1)	100.000%		(1)										
C. LOCAL (8)	100.000%		(4)										
(45)	100.000%		(9)										
SEWER LINES:													
TOTAL MILES: 903.97													
A. INTERCEPTOR	100.000%	60.008%	14.201%	23.366%	2.425%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES 48.66		29.20	6.91	11.37	1.18								
B. TRUNK LINES	100.000%	33.712%	25.938%	23.566%	8.503%	5.394%	2.750%	0.117%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES 102.90		34.69	26.69	24.27	8.75	5.55	2.83	0.12					
C. LOCAL COLLECTOR	100.000%	62.830%	12.376%	9.699%	5.944%	7.439%	1.114%	0.598%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES 752.41		472.74	93.12	72.98	44.72	55.97	8.38	4.50					
D. ZONEGATING													
MILES (4)		(21.73)	4.93	(4.26)	5.99	6.61	(1.79)	2.83	1.97	3.76	1.69		
BULK METERING STATIONS													
CUSTOMER ACCTGS (1)	100.000%												
NO. OF METERS 74,117.00		79,115%	7.434%	5.923%	2.309%	4.740%	0.169%	0.310%	0.060%	0.174%	0.053%		
INDUSTRIAL PRETREATMENT	100.000%	58,638.00	5,510.00	4,390.00	1,711.00	3,513.00	125.00	230.00					
ADMINISTRATIVE EXPENSE (2)	100.000%	24.635%	4.994%	3.319%	2.314%	3.115%	0.384%	0.309%	0.080%	0.174%	0.053%		

NOTES:

- (1) MAINTENANCE & COLLECTION COSTS ARE ALLOCATED ON THE NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP.
- (2) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 23**

ASSIGN OTHER OPERATING REVENUES TO EACH GOVERNMENTAL ENTITY.

BASIS OF ALLOCATION: RETAIL BILLINGS BY GOVERNMENTAL ENTITY - TASK NO. 6 & 7

	<u>RETAIL BILLINGS</u>	<u>PERCENTAGE OF TOTAL</u>	<u>ALLOCATION *</u>
CITY OF GRAND RAPIDS	\$ 32,631,153	71.2639%	\$ 261,843
CITY OF WALKER	4,715,670	10.2986%	37,840
CITY OF KENTWOOD	3,510,881	7.6675%	28,172
CASCADE TOWNSHIP	1,945,319	4.2484%	15,610
GRAND RAPIDS TOWNSHIP	2,432,620	5.3126%	19,520
TALLMADGE TOWNSHIP	287,521	0.6279%	2,307
WRIGHT TOWNSHIP	266,059	0.5811%	2,135
	<u>\$ 45,789,223</u>	<u>100.0000%</u>	<u>\$ 367,427</u>

** Reflects adjustment for circuit breaker provisions per 3rd amendment of W/S agreements*

CITY OF GRAND RAPIDS, MICHIGAN
 SEWAGE DISPOSAL SYSTEM FUND
 ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES-TASK NO. 24
 FISCAL YEAR ENDED JUNE 30, 2011

COST CENTER	DEPRECIATION EXPENSE	INTEGRATED SYSTEM				RETAIL				WHOLESALE				TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP			
BY PHYSICAL LOCATION-TASK 11		\$ 6,751,116	\$ 857,313	\$ 7,118,322	\$ 407,939	\$ 382,495	\$ 113,963	\$ 2,506	\$ -	\$ -	\$ -	\$ -	\$ 12,843,251	
ADD: IN SERVICE-TASK 10		174,315	2,228	28,855	3,657	2,228	(10,307)	(1,563)	-	-	-	-	218,835	
MARNE CONNECTOR AGREEMENT		(12,959)											(12,959)	
LESS: TASK 11/1621- CSO DEP. EXP.		(3,720,197)											(3,720,197)	
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW (GR)	46,649	(18,866)	-	-	-	18,866	-	-	-	-	-	-	-	
FULTON-MIDDLEBORO (GR)	183	(180)	-	-	-	180	-	-	-	-	-	-	-	
WEALTHY ST EXT. CHAMBER	11,321	(2,223)	2,108	-	-	-	115	-	-	-	-	-	-	
WEALTHY MARKET	488,326	(88,446)	72,302	-	-	13,995	1,050	1,099	-	-	-	-	-	
VANPORTLIET		-	(7,290)	-	-	-	1,503	5,787	-	-	-	-	-	
REMEMBRANCE / 3 MILE	62,642	-	(1,448)	-	-	-	784	-	-	-	-	-	-	
O'BRIEN	15,667	-	-	-	-	-	-	-	-	-	-	-	-	
KINGSBURY	10,772	-	-	-	-	-	-	-	-	-	-	-	-	
LEONARD HEIGHTS	4,089	-	-	-	-	-	-	-	-	-	-	-	-	
THORNAPPLE	7,474	-	-	-	-	-	-	-	-	-	-	-	-	
800 28TH ST (NEW CAS)	3,713	-	-	-	-	-	-	-	-	-	-	-	-	
THORNHILLS	3,947	-	-	-	-	-	-	-	-	-	-	-	-	
ROBINHOOD	5,947	-	-	-	-	-	-	-	-	-	-	-	-	
CASCADE SPRINGS	2,183	-	-	-	-	-	-	-	-	-	-	-	-	
SHOREHAVEN	2,420	-	-	-	-	-	-	-	-	-	-	-	-	
EAGLECREST	5,078	-	-	-	-	-	-	-	-	-	-	-	-	
GREENBRIER	1,616	-	-	-	-	-	-	-	-	-	-	-	-	
LINCOLN SCHOOL	5,121	-	-	-	-	-	-	-	-	-	-	-	-	
REEDS LAKE	24,979	-	-	-	-	-	-	-	-	-	-	-	-	
KRAFT	2,420	-	-	-	-	-	-	-	-	-	-	-	-	
ORCHARD VISTA	1,324	-	-	-	-	-	-	-	-	-	-	-	-	
16TH AVE	4,565	-	-	-	-	-	-	-	-	-	-	-	-	
HAYES- WEST	7,052	-	-	-	-	-	-	-	-	-	-	-	-	
HAYES- EAST	9,893	-	-	-	-	24,102	9,893	-	-	-	-	-	-	
BIRD AVE-ALPINE ESTATES	24,102	-	-	-	-	10,783	-	-	-	-	-	-	-	
EAST PARIS	10,783	-	-	-	-	-	-	-	-	-	-	-	-	
SERVICE MAINS		(203,080)	94,957	(174,751)	48,752	82,490	3,588	19,147	2,840	108,118	17,939	-	-	
ADJUSTED BY ZONEGATING		2,863,749	1,020,170	565,936	460,348	535,139	120,589	38,593	2,840	108,118	17,939	-	9,517,060	
LESS CONTRIBUTIONS AMORTIZED		(1,052,263)	(425,912)	(432,724)	(331,856)	(268,527)	(91,247)	-	-	-	(14,905)	-	(3,687,878)	
TASK NO. 21		\$ 1,811,486	\$ 584,258	\$ 133,212	\$ 128,492	\$ 266,612	\$ 29,342	\$ 38,593	\$ 2,840	\$ 108,118	\$ 3,034	\$ -	\$ 5,629,182	
TOTAL		\$ 2,513,195	\$ 584,258	\$ 133,212	\$ 128,492	\$ 266,612	\$ 29,342	\$ 38,593	\$ 2,840	\$ 108,118	\$ 3,034	\$ -	\$ 5,629,182	

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2011**

COST CENTER	RETAIL										WHOLESALE		
	INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	TOTAL	
OPERATION & MAINTENANCE EXPENSE- TASK NO. 22	\$ 15,337,410	\$ 6,230,596	\$ 1,262,994	\$ 839,400	\$ 585,326	\$ 787,818	\$ 97,142	\$ 78,173	\$ 15,065	\$ 43,904	\$ 13,351	\$ 25,291,179	
DEPRECIATION EXPENSE TASK NO. 24	2,513,195	1,811,486	594,258	133,212	128,492	268,612	29,342	38,593	2,840	108,118	3,034	5,623,182	
RETURN ON SYSTEM INVESTMENT TASK NO. 21	3,094,703	4,482,814	1,295,374	437,283	415,276	688,970	74,310	97,892	2,078	436,584	1,268	11,006,552	
REVENUE CREDITS- TASK NO. 23		(281,843)	(37,840)	(28,172)	(15,610)	(19,520)	(2,307)	(2,135)				(367,427)	
CSO DEBT SERVICE REQUIREMENTS ALLOCATE:	11,085,005											11,085,005	
INTEGRATED SYSTEM CREDITS	(1,339,437)	(208,420)	(261,239)	(261,239)	(116,408)	(92,334)	(10,315)	(6,232)	(85,434)	(72,365)	-	(2,190,184)	
INTEGRATED SYSTEM (A)	12,723,907	1,960,871	2,481,625	2,481,625	1,105,812	877,123	97,987	59,195	811,573	687,426	136,789	-	
LESS: CIRCUIT BREAKER (B)	(288,784)	-	-	(74,126)	-	-	(10,856)	-	-	-	-	(371,766)	
	\$ -	\$ 34,445,744	\$ 4,869,237	\$ 3,527,993	\$ 2,102,888	\$ 2,488,669	\$ 275,303	\$ 265,486	\$ 746,122	\$ 1,203,667	\$ 157,442	\$ 50,082,541	

(A) ALLOCATED TO CUSTOMER COMMUNITIES UNDER OLD CONTRACT BASIS OF PLANT FLOW. REMAINING ALLOCATION TO UAB PARTNERS UNDER UNIFORM SERVICE AGREEMENTS BASED ON PLANT FLOW & LAND, AS NOTED IN T.
 (B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

COST CENTER	RETAIL										WHOLESALE		
	INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	TOTAL	
OLD METHOD- PLANT FLOW	\$ 12,723,907	\$ 1,960,871	\$ -	\$ 2,481,625	\$ -	\$ 877,123	\$ 97,987	\$ -	\$ -	\$ 687,426	\$ 136,789	\$ 20,805,519	
NEW METHOD- PLANT FLOW / LAND	\$ 12,723,907	\$ 1,960,871	\$ 2,481,625	\$ 2,481,625	\$ 1,105,812	\$ 877,123	\$ 97,987	\$ 59,195	\$ 811,573	\$ 687,426	\$ 136,789	\$ 20,945,308	

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWER SUPPLY SYSTEM FUND
TASK NO. 25a**

REVIEW THE REVENUE REQUIREMENTS TO ASSURE COMPLIANCE WITH THE APPLICABLE BOND ORDINANCE PROVISIONS.

	<u>YEAR ENDED 6/30/11</u>	<u>PRO FORMA *</u>
REVENUES:		
RETAIL/WHOLESALE SEWAGE SERVICE	\$ 47,682,992	\$ 47,563,901
CONNECTION FEES/FRONT FOOT FEES	523,565	650,000
SEWAGE SURCHARGES	1,648,582	1,273,000
OTHER OPERATING REVENUES	124,680	112,000
INTEREST ON INVESTMENTS	201,359	316,000
MISCELLANEOUS	841,890	762,000
TOTAL REVENUES	<u><u>\$ 51,023,068</u></u>	<u><u>\$ 50,676,901</u></u>
OPERATING EXPENSES:		
OPERATIONS & MAINTENANCE	\$ 24,215,493	\$ 25,155,789
DEPRECIATION	12,843,252	12,843,252
TOTAL EXPENSES	<u><u>\$ 37,058,745</u></u>	<u><u>\$ 37,999,041</u></u>
ADDITIONS: DEPRECIATION	<u>12,843,252</u>	<u>12,843,252</u>
NET EARNINGS OF THE SYSTEM	<u><u>\$ 26,807,575</u></u>	<u><u>\$ 25,521,112</u></u>
DEBT SERVICE (CASH BASIS)		
SERIES 2010A&B BONDS	\$ -	\$ 1,280,226
SERIES 2010 BONDS	1,378,385	1,481,250
SERIES 2008 BONDS	4,394,238	4,395,038
SERIES 2005 BONDS	2,948,569	2,952,006
SERIES 2004 BONDS	1,996,075	1,994,737
SERIES 1998 BONDS	4,391,681	4,391,713
TOTAL SENIOR DEBT SERVICE	<u>15,108,948</u>	<u>16,494,970</u>
SRF DEBT (JUNIOR LIEN)	<u>3,859,187</u>	<u>3,731,424</u>
	<u><u>\$ 18,968,135</u></u>	<u><u>\$ 20,226,394</u></u>
COVERAGE RATIO - SENIOR DEBT	<u>1.77</u>	<u>1.55</u>
COVERAGE RATIO - ALL DEBT	<u>1.41</u>	<u>1.26</u>

* SEWAGE SERVICES ADJUSTED FOR RATE REVISIONS OF -3.30% AND 2.89% EFFECTIVE 1/1/11 AND 1/1/12, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2012 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS.

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SUMMARY

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INITIAL SYSTEM REVENUE REQUIREMENTS		\$ 50,454,307
REVENUES FROM CURRENT RATES		
REU CHARGE	\$ 257,547	
MONTHLY METER CHARGE	12,703,425	
MONTHLY BILLING CHARGE	3,648,512	
COMMODITY CHARGE	<u>32,064,418</u>	<u>(48,673,902)</u>
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		<u>\$ 1,780,405</u>
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>3.66%</u>
INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE		\$ 50,454,307
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL		<u>(371,766)</u>
SYSTEM REVENUE REQUIREMENTS		<u>\$ 50,082,541</u>
ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)		<u>\$ 1,408,639</u>
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>2.89%</u>

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 26**

METER SIZE	EQUIV. FACTOR	CITY OF GR		CITY OF WALKER		CITY OF KENTWOOD		CASCADE TWP		GR TWP		TALLMADGE TWP		WRIGHT TWP	
		METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	USERS*	REU
A 3/4" or less	1.0000	54,433	54,433	4,915	4,915	3,387	3,387	1,275	1,275	3,166	3,166	104	104	-	-
B 1"	1.7778	2,337	4,155	354	629	479	852	221	393	232	412	13	23	-	-
C 1 1/4"	2.7778	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D 1 1/2"	4.0000	900	3,600	139	556	308	1,232	142	568	70	280	3	12	-	-
E 2"	7.1111	772	5,490	84	597	182	1,294	65	462	35	249	2	14	-	-
F 3"	16.0000	91	1,456	9	144	18	288	6	96	6	96	2	32	-	-
G 4"	28.4444	90	2,560	8	228	13	370	2	57	4	114	1	28	-	-
H 6" and over	64.0000	15	960	1	64	3	192	-	-	-	-	-	-	-	-
Other- Wright Twp		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	230	348.187
TOTAL		58,638	72,654	5,510	7,133	4,390	7,615	1,711	2,851	3,513	4,317	125	213	230	348.187

* Source: Grand Rapids Water/Sewage Meter/User Quantity Report, June 30, 2011.

CITY OF GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS * \$ 34,445,744

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

72,654 meter equivalents x \$ 8.90 x 12 = \$ 7,759,447

MONTHLY BILLING CHARGE

58,638 meters x \$ 3.41 x 12 = 2,399,467

COMMODITY CHARGE

7,076,880 units (100 CF) x \$ 3.26 = 23,070,629 (33,229,543)

REQUIRED REVENUE INCREASE (DECREASE) \$ 1,216,201

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 3.66%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 286,784

CITY OF GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

$$\frac{\text{INTEGRATED SYSTEM COST}}{\text{BILLED UNITS}} = \frac{\$23,808,912}{7,076,880} = \underline{\underline{\$ 3.36 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 34,445,744
NEW COMMODITY CHARGE		
7,076,880 x \$ 3.36		\$ 23,778,317
NEW MONTHLY BILLING CHARGE		
58,638 x \$ 3.47 x 12	2,441,686	(26,220,003)
		<u>\$ 8,225,741</u>

$$\text{MONTHLY METER CHARGE} = \frac{\$8,225,741}{72,654 \times 12} = \underline{\underline{\$ 9.43 \text{ MONTHLY}}}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 9.43	\$ 3.47	\$ 12.90	\$ 12.31
1"	1.7778	16.76	3.47	20.23	19.23
1 1/4"	2.7778	26.19	3.47	29.66	28.13
1 1/2"	4.0000	37.72	3.47	41.19	39.01
2"	7.1111	67.06	3.47	70.53	66.70
3"	16.0000	150.88	3.47	154.35	145.81
4"	28.4444	268.23	3.47	271.70	256.57
6" and over	64.0000	603.52	3.47	606.99	573.01

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 286,784

CITY OF WALKER, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS		\$	4,869,237
REVENUES FROM CURRENT RATES			
MONTHLY METER CHARGE			
7,133 meter equivalents	x	\$ 26.71	x 12 = \$ 2,286,269
MONTHLY BILLING CHARGE			
5,510 meters	x	\$ 3.41	x 12 = 225,469
COMMODITY CHARGE			
860,315 units (100 CF)	x	\$ 2.70	= <u>2,322,851</u>
			<u>(4,834,589)</u>
REQUIRED REVENUE INCREASE (DECREASE)		\$	<u>34,648</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>0.72%</u>

CITY OF WALKER, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.72 /100 CF *
 \$ 2.70 x 100.72%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 4,869,237
NEW COMMODITY CHARGE		
860,315 x \$ 2.72		\$ 2,340,057
NEW MONTHLY BILLING CHARGE		
5,510 x \$ 3.47 x 12	<u>229,436</u>	<u>(2,569,493)</u>
		<u>\$ 2,299,744</u>

MONTHLY METER CHARGE = $\frac{\$2,299,744}{7,133 \times 12} = \underline{\underline{\$ 26.87 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 26.87	\$ 3.47	\$ 30.34	\$ 30.12
1"	1.7778	47.77	3.47	51.24	50.90
1 1/4"	2.7778	74.64	3.47	78.11	77.61
1 1/2"	4.0000	107.48	3.47	110.95	110.25
2"	7.1111	191.08	3.47	194.55	193.35
3"	16.0000	429.92	3.47	433.39	430.77
4"	28.4444	764.30	3.47	767.77	763.16
6" and over	64.0000	1,719.68	3.47	1,723.15	1,712.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

CITY OF KENTWOOD, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS * \$ 3,527,983

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

7,615 meter equivalents x \$ 3.35 x 12 = \$ 306,123

MONTHLY BILLING CHARGE

4,390 meters x \$ 3.41 x 12 = 179,639

COMMODITY CHARGE

1,285,311 units (100 CF) x \$ 2.27 = 2,917,656 (3,403,418)

REQUIRED REVENUE INCREASE (DECREASE) \$ 124,565

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 3.66%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 74,126

CITY OF KENTWOOD, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.35 /100 CF *
 \$ 2.27 x 103.66%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 3,527,983
NEW COMMODITY CHARGE 1,285,311 x \$ 2.35	\$ 3,020,481
NEW MONTHLY BILLING CHARGE 4,390 x \$ 3.47 x 12	<u>182,800</u>
	<u>(3,203,281)</u>
	<u>\$ 324,702</u>

MONTHLY METER CHARGE = $\frac{\$324,702}{7,615 \times 12} = \underline{\underline{\$ 3.55 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 3.55	\$ 3.47	\$ 7.02	\$ 6.76
1"	1.7778	6.31	3.47	9.78	9.37
1 1/4"	2.7778	9.86	3.47	13.33	12.72
1 1/2"	4.0000	14.20	3.47	17.67	16.81
2"	7.1111	25.24	3.47	28.71	27.23
3"	16.0000	56.80	3.47	60.27	57.01
4"	28.4444	100.98	3.47	104.45	98.70
6" and over	64.0000	227.20	3.47	230.67	217.81

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 74,126

CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS	\$ 2,102,888
LESS: CASH CONTRIBUTION	-
SYSTEM REVENUE REQUIREMENTS	\$ 2,102,888

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
2,851 meter equivalents	x \$ 27.64	x 12 =	\$ 945,620
MONTHLY BILLING CHARGE			
1,711 meters	x \$ 3.41	x 12 =	70,014
COMMODITY CHARGE			
400,665 units (100 CF)	x \$ 2.55	=	1,021,696
			(2,037,330)

REQUIRED REVENUE INCREASE (DECREASE)	\$ 65,558
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PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	3.22%
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CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.63 /100 CF *
 \$ 2.55 x 103.22%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 2,102,888
NEW COMMODITY CHARGE		
400,665 x \$ 2.63		\$ 1,053,749
NEW MONTHLY BILLING CHARGE		
1,711 x \$ 3.47 x 12	71,246	(1,124,995)
		\$ 977,893

MONTHLY METER CHARGE = $\frac{\$977,893}{2,851 \times 12}$ = \$ 28.58 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 28.58	\$ 3.47	\$ 32.05	\$ 31.05
1"	1.7778	50.81	3.47	54.28	52.55
1 1/4"	2.7778	79.39	3.47	82.86	80.19
1 1/2"	4.0000	114.32	3.47	117.79	113.97
2"	7.1111	203.24	3.47	206.71	199.96
3"	16.0000	457.28	3.47	460.75	445.65
4"	28.4444	812.94	3.47	816.41	789.61
6" and over	64.0000	1,829.12	3.47	1,832.59	1,772.37

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

GRAND RAPIDS TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS	\$	2,488,669
LESS: CASH CONTRIBUTION		(7,200)
SYSTEM REVENUE REQUIREMENTS	\$	<u>2,481,469</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE		
4,317 meter equivalents	x \$ 25.69	x 12 = \$ 1,330,845
MONTHLY BILLING CHARGE		
3,513 meters	x \$ 3.41	x 12 = 143,752
COMMODITY CHARGE		
403,555 units (100 CF)	x \$ 2.49	= <u>1,004,852</u>

REQUIRED REVENUE INCREASE (DECREASE)	\$	<u>2,020</u>
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PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>0.08%</u>
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GRAND RAPIDS TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.49 /100 CF *
 \$ 2.49 x 100.08%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 2,481,469
NEW COMMODITY CHARGE 403,555 x \$ 2.49	\$ 1,004,852
NEW MONTHLY BILLING CHARGE 3,513 x \$ 3.47 x 12	<u>146,281</u>
	<u>(1,151,133)</u>
	<u>\$ 1,330,336</u>

MONTHLY METER CHARGE = $\frac{\$1,330,336}{4,317 \times 12}$ = \$ 25.68 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 25.68	\$ 3.47	\$ 29.15	\$ 29.10
1"	1.7778	45.65	3.47	49.12	49.08
1 1/4"	2.7778	71.33	3.47	74.80	74.77
1 1/2"	4.0000	102.72	3.47	106.19	106.17
2"	7.1111	182.61	3.47	186.08	186.09
3"	16.0000	410.88	3.47	414.35	414.45
4"	28.4444	730.45	3.47	733.92	734.15
6" and over	64.0000	1,643.52	3.47	1,646.99	1,647.57

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

TALLMADGE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS *	\$	275,303
LESS: CASH CONTRIBUTION		(9,720)
SYSTEM REVENUE REQUIREMENTS	\$	<u>265,583</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
213 meter equivalents	x	\$ 29.39	x 12 = \$ 75,121
MONTHLY BILLING CHARGE			
125 meters	x	\$ 3.41	x 12 = 5,115
COMMODITY CHARGE			
17,960 units (100 CF)	x	\$ 10.32	= <u>185,347</u>
			<u>(265,583)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ -</u>

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>0.00%</u>
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* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 10,856

TALLMADGE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 10.32 /100 CF *
 \$ 10.32 x 100.00%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 265,583
NET OF CONTRIBUTION OF \$ 9,720		
NEW COMMODITY CHARGE		
17,960 x \$ 10.32	\$ 185,347	
NEW MONTHLY BILLING CHARGE		
125 x \$ 3.47 x 12	<u>5,205</u>	<u>(190,552)</u>
		<u>\$ 75,031</u>

MONTHLY METER CHARGE = $\frac{\$75,031}{213 \times 12} = \underline{\underline{\$ 29.35 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 29.35	\$ 3.47	\$ 32.82	\$ 32.80
1"	1.7778	52.18	3.47	55.65	55.66
1 1/4"	2.7778	81.53	3.47	85.00	85.05
1 1/2"	4.0000	117.40	3.47	120.87	120.97
2"	7.1111	208.71	3.47	212.18	212.41
3"	16.0000	469.60	3.47	473.07	473.65
4"	28.4444	834.84	3.47	838.31	839.39
6" and over	64.0000	1,878.40	3.47	1,881.87	1,884.37

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 10,856

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS	\$	265,486
LESS: CASH CONTRIBUTION		(5,000)
SYSTEM REVENUE REQUIREMENTS	\$	<u>260,486</u>

REVENUES FROM CURRENT RATES

REU CHARGE		
348.187 meter equivalents	x \$ 61.64	x 12 = \$ 257,547
MONTHLY METER CHARGE		
348.187 meter equivalents	x \$ -	x 12 = -
MONTHLY BILLING CHARGE		
230 meters	x \$ -	x 12 = -
COMMODITY CHARGE		
21,066 units (100 CF)	x \$ -	= <u>-</u> <u>(257,547)</u>
REQUIRED REVENUE INCREASE (DECREASE)		<u>\$ 2,939</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>1.14%</u>

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$260,486}{348.187 \times 12} = \$ \underline{\underline{62.34}} \quad \text{MONTHLY REU CHARGE *}$$

SYSTEM REVENUE REQUIREMENTS ARE NET OF CONTRIBUTION OF \$ 5,000

EXAMPLES OF APPROXIMATE MONTHLY CHARGE BY NUMBER OF REU:

<u>NUMBER OF REU</u>	<u>AMOUNT</u>	<u>NUMBER OF REU</u>	<u>AMOUNT</u>	<u>NUMBER OF REU</u>	<u>AMOUNT</u>
1.0000	\$ 62.34	7.5000	\$ 467.55	19.0000	\$ 1,184.46
1.5000	93.51	8.0000	498.72	20.0000	1,246.80
2.0000	124.68	8.5000	529.89	25.0000	1,558.50
2.5000	155.85	9.0000	561.06	30.0000	1,870.20
3.0000	187.02	9.5000	592.23	35.0000	2,181.90
3.5000	218.19	10.0000	623.40	40.0000	2,493.60
4.0000	249.36	11.0000	685.74	50.0000	3,117.00
4.4000	274.30	12.0000	748.08	60.0000	3,740.40
4.5000	280.53	13.0000	810.42	70.0000	4,363.80
5.0000	311.70	14.0000	872.76	80.0000	4,987.20
5.5000	342.87	15.0000	935.10	90.0000	5,610.60
6.0000	374.04	16.0000	997.44	100.0000	6,234.00
6.5000	405.21	17.0000	1,059.78	150.0000	9,351.00
7.0000	436.38	18.0000	1,122.12	200.0000	12,468.00

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

CITY OF EAST GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	726,139
COMMODITY CHARGE			
473.253 units	x	\$	1,614.00
			763,830
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>(37,691)</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	19,983
MONTHLY SERVICE CHARGE			
\$1,775	x		12 MONTHS
			21,300
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>(1,317)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>-4.97%</u>

CITY OF EAST GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 746,122
NEW COMMODITY CHARGE *	
473.253 x \$ 1,534.00 =	(725,970)
	<hr/>
	<u>\$ 20,152</u>

MONTHLY SERVICE CHARGE * = \$ 20,152 / 12 = \$1,679

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	615,061
COMMODITY CHARGE		
320.669 units x \$ 1,996.00		640,055
		640,055
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	(24,994)
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	588,606
MONTHLY SERVICE CHARGE		
\$48,827 x 12 MONTHS		585,924
		585,924
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	2,682
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-1.82%

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,203,667
NEW COMMODITY CHARGE *	
320.669 x \$ 1,918.00 =	(615,043)
	<hr/>
	<u>\$ 588,624</u>

MONTHLY SERVICE CHARGE * = \$588,624 / 12 = \$49,052

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	139,789
COMMODITY CHARGE		
101.030 units x \$ 1,361.00		137,502
		137,502
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	2,287
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	17,653
MONTHLY SERVICE CHARGE		
\$1,486 x 12 MONTHS		17,832
		17,832
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	(179)
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		1.36%

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 157,442
NEW COMMODITY CHARGE *	
101.030 x \$ 1,384.00 =	(139,826)
	<hr/>
	<u>\$ 17,616</u>

MONTHLY SERVICE CHARGE * = \$ 17,616 / 12 = \$1,468

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 25, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM:  Rick DeVries, P.E.
Assistant City Engineer

SUBJECT: SEWER RATE STUDY - TASK NO. 28 AND 29

Enclosed are the *revised* Front Foot Rates for Sanitary Sewer (Task 28) and the costs for Sanitary Sewer Laterals (Task 29), for the Fiscal Year 2011.

RDV/dv

Enclosures

cc: Jack Stegehuis
Mark Garvey

SEWER RATE STUDY
 SEWAGE DISPOSAL SYSTEM FUND
 RE-EVALUATE FRONT FOOT CHARGES
 TASK NO. 28

The City Engineer's Office has reviewed current construction costs for sewer facilities and recommends the following front foot assessment rates:

	<u>2011</u>	<u>2012</u>	<u>% Increase</u>
Domestic Sewer User	\$ 58.00	\$ 62.00	6.90%
Commercial - Industrial User (Sewer over 8 in. diameter)	\$ 78.00	\$ 88.00	12.82%

The rates are based on an average of prices quoted in bid proposals which have been received by the City Engineer's Office during the period July, 2010 through June, 2011. Calculations of the rates are on file in the City Engineer's Office.

SEWER RATE STUDY
 SEWAGE DISPOSAL SYSTEM FUND
 EVALUATE SEWER LATERAL CHARGES
 TASK NO. 29

The City Engineer's Office has evaluated the cost for a six inch (6") sanitary sewer lateral and recommends that sewer lateral costs should be as follows:

<u>R.O.W. WIDTH</u>	<u>COST FOR 6-INCH LATERAL</u>		
	<u>2011</u>	<u>2012</u>	<u>% Increase</u>
50 ft.	\$1,600	\$1,800	12.50%
60 ft.	\$1,800	\$2,150	19.44%
66 ft.	\$2,000	\$2,300	15.00%
80 ft.	\$2,400	\$2,750	14.58%
100 ft.	\$2,900	\$3,400	17.24%

MEMORANDUM

CITY OF GRAND RAPIDS

Date: September 13, 2011

To: Linda Wagenmaker
Utility Financial Officer

From: Michael Lunn *Mike Lunn*
Acting Environmental Services Manager

Subject: Sewer Rate Study – Task #30 - Surcharges

The Wastewater Treatment plant has a limited amount of capacity which is typically allocated to industries having discharges exceeding ordinance limits. These industries are charged for utilizing this remaining plant capacity in four categories of conventional pollutants. These pollutants are: 1) Biochemical Oxygen Demand (BOD); 2) Total Suspended Solids (TSS); 3) Total Phosphorus (Phos); 4) and Ammonia Nitrogen (NH₃). This benefits the industries in that it reduces their pretreatment requirements and benefits the system by utilizing available system capacity.

As shown on the attached sheets, the surcharge methodology includes evaluating various cost centers at the Wastewater Treatment plant and allocating costs based on unit process operating cost. Cumulative costs can then be allocated to the four conventional pollutant categories identified above to determine appropriate surcharge rates.

ML/LW

City of Grand Rapids Michigan
 Sewage Disposal System Fund
 Evaluation of Wastewater Surcharges for Industrial Customers- BOD, TSS, Phos & NH3
 TASK NO. 30- Part 1

Description	Wastewater Surcharges							
	Rate Study Year 2011	Volume	BOD	TSS	Phos	NH3	Industrial	Other
Operation & Maintenance (See Part 2)	\$ 25,291,179	\$ 4,196,296	\$ 4,069,192	\$ 4,544,115	\$ 504,629	\$ 470,713	\$ 525,153	\$ 10,981,081
Depreciation (See Part 3)	5,629,182	765,041	741,870	828,450	92,008	85,826	-	3,115,987
Return on System Investment (See Part 3)	11,006,552	942,059	913,525	1,020,138	113,297	105,684	-	7,911,849
Total	\$ 41,926,913	\$ 5,903,396	\$ 5,724,587	\$ 6,392,703	\$ 709,934	\$ 662,223	\$ 525,153	\$ 22,008,917

Recommended Surcharge Rate - 2012 **\$ 0.200** **\$ 0.254** **\$ 1.042** **\$ 0.330**

Actual Surcharge Rate - 2011	\$ 0.239	\$ 0.323	\$ 1.079	\$ 0.318
Change in Surcharge Rate - Amount- 2011 to 2012	\$ (0.039)	\$ (0.069)	\$ (0.037)	\$ 0.012
Change in Surcharge Rate - Percent- 2011 to 2012	-16.32%	-21.36%	-3.43%	3.77%

Task No. 30 - Part 3

City of Grand Rapids Michigan
 Sewage Disposal System Fund
 Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
 Allocation of Depreciation Expense & Return on System Investment

Depreciation Expense- Task 24

Description	Amount	Volume	Wastewater Surcharges					Industrial	Other
			BOD	TSS	Phos	NH3			
Integrated System (1)	\$ 2,513,195	\$ 765,041	\$ 741,870	\$ 828,450	\$ 92,008	\$ 85,826	\$ -	\$ -	
Other	3,115,987	-	-	-	-	-	-	3,115,987	
Total	\$ 5,629,182	\$ 765,041	\$ 741,870	\$ 828,450	\$ 92,008	\$ 85,826	\$ -	\$ 3,115,987	

Return on System Investment- Task 21

Description	Amount	Volume	Wastewater Surcharges					Industrial	Other
			BOD	TSS	Phos	NH3			
Integrated System (1)	\$ 3,094,703	\$ 942,059	\$ 913,525	\$ 1,020,138	\$ 113,297	\$ 105,684	\$ -	\$ -	
Other	7,911,849	-	-	-	-	-	-	7,911,849	
Total	\$ 11,006,552	\$ 942,059	\$ 913,525	\$ 1,020,138	\$ 113,297	\$ 105,684	\$ -	\$ 7,911,849	

(1) Allocated on WWTP Allocation Factors *

30.4410% 29.5190% 32.9640% 3.6610% 3.4150%

* Refer to Task No. 30 - Part 2

Task No. 30 - Part 4

City of Grand Rapids Michigan
 Sewage Disposal System Fund
 Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
 Functional Cost Allocation Factors

Line No. Ref.	Cost Function	Allocation Basis	Volume %	Total %	Wastewater Surcharges					Industrial %	Other %
					BOD %	TSS %	Phos %	NH3 %			
(1)	Pre-Treatment	WWTP	100.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(2)	Primary Treatment	WWTP	0.000%	100.000%	30.000%	60.000%	0.000%	10.000%	0.000%	0.000%	0.000%
(3)	Secondary Treatment	WWTP	25.000%	100.000%	50.000%	20.000%	0.000%	5.000%	0.000%	0.000%	0.000%
(4)	Disinfection/Dechlorination	WWTP	100.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(5)	Phosphorus Removal	WWTP	50.000%	100.000%	0.000%	0.000%	50.000%	0.000%	0.000%	0.000%	0.000%
(6)	Residue Handling/Disposal	WWTP	10.000%	100.000%	35.000%	51.000%	2.000%	2.000%	0.000%	0.000%	0.000%
(7)	Bulk Metering Stations	Collection	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(8)	Customer Accounting	Admin	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(9)	Industrial Pretreatment	Industry	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%
(10)	Admin	Admin	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(11)	Collection System	Collection	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%

(a) With the exception of phosphorus removal, foregoing based on "Final Allocation Table" in August 1, 2003 memo from Randall Fisher & Mike Lunn to Eric DeLong regarding 2001 Surcharge Rate Evaluation. Evaluation by WWTP staff for 2011 RS Review concluded percentages for phosphorus removal shall remain allocated 50/50 to the categories above, as initially recommended in the 2006 RS Review, to recommend 2012 rate adjustments.

CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
IPP PERMIT FEE STRUCTURE – TASK NO. 31

The City of Grand Rapids Industrial Pretreatment Program (IPP) Permit fee structure is based on the actual cost of administration and implementation. Administration includes all the costs associated with document generation and handling as well as one annual site visit. The implementation costs include all sampling and associated laboratory analyses required by the permit. These two fees are identified on permit documents as a Permit Fee and an Analytical Fee.

Permit Fee: This fee is based on the actual costs associated with administering the permit program, including time spent on permit required inspections, clerical requirements, data handling requirements and all trunkline monitoring. This fee will be specific to the costs associated with the permit category.

Analytical Fee: This fee is based on actual costs associated with each permit. The costs, and an explanation of how they are determined, are outlined in an accompanying attachment. Labor time, including sampling and sample delivery to our laboratory, was derived from experience:

Composite samples:	1.5 hours each
Grab samples:	1.0 hours each

Four examples of analytical fees are attached herewith.

City of Grand Rapids
Cost of Services Provided by IPP

Last Update: 10/24/2011

Permit Fee: \$ 400.00

IPP Costs:

Labor: \$ 57.57 per hour
Vehicle: \$ 3.57 per hour
Sampler: \$ 35.00 per day

IPP Accounting:

Composite Labor: 1.5 hours per sample
Grab Sample Labor: 1.0 hours per sample

Laboratory Costs:

metals	\$	7.00	ea.
TSS	\$	7.00	ea.
BOD	\$	14.00	ea.
total phosphate	\$	13.50	ea.
pH	\$	5.00	ea.
EPA 624	\$	60.00	ea.
EPA 625	\$	115.00	ea.
BTEX/MTBE	\$	35.00	ea.
sulfide	\$	12.00	ea.
oil & grease	\$	25.00	ea.
total cyanide	\$	15.00	ea.
hex chrome	\$	10.00	ea.
fecal coliform	\$	25.00	ea.

Explanation of Costs:

Labor: Labor is the hourly pay rate of a Water Pollution Control Inspector (classification 21A @ "F" step = to \$28.7842 x 2) per the latest agreement between the City of Grand Rapids and the Grand Rapids Employees Independent Union plus 100% as specified in section 2.81(1) of the City of Grand Rapids Sewage Disposal System Ordinance. If personnel in a different classification are required, time will be billed based on that classification's pay scale plus 100%.

Vehicle: Hourly rate is the actual cost charged to City departments for vehicle use plus 25% for overhead.

Sampler: Sampler costs are derived from an average of the lowest quoted prices obtained from private suppliers in the greater Grand Rapids Area.

Analysis: Laboratory costs are based on the most recently approved competitive bid obtained for contract work provided to the Grand Rapids Wastewater Treatment Plant's Laboratory.

Permit No: Example 1

Company: Typical Metal Finisher
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 782.84
Amount Due: \$ 1,182.84

Composite Samples: 4

IPP Requirements: man hours = 6.0 x \$ 57.57 = \$ 345.42
sampler days = 4.0 x \$ 35.00 = \$ 140.00
vehicle hours = 6.0 x \$ 3.57 = \$ 21.42

Total IPP Composite Costs: \$ 506.84

Laboratory Analysis: metals 7 x \$ 7.00 = \$ 49.00
(each composite) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ 49.00

Total Laboratory Composite Costs: \$ 196.00

Total Composite Sample Costs: \$ 702.84

Grab Samples: 4

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
vehicle hours = 0.0 x \$ 3.57 = \$ -

Total IPP Grab Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each grab) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide 1 x \$ 15.00 = \$ 15.00
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 45.00 = \$ -
other x = \$ -

total per grab: \$ 20.00

Total Laboratory Grab Costs: \$ 80.00

Total Grab Sample Costs: \$ 80.00

Total Analytical Permit Costs: \$ 782.84

Permit No: Example 2

Company: Litho Process
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 66.14
Amount Due: \$ 466.14

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.57 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: (each composite)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 1

IPP Requirements: man hours = 1.0 x \$ 57.57 = \$ 57.57
vehicle hours = 1.0 x \$ 3.57 = \$ 3.57

Total IPP Grab Costs: \$ 61.14

Laboratory Analysis: (each grab)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 5.00

Total Laboratory Grab Costs: \$ 5.00

Total Grab Sample Costs: \$ 66.14

Total Analytical Permit Costs: \$ 66.14

Permit No: Example 3

Company: Stripping Process
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 101.14
Amount Due: \$ 501.14

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.57 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: (each composite)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 1

IPP Requirements: man hours = 1.0 x \$ 57.57 = \$ 57.57
vehicle hours = 1.0 x \$ 3.57 = \$ 3.57

Total IPP Grab Costs: \$ 61.14

Laboratory Analysis: (each grab)
metals 5 x \$ 7.00 = \$ 35.00
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 40.00

Total Laboratory Grab Costs: \$ 40.00

Total Grab Sample Costs: \$ 101.14

Total Analytical Permit Costs: \$ 101.14

Permit No: Example 4

Company: Silver User - photoprocessor
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 204.42
Amount Due: \$ 604.42

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.57 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: (each composite)
metals x \$ 7.00 = \$ -
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 3

IPP Requirements: man hours = 3.0 x \$ 57.57 = \$ 172.71
vehicle hours = 3.0 x \$ 3.57 = \$ 10.71

Total IPP Grab Costs: \$ 183.42

Laboratory Analysis: (each grab)
metals 1 x \$ 7.00 = \$ 7.00
TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphate x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 7.00

Total Laboratory Grab Costs: \$ 21.00

Total Grab Sample Costs: \$ 204.42

Total Analytical Permit Costs: \$ 204.42

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2011

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE *CRS*
Assistant Environmental Services Manager

SUBJECT: **2011 SEWER RATE STUDY - TASK #32 – SANITARY SEWER
OVERSIZING RATES**

Sanitary Sewer Oversizing rates are established as follows:

<u>Description</u>	<u>Amount (Per lineal foot)</u>
8" to 10"	\$ 6.44
8" to 12"	\$ 11.50
8" to 15"	\$ 20.91
10" to 12"	\$ 5.06
10" to 15"	\$ 14.47
12" to 15"	\$ 9.41

These rates have been determined in accordance with the Sewage Disposal System Rules and Regulations and are approved for use from January 1, 2012 through December 31, 2012. Background information and calculations to establish these rates are on file in the Utility Engineering Distribution and Collection Division Office located at 1900 Oak Industrial Drive, NE. If you have any questions regarding this matter, please call me at extension 3690 (456-3690)

CRS/SS

srs\stask32 2011

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 33**

SERVICE AREA MAPS AND SERVICE AREA LAND MASS SUMMARIES

The following summarizes Utility Service Districts (USD) land mass square miles for UAB partner communities, per information on file as of October 10, 2011:

UAB Partners	Sq. Miles of USD by CC	Percent
Grand Rapids	45.36	38.500%
Walker	20.17	17.119%
Kentwood	14.28	12.120%
Cascade	16.21	13.758%
Grand Rapids Township	7.95	6.748%
Tallmadge Township	2.44	2.071%
Wright Township	0.89	0.755%
East Grand Rapids	3.37	2.860%
Ada	7.15	6.069%
Total	117.82	100.000%

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 34**

INDIVIDUAL CIRCUIT BREAKER AND CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER

The Third Amendment to the Water and Sanitary Sewer Agreements stipulates penalty fees shall be used to fund the circuit breaker provisions noted above. The following summarizes those values:

<u>Description</u>	<u>AMOUNT</u>	<u>PERCENT</u>
Individual Circuit Breaker	\$ 94,303	12.50%
City & Customer Community Circuit Breaker	660,120	87.50%
Total	<u>\$ 754,423</u>	<u>100.00%</u>

The following summarizes the amount, if any, of the City & Customer Community Circuit Breaker to be applied as a revenue credit in next year's Rate Study:

<u>Description</u>	<u>AMOUNT</u>	<u>PERCENT</u>
City & Customer Community Circuit Breaker Amount- Above	\$ 660,120	100.00%
Less: Amount Applied in Current Rate Study	(371,766)	-56.32%
Total Revenue Credit- Next Year's Rate Study	<u>\$ 288,354</u>	<u>43.68%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWER SUPPLY SYSTEM FUND
TASK NO. 35**

DETERMINE FOOTING DRAIN OPT OUT SEWER RATE.

1. Avoided Claims for Sewage Backups

Annual claim costs

Annual Backup Claims	\$400,000 /year ¹	Estimated annual claims cost
System Retail Customers	87,800	Total retail customers ²
Grand Rapids Retail Customers	<u>67,619</u>	Total retail customers in Grand Rapids ²
Annual Cost	<u>\$4.56 /yr/cust.</u>	Annual cost for claims in Grand Rapids

2. Avoided Costs to treat the additional flow generated by footing drains

Flow Estimate

DWF	43,800 gal/year	Average generation rate
WWF	<u>21,796</u> gal/year	Average generation rate
Total	65,596 gal/year	Average per house

Unit Conveyance & Treatment Costs

Annual average FD flows	0.066 MG/yr	Average per house
Conveyance	\$420 /MG	Unit conveyance cost ³
Treatment	<u>\$818</u> /MG	Unit treatment cost ³
Conveyance & Treatment	\$1,238 /MG	
Annual Cost	<u>\$81.21 /yr/cust.</u>	Annual cost for a connected FD

3. Actual MDNRE penalties for SSO's

Penalties for SSO

Grand Rapids Customers	67,619	
Penalties	\$25,000	Per occurrence
Potential SSOs	0 /year	Occurrences
Annual cost	<u>0</u> \$/year	
	<u>\$0.00 /yr/cust.</u>	Annual cost for penalties

4. Avoided Transport & Future Projects

Cost Per FDD

Pilot Project Costs	2,236 \$/yr/FDD cust.	Annual cost of FDD work ⁶
FDD Equivalents	<u>25,598</u> FDD	FDDs needed to correct backup problems
Total Cost	\$57,247,398	Annualized Conveyance and Storage Costs
Grand Rapids Customers	<u>67,619</u>	Customers in Grand Rapids
Cost Per single Family Home	<u>\$846.62</u> \$/home/not removed	Annualized cost for Grand Rapids Customers

5. Avoided Administrative (Engineering & Legal) Costs

Associated with Administration of claims, construction

Legal	0.5	Citywide claims administration
Engineering	<u>1.5</u>	Citywide engineering investigation
Staffing	2.0	Total staffing
Rate	\$200,000 /year	Average loaded staffing rate ⁴
Total	\$400,000 /year	
Customers	<u>67,619</u>	In Grand Rapids
	<u>\$5.92</u> \$/yr/cust.	

Annual Cost Summary

1. Avoided Claims	\$4.56	
2. Avoided Treatment	\$81.21	
3. Actual MDNRE Penalties for SSOs	\$0.00	
4. Avoided Future Projects	\$846.62	
5. Administration	<u>\$5.92</u>	
TOTAL	\$938.30 \$/yr/cust.	
	<u>\$78.19 /month/cust.</u>	Monthly fee for not disconnecting

Notes:

- ¹ Sinking fund annual budget
- ² 2009 customer numbers from Collection System Master Plan
- ³ Value for sewer maintenance and WWTP costs from 2009 rate study.
- ⁴ Estimated staff rate with benefits
- ⁵ Total cost per FDD amortized over 20 years with 5% interest rate

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PRELIMINARY RATE RECOMMENDATION

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 7, 2011

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *fw*
Utility Financial Officer

SUBJECT: 2011 WATER/SEWER RATE REVIEW - PRELIMINARY REPORT

The preliminary report, recommending water and sewer rates as of January 1, 2012 for Grand Rapids and all customer communities, is submitted for consideration. The report continues to be two-tiered in nature, calculating recommended rates for customer communities based upon: (a) adherence to the rate-making methodology established in 1976-1977 for customer communities not party to the uniform water and sewer service agreements; (b) rate methodology changes, based upon the uniform service agreements with our UAB partners.

Recommended rate adjustments incorporate provisions of the third amendment to the uniform service agreements with our Utility Partners; specifically, the elimination of penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker. That generated \$167,859 to support the ICB, the program aimed at addressing retail users requiring assistance in payment of their water/sewer bills. The third amendment also provides a funding mechanism, if sufficient funding is available, to limit each retail service area revenue requirement change to a level in line with the overall systems' initial average change, i.e., the City and Customer Community Circuit Breaker. Adequate funds were available to achieve that goal in the water system and full relief was provided to Grand Rapids, Walker and Tallmadge Township. Adequate funds were also available in the sewage system and full relief was provided to Grand Rapids, Kentwood and Tallmadge Township.

Proposed 2012 water rates reflect increases resulting from decreased revenue credits, and decreases for personal services and contractual services related to Comprehensive Master Plan work and the new Customer Information System. Proposed 2012 sewer rates reflect increases for CSO projects, biosolids, and the impact of the judgment awarded in the CTE lawsuit, which was reflected in the 2011 rates as a credit; decreases were seen from personal services and surcharge and other revenue credits. Both systems saw increases as a result of declining billed volume and the phase-in of the provision for using a three year average to smooth billed flow first used in the 2010 Rate Study.

Summaries of proposed overall revisions for the systems are as follows:

1. Water Supply System revenue requirements will increase \$2,047,970 or 5.15% more than revenues generated by existing rates and charges.
2. Sewage Disposal System revenue requirements will increase \$1,408,639 or 2.89% more than revenues generated by existing rates and charges.

Attached is a schedule of comparative 2011/2012 water/sewer quarterly billings based on system consumption averages for a typical domestic user in Grand Rapids and retail customer communities. That schedule also includes a comparison of the approximate 2011/2012 monthly charges for Wright Township's REU (Residential Equivalent Unit) rate structure. Comparative rate adjustments are also noted for our wholesale customer communities.

Announcement of proposed 2012 water and sewer rates to our UAB partners and other customer communities is scheduled for Thursday, November 10, 2011. All customer communities have a thirty-day comment period following notification of the rates as provided in our water/sewer service agreements. Concurrence of customer community rates by the City Commission is scheduled for Tuesday, December 20, 2011.

Resolutions are being prepared providing for publication of proposed ordinances amending the Grand Rapids Water and Sewer Rates and Charges and establishing December 6, 2011 as the date for public hearing and December 20, 2011 to consider adoption of the proposed ordinances.

LW

Attachment

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**CITY OF GRAND RAPIDS, MICHIGAN
2011 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
November 7, 2011**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2011</u>	<u>2012</u>	<u>DOLLARS</u>	<u>PERCENT</u>
GRAND RAPIDS				
WATER	\$ 70.07	\$ 73.74	\$ 3.67	5.24%
SEWER	95.61	99.18	3.57	3.73%
	<u>\$ 165.68</u>	<u>\$ 172.92</u>	<u>\$ 7.24</u>	<u>4.37%</u>
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 74.29	\$ 78.55	\$ 4.26	5.73%
SEWER	138.96	139.98	1.02	0.73%
	<u>\$ 213.25</u>	<u>\$ 218.53</u>	<u>\$ 5.28</u>	<u>2.48%</u>
RATIO TO GR	1.29	1.26		
KENTWOOD				
WATER	\$ 84.50	\$ 87.17	\$ 2.67	3.16%
SEWER	61.14	63.36	2.22	3.63%
	<u>\$ 145.64</u>	<u>\$ 150.53</u>	<u>\$ 4.89</u>	<u>3.36%</u>
RATIO TO GR	0.88	0.87		
CASCADE TWP				
WATER	\$ 111.92	\$ 116.60	\$ 4.68	4.18%
SEWER	139.05	143.49	4.44	3.19%
	<u>\$ 250.97</u>	<u>\$ 260.09</u>	<u>\$ 9.12</u>	<u>3.63%</u>
RATIO TO GR	1.51	1.50		
GRAND RAPIDS TWP				
WATER	\$ 90.79	\$ 92.61	\$ 1.82	2.00%
SEWER	132.12	132.63	0.51	0.39%
	<u>\$ 222.91</u>	<u>\$ 225.24</u>	<u>\$ 2.33</u>	<u>1.05%</u>
RATIO TO GR	1.35	1.30		
TALLMADGE TWP- Contribution of \$18,295 for 2011, \$0 for 2012.				
WATER	\$ 112.87	\$ 120.51	\$ 7.64	6.77%
SEWER	284.16	294.48	10.32	3.63%
	<u>\$ 397.03</u>	<u>\$ 414.99</u>	<u>\$ 17.96</u>	<u>4.52%</u>
RATIO TO GR	2.40	2.40		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER QUARTERLY CONSUMPTION OF : WATER- 23.00 UNITS OR 17,204 GALLONS
SEWER - 18.00 UNITS OR 13,464 GALLONS
NO. OF MONTHS: 3

Note: The average water consumption depicted above reflects a decrease of one (1) unit from last year's rate study. (The average quarterly consumption for water & sewer last year was 24 and 18 units, respectively).

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$5,000 for 2011, \$0 for 2012.

SEWER (No. of REU 1.00)	<u>\$ 184.92</u>	<u>\$ 190.62</u>	<u>\$ 5.70</u>	3.08%
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CITY OF GRAND RAPIDS, MICHIGAN
2011 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
November 7, 2011

	<u>2011</u>	<u>2012</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$ 16,119.00	\$ 17,894.00	11.01%
- COMMODITY (100 CF)	1.19	1.24	4.20%
SEWER - SERVICE (MONTHLY)	1,775.00	1,679.00	-5.41%
- COMMODITY (MG)	1,614.00	1,534.00	-4.96%
ADA TWP			
WATER - SERVICE	\$ 35,517.00	\$ 37,090.00	4.43%
- COMMODITY	1.30	1.36	4.62%
SEWER - SERVICE	48,827.00	49,052.00	0.46%
- COMMODITY	1,996.00	1,918.00	-3.91%
OTTAWA COUNTY			
WATER - SERVICE	\$ -	\$ 231.00	N/A
- COMMODITY	1.28	1.31	2.34%
GAINES TWP			
SEWER - SERVICE	\$ 1,486.00	\$ 1,468.00	-1.21%
- COMMODITY	1,361.00	1,384.00	1.69%

PROPOSED GRAND RAPIDS ORDINANCES

*80860 Com. Lumpkins, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

RESOLVED that the following Ordinance to amend Sections 2.34, 2.35, 2.40 and 2.45 of Chapter 26 of Title II of the City Code be published as part of the proceedings, that a public hearing on the proposed Ordinance be held on December 6, 2011, at 7:00 p.m., that the City Clerk be directed to publish notice of Public Hearing and that the proposed Ordinance be considered for adoption on December 20, 2011.

AN ORDINANCE TO AMEND CHAPTER 26 OF TITLE II OF THE CODE OF THE CITY OF GRAND RAPIDS AMENDING THE WATER RATES AND CHARGES

ORDINANCE NO. 2011-_____ THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.34 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.34 Local Distribution Charges.

- (1) Whenever a watermain used for local distribution is constructed either through a special assessment project or as may be ordered or required by law, the property owners for whom the line is designed shall each pay their share of the cost of installation. Similarly, any property owner requesting service who has not previously paid his or her share of the cost of constructing the watermain used for local distribution shall pay those costs before service is permitted.
- (2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the watermain used for local distribution. The front foot rate shall be as follows:
 - (a) Domestic User: \$61.00;
 - (b) Commercial or Industrial User;
 1. The same as a domestic user if the connection is made to a line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$94.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local distribution lines.

- (3) If the City Commission shall determine that it is not advisable to collect the front foot rate at the time of construction or connection (if not previously paid at the time of construction), it may direct that the cost be borne initially by the System and subsequently be collected from the property owner in accordance with this Section.
- (4) Upon completion of construction or at the time connection is requested (if this cost has not been paid at the time of construction), the City Engineer shall certify to the City Comptroller the cost to be charged to the property owner. The Comptroller shall in turn certify the amount thereof to the City Treasurer. The City Treasurer shall bill the owner of the premises affected advising him or her that unless the amount so billed is paid within thirty (30) days from the date of mailing that the same shall be presented to the City Commission at the first meeting thereof after the expiration of thirty (30) days for assessment against said premises as a special assessment.

In the event the bill for such installation and connection is not paid within thirty (30) days from the date said notice is mailed, the City Treasurer shall report the same to the City Commission which shall examine the same and if found by it to be correct shall confirm it as a special assessment against the premises affected, at which time the City Commission shall also direct the number of installments into which the same shall be divided, and shall direct the City Assessor to extend the same upon the tax roll as a special assessment in the manner provided in Chapter 10 of this Code. All collection procedures for special assessments established in Chapter 10 of this Code shall be applicable to assessments made hereunder.

- (5) In lieu of the procedure above described, such installations and connections may be made at the expense of the System when the owner of the premises signs a written agreement agreeing to pay the expense of such installation and connections upon terms agreeable to the City Manager and that the unpaid balance shall constitute a lien upon his or her property of the same character and subject to the same methods of collection as prescribed for special assessments in Chapter 10 of this Code."

Section 2. That Section 2.35 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.35 Integrated Water Connection Fee Schedule.

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Water Connection Base Fee Schedule

Water Meter (or equivalent) <u>Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$2,780
1	4,640
1 ½	9,260
2	14,820
3	32,440
4	58,380
6 and over	129,740

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to

be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Water Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection Fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were totaled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter."

Section 3. That Section 2.40 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.40 Rates and Charges for Retail Customers Within the City of Grand Rapids.

The following charges for water service provided retail users within the City of Grand Rapids shall be made.

Commodity Rate

Domestic	\$1.86 per 100 cubic feet
Commercial	\$1.86 per 100 cubic feet
Industrial	\$1.86 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$10.32
1 inch	15.55
1 1/4 inch	22.27
1 1/2 inch	30.48
2 inches	51.39
3 inches	111.12
4 inches	194.75
6 inches or larger	433.68"

Section 4. That Section 2.45 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.45 Effective Date.

The rates, charges and fees set forth in Section 2.34, 2.35 and 2.40 shall be effective on January 1, 2012."

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held November 15, 2011.



Lauri S. Parks, City Clerk

*80861 Com. Lumpkins, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

RESOLVED that the following Ordinance to amend Section 2.95, 2.96, 2.101, 2.102 and 2.105 of Chapter 27 of Title II of the City Code be published as part of the proceedings, and that a public hearing on the proposed Ordinance be held on December 6, 2011, at 7:00 p.m., that the City Clerk be directed to publish notice of Public Hearing and that the proposed Ordinance be considered for adoption on December 20, 2011.

**AN ORDINANCE TO AMEND CHAPTER 27 OF TITLE II
OF THE CODE OF THE CITY OF GRAND RAPIDS
AMENDING THE SEWER RATES AND CHARGES**

**ORDINANCE NO. 2011-_____
THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:**

Section 1. That Section 2.95 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.95 Local Collector Sewer Line Installation Charges.

- (1) Whenever a local collector sewer line is constructed either through a special assessment project or as may be ordered or required by law, the property owners for whom the line is designed to serve shall each pay their share of the cost of installation. Similarly, any property owner requesting service who has not previously paid his or her share of the cost of constructing the local collector sewer shall pay those costs before service is permitted.
- (2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the local collector sewer line from which he or she will receive service. The front foot rate shall be as follows:
 - (a) Domestic User: \$62.00;
 - (b) Commercial or Industrial User;
 1. The same as a domestic user if the connection is made to a local collector sewer line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$88.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local collector sewer lines.

- (3) If the City Commission shall determine that it is not advisable to collect the front foot rate at the time of construction or connection (if not previously paid at the time of construction), it may direct that the cost be borne initially by the System and subsequently be collected from the property owner in accordance with this Section.
- (4) Upon completion of construction or at the time connection is requested (if this cost has not been paid at the time of construction), the City Engineer shall certify to the City Comptroller the cost to be charged to the property owner. The Comptroller shall in turn certify the amount thereof to the City Treasurer. The City Treasurer shall bill the owner of the premises affected advising him or her that unless the amount so billed is paid within thirty (30) days from the date of mailing that the same shall be presented to the City Commission at the first meeting thereof after the expiration of thirty (30) days for assessment against said premises as a special assessment.

In the event the bill for such installation and connection is not paid within thirty (30) days from the date said notice is mailed, the City Treasurer shall report the same to the City Commission which shall examine the same and if found by it to be correct shall confirm it as a special assessment against the premises affected, at which time the City Commission shall also direct the number of installments into which the same shall be divided, and shall direct the City Assessor to extend the same upon the tax roll as a special assessment in the manner provided in Chapter 10 of this Code. All collection procedures for special assessments established in Chapter 10 of this Code shall be applicable to assessments made hereunder.

- (5) In lieu of the procedure above described, such costs may be made at the expense of the System when the owner of the premises signs a written agreement agreeing to pay the cost upon terms agreeable to the City Manager and that the unpaid balance shall constitute a lien upon his or her property of the same character and subject to the same methods of collection as prescribed for special assessments in Chapter 10 of this Code."

Section 2. That Section 2.96 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.96 Integrated Sewer Connection Fee Schedule.

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Sewer Connection Base Fee Schedule

<u>Water Meter (or equivalent) Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$2,780
1	4,640
1 ½	9,260
2	14,820
3	32,440
4	58,380
6 and over	129,740

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as

adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Sewer Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection Fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size."

Section 3. That Section 2.101 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.101 Rates and Charges for Retail Users Within the City of Grand Rapids.

The following rates and charges for sewage disposal service shall apply for users within the City of Grand Rapids:

	<u>Commodity Rate</u>
Domestic	\$3.36 per 100 cubic feet
Commercial	\$3.36 per 100 cubic feet
Industrial	\$3.36 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$12.90
1 inch	20.23
1 1/4 inches	29.66
1 1/2 inches	41.19
2 inches	70.53
3 inches	154.35
4 inches	271.70
6 inches or larger	606.99"

Section 4. That Section 2.102 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.102 Surcharges and Permit Fees.

- (1) If the City Manager determines that a discharge will not cause pass through or interference as defined in this Chapter, Industrial or Commercial Users whether they are located within a retail service area or a bulk service area shall be charged a surcharge if the concentration of their discharge exceeds a five-day BOD of two hundred fifty (250) mg/l, and/or TSS of two hundred fifty (250) mg/l, or any phosphorus of fifteen (15) mg/l. That charge shall be twenty cents (\$0.200) per pound of BOD and twenty five and four-tenth cents (\$0.254) per pound of TSS and one dollar and four and two-tenth cents (\$1.042) per pound of phosphorus in excess of the above limits. In addition, all Industrial or Commercial Users shall be charged a surcharge for ammonia concentrations exceeding thirty-eight (38) mg/l. The charge shall be thirty three cents (\$0.330) per pound of ammonia in excess of the above limit. Discharge concentrations of these substances and the resulting surcharge shall be based on at least three composite samples per quarter. This sampling shall be performed by either the City or the Industrial User as determined by the City Manager.
- (2) The fee for a Significant Industrial User Discharge Permit as provided for in Section 2.70 of this Chapter whether they are located within a retail service area or a bulk service area shall be four hundred dollars (\$400.00) per year and an analytical fee based upon Section 2.102(3).
- (3) The following schedule of charges shall apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit:

Metals	\$7.00 each
TSS	7.00 each
BOD	14.00 each
Total Phosphate	13.50 each
pH	5.00 each
EPA 624	60.00 each
EPA 625	115.00 each
BTEX/MTBE	35.00 each
Sulfide	12.00 each
Oil and Grease	25.00 each
Total Cyanide	15.00 each
Hexavalent Chromium	10.00 each
Fecal Coliform	25.00 each
Labor	57.57 hour

Sampler	35.00 day
Vehicle	3.57 hour

- (4) These charges will be reviewed annually and may change to reflect the current cost of providing these services."

Section 5. That Section 2.105 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.105 Effective Date.

The rates, charges and fees set forth in Section 2.95, 2.96, 2.101 and 2.102 shall be effective on January 1, 2012."

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held November 15, 2011.



Lauri S. Parks, City Clerk

NOTICE OF PUBLIC HEARING

Grand Rapids Press
155 Michigan St. NW., Grand Rapids, MI 49503
AFFIDAVIT OF PUBLICATION

State of Michigan,) ss
County of Kent)

Sheryl L DeVriendt being duly sworn, deposes and says that he/she is principal clerk of the Grand Rapids Press; that said Grand Rapids Press is a newspaper published and circulated in the County of Kent, and the attached notice has been duly published in said newspaper on the following dates:

November 26, 2011

Customer Name:
CITY OF GRAND RAPIDS

Sheryl L DeVriendt
Sheryl L DeVriendt

Subscribed and sworn to before me this 28th day of November A.D. 2011

Diane F. Fase
Diane F. Fase NOTARY PUBLIC IN AND FOR THE COUNTY OF KENT, STATE OF MICHIGAN

My Commission Expires: February 19, 2014

DIANE F. FASE
Notary Public, State of Michigan
County of Kent
My Commission Expires: 02/19/2014
Acting in the County of Kent



CITY OF GRAND RAPIDS

A PUBLIC HEARING ON PROPOSED WATER/SEWER RATES AND CHARGES FOR 2012

will be held at 7:00 p.m. on Tuesday, December 6, 2011, in the Grand Rapids City Commission Chambers, 9th floor of City Hall, 300 Monroe Avenue, NW, Grand Rapids, MI.

The City of Grand Rapids has completed the "Preliminary Water-Sewer 2011 Rate Study" report, which is the basis for recommending rates to become effective January 1, 2012 for all residential, commercial and industrial users. That report, which also includes information on the Individual Circuit Breaker Program, the program aimed to help retail users requiring assistance in payment of their water/sewer bills, is available for public inspection in the City Clerk's Office, 2nd floor of City Hall, between 8:00 a.m. and 5:00 p.m. weekdays.

We encourage all water/sewer users to attend this public hearing on December 6, 2011.

428556401

Times \$	134.40
Affidavit \$	0.00
Subscriptions \$	134.40

**AFFIDAVIT OF PUBLICATION
GRAND RAPIDS PRESS
GRAND RAPIDS, MICHIGAN**

IN THE MATTER OF

CITY OF GRAND RAPIDS
CITY CLERK'S OFFICE
300 MONROE NW 7TH FLOOR
GRAND RAPIDS MI 49503

Received and filed this 28th day of November A.D. 2011

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PUBLIC HEARINGS - GRAND RAPIDS ORDINANCES

80948 Pursuant to Commission File No. 80860, dated November 15, 2011, a public hearing was held on this date to consider an amendment to Chapter 26, Title II of the Code of the City of Grand Rapids (Water Rates and Charges).

At the conclusion of said hearing, the Mayor declared the hearing closed and referred the matter to the Committee of the Whole.

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 6, 2011.

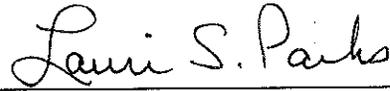


Lauri S. Parks, City Clerk

80949 Pursuant to Commission File No. 80861, dated November 15, 2011, a public hearing was held on this date to consider an amendment to Chapter 27, Title II of the Code of the City of Grand Rapids (Sewer Rates and Charges).

At the conclusion of said hearing, the Mayor declared the hearing closed and referred the matter to the Committee of the Whole.

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 6, 2011.

A handwritten signature in cursive script that reads "Lauri S. Parks". The signature is written in black ink and is positioned above a horizontal line.

Lauri S. Parks, City Clerk

FINAL ADOPTION OF RATE ORDINANCES

80964 An Ordinance to amend Chapter 26 of Title II of the City Code amending Water Rates and Charges was presented to the City Commission on November 15, 2011 under File No. 80860 and a hearing was held on December 6, 2011 under File No. 80948. The aforementioned ordinance shall be considered for adoption this date.

Com. Lumpkins, supported by Com. Bliss, moved to adopt the following ordinance:

AN ORDINANCE TO AMEND CHAPTER 26 OF TITLE II OF THE CODE OF THE CITY OF GRAND RAPIDS AMENDING THE WATER RATES AND CHARGES

ORDINANCE NO. 2011-58

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.34 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.34 Local Distribution Charges.

- (1) Whenever a watermain used for local distribution is constructed either through a special assessment project or as may be ordered or required by law, the property owners for whom the line is designed shall each pay their share of the cost of installation. Similarly, any property owner requesting service who has not previously paid his or her share of the cost of constructing the watermain used for local distribution shall pay those costs before service is permitted.
- (2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the watermain used for local distribution. The front foot rate shall be as follows:
 - (a) Domestic User: \$61.00;
 - (b) Commercial or Industrial User;
 1. The same as a domestic user if the connection is made to a line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$94.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local distribution lines.

- (3) If the City Commission shall determine that it is not advisable to collect the front foot rate at the time of construction or connection (if not previously paid at the time of construction), it may direct that the cost be borne initially by the System and subsequently be collected from the property owner in accordance with this Section.
- (4) Upon completion of construction or at the time connection is requested (if this cost has not been paid at the time of construction), the City Engineer shall certify to the City Comptroller the cost to be charged to the property owner. The Comptroller shall in turn certify the amount thereof to the City Treasurer. The City Treasurer shall bill the owner of the premises affected advising him or her that unless the amount so billed is paid within thirty (30) days from the date of mailing that the same shall be presented to the City Commission at the first meeting thereof after the

expiration of thirty (30) days for assessment against said premises as a special assessment. In the event the bill for such installation and connection is not paid within thirty (30) days from the date said notice is mailed, the City Treasurer shall report the same to the City Commission which shall examine the same and if found by it to be correct shall confirm it as a special assessment against the premises affected, at which time the City Commission shall also direct the number of installments into which the same shall be divided, and shall direct the City Assessor to extend the same upon the tax roll as a special assessment in the manner provided in Chapter 10 of this Code. All collection procedures for special assessments established in Chapter 10 of this Code shall be applicable to assessments made hereunder.

- (5) In lieu of the procedure above described, such installations and connections may be made at the expense of the System when the owner of the premises signs a written agreement agreeing to pay the expense of such installation and connections upon terms agreeable to the City Manager and that the unpaid balance shall constitute a lien upon his or her property of the same character and subject to the same methods of collection as prescribed for special assessments in Chapter 10 of this Code."

Section 2. That Section 2.35 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.35 Integrated Water Connection Fee Schedule.

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Water Connection Base Fee Schedule

<u>Water Meter (or equivalent) Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$2,780
1	4,640
1 1/2	9,260
2	14,820
3	32,440
4	58,380
6 and over	129,740

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000)

square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in the foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Water Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were

totalled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter."

Section 3. That Section 2.40 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.40 Rates and Charges for Retail Customers Within the City of Grand Rapids.

The following charges for water service provided retail users within the City of Grand Rapids shall be made.

Commodity Rate

Domestic	\$1.86 per 100 cubic feet
Commercial	\$1.86 per 100 cubic feet
Industrial	\$1.86 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$10.32
1 inch	15.55
1 1/4 inch	22.27
1 1/2 inch	30.48
2 inches	51.39
3 inches	111.12
4 inches	194.75
6 inches or larger	433.68"

Section 4. That Section 2.45 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.45 Effective Date.

The rates, charges and fees set forth in Section 2.34, 2.35 and 2.40 shall be effective on January 1, 2012."

Carried by a roll call vote: Yeas: -7 Nays: -0

Com. Lumpkins, supported by Com. Kelly, moved that the ordinance take immediate effect pursuant to Section 9 of Title V of the City Charter.

Adopted: Yeas: -7 Nays: -0

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 20, 2011.



Lauri S. Parks, City Clerk

80965 An Ordinance to amend Chapter 27 of Title II of the City Code amending Sewer Rates and Charges was presented to the City Commission on November 15, 2011 under File No. 80861 and a hearing was held on December 6, 2011 under File No. 80949. The aforementioned ordinance shall be considered for adoption this date.

Com. Lumpkins, supported by Com. Shaffer, moved to adopt the following ordinance:

**AN ORDINANCE TO AMEND CHAPTER 27 OF TITLE II
OF THE CODE OF THE CITY OF GRAND RAPIDS
AMENDING THE SEWER RATES AND CHARGES**

ORDINANCE NO. 2011-59

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.95 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.95 Local Collector Sewer Line Installation Charges.

- (1) Whenever a local collector sewer line is constructed either through a special assessment project or as may be ordered or required by law, the property owners for whom the line is designed to serve shall each pay their share of the cost of installation. Similarly, any property owner requesting service who has not previously paid his or her share of the cost of constructing the local collector sewer shall pay those costs before service is permitted.
- (2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the local collector sewer line from which he or she will receive service. The front foot rate shall be as follows:
 - (a) Domestic User: \$62.00;
 - (b) Commercial or Industrial User;
 1. The same as a domestic user if the connection is made to a local collector sewer line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$88.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local collector sewer lines.

- (3) If the City Commission shall determine that it is not advisable to collect the front foot rate at the time of construction or connection (if not previously paid at the time of construction), it may direct that the cost be borne initially by the System and subsequently be collected from the property owner in accordance with this Section.
- (4) Upon completion of construction or at the time connection is requested (if this cost has not been paid at the time of construction), the City Engineer shall certify to the City Comptroller the cost to be charged to the property owner. The Comptroller shall in turn certify the amount thereof to the City Treasurer. The City Treasurer shall bill the owner of the premises affected advising him or her that unless the amount so billed is paid within thirty (30) days from the date of mailing that the same shall be presented to the City Commission at the first meeting thereof after the

expiration of thirty (30) days for assessment against said premises as a special assessment. In the event the bill for such installation and connection is not paid within thirty (30) days from the date said notice is mailed, the City Treasurer shall report the same to the City Commission which shall examine the same and if found by it to be correct shall confirm it as a special assessment against the premises affected, at which time the City Commission shall also direct the number of installments into which the same shall be divided, and shall direct the City Assessor to extend the same upon the tax roll as a special assessment in the manner provided in Chapter 10 of this Code. All collection procedures for special assessments established in Chapter 10 of this Code shall be applicable to assessments made hereunder.

- (5) In lieu of the procedure above described, such costs may be made at the expense of the System when the owner of the premises signs a written agreement agreeing to pay the cost upon terms agreeable to the City Manager and that the unpaid balance shall constitute a lien upon his or her property of the same character and subject to the same methods of collection as prescribed for special assessments in Chapter 10 of this Code."

Section 2. That Section 2.96 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.96 Integrated Sewer Connection Fee Schedule.

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Sewer Connection Base Fee Schedule

Water Meter (or equivalent) Size (inches)	<u>Base Fee</u>
3/4 or less	\$2,780
1	4,640
1 ½	9,260
2	14,820
3	32,440
4	58,380
6 and over	129,740

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to

be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in the foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Sewer Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "Index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size."

Section 3. That Section 2.101 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.101 Rates and Charges for Retail Users Within the City of Grand Rapids.

The following rates and charges for sewage disposal service shall apply for users within the City of Grand Rapids:

Commodity Rate

Domestic	\$3.36 per 100 cubic feet
Commercial	\$3.36 per 100 cubic feet
Industrial	\$3.36 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$12.90
1 inch	20.23
1 1/4 inches	29.66
1 1/2 inches	41.19
2 inches	70.53
3 inches	154.35
4 inches	271.70
6 inches or larger	606.99"

Section 4. That Section 2.102 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.102 Surcharges and Permit Fees.

- (1) If the City Manager determines that a discharge will not cause pass through or interference as defined in this Chapter, Industrial or Commercial users whether they are located within a retail service area or a bulk service area shall be charged a surcharge if the concentration of their discharge exceeds a five-day BOD of two hundred fifty (250) mg/l, and/or TSS of two hundred fifty (250) mg/l, or any phosphorus of fifteen (15) mg/l. That charge shall be twenty cents (\$0.200) per pound of BOD and twenty five and four-tenth cents (\$0.254) per pound of TSS and one dollar and four and two-tenth cents (\$1.042) per pound of phosphorus in excess of the above limits. In addition, all industrial or commercial users shall be charged a surcharge for ammonia concentrations exceeding thirty-eight (38) mg/l. The charge shall be thirty three cents (\$0.330) per pound of ammonia in excess of the above limit. Discharge concentrations of these substances and the resulting surcharge shall be based on at least three composite samples per quarter. This sampling shall be performed by either the City or the Industrial User as determined by the City Manager.
- (2) The fee for a Significant Industrial User Discharge Permit as provided for in Section 2.70 of this Chapter whether they are located within a retail service area or a bulk service area shall be four hundred dollars (\$400.00) per year and an analytical fee based upon Section 2.102(3).
- (3) The following schedule of charges shall apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit:

Metals	\$7.00 each
TSS	7.00 each
BOD	14.00 each
Total Phosphate	13.50 each
pH	5.00 each
EPA 624	60.00 each
EPA 625	115.00 each
BTEX/MTBE	35.00 each
Sulfide	12.00 each

Oil and Grease	25.00 each
Total Cyanide	15.00 each
Hexavalent Chromium	10.00 each
Fecal Coliform	25.00 each
Labor	57.57 hour
Sampler	35.00 day
Vehicle	3.57 hour

- (4) These charges will be reviewed annually and may change to reflect the current cost of providing these services."

Section 5. That Section 2.105 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.105 Effective Date.

The rates, charges and fees set forth in Section 2.95, 2.96, 2.101 and 2.102 shall be effective on January 1, 2012."

Carried by a roll call vote: Yeas: -7 Nays: -0

Com. Shaffer, supported by Com. Bliss, moved that the ordinance take immediate effect pursuant to Section 9 of Title V of the City Charter.

Adopted: Yeas: -7 Nays: -0

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 20, 2011.



Lauri S. Parks, City Clerk

INTRODUCTION OF RESOLUTION APPROVING CUSTOMER COMMUNITIES' RATES

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: December 13, 2011

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2012 CUSTOMER COMMUNITY WATER-SEWER RATES

The 2011 Preliminary Water-Sewer Rate Study recommended water and sewer rate adjustments as of January 1, 2012 for Grand Rapids and each customer community served by the water and sewage systems. City Commission approval of rate adjustments for customer communities is required.

UAB partners and other customer communities were notified of the recommended rate adjustments on November 10, 2011. The water-sewer service agreements provide our customer communities a thirty-day comment period following notification of rate adjustments. Wright Township has elected to contribute \$5,000 and Grand Rapids Township is contributing \$7,200 to reduce sewer rates effective January 1, 2012. Tallmadge Township has elected to contribute \$9,720 to reduce sewer rates and \$8,038 to reduce water rates. In summary, Water Supply System revenue requirements reflect an increase of \$2,047,970 or 5.15% more than revenues generated by existing rates and charges, and Sewage Disposal System revenue requirements reflect an increase of \$1,408,639 or 2.89% more than revenues generated by existing rates and charges.

The attached resolution approves the recommended water and sewer rates for the City's retail and wholesale communities for calendar year 2012. A summary of water and sewer revenue requirement changes and a rate schedule for each customer community is attached to the resolution.

LW

Attachments

YOUR COMMITTEE OF THE WHOLE recommends adoption of the following resolution approving the attached revised Water and Sewer Rates in accordance with the 2011 Water-Sewer Rate Review.

CORRECT IN FORM

DEPARTMENT OF LAW

COMMITTEE OF THE WHOLE

Com. _____, supported by Com. _____, moved adoption of the following resolution:

WHEREAS, The Water-Sewer rate studies have been undertaken and completed for the years 1976 through 2010, and,

WHEREAS, The 2011 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2010 Water-Sewer Rate Studies, as adjusted where appropriate for the uniform water and sewer service agreements.

RESOLVED that the attached water and sewer rates are approved and shall be effective January 1, 2012.

RESOLVED that the City Clerk is directed to notify the contractual water and sewer service customers in writing of the water and sewer rates, and the Mayor and City Clerk are authorized to take any other action as may be required to evidence the new water and sewer rates.

Drafted by: Linda Wagenmaker, Utility Financial Officer

**CITY OF GRAND RAPIDS, MICHIGAN
2011 FINAL WATER/SEWER RATE STUDY
SUMMARY OF REVENUE REQUIREMENT CHANGES
December 13, 2011**

	<u>WATER (1)</u>		<u>SEWER (1)</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
GRAND RAPIDS	\$ 1,394,229	5.86%	\$ 1,216,201	3.66%
WALKER	183,844	5.86%	34,648	0.72%
KENTWOOD	148,450	3.53%	124,565	3.66%
CASCADE TWP	128,432	4.25%	65,558	3.22%
GRAND RAPIDS TWP	46,528	2.17%	2,020	0.08%
NET OF CONTRIBUTION OF:			7,200	
TALLMADGE TWP (2)	0	0.00%	-	0.00%
NET OF CONTRIBUTION OF:	8,038		9,720	
WRIGHT TWP (2)	NA	NA	2,939	1.14%
NET OF CONTRIBUTION OF:			5,000	
EAST GRAND RAPIDS	50,425	5.69%	(39,008)	-4.97%
ADA TWP	58,533	4.55%	(22,312)	-1.82%
OTTAWA COUNTY	29,490	2.59%	NA	NA
GAINES TWP	NA	NA	2,108	1.36%
SYSTEM	\$ 2,047,970	5.15%	\$ 1,408,639	2.89%

(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study. (Includes consideration for relief from CCCCB)

(2) Tallmadge Twp contributed \$18,295 in 2010 Rate Study for 2011 sewer revenue requirements & rates.
Wright Twp contributed \$5,000 in 2010 Rate Study for 2011 sewer revenue requirements & rates.

DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCB)

	<u>WATER</u>		<u>SEWER</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
SYSTEM CHANGE- ABOVE	\$ 2,047,970	5.15%	\$ 1,408,639	2.89%
ADD: CCCB RELIEF	282,842	0.71%	371,766	0.77%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ 2,330,812</u>	<u>5.86%</u>	<u>\$ 1,780,405</u>	<u>3.66%</u>

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APPROVAL OF CUSTOMER COMMUNITIES' RATES

*81000 Com. Bliss, supported by Com. Gutowski, moved adoption of the following resolution under the Consent Agenda:

WHEREAS, the Water-Sewer rate studies have been undertaken and completed for the years 1976 through 2010, and,

WHEREAS, the 2011 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2010 Water-Sewer Rate Studies, as adjusted where appropriate for the uniform water and sewer service agreements.

RESOLVED that the attached water and sewer rates are approved and shall be effective January 1, 2012.

RESOLVED that the City Clerk is directed to notify the contractual water and sewer service customers in writing of the water and sewer rates, and the Mayor and City Clerk are authorized to take any other action as may be required to evidence the new water and sewer rates.

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 20, 2011.



Lauri S. Parks, City Clerk



December 22, 2011

Ms. Sarah Bydalek, City Clerk
City of Walker
4243 Remembrance Road NW
Grand Rapids, MI 49504

Dear Sarah:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for the City of Walker are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

CITY OF WALKER, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.70 /100 CF *
 \$ 1.61 x 105.86%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 3,321,121
NEW COMMODITY CHARGE		
1,194,272 x \$ 1.70	\$ 2,030,262	
NEW MONTHLY BILLING CHARGE		
6,020 x \$ 3.60 x 12	260,064	
MONTHLY FIRE PROTECTION CHARGE	100,307	
ANNUAL HYDRANT CHARGE	-	(2,390,633)
		<u>\$ 930,488</u>

MONTHLY METER CHARGE = $\frac{\$930,488}{8,120 \times 12}$ = \$ 9.55 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 9.55	\$ 3.60	\$ 13.15	\$ 12.42
1"	1.7778	16.98	3.60	20.58	19.12
1 1/4"	2.7778	26.53	3.60	30.13	27.73
1 1/2"	4.0000	38.20	3.60	41.80	38.25
2"	7.1111	67.91	3.60	71.51	65.04
3"	16.0000	152.80	3.60	156.40	141.57
4"	28.4444	271.64	3.60	275.24	248.72
6" and over	64.0000	611.20	3.60	614.80	554.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 123,947

CITY OF WALKER, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.72 /100 CF *
 \$ 2.70 x 100.72%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 4,869,237

NEW COMMODITY CHARGE
 860,315 x \$ 2.72 \$ 2,340,057

NEW MONTHLY BILLING CHARGE
 5,510 x \$ 3.47 x 12 229,436 (2,569,493)

\$ 2,299,744

MONTHLY METER CHARGE = $\frac{\$2,299,744}{7,133 \times 12} = \underline{\underline{\$ 26.87 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 26.87	\$ 3.47	\$ 30.34	\$ 30.12
1"	1.7778	47.77	3.47	51.24	50.90
1 1/4"	2.7778	74.64	3.47	78.11	77.61
1 1/2"	4.0000	107.48	3.47	110.95	110.25
2"	7.1111	191.08	3.47	194.55	193.35
3"	16.0000	429.92	3.47	433.39	430.77
4"	28.4444	764.30	3.47	767.77	763.16
6" and over	64.0000	1,719.68	3.47	1,723.15	1,712.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

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December 22, 2011

Mr. Dan Kasunic, Clerk
City of Kentwood
4900 Breton Avenue SE
Kentwood, MI 49518-8848

Dear Dan:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for the City of Kentwood are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

CITY OF KENTWOOD, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.35 /100 CF *
 \$ 2.27 x 103.66%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 3,527,983

NEW COMMODITY CHARGE
 1,285,311 x \$ 2.35 \$ 3,020,481

NEW MONTHLY BILLING CHARGE
 4,390 x \$ 3.47 x 12 182,800 (3,203,281)

\$ 324,702

MONTHLY METER CHARGE = $\frac{\$324,702}{7,615 \times 12} = \underline{\underline{\$ 3.55 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 3.55	\$ 3.47	\$ 7.02	\$ 6.76
1"	1.7778	6.31	3.47	9.78	9.37
1 1/4"	2.7778	9.86	3.47	13.33	12.72
1 1/2"	4.0000	14.20	3.47	17.67	16.81
2"	7.1111	25.24	3.47	28.71	27.23
3"	16.0000	56.80	3.47	60.27	57.01
4"	28.4444	100.98	3.47	104.45	98.70
6" and over	64.0000	227.20	3.47	230.67	217.81

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 74,126

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December 22, 2011

Mr. Ronald Goodyke, Clerk
Cascade Charter Township
2865 Thornhills SE
Grand Rapids, MI 49546-7192

Dear Mr. Goodyke:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Cascade Charter Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

CASCADE TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.26 /100 CF *
 \$ 2.17 x 104.25%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 3,152,839
NEW COMMODITY CHARGE		
808,514 x \$ 2.26	\$ 1,827,242	
NEW MONTHLY BILLING CHARGE		
3,114 x \$ 3.60 x 12	134,525	
MONTHLY FIRE PROTECTION CHARGE	95,613	
ANNUAL HYDRANT CHARGE	<u>38,960</u>	<u>(2,096,340)</u>
		<u>\$ 1,056,499</u>

MONTHLY METER CHARGE = $\frac{\$1,056,499}{4,908 \times 12} = \underline{\underline{\$ 17.94 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 17.94	\$ 3.60	\$ 21.54	\$ 20.67
1"	1.7778	31.89	3.60	35.49	33.78
1 1/4"	2.7778	49.83	3.60	53.43	50.64
1 1/2"	4.0000	71.76	3.60	75.36	71.25
2"	7.1111	127.57	3.60	131.17	123.70
3"	16.0000	287.04	3.60	290.64	273.57
4"	28.4444	510.29	3.60	513.89	483.38
6" and over	64.0000	1,148.16	3.60	1,151.76	1,082.85

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.63 /100 CF *
 \$ 2.55 x 103.22%

MONTHLY SERVICE CHARGE:

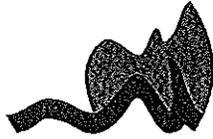
SYSTEM REVENUE REQUIREMENTS		\$ 2,102,888
NEW COMMODITY CHARGE		
400,665 x \$ 2.63		\$ 1,053,749
NEW MONTHLY BILLING CHARGE		
1,711 x \$ 3.47 x 12	71,246	(1,124,995)
		\$ 977,893

MONTHLY METER CHARGE = $\frac{\$977,893}{2,851 \times 12} = \underline{\underline{\$ 28.58 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 28.58	\$ 3.47	\$ 32.05	\$ 31.05
1"	1.7778	50.81	3.47	54.28	52.55
1 1/4"	2.7778	79.39	3.47	82.86	80.19
1 1/2"	4.0000	114.32	3.47	117.79	113.97
2"	7.1111	203.24	3.47	206.71	199.96
3"	16.0000	457.28	3.47	460.75	445.65
4"	28.4444	812.94	3.47	816.41	789.61
6" and over	64.0000	1,829.12	3.47	1,832.59	1,772.37

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

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December 22, 2011

Ms. Janice Hulbert, Clerk
Grand Rapids Charter Township
1836 East Beltline NE
Grand Rapids, MI 49525

Dear Janice:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Grand Rapids Charter Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

A handwritten signature in cursive script that reads "Lauri S. Parks".

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

GRAND RAPIDS TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.89 /100 CF *
 \$ 1.85 x 102.17%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 2,194,992
NEW COMMODITY CHARGE 651,580 x \$ 1.89	\$ 1,231,486
NEW MONTHLY BILLING CHARGE 3,921 x \$ 3.60 x 12	169,387
MONTHLY FIRE PROTECTION CHARGE	29,045
ANNUAL HYDRANT CHARGE	<u>-</u> (1,429,918)
	<u>\$ 765,074</u>

MONTHLY METER CHARGE = $\frac{\$765,074}{4,990 \times 12} = \underline{\underline{\$ 12.78 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 12.78	\$ 3.60	\$ 16.38	\$ 16.08
1"	1.7778	22.72	3.60	26.32	25.62
1 1/4"	2.7778	35.50	3.60	39.10	37.89
1 1/2"	4.0000	51.12	3.60	54.72	52.89
2"	7.1111	90.88	3.60	94.48	91.06
3"	16.0000	204.48	3.60	208.08	200.13
4"	28.4444	363.52	3.60	367.12	352.82
6" and over	64.0000	817.92	3.60	821.52	789.09

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

GRAND RAPIDS TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.49 /100 CF *
 \$ 2.49 x 100.08%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 2,481,469

NEW COMMODITY CHARGE
 403,555 x \$ 2.49 \$ 1,004,852

NEW MONTHLY BILLING CHARGE
 3,513 x \$ 3.47 x 12 146,281 (1,151,133)

\$ 1,330,336

MONTHLY METER CHARGE = $\frac{\$1,330,336}{4,317 \times 12} = \underline{\underline{\$ 25.68 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 25.68	\$ 3.47	\$ 29.15	\$ 29.10
1"	1.7778	45.65	3.47	49.12	49.08
1 1/4"	2.7778	71.33	3.47	74.80	74.77
1 1/2"	4.0000	102.72	3.47	106.19	106.17
2"	7.1111	182.61	3.47	186.08	186.09
3"	16.0000	410.88	3.47	414.35	414.45
4"	28.4444	730.45	3.47	733.92	734.15
6" and over	64.0000	1,643.52	3.47	1,646.99	1,647.57

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

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December 22, 2011

Ms. Lenore Cook, Clerk
Tallmadge Township Offices
0-1451 Leonard Street NW
Grand Rapids, MI 49504

Dear Ms. Cook:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Tallmadge Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

A handwritten signature in cursive script that reads "Lauri S. Parks".

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

TALLMADGE TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 3.83 /100 CF *
\$ 3.83 x 100.00%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 137,168
NET OF CONTRIBUTION OF \$ 8,038		
NEW COMMODITY CHARGE		
24,510 x \$ 3.83	\$ 93,873	
NEW MONTHLY BILLING CHARGE		
138 x \$ 3.60 x 12	5,962	
MONTHLY FIRE PROTECTION CHARGE	7,786	
ANNUAL HYDRANT CHARGE	<u>16,704</u>	<u>(124,325)</u>
		<u>\$ 12,843</u>

MONTHLY METER CHARGE = $\frac{\$12,843}{234 \times 12} = \underline{\underline{\$ 4.57 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 4.57	\$ 3.60	\$ 8.17	\$ 8.26
1"	1.7778	8.12	3.60	11.72	11.72
1 1/4"	2.7778	12.69	3.60	16.29	16.17
1 1/2"	4.0000	18.28	3.60	21.88	21.61
2"	7.1111	32.50	3.60	36.10	35.45
3"	16.0000	73.12	3.60	76.72	75.01
4"	28.4444	129.99	3.60	133.59	130.39
6" and over	64.0000	292.48	3.60	296.08	288.61

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012
 ** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 4,717

TALLMADGE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 10.32 /100 CF *
 \$ 10.32 x 100.00%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 265,583
NET OF CONTRIBUTION OF \$ 9,720		
NEW COMMODITY CHARGE		
17,960 x \$ 10.32	\$ 185,347	
NEW MONTHLY BILLING CHARGE		
125 x \$ 3.47 x 12	<u>5,205</u>	<u>(190,552)</u>
		<u>\$ 75,031</u>

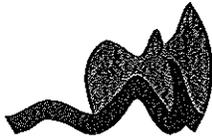
MONTHLY METER CHARGE = $\frac{\$75,031}{213 \times 12} = \underline{\underline{\$ 29.35 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 29.35	\$ 3.47	\$ 32.82	\$ 32.80
1"	1.7778	52.18	3.47	55.65	55.66
1 1/4"	2.7778	81.53	3.47	85.00	85.05
1 1/2"	4.0000	117.40	3.47	120.87	120.97
2"	7.1111	208.71	3.47	212.18	212.41
3"	16.0000	469.60	3.47	473.07	473.65
4"	28.4444	834.84	3.47	838.31	839.39
6" and over	64.0000	1,878.40	3.47	1,881.87	1,884.37

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2012

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 10,856

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December 22, 2011

Ms. Linda Way, Township Clerk
Wright Township
1565 Jackson
P.O. Box 255
Marne, MI 49435

Dear Ms. Way:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Wright Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$260,486}{348.187 \times 12} = \$ \underline{\underline{62.34}} \quad \text{MONTHLY REU CHARGE *}$$

SYSTEM REVENUE REQUIREMENTS ARE NET OF CONTRIBUTION OF \$ 5,000

EXAMPLES OF APPROXIMATE MONTHLY CHARGE BY NUMBER OF REU:

<u>NUMBER OF REU</u>	<u>AMOUNT</u>	<u>NUMBER OF REU</u>	<u>AMOUNT</u>	<u>NUMBER OF REU</u>	<u>AMOUNT</u>
1.0000	\$ 62.34	7.5000	\$ 467.55	19.0000	\$ 1,184.46
1.5000	93.51	8.0000	498.72	20.0000	1,246.80
2.0000	124.68	8.5000	529.89	25.0000	1,558.50
2.5000	155.85	9.0000	561.06	30.0000	1,870.20
3.0000	187.02	9.5000	592.23	35.0000	2,181.90
3.5000	218.19	10.0000	623.40	40.0000	2,493.60
4.0000	249.36	11.0000	685.74	50.0000	3,117.00
4.4000	274.30	12.0000	748.08	60.0000	3,740.40
4.5000	280.53	13.0000	810.42	70.0000	4,363.80
5.0000	311.70	14.0000	872.76	80.0000	4,987.20
5.5000	342.87	15.0000	935.10	90.0000	5,610.60
6.0000	374.04	16.0000	997.44	100.0000	6,234.00
6.5000	405.21	17.0000	1,059.78	150.0000	9,351.00
7.0000	436.38	18.0000	1,122.12	200.0000	12,468.00

* NEW RATES EFFECTIVE ON JANUARY 1, 2012



December 22, 2011

Ms. Karen Brower, Clerk
City of East Grand Rapids
750 Lakeside Drive SE
East Grand Rapids, MI 49506

Dear Karen:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 12, 2011, followed by a thirty-day comment period.

On December 21, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2011. A certified copy of the resolution and the approved rate schedules for the City of East Grand Rapids are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/slz-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 937,189
NEW COMMODITY CHARGE *	
582,635 x \$1.24 =	(722,467)
	<hr/>
	<u>\$ 214,722</u>

MONTHLY SERVICE CHARGE * = \$214,722 / 12 = \$17,894

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

CITY OF EAST GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 746,122
NEW COMMODITY CHARGE *	
473.253 x \$ 1,534.00 =	(725,970)
	<hr/>
	<u>\$ 20,152</u>

MONTHLY SERVICE CHARGE * = \$ 20,152 / 12 = \$1,679

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

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December 22, 2011

Ms. Susan Burton, Clerk
Ada Township
7330 Thornapple River Drive
P.O. Box 370
Ada, MI 49301

Dear Susan:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Ada Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

ADA TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 1,343,920
NEW COMMODITY CHARGE *	
660,910 x \$1.36 =	(898,838)
	<hr/>
	<u>\$ 445,082</u>

MONTHLY SERVICE CHARGE * = \$445,082 / 12 = \$37,090

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,203,667
NEW COMMODITY CHARGE *	
320.669 x \$ 1,918.00 =	(615,043)
	<hr/>
	<u>\$ 588,624</u>

MONTHLY SERVICE CHARGE * = \$588,624 / 12 = \$49,052

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

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December 22, 2011

Mr. Ken Zarzecki
Director of Public Utilities
County of Ottawa
Board of County Road Commissioners
U.S. 31 at Rosy Mound Drive, P.O. Box 739
Grand Haven, MI 49417

Dear Mr. Zarzecki:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Ottawa County are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,169,450
NEW COMMODITY CHARGE *	
890,594 x \$1.31 =	(1,166,678)
	<hr/>
	<u>\$ 2,772</u>

MONTHLY SERVICE CHARGE * = \$ 2,772 / 12 = \$231

* NEW RATES EFFECTIVE ON JANUARY 1, 2012



December 22, 2011

Ms. Crystal Osterink, Clerk
Gaines Charter Township
8555 Kalamazoo Ave., S.E.
Caledonia, MI 49316-8270

Dear Crystal:

The "2011 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer service.

Customer communities were notified of the recommended rate changes at a meeting on November 10, 2011, followed by a thirty-day comment period.

On December 20, 2011, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2012. A certified copy of the resolution and the approved rate schedules for Gaines Charter Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

Lauri S. Parks
City Clerk

LSP/pas-tg

Enclosures

cc: Scott Buhner, Chief Financial Officer
Linda Wagenmaker, Financial Analyst

GAINES TOWNSHIP

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 157,442
NEW COMMODITY CHARGE *	
101.030 x \$ 1,384.00 =	(139,826)
	<hr/>
	<u>\$ 17,616</u>

MONTHLY SERVICE CHARGE * = \$ 17,616 / 12 = \$1,468

* NEW RATES EFFECTIVE ON JANUARY 1, 2012

**CITY OF GRAND RAPIDS, MICHIGAN
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2012**

WATER RATES

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 1.86	\$ 1.70	\$ 1.69	\$ 2.26	\$ 1.89	\$ 3.83	NA
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 10.32	\$ 13.15	\$ 16.10	\$ 21.54	\$ 16.38	\$ 8.17	NA
1"	B	\$ 15.55	\$ 20.58	\$ 25.82	\$ 35.49	\$ 26.32	\$ 11.72	NA
1-1/4"	C	\$ 22.27	\$ 30.13	\$ 38.32	\$ 53.43	\$ 39.10	\$ 16.29	NA
1-1/2"	D	\$ 30.48	\$ 41.80	\$ 53.60	\$ 75.36	\$ 54.72	\$ 21.88	NA
2"	E	\$ 51.39	\$ 71.51	\$ 92.49	\$ 131.17	\$ 94.48	\$ 36.10	NA
3"	F	\$ 111.12	\$ 156.40	\$ 203.60	\$ 290.64	\$ 208.08	\$ 76.72	NA
4"	G	\$ 194.75	\$ 275.24	\$ 359.16	\$ 513.89	\$ 367.12	\$ 133.59	NA
6" & Over	H	\$ 433.68	\$ 614.80	\$ 803.60	\$ 1,151.76	\$ 821.52	\$ 296.08	NA

SEWER RATES

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 3.36	\$ 2.72	\$ 2.35	\$ 2.63	\$ 2.49	\$ 10.32	NA
REU Charge (Monthly) *		NA	NA	NA	NA	NA	NA	\$ 62.34
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 12.90	\$ 30.34	\$ 7.02	\$ 32.05	\$ 29.15	\$ 32.82	NA
1"	B	\$ 20.23	\$ 51.24	\$ 9.78	\$ 54.28	\$ 49.12	\$ 55.65	NA
1-1/4"	C	\$ 29.66	\$ 78.11	\$ 13.33	\$ 82.86	\$ 74.80	\$ 85.00	NA
1-1/2"	D	\$ 41.19	\$ 110.95	\$ 17.67	\$ 117.79	\$ 106.19	\$ 120.87	NA
2"	E	\$ 70.53	\$ 194.55	\$ 28.71	\$ 206.71	\$ 186.08	\$ 212.18	NA
3"	F	\$ 154.35	\$ 433.39	\$ 60.27	\$ 460.75	\$ 414.35	\$ 473.07	NA
4"	G	\$ 271.70	\$ 767.77	\$ 104.45	\$ 816.41	\$ 733.92	\$ 838.31	NA
6" & Over	H	\$ 606.99	\$ 1,723.15	\$ 230.67	\$ 1,832.59	\$ 1,646.99	\$ 1,881.87	NA

* REU - Residential Equivalent Unit (Wright Township Only)

FIRE PROTECTION RATES- ALL GOVERNMENTAL UNITS

6"	H	\$ 16.00	10"	J	\$ 44.48
8"	I	\$ 28.40	12"	K	\$ 64.00

**CITY OF GRAND RAPIDS, MICHIGAN
WATER & SEWER RATES FOR WHOLESALE CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2012**

	<u>RATES</u>
EAST GRAND RAPIDS	
WATER - SERVICE (MONTHLY)	\$ 17,894.00
- COMMODITY (100 CF)	1.24
SEWER - SERVICE (MONTHLY)	1,679.00
- COMMODITY (MG)	1,534.00
ADA TWP	
WATER - SERVICE	\$ 37,090.00
- COMMODITY	1.36
SEWER - SERVICE	49,052.00
- COMMODITY	1,918.00
OTTAWA COUNTY	
WATER - SERVICE	\$ 231.00
- COMMODITY	1.31
GAINES TWP	
SEWER - SERVICE	\$ 1,468.00
- COMMODITY	1,384.00

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