

Water S
Wat

ENDED 6-30-76, AS

RATE OF RETURN TEST

for:

Revenue Rec

Oper Maintenance Expenses

De on

Credits

at 7.35%

est Expense (Actual)

est Earned on Restricted Bond

\$6,243,703

R e Requirements

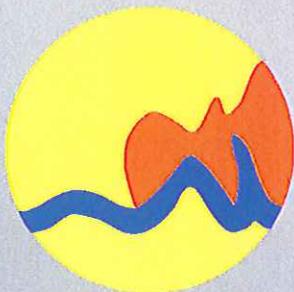
\$5,783,338

DI ent Rates

\$ 460,365

Final

Water/Sewer Rate Study 2010



City of Grand Rapids

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: February 8, 2011

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2010 WATER/SEWER RATE REVIEW – CALENDAR YEAR 2011 RATES

This is the final report for water and sewer rates effective January 1, 2011 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 \$158,006 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 Kentwood, Cascade Township, Grand Rapids Township and Wright Township.

The 2011 water rates reflect decreased tank maintenance costs and increases for contractual services related to Comprehensive Master Plan work and the new Customer Information System. Sewer rates for 2011 reflect increases for Saddleback sewer project work and decreases for contractual large sewer cleaning, claims due to wet weather and the judgment awarded in the CTE lawsuit. Both systems saw decreases as a result of application of the new contract provisions of the fourth amendment to the uniform service agreements which use a three year average to smooth billed flow, and also reduced the rate of return on zoned fixed assets to The Bond Buyer Index of 20 Municipal Bonds plus 4.5% per annum (from 6%). These new contract provisions were recommended by the UAB Rate Review Sub-committee in response to interests expressed by the City and its partner communities.

Summaries of overall revisions for the systems are as follows:

1. Water Supply System revenue requirements decreased by \$2,753,885 or 6.27% less than revenues generated by existing rates and charges.
2. Sewage Disposal System revenue requirements decreased by \$1,694,027 or 3.3% less than revenues generated by existing rates and charges.

Attached is a schedule of comparative 2010/2011 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 2010/2011 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 2011 water and sewer rates to our UAB partners and other customer communities was made on Friday, November 12, 2010. The City Commission approved customer community rates by resolution (file #79984) on December 21, 2010.

Public hearings for water and sewer rates and charges in Grand Rapids were held on December 7, 2010 (file #79943 and #79944). The City Commission approved final adoption of water and sewer rate ordinances (2010-72 & 2010-73) on December 21, 2010 (file #79958 and #79959).

LW

Attachment

T:\Water\Accountant\Rate Study\WSRS\10Final-Cover Memo.doc

**CITY OF GRAND RAPIDS, MICHIGAN
2010 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
December 14, 2010**

	APPROXIMATE QUARTERLY BILL		CHANGE	
	2010	2011	DOLLARS	PERCENT
GRAND RAPIDS				
WATER	\$ 75.69	\$ 71.79	\$ (3.90)	-5.15%
SEWER	101.04	95.61	(5.43)	-5.37%
	<u>\$ 176.73</u>	<u>\$ 167.40</u>	<u>\$ (9.33)</u>	-5.28%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 80.13	\$ 75.90	\$ (4.23)	-5.28%
SEWER	142.53	138.96	(3.57)	-2.50%
	<u>\$ 222.66</u>	<u>\$ 214.86</u>	<u>\$ (7.80)</u>	-3.50%
RATIO TO GR	1.26	1.28		
KENTWOOD				
WATER	\$ 92.67	\$ 86.13	\$ (6.54)	-7.06%
SEWER	62.10	61.14	(0.96)	-1.55%
	<u>\$ 154.77</u>	<u>\$ 147.27</u>	<u>\$ (7.50)</u>	-4.85%
RATIO TO GR	0.88	0.88		
CASCADE TWP				
WATER	\$ 127.02	\$ 114.09	\$ (12.93)	-10.18%
SEWER	142.17	139.05	(3.12)	-2.19%
	<u>\$ 269.19</u>	<u>\$ 253.14</u>	<u>\$ (16.05)</u>	-5.96%
RATIO TO GR	1.52	1.51		
GRAND RAPIDS TWP				
WATER	\$ 100.74	\$ 92.64	\$ (8.10)	-8.04%
SEWER	135.24	132.12	(3.12)	-2.31%
	<u>\$ 235.98</u>	<u>\$ 224.76</u>	<u>\$ (11.22)</u>	-4.75%
RATIO TO GR	1.34	1.34		
TALLMADGE TWP- Contribution of \$0 for 2010, \$18,295 for 2011.				
WATER	\$ 124.38	\$ 116.70	\$ (7.68)	-6.17%
SEWER	313.83	284.16	(29.67)	-9.45%
	<u>\$ 438.21</u>	<u>\$ 400.86</u>	<u>\$ (37.35)</u>	-8.52%
RATIO TO GR	2.48	2.39		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER
 QUARTERLY CONSUMPTION OF : WATER- 24.00 UNITS OR 17,952 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 25 and 18 units, respectively).

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

WRIGHT TWP- Contribution of \$17,000 for 2010, \$5,000 for 2011.

SEWER (No. of REU 1.00)	<u>\$ 193.35</u>	<u>\$ 184.92</u>	<u>\$ (8.43)</u>	-4.36%
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CITY OF GRAND RAPIDS, MICHIGAN
2010 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
 December 14, 2010

	<u>2010</u>	<u>2011</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$ 18,821.00	\$ 16,119.00	-14.36%
- COMMODITY (100 CF)	1.27	1.19	-6.30%
SEWER - SERVICE (MONTHLY)	2,374.00	1,775.00	-25.23%
- COMMODITY (MG)	1,575.00	1,614.00	2.48%
ADA TWP			
WATER - SERVICE	\$ 44,124.00	\$ 35,517.00	-19.51%
- COMMODITY	1.36	1.30	-4.41%
SEWER - SERVICE	16,514.00	48,827.00	195.67%
- COMMODITY	1,892.00	1,996.00	5.50%
OTTAWA COUNTY			
WATER - SERVICE	\$ -	\$ -	N/A
- COMMODITY	1.34	1.28	-4.48%
GAINES TWP			
SEWER - SERVICE	\$ 2,146.00	\$ 1,486.00	-30.75%
- COMMODITY	1,229.00	1,361.00	10.74%

**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
ANNUAL WATER-SEWER RATE REVIEW**

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**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 SYSTEM ADDITIONS AND IMPROVEMENTS
 FOR THE YEAR ENDED JUNE 30, 2010
 TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		INTERMEDIATE		PRIMARY		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	4,037	0.76	3,925	0.74	4	0.00	7,966	1.50
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
CSO Construction	7,429	1.41	3,868	0.73	272	0.05	11,569	2.19
CSO Abandonment	(9,424)	(1.78)	(3,913)	(0.74)	(272)	(0.05)	(13,609)	(2.57)
	<u>2,042</u>	<u>0.39</u>	<u>3,880</u>	<u>0.73</u>	<u>4</u>	<u>0.00</u>	<u>5,926</u>	<u>1.12</u>
Kentwood								
Construction	307	0.06	(25)	0.00	0	0.00	282	0.06
Abandonment	(205)	(0.04)	0	0.00	0	0.00	(205)	(0.04)
	<u>102</u>	<u>0.02</u>	<u>(25)</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>77</u>	<u>0.02</u>
Cascade Twp.								
Construction	(6)	0.00	21	0.00	0	0.00	15	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>(6)</u>	<u>0.00</u>	<u>21</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>15</u>	<u>0.00</u>
G.R. Twp.								
Construction	765	0.14	243	0.05	(16)	0.00	992	0.19
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>765</u>	<u>0.14</u>	<u>243</u>	<u>0.05</u>	<u>(16)</u>	<u>0.00</u>	<u>992</u>	<u>0.19</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	5,364	1.02	4,088	0.77	0	0.00	9,452	1.79
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>5,364</u>	<u>1.02</u>	<u>4,088</u>	<u>0.77</u>	<u>0</u>	<u>0.00</u>	<u>9,452</u>	<u>1.79</u>
TOTAL	<u><u>8,267</u></u>	<u><u>1.57</u></u>	<u><u>8,207</u></u>	<u><u>1.55</u></u>	<u><u>(12)</u></u>	<u><u>-</u></u>	<u><u>16,462</u></u>	<u><u>3.12</u></u>

WATER COSTS

COMMUNITY	COMMUNITY COST
Grand Rapids	\$ -
Kentwood	25,955
Cascade Twp.	0
Grand Rapids Twp.	27,886
Tallmadge Twp.	0
Walker	753,410
TOTAL	<u><u>\$ 807,251</u></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, 2010**

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	\$ 418,296						\$ 418,296			
4312	WATER-CUSTOMER SERVICE *	2,863,463						2,863,463			
4315	ENGINEERING	1,240,430							1,240,430		
4320	COLDBROOK CONTROL	1,377,300	1,377,300								
4322	COLDBROOK DISTRIBUTION	2,108,422		630,525	1,477,897						
4331	FIELD OPERATIONS	6,376,239				322,064	1,621,988	4,432,187			
4342	FILTRATION	6,959,292	6,959,292								
	SUBTOTAL OPERATING EXPENSE	21,343,442	6,959,292	2,007,825	1,477,897	322,064	1,621,988	4,432,187	1,240,430	-	
4311	ADMINISTRATION	2,770,727								2,770,727	
	TOTAL	\$ 24,114,169	\$ 6,959,292	\$ 2,007,825	\$ 1,477,897	\$ 322,064	\$ 1,621,988	\$ 4,432,187	\$ 1,240,430	\$ 2,770,727	

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

METHOD OF DISTRIBUTION

0430	TREASURER-CUSTOMER SERVICE	100.0000%							100.0000%	
4312	WATER-CUSTOMER SERVICE	100.0000%							100.0000%	
4315	ENGINEERING	100.0000%							100.0000%	
4320	COLDBROOK CONTROL	100.0000%	100.0000%							
4322	COLDBROOK DISTRIBUTION	100.0000%		29.910%	70.090%					
4331	FIELD OPERATIONS	100.0000%				5.051%	25.438%	69.511%		
	TOTAL MILES OF MAIN	1,160.45				58.62	295.19	806.64		
4342	FILTRATION	100.0000%	100.0000%							
4311	ADMINISTRATION	100.0000%								100.0000%

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2
FISCAL YEAR ENDED JUNE 30, 2010**

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														
	\$ 6,959,292	\$ 6,959,292												
PUMPING STATIONS:														
A. PRIMARY TRANSPORT	2,007,825	2,007,825												
B. INTERMEDIATE TRANSPORT	1,477,897		1,144,442	49,833	283,622									
WATERMAINS:														
A. PRIMARY TRANSPORT	322,064		264,982	17,691	25,053		9,230	5,108						
B. INTERMEDIATE TRANSPORT	1,621,988		617,069	340,228	295,997		213,519	132,646		22,529				
C. LOCAL DISTRIBUTION	4,432,187		3,274,366	344,514	300,680		236,812	262,607		13,208				
RETAIL CUSTOMER METERING	3,281,759		2,492,628	260,703	218,171		139,409	164,022		6,826				
SUBTOTAL OPERATING EXPENSE	20,103,012	8,967,117	7,793,487	1,012,969	1,123,523		598,970	564,383		42,563				
ENGINEERING SERVICES	1,240,430	553,293	480,890	62,505	69,328		36,965	34,819		2,630				
ADMINISTRATIVE EXPENSE	2,770,727	1,235,883	1,074,155	139,617	154,856		82,568	77,774		5,874				
TOTAL	\$ 24,114,169	\$ 10,756,293	\$ 9,348,532	\$ 1,215,091	\$ 1,347,707		\$ 718,503	\$ 676,976		\$ 51,067				

METHOD OF DISTRIBUTION

FILTRATION PLANTS	100.00%	100.00%												
PUMPING STATIONS														
A. PRIMARY TRANSPORT	100.00%	100.00%												
B. INTERMEDIATE TRANSPORT	100.00%		77.437%	3.372%	19.191%									
MEMO														
WATERMAINS														
TOTAL MILES:	1,160.45													
A. PRIMARY TRANSPORT	58.62		82.276%	5.493%	7.779%		2.866%	1.586%						
MILES	295.19		48.23	3.22	4.56		1.68	0.93						
B. INTERMEDIATE TRANSPORT	806.64		38.044%	20.976%	18.249%		13.164%	8.178%		1.389%				
MILES	80.358.00		112.30	61.92	53.87		38.86	24.14		4.10				
C. LOCAL DISTRIBUTION			73.877%	7.773%	6.784%		5.343%	5.925%		0.298%				
MILES			595.93	62.70	54.72		43.10	47.79		2.40				
RETAIL CUSTOMER METERING (1)			75.954%	7.944%	6.648%		4.248%	4.998%		0.208%				
NUMBER OF METERS			61,035.00	6,384.00	5,342.00		3,414.00	4,016.00		167.00				
ENGINEERING SERVICES (2)			38.768%	5.039%	5.589%		2.980%	2.807%		0.212%				
ADMINISTRATIVE EXPENSE (3)			38.768%	5.039%	5.589%		2.980%	2.807%		0.212%				

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, 2010

ACTIVITY CODE	ACTIVITY	ADJUSTED EXPENSE BY ACTIVITY	PUMPING STATIONS		WATERMAINS		RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
			PRIMARY	INTERM.	PRIMARY	INTERMED. TRANSPORT			
0430	TREASURER-CUSTOMER SERVICE	\$ 439,280					\$ 439,280		
4312	WATER-CUSTOMER SERVICE *	3,095,312					3,095,312		
4315	ENGINEERING	1,312,541						1,312,541	
4320	COLDBROOK CONTROL	1,481,547	1,481,547						
4322	COLDBROOK DISTRIBUTION	2,157,031	645,061	1,511,970					
4331	FIELD OPERATIONS	6,638,589			335,315	1,688,724			
4342	FILTRATION	7,355,378		7,355,378					
	SUBTOTAL OPERATING EXPENSE	22,479,678	2,126,608	1,511,970	335,315	1,688,724	3,534,592	1,312,541	-
4311	ADMINISTRATION	2,787,446							2,787,446
	TOTAL	\$ 25,267,124	\$ 2,126,608	\$ 1,511,970	\$ 335,315	\$ 1,688,724	\$ 3,534,592	\$ 1,312,541	\$ 2,787,446

* 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%	29.910%	70.090%					
4331	FIELD OPERATIONS	100.000%			5.051%	25.438%	69.511%		
	TOTAL MILES OF MAIN	1,160.45			58.62	295.19	806.64		
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, 2010**

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													
	\$ 7,355,378	\$ 7,355,378											
PUMPING STATIONS:													
A. PRIMARY TRANSPORT	2,126,608	2,126,608											
B. INTERMEDIATE TRANSPORT	1,511,970		1,170,828	50,982	290,160								
WATERMAINS:													
A. PRIMARY TRANSPORT	335,315		275,884	18,419	26,084		9,610	5,318					
B. INTERMEDIATE TRANSPORT	1,688,724		642,458	354,227	308,175		222,304	138,104	23,456				
C. LOCAL DISTRIBUTION	4,614,550		3,409,092	358,689	313,051		246,555	273,412	13,751				
RETAIL CUSTOMER METERING	3,534,592		2,684,664	280,788	234,980		150,149	176,659	7,352				
SUBTOTAL OPERATING EXPENSE	21,167,137	9,481,986	8,182,926	1,063,105	1,172,450		628,618	593,493	44,559				
ENGINEERING SERVICES	1,312,541	587,953	507,415	65,916	72,702		38,982	36,804	2,769				
ADMINISTRATIVE EXPENSE	2,787,446	1,248,635	1,077,599	139,986	154,397		82,787	78,160	5,882				
TOTAL	\$ 25,267,124	\$ 11,318,574	\$ 9,767,940	\$ 1,269,007	\$ 1,399,549		\$ 750,387	\$ 708,457	\$ 53,210				

METHOD OF DISTRIBUTION

FILTRATION PLANTS	100.00%	100.00%											
PUMPING STATIONS													
A. PRIMARY TRANSPORT	100.00%	100.00%											
B. INTERMEDIATE TRANSPORT	100.00%		77.437%	3.372%	19.191%								
MEMO													
WATERMAINS													
TOTAL MILES:	1,160.45												
A. PRIMARY TRANSPORT			82.276%	5.493%	7.779%		2.866%	1.586%					
MILES	58.62		48.23	3.22	4.56		1.68	0.93					
B. INTERMEDIATE TRANSPORT			38.044%	20.976%	18.249%		13.164%	8.178%	1.389%				
MILES	295.19		112.30	61.92	53.87		38.86	24.14	4.10				
C. LOCAL DISTRIBUTION			73.877%	7.773%	6.784%		5.343%	5.925%	0.298%				
MILES	806.64		595.93	62.70	54.72		43.10	47.79	2.40				
RETAIL CUSTOMER METERING (1)			75.954%	7.944%	6.648%		4.248%	4.998%	0.208%				
NUMBER OF METERS	80,358.00		61,035.00	6,384.00	5,342.00		3,414.00	4,016.00	167.00				
ENGINEERING SERVICES (2)			38.659%	5.022%	5.539%		2.970%	2.804%	0.211%				
ADMINISTRATIVE EXPENSE (3)			38.659%	5.022%	5.539%		2.970%	2.804%	0.211%				

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, 2010
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4311- ADMINISTRATION

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 45,710.97	\$ 12,963.63	\$ 58,674.60
706	PERMANENT EMPLOYEES	503,273.88	12,581.85	515,855.73
709	TIME & ONE-HALF	1,420.31	35.51	1,455.82
715	EMPLOYERS SOCIAL SECURITY	37,226.18	930.65	38,156.83
717	SPECIAL PENSION BENEFITS	9,195.22	-	9,195.22
719	HOSPITALIZATION INSURANCE	73,333.15	(366.67)	72,966.48
721	LONGEVITY PAY	5,326.32	-	5,326.32
722	RETIREMENT FUND CONTRIBUTION	40,673.08	30,272.97	70,946.05
725	FOOD/CLEAN/CAR ALLOWANCE	2,314.00	-	2,314.00
	TOTAL PERSONAL SERVICES	<u>718,473.11</u>	<u>56,417.94</u>	<u>774,891.05</u>
810	BAD DEBT WRITE-OFFS	14,013.16	-	14,013.16
814	COMPUTER SERVICES	187,921.31	-	187,921.31
818	CONTRACTUAL SERVICES	247,189.69	173,593.00	420,782.69
828	MEDICAL/SUPPORTIVE SERVICES	38.75	-	38.75
835	FEES	698.60	-	698.60
872	PROFESSIONAL DEVELOPMENT	13,697.06	-	13,697.06
873	OTHER TRAVEL AND TRAINING	9,550.50	-	9,550.50
874	LOCAL BUSINESS EXPENSE	174.50	-	174.50
875	MEMBERSHIPS	17,631.25	-	17,631.25
876	PUBLICATIONS AND SUBSCRIPTIONS	1,543.28	-	1,543.28
880	COMMUNITY PROMOTION	9,400.67	-	9,400.67
912	CLAIMS/GENERAL INSURANCE	143,483.75	242,347.25	385,831.00
919	INSURANCE PREMIUMS	166,703.00	-	166,703.00
928	TELEPHONE	10,580.86	-	10,580.86
945	LAND RENTAL OR LEASE	2,658.44	-	2,658.44
947	VEHICLE RENTAL/CAR MILEAGE	5,792.99	-	5,792.99
	TOTAL OTHER SERVICES & CHARGES	<u>831,077.81</u>	<u>415,940.25</u>	<u>1,247,018.06</u>
982	EQUIPMENT	5,839.26	-	5,839.26
	TOTAL CAPITAL	<u>5,839.26</u>	<u>-</u>	<u>5,839.26</u>
999	OPERATING TRANSFERS OUT	1,215,336.96	(455,638.96)	759,698.00
	TOTAL TRANSFERS/FEES	<u>1,215,336.96</u>	<u>(455,638.96)</u>	<u>759,698.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,770,727.14</u>	<u>\$ 16,719.23</u>	<u>\$ 2,787,446.37</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2010
 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	\$ 190,529.10	\$ 54,034.05	\$ 244,563.15
706	PERMANENT EMPLOYEES	2,067,524.99	51,688.12	2,119,213.11
707	TEMPORARY EMPLOYEES	41,077.56	1,026.94	42,104.50
708	SHIFT DIFFERENTIAL	908.04	-	908.04
709	TIME & ONE-HALF	122,084.28	3,052.11	125,136.39
710	ACT.ASSIGNMENT	12,982.72	324.57	13,307.29
712	UNEMPLOYMENT COMPENSATION	25,775.36	-	25,775.36
715	EMPLOYERS SOCIAL SECURITY	167,186.43	4,179.66	171,366.09
719	HOSPITALIZATION INSURANCE	562,625.82	(2,813.13)	559,812.69
721	LONGEVITY PAY	24,426.50	-	24,426.50
722	RETIREMENT FUND CONTRIBUTION	193,772.14	144,224.60	337,996.74
	TOTAL PERSONAL SERVICES	<u>3,408,892.94</u>	<u>255,716.92</u>	<u>3,664,609.86</u>
728	SUPPLIES	44,224.49	-	44,224.49
730	POSTAGE	218,157.62	-	218,157.62
	TOTAL SUPPLIES	<u>262,382.11</u>	<u>-</u>	<u>262,382.11</u>
814	COMPUTER SERVICES	435,596.04	-	435,596.04
818	CONTRACTUAL SERVICES	621,527.90	299,779.00	921,306.90
828	MEDICAL/SUPPORTIVE SERVICES	159.00	-	159.00
835	FEES	24.00	-	24.00
848	SUBSIDY	96,652.00	(96,652.00)	-
876	PUBLICATIONS AND SUBSCRIPTIONS	428.40	-	428.40
900	PRINTING & PUBLISHING	1,892.80	-	1,892.80
928	TELEPHONE	24,097.43	-	24,097.43
930	MAINTENANCE REPAIR	651,293.19	-	651,293.19
943	EQUIPMENT RENTALS OR LEASE	151,128.00	-	151,128.00
947	VEHICLE RENTAL/CAR MILEAGE	9,948.75	-	9,948.75
	TOTAL OTHER SERVICES & CHARGES	<u>1,992,747.51</u>	<u>203,127.00</u>	<u>2,195,874.51</u>
981	FURNITURE	816.20	-	816.20
982	EQUIPMENT	2,138.00	-	2,138.00
	TOTAL CAPITAL	<u>2,954.20</u>	<u>-</u>	<u>2,954.20</u>
	ORGANIZATIONAL UNIT TOTAL (GROSS)	\$ 5,666,976.76	\$ 458,843.92	\$ 6,125,820.68
	LESS: SDSF CONTRIBUTION *	(2,803,514.00)	(226,994.99)	(3,030,508.99)
	ORGANIZATIONAL UNIT TOTAL (NET)	<u>\$ 2,863,462.76</u>	<u>\$ 231,848.93</u>	<u>\$ 3,095,311.69</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, 2010
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4315- ENGINEERING

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST FACTORS	CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 53,774.57	\$ 15,250.47	\$ 69,025.04
706	PERMANENT EMPLOYEES	563,640.06	14,091.00	577,731.06
707	TEMPORARY EMPLOYEES	8,039.68	200.99	8,240.67
709	TIME & ONE-HALF	345.66	8.64	354.30
710	ACT.ASSIGNMENT	1,019.52	25.49	1,045.01
712	UNEMPLOYMENT COMPENSATION	7,735.11	-	7,735.11
715	EMPLOYERS SOCIAL SECURITY	45,355.98	1,133.90	46,489.88
719	HOSPITALIZATION INSURANCE	126,420.30	(632.10)	125,788.20
721	LONGEVITY PAY	5,299.62	-	5,299.62
722	RETIREMENT FUND CONTRIBUTION	56,472.65	42,032.59	98,505.24
	TOTAL PERSONAL SERVICES	<u>868,103.15</u>	<u>72,110.98</u>	<u>940,214.13</u>
728	SUPPLIES	9,794.25	-	9,794.25
	TOTAL SUPPLIES	<u>9,794.25</u>	<u>-</u>	<u>9,794.25</u>
814	COMPUTER SERVICES	205,502.74	-	205,502.74
818	CONTRACTUAL SERVICES	12,235.83	-	12,235.83
928	TELEPHONE	11,860.96	-	11,860.96
930	MAINTENANCE REPAIR	5,262.51	-	5,262.51
943	EQUIPMENT RENTALS OR LEASE	56,707.31	-	56,707.31
947	VEHICLE RENTAL/CAR MILEAGE	1,745.00	-	1,745.00
	TOTAL OTHER SERVICES & CHARGES	<u>293,314.35</u>	<u>-</u>	<u>293,314.35</u>
982	EQUIPMENT	4,950.00	-	4,950.00
	TOTAL CAPITAL	<u>4,950.00</u>	<u>-</u>	<u>4,950.00</u>
999	OPERATING TRANSFERS OUT	64,268.04	-	64,268.04
	TOTAL TRANSFERS/FEES	<u>64,268.04</u>	<u>-</u>	<u>64,268.04</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,240,429.79</u>	<u>\$ 72,110.98</u>	<u>\$ 1,312,540.77</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2010
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4320- COLDBROOK CONTROL

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 76,960.86	\$ 21,826.10	\$ 98,786.96
706	PERMANENT EMPLOYEES	812,252.00	20,306.30	832,558.30
707	TEMPORARY EMPLOYEES	11,233.28	280.83	11,514.11
708	SHIFT DIFFERENTIAL	7,891.65	-	7,891.65
709	TIME & ONE-HALF	35,291.13	882.28	36,173.41
710	ACT.ASSIGNMENT	72.61	1.82	74.43
714	REGULAR HOURLY RATE	3,312.41	82.81	3,395.22
715	EMPLOYERS SOCIAL SECURITY	67,802.13	1,695.05	69,497.18
719	HOSPITALIZATION INSURANCE	194,519.71	(972.60)	193,547.11
721	LONGEVITY PAY	8,950.00	-	8,950.00
722	RETIREMENT FUND CONTRIBUTION	80,806.16	60,144.02	140,950.18
	TOTAL PERSONAL SERVICES	<u>1,299,091.94</u>	<u>104,246.61</u>	<u>1,403,338.55</u>
728	SUPPLIES	4,575.30	-	4,575.30
768	CLOTHING/CLEANING ALLOWANCE	334.90	-	334.90
	TOTAL SUPPLIES	<u>4,910.20</u>	<u>-</u>	<u>4,910.20</u>
814	COMPUTER SERVICES	2,406.96	-	2,406.96
928	TELEPHONE	44,852.05	-	44,852.05
930	MAINTENANCE REPAIR	1,601.79	-	1,601.79
943	EQUIPMENT RENTALS OR LEASE	22,350.36	-	22,350.36
947	VEHICLE RENTAL/CAR MILEAGE	595.00	-	595.00
	TOTAL OTHER SERVICES & CHARGES	<u>71,806.16</u>	<u>-</u>	<u>71,806.16</u>
982	EQUIPMENT	1,492.06	-	1,492.06
	TOTAL CAPITAL	<u>1,492.06</u>	<u>-</u>	<u>1,492.06</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,377,300.36</u>	<u>\$ 104,246.61</u>	<u>\$ 1,481,546.97</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2010
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4322- COLDBROOK DISTRIBUTION

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 34,329.92	\$ 9,735.97	\$ 44,065.89
706	PERMANENT EMPLOYEES	400,423.16	10,010.58	410,433.74
709	TIME & ONE-HALF	2,894.12	72.35	2,966.47
710	ACT.ASSIGNMENT	36.17	0.90	37.07
715	EMPLOYERS SOCIAL SECURITY	29,067.02	726.68	29,793.70
719	HOSPITALIZATION INSURANCE	94,664.01	(473.32)	94,190.69
721	LONGEVITY PAY	5,570.00	-	5,570.00
722	RETIREMENT FUND CONTRIBUTION	38,339.79	28,536.31	66,876.10
	TOTAL PERSONAL SERVICES	605,324.19	48,609.47	653,933.66
728	SUPPLIES	83,551.91	-	83,551.91
768	CLOTHING/CLEANING ALLOWANCE	864.62	-	864.62
	TOTAL SUPPLIES	84,416.53	-	84,416.53
814	COMPUTER SERVICES	16,143.00	-	16,143.00
921	ELECTRICITY	1,228,426.79	-	1,228,426.79
922	WATER	4,481.27	-	4,481.27
923	GAS	84,681.38	-	84,681.38
930	MAINTENANCE REPAIR	22,227.64	-	22,227.64
943	EQUIPMENT RENTALS OR LEASE	58,128.96	-	58,128.96
959	REFUSE COLLECTION CHARGES	4,591.98	-	4,591.98
	TOTAL OTHER SERVICES & CHARGES	1,418,681.02	-	1,418,681.02
	ORGANIZATIONAL UNIT TOTAL	\$ 2,108,421.74	\$ 48,609.47	\$ 2,157,031.21

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2010
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4331- FIELD OPERATIONS

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
703	RETIREE HEALTH CARE	\$ 191,073.26	\$ 54,188.38	\$ 245,261.64
706	PERMANENT EMPLOYEES	2,033,761.00	50,844.03	2,084,605.03
707	TEMPORARY EMPLOYEES	12,479.94	312.00	12,791.94
708	SHIFT DIFFERENTIAL	1,337.18	-	1,337.18
709	TIME & ONE-HALF	247,332.62	6,183.32	253,515.94
710	ACT.ASSIGNMENT	1,349.08	33.73	1,382.81
715	EMPLOYERS SOCIAL SECURITY	176,241.60	4,406.04	180,647.64
719	HOSPITALIZATION INSURANCE	513,581.80	(2,567.91)	511,013.89
721	LONGEVITY PAY	22,662.79	-	22,662.79
722	RETIREMENT FUND CONTRIBUTION	200,121.03	148,950.08	349,071.11
	TOTAL PERSONAL SERVICES	<u>3,399,940.30</u>	<u>262,349.67</u>	<u>3,662,289.97</u>
728	SUPPLIES/INVENTORY	14,804.45	-	14,804.45
730	POSTAGE	17.80	-	17.80
785	PAVEMENT REPAIR	854,385.61	-	854,385.61
	TOTAL SUPPLIES	<u>869,207.86</u>	<u>-</u>	<u>869,207.86</u>
814	COMPUTER SERVICES	41,825.04	-	41,825.04
818	CONTRACTUAL SERVICES	18,684.30	-	18,684.30
921	ELECTRICITY	48,278.81	-	48,278.81
922	WATER	1,084.20	-	1,084.20
923	GAS	36,883.76	-	36,883.76
928	TELEPHONE	19,340.21	-	19,340.21
930	MAINTENANCE REPAIR	1,081,981.97	-	1,081,981.97
943	EQUIPMENT RENTALS OR LEASE	856,732.49	-	856,732.49
947	VEHICLE RENTAL/CAR MILEAGE	2,280.00	-	2,280.00
	TOTAL OTHER SERVICES & CHARGES	<u>2,107,090.78</u>	<u>-</u>	<u>2,107,090.78</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 6,376,238.94</u>	<u>\$ 262,349.67</u>	<u>\$ 6,638,588.61</u>

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2010
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4342- LAKE MI. FILTRATION

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 193,507.24	\$ 54,878.65	\$ 248,385.89
706	PERMANENT EMPLOYEES	2,154,761.19	53,869.03	2,208,630.22
708	SHIFT DIFFERENTIAL	7,921.24	-	7,921.24
709	TIME & ONE-HALF	93,603.25	2,340.08	95,943.33
710	ACT.ASSIGNMENT	5,020.92	125.52	5,146.44
714	REGULAR HOURLY RATE	2,041.37	51.03	2,092.40
715	EMPLOYERS SOCIAL SECURITY	168,167.01	4,204.18	172,371.19
719	HOSPITALIZATION INSURANCE	494,195.96	(2,470.98)	491,724.98
721	LONGEVITY PAY	19,864.26	-	19,864.26
722	RETIREMENT FUND CONTRIBUTION	203,639.87	151,569.16	355,209.03
	TOTAL PERSONAL SERVICES	<u>3,342,722.31</u>	<u>264,566.67</u>	<u>3,607,288.98</u>
728	SUPPLIES	1,155,193.53	-	1,155,193.53
730	POSTAGE	166.29	-	166.29
768	CLOTHING/CLEANING ALLOWANCE	1,886.13	-	1,886.13
780	INVENTORY - COST OF GOODS SOLD	(119,421.70)	-	(119,421.70)
	TOTAL SUPPLIES	<u>1,037,824.25</u>	<u>-</u>	<u>1,037,824.25</u>
814	COMPUTER SERVICES	100,199.04	-	100,199.04
818	CONTRACTUAL SERVICES	322,180.41	131,519.00	453,699.41
921	ELECTRICITY	1,491,374.00	-	1,491,374.00
923	GAS	304,964.11	-	304,964.11
928	TELEPHONE	40,223.31	-	40,223.31
930	MAINTENANCE REPAIR	222,285.62	-	222,285.62
943	EQUIPMENT RENTALS OR LEASE	93,311.48	-	93,311.48
947	VEHICLE RENTAL/CAR MILEAGE	2,271.56	-	2,271.56
959	REFUSE COLLECTION CHARGES	1,935.87	-	1,935.87
	TOTAL OTHER SERVICES & CHARGES	<u>2,578,745.40</u>	<u>131,519.00</u>	<u>2,710,264.40</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 6,959,291.96</u>	<u>\$ 396,085.67</u>	<u>\$ 7,355,377.63</u>

**CITY OF GRAND RAPIDS, MICHIGAN
 WATER SUPPLY SYSTEM FUND
 ADJUSTED ACTUAL EXPENSE
 YEAR ENDED JUNE 30, 2010
 RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 0430- TREASURER- CUSTOMER SERV'S

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 20,965.02	\$ 5,945.68	\$ 26,910.70
706	PERMANENT EMPLOYEES	159,826.94	3,995.67	163,822.61
707	TEMPORARY EMPLOYEES	11,153.54	278.84	11,432.38
709	TIME & ONE-HALF	3.98	0.10	4.08
710	ACT.ASSIGNMENT	95.08	2.38	97.46
715	EMPLOYERS SOCIAL SECURITY	12,192.43	304.81	12,497.24
719	HOSPITALIZATION INSURANCE	33,314.74	(166.57)	33,148.17
721	LONGEVITY PAY	1,546.35	-	1,546.35
722	RETIREMENT FUND CONTRIBUTION	14,272.03	10,622.67	24,894.70
	TOTAL PERSONAL SERVICES	<u>253,370.11</u>	<u>20,983.58</u>	<u>274,353.69</u>
728	SUPPLIES	4,264.72	-	4,264.72
	TOTAL SUPPLIES	<u>4,264.72</u>	<u>-</u>	<u>4,264.72</u>
814	COMPUTER SERVICES	101,736.96	-	101,736.96
818	CONTRACTUAL SERVICES	7,334.64	-	7,334.64
835	FEES	39,817.74	-	39,817.74
928	TELEPHONE	936.00	-	936.00
930	MAINTENANCE REPAIR	971.72	-	971.72
942	BUILDINGS RENTALS OR LEASE	7,029.37	-	7,029.37
947	VEHICLE RENTAL/CAR MILEAGE	2,835.00	-	2,835.00
	TOTAL OTHER SERVICES & CHARGES	<u>160,661.43</u>	<u>-</u>	<u>160,661.43</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 418,296.26</u>	<u>\$ 20,983.58</u>	<u>\$ 439,279.84</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2010

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2010 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, 2010.

NON-INTEGRATED

4311- Administration	\$2,770,727
4312- Customer Services	6,085,273
4315- Engineering	1,240,430
4331- Field Operations	6,376,239

INTEGRATED

4342- Lake Mi. Filtration	6,959,292
---------------------------	-----------

INTEGRATED & NON-INTEGRATED

4320- Coldbrook Control	1,377,300
4322- Coldbrook Distribution	2,108,422

Attached is the calculation of integrated and non-integrated adjusted expenses for Coldbrook Distribution (4322) for 2010.

LW/SS

Attachment

wrs\wtask4 2010

ALLOCATION OF COLDBROOK PUMPING TO WATER PUMPING FACILITIES

STATION	ENERGY COST	PERCENT	EXPENDITURE ALLOCATION	
			ACTUAL	ADJUSTED
ALGER	\$ 38,666	3.16%	\$ 66,364	\$ 67,894
BOOSTER A	9,173	0.75%	15,744	16,107
BOOSTER D	37,434	3.05%	64,250	65,731
BRISTOL	29,034	2.36%	49,833	50,982
COLDBROOK	269,430	21.93%	462,439	473,102
COVELL	33,797	2.75%	58,008	59,345
EAST PARIS	165,246	13.45%	283,622	290,160
FRANKLIN	326,399	26.57%	560,218	573,134
LEFFINGWELL	32,784	2.67%	56,269	57,566
LIVINGSTON	152,373	12.40%	261,527	267,556
WILSON	86,338	7.03%	148,187	151,603
BURTON	11,594	0.94%	19,899	20,358
DEAN LAKE	36,159	2.94%	62,062	63,493
TOTAL	\$ 1,228,427	100.00%	\$ 2,108,422	\$ 2,157,031

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Buhrer 
Chief Financial Officer

SUBJECT: 2010 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, 2010**

Sub-Object - 703

The factor to establish calendar year 2011 retiree health care cost is 28.36%. Increase total of fiscal year 2010's retiree health care (sub-object 703) by this percent to establish the cost for calendar year 2011.

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

The wage increase factor to translate FY2010 actual costs to estimated calendar 2011 will be 2.5%.

Sub-Object - 715

Increase FY2010 actual FICA expense by 2.5% to account for the effect of the wage increases.

Sub-Object - 719

Decrease FY2010 health insurance actual by 0.5% to reflect rate changes effective in FY2011.

Sub-Object - 722

Increase FY2010 actual expense by 74.43% to reflect the effect of a General Pension rate change increase from 13.62% to 19.7% and an estimated wage increase of 2.5%.

Sub-Object - 999

Administration - Adjust FY2010 actual cost to reflect adjustments in charges for central services rendered by the Insurance Payment Fund and the General Operating Fund.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson 
Water System Manager

SUBJECT: **2010 WATER RATE STUDY - TASK #5-KNOWN COST INCREASES/DECREASES**

Known cost increases by which to adjust FY10 operating costs include fund carry-forwards for the Comprehensive Master Plan and training/support & maintenance costs related to the CIS project plan that were not completed prior to June 30, 2010, as follows:

<u>ACCOUNT</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
4312-818	EMA, Inc. (CIS)	\$150,217
4312-818	Cayenta/Harris (CIS)	149,562
4311-818	Black & Veatch Corp (CMP)	173,593
4342-818	Black & Veatch Corp (CMP)	131,519

JT

wrs\wtask5 2010

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 26, 2010

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2010 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, 2010, and volume comparisons for the past five (5) years by governmental unit and for the total system.

LW

Attachment

wrs\wtask6 2010

**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, 2010:

RETAIL:	SALES REVENUE			3 YR AVE VOL BILLED
	A	B	C	(GALLONS)
CITY OF GRAND RAPIDS (1)	\$ 23,650,328.27		\$ 43,054.57	6,865,333,992
CITY OF WALKER	3,016,381.70			963,170,428
CITY OF KENTWOOD	4,061,051.45			1,247,239,884
CASCADE TOWNSHIP	2,936,556.07	38,960.00		660,774,224
GRAND RAPIDS TOWNSHIP	2,142,156.49			527,643,688
TALLMADGE TOWNSHIP	118,733.00	16,704.00		19,054,552
SUB-TOTAL RETAIL (2)	<u>\$ 35,925,206.98</u>	<u>\$ 55,664.00</u>	<u>\$ 43,054.57</u>	<u>10,283,216,768</u>
WHOLESALE:				
CITY OF E. GRAND RAPIDS	\$ 894,845.19			453,950,728
OTTAWA CO. (3)	1,194,821.08	5,760.00		706,518,164
ADA TOWNSHIP	1,316,191.06			519,692,448
SUB-TOTAL WHOLESALE	<u>\$ 3,405,857.33</u>	<u>\$ 5,760.00</u>	<u>\$ -</u>	<u>1,680,161,340</u>
TOTAL	<u>\$ 39,331,064.31</u>	<u>\$ 61,424.00</u>	<u>\$ 43,054.57</u>	<u>11,963,378,108</u>

REVENUE CLASSIFICATION:

A) 4311 - 642008 OTTAWA COUNTY WATER SALES	\$ 1,194,821.08
4311 - 642011 RETAIL METERED WATER SALES	35,864,029.52
4311 - 642012 E. GRAND RAPIDS WATER SALES	894,845.19
4311 - 642013 WYOMING WATER SALES	61,177.46
4311 - 642021 ADA WATER SALES	1,316,191.06
SUB-TOTAL	<u>\$ 39,331,064.31</u>
B) 4311 - 607048 FIRE HYDRANT BILLINGS	<u>\$ 61,424.00</u>
C) 4311 - 642024 UNMETERED WATER SALES	<u>\$ 43,054.57</u>
TOTAL	<u>\$ 39,435,542.88</u>

(1) THE VOLUME & DOLLAR AMOUNT FOR THE CITY OF WYOMING ARE INCLUDED IN THE GRAND RAPIDS TOTALS.

(2) A REVENUE ACCRUAL OF \$699,757 (190,758,153 GALLONS) HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2010.

(3) THE VOLUME EXCLUDES BILLINGS (1,079,364 GALLONS) FOR THE SUPPLEMENTAL AGREEMENT, DATED 5/13/2004 (aka, NOWS AGREEMENT), WITH OTTAWA FOR THE PERIOD JULY 1, 2009 TO JUNE 30, 2010.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
2010 RATE STUDY TASK NO. 6**

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

MUNICIPALITY	FY06		FY07		FY08		FY09		FY10		FY06 - FY10	
	VOL BILLED	% CHANGE	VOL BILLED	% CHANGE								
GRAND RAPIDS	7,863,078	-6.32%	7,366,098	1.07%	7,444,641	-10.32%	6,676,075	-10.32%	6,617,068	-0.88%	6,617,068	-15.85%
WALKER	1,083,040	-4.68%	1,032,301	3.64%	1,069,867	-11.58%	946,018	-11.58%	892,980	-5.61%	892,980	-17.55%
KENTWOOD	1,412,532	-4.16%	1,353,813	2.70%	1,390,347	-14.46%	1,189,270	-14.46%	1,188,114	-0.10%	1,188,114	-15.89%
CASCADE TWP	726,395	-2.52%	708,112	6.85%	756,637	-14.04%	650,371	-14.04%	588,309	-9.54%	588,309	-19.01%
GRAND RAPIDS TWP	557,041	-3.37%	538,271	7.95%	581,057	-9.96%	523,192	-9.96%	489,199	-6.50%	489,199	-12.18%
TALLMADGE TWP	18,251	-6.67%	17,033	14.55%	19,512	3.76%	20,245	3.76%	17,766	-12.24%	17,766	-2.66%
EAST GRAND RAPIDS	492,470	-6.49%	460,521	9.50%	504,268	-12.99%	438,786	-12.99%	418,797	-4.56%	418,797	-14.96%
OTTAWA COUNTY	778,965	-8.07%	716,087	3.05%	737,951	-7.78%	680,543	-7.78%	706,518	3.82%	706,518	-9.30%
ADA TWP	495,043	9.63%	542,697	2.62%	556,923	-6.08%	523,082	-6.08%	479,072	-8.41%	479,072	-3.23%
TOTAL	13,426,815	-5.15%	12,734,933	2.56%	13,061,203	-10.82%	11,647,582	-10.82%	11,397,823	-2.14%	11,397,823	-15.11%
VOLUME PUMPED	14,812,000		14,705,000		14,419,000		13,172,000		12,480,000		12,480,000	
% BILLED TO PUMPED	90.6%		86.6%		90.6%		88.4%		91.3%		91.3%	
GRAND RAPIDS VOLUME COMPARED TO CUSTOMER COMMUNITIES												
VOLUME = 1,000 GALLONS	FY06		FY07		FY08		FY09		FY10		FY06 - FY10	
	% OF TOTAL	% OF TOTAL										
GRAND RAPIDS	58.56%	57.84%	57.84%	57.00%	57.00%	57.32%	57.32%	58.06%	58.06%	58.06%	58.06%	58.06%
CUSTOMER COMMUNITIES	41.44%	42.16%	42.16%	43.00%	43.00%	42.68%	42.68%	41.94%	41.94%	41.94%	41.94%	41.94%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**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	\$ 7,560.00
4311-476010	PAVING PERMITS	-
4311-476012	TAPPING PERMITS	6,200.00
4311-607001	MISCELLANEOUS SERVICE FEES	31,628.02
4311-607027	INSPECTION FEES - UTILITIES	36,390.00
4311-607034	MONTHLY STATEMENT SERVICE FEES	202,919.35
4311-607043	PRELIM/DESIGN/CONSTR ENGINEERING	44,277.25
4311-607049	SERVICES FOR CONTRACTORS	68,922.99
4311-607052	METER SETTING FEES	13,540.00
4311-659002	PENALTY FINES *	-
		<u>\$ 411,437.61</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR \$ 344,981.00

OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION & LAKELINE CREDIT

4311-607051	WATER FRONT FOOTAGE	\$ 48,939.19
4311-607053	INTEGRATED WATER CONNECTION	822,348.50
		<u>\$ 871,287.69</u>

OFFSETTING CREDIT TO CUSTOMER ACCOUNTING ACTIVITY EXPENSES:

4311-699001	BILLABLE EXPENSE - SEWAGE DISPOSAL SYSTEM *	<u>\$ 2,803,514.00</u>
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* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson
Water System Manager



SUBJECT: 2010 WATER RATE STUDY- TASK #8

No significant changes in operating levels are anticipated to take effect by January 1, 2011, which would require adjustments to operating costs for the test period.

JT

wrs\wtask8 2010

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Joellen Thompson
Water System Manager 

SUBJECT: **2010 WATER RATE STUDY- TASK #9**

No significant changes in water revenues are anticipated to take effect by January 1, 2011, which would require an adjustment to operating revenue estimates as a whole.

JT

wrs\wtask9 2010

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 19, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg *WJ*
Acting Assistant Water System Manager

SUBJECT: 2010 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, 2011.

<u>Description</u>	<u>Location</u>	<u>Amount</u>
Joe Taylor Park Impr. (ES CSO #19)	Grand Rapids	\$169,700
ES CSO #25	Grand Rapids	120,300
ES CSO #15	Grand Rapids	278,000
MDOT I-196 watermain crossings	Grand Rapids	402,700
Chamberlain, Eastbrook & Clearbrook	Grand Rapids	641,200
Crahen & Bradford intersection	Grand Rapids Twp	132,000
Commerce, Williams & Barlett	Grand Rapids	486,700
Oakwood, Ann & Dean	Grand Rapids	418,000
Bostwick-Crescent/Michigan	Grand Rapids	200,000
Washtewaw-Diamond/east end	Grand Rapids	596,700
Lockridge & Truxton	Grand Rapids	367,300
Coldbrook Pump complex-AHU Ph II	Grand Rapids	235,400

WJLW

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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, 2010"

INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 2,507,974	\$ -	\$ -
LAND IMPROVEMENTS	1,987,789	1,082,854	98,713
BUILDINGS & STRUCTURES	46,991,540	19,140,682	909,838
STORAGE	7,584,993	4,697,044	138,459
PROCESS EQUIPMENT	56,396,362	26,762,522	1,695,301
AUXILIARY EQUIPMENT	14,701,826	11,488,576	275,776
METERS	7,375,481	7,375,481	27,231
MACHINERY & EQUIPMENT	2,961,961	2,279,030	110,095
OFFICE EQUIPMENT & FURNITURE	622,184	622,184	-
WATERMAINS	55,592,968	15,073,974	741,240
	<u>\$ 196,723,078</u>	<u>\$ 88,522,347</u>	<u>\$ 3,996,653</u>

NON-INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 934,636	\$ -	\$ -
LAND IMPROVEMENTS	1,192,503	697,816	41,033
BUILDINGS & STRUCTURES	10,979,407	2,459,496	225,919
STORAGE	9,461,759	4,295,035	270,870
PROCESS EQUIPMENT	4,476,690	2,273,060	131,327
AUXILIARY EQUIPMENT	1,899,721	1,699,516	23,379
MACHINERY & EQUIPMENT	2,187,324	1,966,698	84,062
OFFICE EQUIPMENT & FURNITURE	533,805	392,922	27,472
WATERMAINS - GRAND RAPIDS	112,946,164	23,850,882	1,433,449
WATERMAINS - WALKER	21,246,433	5,497,685	268,228
WATERMAINS - KENTWOOD	24,430,442	6,026,005	325,843
WATERMAINS - CASCADE TWP	20,150,425	4,311,823	269,889
WATERMAINS - GRAND RAPIDS TWP	16,645,046	3,111,772	217,241
WATERMAINS - TALLMADGE TWP	2,014,737	226,101	26,863
	<u>\$ 229,099,092</u>	<u>\$ 56,808,811</u>	<u>\$ 3,345,575</u>
TOTAL	<u>\$ 425,822,170</u>	<u>\$145,331,158</u>	<u>\$ 7,342,228</u>

SOURCE: FINAL GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2010.

**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, 2010: \$2,298,828

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 = \$25,267,124 @ 90/365 = \$6,230,250

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$2,298,828
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	<u>6,230,250</u>
	<u><u>\$8,529,078</u></u>

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
ZONEGATED FACILITIES
TASK #13
November 5, 2010**

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 the Coldbrook Complex and a revised map is on file at Oak Industrial Drive.

LW

wrslwtask13 2010

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 28, 2010

TO: Linda Wagenmaker
Utility Financial Officer

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

SUBJECT: 2010 WATER RATE STUDY- TASK #14

Base maps and zonedating maps for the water rate study, adjusted and revised to reflect changes are presently being updated to reflect 2010 zonedating information. The water maps will be completely updated by the end of calendar year 2010.

WJ/LW

wrs\wtask14 2010

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 15**

COMPUTE CONSTRUCTION COST RATE BASE (DEPRECIATED PLANT, PLUS WORKING CAPITAL, LESS CONTRIBUTIONS BY OTHERS).

ORIGINAL CONSTRUCTION COST	- TASK #10	\$ 4,048,000	
	- TASK #11	425,822,170	
		<hr/>	\$ 429,870,170
LESS: ACCUMULATED DEPRECIATION	- TASK #11	\$ 145,331,158	
	- TASK #10	-	(145,331,158)
		<hr/>	<hr/>
			284,539,012
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 8,529,078	
		<hr/>	8,529,078
			<hr/>
			293,068,090
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 87,224,614	
LESS: AMORTIZATION		(24,555,537)	
		<hr/>	(62,669,077)
CONSTRUCTION COST RATE BASE			<hr/> <hr/>
			\$ 230,399,013

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 27, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Saindon *SS*
Financial Analyst

**SUBJECT: 2010 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, 2011. 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, 2011 is as follows:

August, 2010 Index	218.312
August, 2009 Index	215.834
Increase (decrease)	2.478
Percentage increase (decrease)	1.15%

SS

Attachment

wrs\wtask15a 2010

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>1/01/10</u>	<u>1/01/11</u>
3/4 or less	\$ 2,650	\$ 2,680
1	4,400	4,480
1 ½	8,750	8,920
2	14,050	14,280
3	30,750	31,280
4	55,300	56,280
6 and over	122,950	125,080

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	SE ELEVATED STORAGE TANK AND WATER MAIN	4,837,000
2	WILSON PUMP STATION IMPROVEMENTS	682,000
3	SOUTH WALKER WATERMAIN PHASE II	1,722,000
4	FOUR MILE ROAD WATER MAIN AND ELEVATED TANK	8,245,000
5	DEAN LAKE SERVICE CENTER EXPANSION	1,380,000
6	EAST PARIS SERVICE CENTER EXPANSION	3,780,000
7	CASCADE NORTH RIVER CROSSING	3,230,000
8	LIVINGSTON DISCHARGE LINE	8,750,000
		<u>\$ 32,626,000</u>

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2011. COSTS SHOWN ARE IN 2010 DOLLARS.

SOURCE: WAYNE JERNBERG, WATER SYSTEM HYDRAULIC ENGINEER
 OCTOBER 2010

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

**BONDS - PRINCIPAL & INTEREST PAYMENTS
 1993, 2000, 2005 & 2010 BONDS**

FISCAL YEAR ENDING JUNE 30,	CASH BASIS		
	PRINCIPAL	INTEREST	PRIN & INT
2011	\$ 8,215,000	\$ 4,691,345	\$ 12,906,345
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

**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	\$ 230,399,013
LESS: BONDED INDEBTEDNESS - TASK NO. 17	(123,406,197)
NET WATER SYSTEM EQUITY	<u>\$ 106,992,816</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>
08-Oct-09	4.060%	08-Apr-10	4.450%
15-Oct-09	4.320%	15-Apr-10	4.430%
22-Oct-09	4.310%	22-Apr-10	4.370%
29-Oct-09	4.390%	29-Apr-10	4.370%
05-Nov-09	4.410%	06-May-10	4.290%
12-Nov-09	4.400%	13-May-10	4.320%
19-Nov-09	4.350%	20-May-10	4.270%
24-Nov-09	4.330%	27-May-10	4.280%
03-Dec-09	4.240%	03-Jun-10	4.280%
10-Dec-09	4.190%	10-Jun-10	4.370%
17-Dec-09	4.180%	17-Jun-10	4.400%
23-Dec-09	4.210%	24-Jun-10	4.400%
30-Dec-09	4.250%	01-Jul-10	4.380%
07-Jan-10	4.310%	08-Jul-10	4.360%
14-Jan-10	4.310%	15-Jul-10	4.370%
21-Jan-10	4.300%	22-Jul-10	4.260%
28-Jan-10	4.390%	29-Jul-10	4.210%
04-Feb-10	4.360%	05-Aug-10	4.160%
11-Feb-10	4.340%	12-Aug-10	4.060%
18-Feb-10	4.380%	19-Aug-10	4.030%
25-Feb-10	4.360%	26-Aug-10	3.880%
04-Mar-10	4.340%	02-Sep-10	3.860%
11-Mar-10	4.330%	09-Sep-10	3.920%
18-Mar-10	4.320%	16-Sep-10	3.890%
25-Mar-10	4.440%	23-Sep-10	3.830%
31-Mar-10	4.440%	30-Sep-10	3.840%
		<u>52 WEEKS</u>	<u>4.260%</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	\$ 106,992,816	@ 5.260%	= \$ 5,627,822
WATER SYSTEM INDEBTEDNESS IN THE CCR BASE -1993 Bonds (<i>Fixed Rate Conversion</i>)	28,900,000	@ 5.330%	= 1,540,370
-2000 Bonds	5,285,000	@ 5.750%	= 303,888
-2005 Bonds	32,395,000	@ 4.850%	= 1,571,158
-2009 Bonds (Amt in CCRB)	13,801,197	@ 4.980%	= 687,300
-2010 Bonds (Refunded 2000 bonds)	43,025,000	@ 4.590%	= 1,974,848
LESS: INTEREST EARNED DURING THE TEST PERIOD ON BOND RESERVE AND REPLACEMENT ACCOUNTS			(13,684)
	\$ 230,399,013		\$ 11,691,702
COMPOSITE RATE OF RETURN ON INVESTMENT		\$ 11,691,702 230,399,013	= 5.075%

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, 2010

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	\$ 196,723,078	\$ 133,256,561	\$ 21,627,027	\$ 22,826,000	\$ 20,145,456	\$ 15,176,556	\$ 2,014,737	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 411,769,415
LESS: ACCUMULATED DEPRECIATION	88,522,347	33,470,242	5,600,373	6,630,932	4,310,696	2,835,899	226,101	-	-	-	-	-	-	141,596,590
NET BOOK VALUE	\$ 108,200,731	\$ 99,786,319	\$ 16,026,654	\$ 16,195,068	\$ 15,834,760	\$ 12,340,657	\$ 1,788,636	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 270,172,825
WORKING CAPITAL REQUIREMENT	3,820,601	3,089,488	429,695	484,110	358,733	267,301	19,787	23,029	-	36,334	-	-	-	8,529,078
	\$ 112,021,332	\$ 102,875,807	\$ 16,456,349	\$ 16,679,178	\$ 16,193,493	\$ 12,607,958	\$ 1,808,423	\$ 23,029	\$ -	\$ 36,334	\$ -	\$ -	\$ -	\$ 278,701,903
CONTRIBUTIONS	-	23,785,768	17,096,967	16,509,330	16,234,201	11,533,701	2,014,737	-	-	-	-	-	-	87,174,704
LESS AMORTIZATION	-	(9,972,996)	(4,312,881)	(3,802,915)	(3,748,014)	(2,441,074)	(230,654)	-	-	-	-	-	-	(24,508,534)
	\$ -	\$ (13,812,772)	\$ (12,784,086)	\$ (12,706,415)	\$ (12,496,187)	\$ (9,092,627)	\$ (1,784,083)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (62,666,170)
CONSTRUCTION COST RATE BASE	\$ 112,021,332	\$ 89,063,035	\$ 3,672,263	\$ 3,972,763	\$ 3,707,306	\$ 3,515,331	\$ 24,340	\$ 23,029	\$ -	\$ 36,334	\$ -	\$ -	\$ -	\$ 216,035,733
RETURN ON INVESTMENT- TASK 20	5.075%	\$ 4,519,949	\$ 186,367	\$ 201,618	\$ 188,146	\$ 178,403	\$ 1,235	\$ 1,169	\$ -	\$ 1,844	\$ -	\$ -	\$ -	\$ 10,963,814

ZONEGATED

COST	\$ -	\$ (4,493,563)	\$ 600,137	\$ 6,271,806	\$ 6,883,625	\$ 3,463,417	\$ 170,342	\$ 1,349,049	\$ -	\$ 3,855,942	\$ -	\$ -	\$ -	\$ 18,100,755
LESS: ACCUMULATED DEPRECIATION	-	(2,156,377)	424,635	1,112,253	2,086,547	974,400	72,806	280,465	-	939,839	-	-	-	3,734,568
NET BOOK VALUE	\$ -	\$ (2,337,186)	\$ 175,502	\$ 5,159,553	\$ 4,797,078	\$ 2,489,017	\$ 97,536	\$ 1,068,584	\$ -	\$ 2,916,103	\$ -	\$ -	\$ -	\$ 14,366,187
WORKING CAPITAL REQUIREMENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ (2,337,186)	\$ 175,502	\$ 5,159,553	\$ 4,797,078	\$ 2,489,017	\$ 97,536	\$ 1,068,584	\$ -	\$ 2,916,103	\$ -	\$ -	\$ -	\$ 14,366,187
CONTRIBUTIONS	-	-	-	13,480	3,339	22,221	-	-	-	10,870	-	-	-	49,910
LESS AMORTIZATION	-	-	-	(12,695)	(3,145)	(20,927)	-	-	-	(10,236)	-	-	-	(47,003)
	\$ -	\$ -	\$ -	\$ (785)	\$ (194)	\$ (1,294)	\$ -	\$ -	\$ -	\$ (634)	\$ -	\$ -	\$ -	\$ (2,907)
CONSTRUCTION COST RATE BASE	\$ -	\$ (2,337,186)	\$ 175,502	\$ 5,158,768	\$ 4,796,884	\$ 2,487,723	\$ 97,536	\$ 1,068,584	\$ -	\$ 2,915,469	\$ -	\$ -	\$ -	\$ 14,363,280
RETURN ON INVESTMENT- TASK 19/20	-	\$ (204,737)	\$ 15,374	\$ 451,908	\$ 420,207	\$ 217,925	\$ 8,544	\$ 93,608	\$ -	\$ 255,395	\$ -	\$ -	\$ -	\$ 1,258,224
RETURN ON INVESTMENT- TASK 19/20	8.760%	\$ 201,741	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%	\$ 8,760%
5.075%	\$ 4,315,212	\$ 201,741	\$ 653,526	\$ 608,353	\$ 396,328	\$ 9,779	\$ 94,777	\$ -	\$ -	\$ 257,239	\$ -	\$ -	\$ -	\$ 12,222,038
TOTAL RETURN ON INVESTMENT		\$ 4,315,212	\$ 201,741	\$ 653,526	\$ 608,353	\$ 396,328	\$ 9,779	\$ 94,777	\$ -	\$ 257,239	\$ -	\$ -	\$ -	\$ 12,222,038

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2010**

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		\$ 144,612,009	\$ 21,246,433	\$ 24,430,442	\$ 20,150,425	\$ 16,645,046	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 425,822,170
IN SERVICE- TASK 10		3,916,000	-	-	-	132,000	-	-	-	-	4,048,000
BRISTOL		(612,700)	612,700	-	-	-	-	-	-	-	-
EAST PARIS		(1,710,802)	-	1,710,802	-	-	-	-	-	-	-
WATERMANS		(20,251,742)	(725,425)	(6,451,824)	(6,200)	(2,168,055)	-	-	-	-	(29,603,246)
LESS: WATERMANS-TOTAL SUBS-HOME COMM		7,303,795	493,319	3,136,580	1,231	567,565	-	-	-	-	11,502,490
ADD: WATERMANS-TOTAL ADDS-HOME COMM		\$ 133,256,560	\$ 21,627,027	\$ 22,826,000	\$ 20,145,456	\$ 15,176,556	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 411,769,414

CONSTRUCTION COST- ZONEGATING

PUMPING STATIONS:											
KNAPP SERVICE CENTER	\$ 2,416,086	\$ -	\$ 282,465	\$ 69,970	\$ 465,628	\$ -	\$ -	\$ 227,764	\$ -	\$ -	\$ -
LIVINGSTON	1,952,850	(323,353)	87,449	21,520	143,984	-	-	70,400	-	-	-
FRANKLIN	6,949,487	(3,784,677)	1,497,545	794,257	351,992	-	603,146	517,737	-	-	-
LEFFINGWELL	141,009	(61,037)	-	4,084	27,175	-	-	13,293	-	-	-
BRISTOL	612,700	-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,710,802	-	(821,647)	821,647	-	-	-	-	-	-	-
STORAGE TANKS:											
ELKS	236,335	(178,570)	173,267	-	-	5,303	-	-	-	-	-
KNAPP	118,570	(19,633)	-	5,310	1,307	8,742	-	-	-	4,274	-
CAMBRIDGE	116,070	(87,425)	-	71,656	5,918	-	9,851	-	-	-	-
WATERMANS- ZONEGATED COST		966,959	426,870	5,132,543	5,164,922	2,465,896	165,039	736,052	-	3,022,474	18,100,755
TOTAL- ZONEGATED COST	\$ -	\$ (4,493,563)	\$ 600,137	\$ 6,271,806	\$ 6,893,625	\$ 3,463,417	\$ 170,342	\$ 1,349,049	\$ -	\$ 3,855,942	\$ 18,100,755
GRAND TOTAL- COST	\$ 196,723,078	\$ 128,762,997	\$ 22,227,164	\$ 29,097,806	\$ 27,029,081	\$ 18,639,973	\$ 2,185,079	\$ 1,349,049	\$ -	\$ 3,855,942	\$ 429,870,169

ACCUMULATED DEPRECIATION-BY PHYSICAL LOCATION

ACC DEPREC BY PHYSICAL LOCATION- TASK 11	\$ 88,522,347	\$ 37,635,425	\$ 5,497,685	\$ 6,025,005	\$ 4,311,823	\$ 3,111,772	\$ 226,101	\$ -	\$ -	\$ -	\$ 145,331,158
BRISTOL	(206,303)	(1,455,820)	206,303	-	-	-	-	-	-	-	-
EAST PARIS	(1,455,820)	-	-	1,455,820	-	-	-	-	-	-	-
WATERMANS	(3,947,855)	(347,786)	(347,786)	(1,693,375)	(1,405)	(427,399)	-	-	-	-	(6,417,820)
ADD: WATERMANS-TOTAL SUBS-HOME COMM	1,444,795	244,171	244,171	842,482	279	151,526	-	-	-	-	2,683,253
ADD: WATERMANS-TOTAL ADDS-HOME COMM	\$ 33,470,242	\$ 5,600,373	\$ 5,600,373	\$ 6,630,932	\$ 4,310,697	\$ 2,835,899	\$ 226,101	\$ -	\$ -	\$ -	\$ 141,996,691
TOTAL- PHYSICAL LOCATION ACC DEP	\$ 88,522,347	\$ 33,470,242	\$ 5,600,373	\$ 6,630,932	\$ 4,310,697	\$ 2,835,899	\$ 226,101	\$ -	\$ -	\$ -	\$ 141,996,691

ACCUMULATED DEPRECIATION-ZONEGATING

PUMPING STATIONS:											
KNAPP SERVICE CENTER	\$ 1,704,217	\$ (737,686)	\$ -	\$ 199,240	\$ 49,354	\$ 328,437	\$ -	\$ -	\$ 160,657	\$ -	\$ -
LIVINGSTON	688,723	(109,072)	-	29,498	7,259	48,568	-	-	23,747	-	-
FRANKLIN	2,030,321	(1,099,866)	-	437,514	232,045	102,836	-	176,212	151,259	-	-
LEFFINGWELL	132,836	(57,499)	-	15,530	3,847	25,600	-	-	12,522	-	-
BRISTOL	206,303	-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,455,820	-	-	(699,187)	699,187	-	-	-	-	-	-
STORAGE TANKS:											
ELKS	236,335	(178,570)	173,267	-	-	-	5,303	-	-	-	-
KNAPP	116,070	(19,219)	-	5,198	1,279	8,558	-	-	4,184	-	-
CAMBRIDGE	116,070	(87,425)	-	71,656	5,918	-	-	9,851	-	-	-
WATERMANS- ZONEGATED ACC DEP		132,962	251,368	1,052,804	1,087,658	460,401	67,503	94,402	587,470	-	3,734,568
TOTAL- ZONEGATED ACC DEP	\$ -	\$ (2,156,377)	\$ 424,635	\$ 1,112,253	\$ 2,086,547	\$ 974,400	\$ 72,806	\$ 280,465	\$ 939,839	\$ -	\$ 3,734,568
GRAND TOTAL- ACC DEP	\$ 88,522,347	\$ 31,313,865	\$ 6,025,008	\$ 7,743,185	\$ 6,397,244	\$ 3,810,299	\$ 298,907	\$ 280,465	\$ 939,839	\$ -	\$ 145,331,159

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ZONEGATED BY GOVERNMENTAL UNIT - TASK #22
FISCAL YEAR ENDED JUNE 30, 2010**

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	\$ 7,355,378	\$ 7,355,378											
PUMPING STATIONS:													
A. PRIMARY TRANSPORT	2,126,608	2,126,608	770,556	44,075	300,444	211,312	72,086	-	49,742	-	-	63,755	
B. INTERMEDIATE TRANSPORT	1,511,970												
WATERMAINS:													
A. PRIMARY TRANSPORT	335,315		177,261	32,492	57,946	34,437	13,215	687	7,380	-	-	11,897	
B. INTERMEDIATE TRANSPORT	1,688,724		625,740	350,393	295,020	247,820	127,921	27,290	118	-	-	14,422	
C. LOCAL DISTRIBUTION	4,614,550		3,409,092	358,689	313,051	246,555	273,412	13,751	-	-	-	-	
RETAIL CUSTOMER METERING *	3,534,592		2,684,664	280,788	234,980	150,149	176,659	7,352	-	-	-	-	
SUBTOTAL OPERATING EXPENSE	21,167,137	9,481,986	7,667,313	1,066,437	1,201,441	890,273	663,293	49,080	57,240	-	-	90,074	
ENGINEERING SERVICES	1,312,541	587,953	475,442	66,126	74,500	55,205	41,135	3,045	3,544	-	-	5,591	
ADMINISTRATIVE EXPENSE	2,787,446	1,248,635	1,009,697	140,432	158,215	117,240	87,359	6,467	7,526	-	-	11,875	
TOTAL	\$ 25,267,124	\$ 11,318,574	\$ 9,152,452	\$ 1,272,995	\$ 1,434,156	\$ 1,062,718	\$ 791,787	\$ 58,592	\$ 68,310	\$ -	\$ -	\$ 107,540	

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

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%	50.963%	2.915%	19.871%	13.976%	4.768%		3.290%				4.217%
MEMO													
WATERMAINS													
TOTAL MILES:	1,160.45												
A. PRIMARY TRANSPORT		100.000%	52.864%	9.690%	17.281%	10.270%	3.941%		2.201%				3.548%
MILES	58.62		30.99	5.68	10.13	6.02	2.31		1.29				2.08
B. INTERMEDIATE TRANSPORT		100.000%	37.054%	20.749%	17.470%	14.675%	7.575%		0.007%				0.854%
MILES	295.19		109.38	61.25	51.57	43.32	22.36		0.02				2.52
C. LOCAL DISTRIBUTION		100.000%	73.877%	7.773%	6.784%	5.343%	5.925%		0.298%				-
MILES	806.64		595.93	62.70	54.72	43.10	47.79		-				-
RETAIL CUSTOMER METERING (1)		100.000%	75.954%	7.944%	6.648%	4.248%	4.998%		0.208%				0.426%
NUMBER OF METERS	80,358.00		61,035.00	6,384.00	5,342.00	3,414.00	4,016.00		167.00				0.426%
ENGINEERING SERVICES (2)		100.000%	36.223%	5.038%	5.676%	4.206%	3.134%		0.270%				0.426%
ADMINISTRATIVE EXPENSE (3)		100.000%	36.223%	5.038%	5.676%	4.206%	3.134%		0.270%				0.426%

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	\$ 23,650,328	65.8321%	\$ 497,967
CITY OF WALKER	3,016,382	8.3963%	63,511
CITY OF KENTWOOD	4,061,051	11.3042%	85,507
CASCADE TOWNSHIP	2,936,556	8.1741%	61,830
GRAND RAPIDS TOWNSHIP	2,142,156	5.9628%	45,104
TALLMADGE TOWNSHIP	118,733	0.3305%	2,500
	<u>\$ 35,925,206</u>	<u>100.0000%</u>	<u>\$ 756,419</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, 2010

COST CENTER	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			
BY PHYSICAL LOCATION-TASK 11		\$ 3,996,653	\$ 2,187,768	\$ 284,098	\$ 359,716	\$ 269,889	\$ 217,241	\$ 26,863						\$ 7,342,228
IN SERVICE- TASK 10		-	60,844	-	-	-	1,760	-	-	-	-	-	-	62,604
PUMPING STATIONS:														
KNAPP SERVICE CENTER	\$ 50,043		(21,662)	-	5,851	1,449	9,644	-	-	-	4,718	-	-	-
LIVINGSTON	42,634		(7,059)	-	1,909	470	3,143	-	-	-	1,537	-	-	-
FRANKLIN	208,505		(112,952)	-	44,931	23,830	10,561	-	18,096	-	15,534	-	-	-
LEFFINGWELL	908		(393)	-	106	26	175	-	-	-	86	-	-	-
BRISTOL	15,870		-	-	(16,268)	16,268	-	-	-	-	-	-	-	-
EAST PARIS	33,873		-	-	-	-	-	-	-	-	-	-	-	-
STORAGE TANKS:														
ELKS	-		-	-	-	-	-	-	-	-	-	-	-	-
KNAPP	-		-	-	-	-	-	-	-	-	-	-	-	-
CAMBRIDGE	-		-	-	-	-	-	-	-	-	-	-	-	-
WATERMANS			(159,075)	2,597	24,043	68,784	11,539	2,201	9,611	-	40,300	-	-	-
ADJUSTED BY ZONEGATING		3,996,653	1,947,471	286,695	420,288	380,716	254,063	29,064	27,707	-	62,175	-	-	7,404,832
LESS CONTRIBUTIONS AMORTIZED		-	(864,667)	(226,803)	(222,433)	(217,740)	(155,615)	(26,863)	-	-	-	-	-	(1,714,121)
TASK NO. 21		\$ 3,996,653	\$ 1,082,804	\$ 59,892	\$ 197,855	\$ 162,976	\$ 98,448	\$ 2,201	\$ 27,707	\$ -	\$ 62,175	\$ -	\$ -	\$ 5,690,711
TOTAL														

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2010**

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	\$ 11,318,574	\$ 9,152,452	\$ 1,272,995	\$ 1,434,156	\$ 1,062,718	\$ 791,787	\$ 58,592	\$ 68,310	\$ -	\$ 107,540	\$ 25,267,124	
DEPRECIATION EXPENSE TASK NO. 24	3,996,653	1,082,804	59,892	197,855	162,976	98,448	2,201	27,707	-	62,175	5,690,711	
RETURN ON SYSTEM INVESTMENT TASK NO. 21	5,685,083	4,315,212	201,741	653,526	608,353	396,328	9,779	94,777	-	257,239	12,222,038	
REVENUE CREDITS- TASK NO. 23 ALLOCATE:	-	(497,967)	(63,511)	(85,507)	(61,830)	(45,104)	(2,500)	-	-	-	(756,419)	
INTEG CONN. FEE CREDIT (A)	-	(469,702)	(84,136)	(90,844)	(60,596)	(43,027)	(3,515)	(31,415)	-	(39,114)	(822,349)	
INTEGRATED SYSTEM (A)	(21,000,310)	11,306,909	2,025,370	2,186,836	1,458,699	1,035,776	84,618	756,238	1,204,296	941,568	-	
LESS: CIRCUIT BREAKER (B)	-	(256,509)	(135,318)	-	-	-	(9,171)	-	-	-	(400,996)	
	\$ -	\$ 24,633,199	\$ 3,277,033	\$ 4,296,022	\$ 3,170,320	\$ 2,234,208	\$ 140,004	\$ 915,617	\$ 1,204,296	\$ 1,329,408	\$ 41,200,107	

(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.

	YEAR ENDED 6/30/10	PRO FORMA *
REVENUES:		
RETAIL/WHOLESALE WATER SALES	\$ 39,331,064	\$ 39,514,210
CONNECTION FEES/FRONT FOOT FEES	871,288	950,000
BILLABLE TO SDS FUND	2,101,817	2,211,513
ENGINEERING FEES	44,277	70,000
OTHER OPERATING REVENUES	1,735,730	1,669,000
INTEREST ON INVESTMENTS	240,925	291,775
MISCELLANEOUS	639,722	585,730
TOTAL REVENUES	\$ 44,964,823	\$ 45,292,228
OPERATING EXPENSES:		
OPERATIONS & MAINTENANCE	\$ 26,917,683	\$ 27,456,345
DEPRECIATION	7,342,229	7,342,229
TOTAL EXPENSES	\$ 34,259,912	\$ 34,798,574
ADDITIONS: DEPRECIATION	7,342,229	7,342,229
NET EARNINGS OF THE SYSTEM	\$ 18,047,140	\$ 17,835,883
DEBT SERVICE (CASH BASIS)		
SERIES 1993 BONDS	\$ 3,267,850	\$ 3,313,250
SERIES 2000 BONDS	8,167,000	6,882,319
SERIES 2005 BONDS	2,274,206	2,273,650
SERIES 2009 BONDS	929,190	1,968,440
SERIES 2010 BONDS	-	437,126
	\$ 14,638,246	\$ 14,874,785
COVERAGE RATIO	1.23	1.20

* METERED SALES ADJUSTED FOR RATE REVISIONS OF 9.89% AND -6.27% EFFECTIVE 1/1/10 AND 1/1/11, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2011 FISCAL PLAN.

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SUMMARY

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

INITIAL SYSTEM REVENUE REQUIREMENTS \$ 41,601,105

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE	\$ 11,300,507	
MONTHLY BILLING CHARGE	3,473,668	
COMMODITY CHARGE	28,449,837	
MONTHLY FIRE PROTECTION	674,316	
ANNUAL HYDRANT CHARGE	55,664	(43,953,992)
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		\$ (2,352,887)
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-5.35%

INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE	\$ 41,601,105
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL	(400,998)
SYSTEM REVENUE REQUIREMENTS	\$ 41,200,107

ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)	\$ (2,753,885)
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	-6.27%

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

METER SIZE	EQUIV. FACTOR	CITY OF GR METERS EQUIV.	CITY OF WALKER METERS EQUIV.	CITY OF KENTWOOD METERS EQUIV.	CASCADE TWP METERS EQUIV.	GR TWP METERS EQUIV.	TALLMADGE TWP METERS EQUIV.
A 3/4" or less	1.0000	54,621	5,202	3,432	2,410	3,414	109
B 1"	1.7778	2,625	473	640	328	305	19
C 1 1/4"	2.7778	-	-	-	-	-	-
D 1 1/2"	4.0000	1,133	207	398	241	108	4
E 2"	7.1111	994	103	196	105	48	2
F 3"	16.0000	89	11	20	8	7	2
G 4"	28.4444	92	8	14	2	3	1
H 6" and over	64.0000	20	2	3	-	-	-
		59,574	6,006	4,703	3,094	3,885	137
		76,209	8,135	8,466	4,889	4,926	233

FIRE PROTECTION SERVICE

H 6"	1,121	262	338	166	109	25	
I 8"	302	89	265	127	21	2	
J 10"	16	6	9	2	-	-	
K 12"	22	21	27	25	1	3	
	1,461	378	639	320	131	30	
TOTAL	61,035	6,384	5,342	3,414	4,016	167	
TOTAL							80,358

Source: Water/Sewage Meter/User Quantity Report, dated October 27, 2010.

CITY OF GRAND RAPIDS, MICHIGAN

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

SYSTEM REVENUE REQUIREMENTS * \$ 24,633,199

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE					
76,209 meter equivalents	x	\$ 6.93	x	12 =	\$ 6,337,540
MONTHLY BILLING CHARGE					
59,574 meters	x	\$ 3.74	x	12 =	2,673,681
COMMODITY CHARGE					
9,178,254 units (100 CF)	x	\$ 1.82	=		16,704,422
MONTHLY FIRE PROTECTION					309,924
ANNUAL HYDRANT CHARGE					- (26,025,567)
REQUIRED REVENUE INCREASE (DECREASE)					<u>\$ (1,392,368)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES					<u>-5.35%</u>

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 256,509

CITY OF GRAND RAPIDS, MICHIGAN

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

COMMODITY CHARGE:

$$\frac{\text{COMMODITY CHARGE @ 64\%}}{\text{BILLED UNITS}} = \frac{\$15,765,247}{9,178,254} = \underline{\underline{\$ 1.72 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 24,633,199
NEW COMMODITY CHARGE		
9,178,254 x \$ 1.72		\$ 15,786,597
NEW MONTHLY BILLING CHARGE		
59,574 x \$ 3.81 x 12		2,723,723
MONTHLY FIRE PROTECTION CHARGE		309,924
ANNUAL HYDRANT CHARGE		-
		<u>(18,820,244)</u>
		<u>\$ 5,812,955</u>

$$\text{MONTHLY METER CHARGE} = \frac{\$5,812,955}{76,209 \times 12} = \underline{\underline{\$ 6.36 \text{ MONTHLY}}}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 6.36	\$ 3.81	\$ 10.17	\$ 10.67
1"	1.7778	11.31	3.81	15.12	16.06
1 1/4"	2.7778	17.67	3.81	21.48	22.99
1 1/2"	4.0000	25.44	3.81	29.25	31.46
2"	7.1111	45.23	3.81	49.04	53.02
3"	16.0000	101.76	3.81	105.57	114.62
4"	28.4444	180.91	3.81	184.72	200.86
6" and over	64.0000	407.04	3.81	410.85	447.26

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 256,509

CITY OF WALKER, MICHIGAN

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

SYSTEM REVENUE REQUIREMENTS * \$ 3,277,033

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE					
8,135 meter equivalents	x	\$ 9.37	x	12 =	\$ 914,699
MONTHLY BILLING CHARGE					
6,006 meters	x	\$ 3.74	x	12 =	269,549
COMMODITY CHARGE					
1,287,661 units (100 CF)	x	\$ 1.70	=		2,189,024
MONTHLY FIRE PROTECTION					88,992
ANNUAL HYDRANT CHARGE					- <u>(3,462,264)</u>
REQUIRED REVENUE INCREASE (DECREASE)					<u>\$ (185,231)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES					<u>-5.35%</u>

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 135,318

CITY OF WALKER, MICHIGAN

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.61 /100 CF *
 \$ 1.70 x 94.65%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 3,277,033

NEW COMMODITY CHARGE
 1,287,661 x \$ 1.61 \$ 2,073,134

NEW MONTHLY BILLING CHARGE
 6,006 x \$ 3.81 x 12 274,594

MONTHLY FIRE PROTECTION CHARGE 88,992

ANNUAL HYDRANT CHARGE - (2,436,720)
\$ 840,313

MONTHLY METER CHARGE = $\frac{\$840,313}{8,135 \times 12}$ = \$ 8.61 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 8.61	\$ 3.81	\$ 12.42	\$ 13.11
1"	1.7778	15.31	3.81	19.12	20.40
1 1/4"	2.7778	23.92	3.81	27.73	29.77
1 1/2"	4.0000	34.44	3.81	38.25	41.22
2"	7.1111	61.23	3.81	65.04	70.37
3"	16.0000	137.76	3.81	141.57	153.66
4"	28.4444	244.91	3.81	248.72	270.26
6" and over	64.0000	551.04	3.81	554.85	603.42

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011
 ** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 135,318

CITY OF KENTWOOD, MICHIGAN

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

SYSTEM REVENUE REQUIREMENTS \$ 4,296,022

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,466 meter equivalents x \$ 13.15 x 12 = \$ 1,335,935

MONTHLY BILLING CHARGE

4,703 meters x \$ 3.74 x 12 = 211,071

COMMODITY CHARGE

1,667,433 units (100 CF) x \$ 1.75 = 2,918,008

MONTHLY FIRE PROTECTION

158,544

ANNUAL HYDRANT CHARGE

- (4,623,558)

REQUIRED REVENUE INCREASE (DECREASE)

\$ (327,536)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-7.08%

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

SYSTEM REVENUE REQUIREMENTS \$ 3,170,320

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

4,889 meter equivalents x \$ 19.32 x 12 = \$ 1,133,466

MONTHLY BILLING CHARGE

3,094 meters x \$ 3.74 x 12 = 138,859

COMMODITY CHARGE

883,388 units (100 CF) x \$ 2.41 = 2,128,965

MONTHLY FIRE PROTECTION

83,520

ANNUAL HYDRANT CHARGE

38,960

(3,523,770)

REQUIRED REVENUE INCREASE (DECREASE)

\$ (353,450)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-10.03%

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

SYSTEM REVENUE REQUIREMENTS \$ 2,234,208

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
4,926 meter equivalents	x	\$ 13.68	x 12 = \$ 808,652
MONTHLY BILLING CHARGE			
3,885 meters	x	\$ 3.74	x 12 = 174,359
COMMODITY CHARGE			
705,406 units (100 CF)	x	\$ 2.02	= 1,424,920
MONTHLY FIRE PROTECTION			26,316
ANNUAL HYDRANT CHARGE			-
			(2,434,247)
REQUIRED REVENUE INCREASE (DECREASE)			\$ (200,039)
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			-8.22%

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

SYSTEM REVENUE REQUIREMENTS *	\$	140,004
LESS: CASH CONTRIBUTION		-
SYSTEM REVENUE REQUIREMENTS	\$	140,004

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE		
233 meter equivalents	x \$ 5.32	x 12 = \$ 14,875
MONTHLY BILLING CHARGE		
137 meters	x \$ 3.74	x 12 = 6,149
COMMODITY CHARGE		
25,474 units (100 CF)	x \$ 4.05	= 103,170
MONTHLY FIRE PROTECTION		7,020
ANNUAL HYDRANT CHARGE		16,704
REQUIRED REVENUE INCREASE (DECREASE)		(147,918)
		\$ (7,914)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-5.35%
--	--	--------

CITY OF EAST GRAND RAPIDS, MICHIGAN

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS *		\$	724,823
COMMODITY CHARGE			
(100CF) 606,886 units	x	\$ 1.27	770,745
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>(45,922)</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	190,794
MONTHLY SERVICE CHARGE			
\$18,821	x	12 MONTHS	225,852
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>(35,058)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>-8.13%</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	\$ 915,617
NEW COMMODITY CHARGE *	
606,886 x \$1.19 =	(722,194)
	<hr/>
	<u>\$ 193,423</u>

MONTHLY SERVICE CHARGE * = \$ 193,423 / 12 = \$16,119

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS *	\$	902,454
COMMODITY CHARGE		
(100CF) 694,776 units x \$ 1.36		944,895
		944,895
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	(42,441)
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	426,954
MONTHLY SERVICE CHARGE		
\$44,124 x 12 MONTHS		529,488
		529,488
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	(102,534)
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-9.83%

* NET OF INTEGRATED CONNECTION FEE CREDIT.

ADA TOWNSHIP

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

SYSTEM REVENUE REQUIREMENTS \$ 1,329,408

NEW COMMODITY CHARGE * (903,209)
694,776 x \$1.30 =

\$ 426,199

MONTHLY SERVICE CHARGE * = \$426,199 / 12 = \$35,517

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 1,204,296
COMMODITY CHARGE		
(100CF) 944,543 units x \$ 1.34		1,265,688
		1,265,688
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$ (61,392)
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ -
MONTHLY SERVICE CHARGE		
\$0 x 12 MONTHS		-
		-
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$ -
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-4.85%

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,204,296
NEW COMMODITY CHARGE *	
944,543 x \$1.28 =	(1,209,015)
	<hr/>
	<u>\$ (4,719)</u>

MONTHLY SERVICE CHARGE * = \$ - / 12 = \$0

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 7, 2010

TO: Linda Wagenmaker
Financial Analyst

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

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

Enclosed are the Front Foot Rates for Watermain (Task 28) and the costs for the Water Service Pipes (Task 29), for the Fiscal Year 2010.

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>2010</u>	<u>2011</u>	<u>% Increase</u>
Domestic Water User	\$ 55.00	\$ 53.00	-3.64%
Commercial - Industrial User (Watermain over 8 in. diameter)	\$ 75.00	\$ 80.00	6.67%

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, 2009 through June, 2010. 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	2010	\$ 1,500	\$ 1,750	\$ 1,900	\$ 2,200	\$ 2,600
	2011	\$ 1,500	\$ 1,700	\$ 1,800	\$ 2,100	\$ 2,500
Cost for 1-1/2" Water Service	2010	\$ 2,150	\$ 2,400	\$ 2,500	\$ 2,900	\$ 3,400
	2011	\$ 2,100	\$ 2,300	\$ 2,450	\$ 2,800	\$ 3,300
Cost for 2" Water Service	2010	\$ 2,550	\$ 2,900	\$ 3,100	\$ 3,450	\$ 4,000
	2011	\$ 2,500	\$ 2,800	\$ 3,000	\$ 3,400	\$ 3,950

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	0.00%	-2.86%	-5.26%	-4.55%	-3.85%
Increase for 1-1/2" Water Service	-2.33%	-4.17%	-2.00%	-3.45%	-2.94%
Increase for 2" Water Service	-1.96%	-3.45%	-3.23%	-1.45%	-1.25%

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Eileen L. Pierce 
Water Customer Service Administrator

SUBJECT: 2010 Water Rate Study – Task #30

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

Based on this review, the following changes are recommended:

- Fire protection charges increase for all 6-12" pipe sizes for monthly and quarterly charges.
- Hydrant use permits for weekly pool filling permits; contractor seasonal (Winter or Summer) hydrant connection permits; tanker hydrant connection permits; and hydrant flow test fees.
- Connection fee by size for hydrant connections deleted.
- Tapping permit increase for 2" and smaller.
- Meter testing fees are new and are the responsibility of the customer if the meter reading is accurate. If the meter is faulty, there will be no charge to the customer.
- Security deposit increase to \$561.60, which is three times the average residential quarterly water/sewer bill of \$187.20.
- Delete the returned check processing fee (water) per account of \$7.
- Service fees added for (1) customer-requested on-site visits where the issue is not the responsibility of the water department, and (2) a turn-on/turn-off charge for real estate inspections.
- Penalty for failure to keep an appointment increase.
- A penalty was added for each additional failure to keep an appointment for the same request.
- Miscellaneous permit fees added for sanitary service line inspection; storm service line inspection; plumbing service re-inspection; cross connection re-inspection; sewer lateral service demolition/cap off inspection within and outside the City; and footing drain lateral inspection within and outside the City.
- Street opening and water inspection within and outside the City increase.
- Unauthorized use of a hydrant/water increase.
- Failure to return hydrant connection equipment fee increase.
- Added damaged equipment fee.
- Lost/non-returned hydrant wrench increase.

- Unauthorized service tap of watermain increase.

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

ELP/ep

cc: Joellen Thompson
Wayne Jernberg
Pamela Ritsema

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	\$25.00
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

MONTHLY PAYMENT OPTION

	<u>Fee</u>
Service fee each additional month	\$1.00

SECURITY DEPOSIT

	<u>Minimum Charge</u>
Three (3) times average quarterly bill (\$187.20)	\$561.60

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: November 2, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Wayne Jernberg *WJ*
Acting Assistant Water System Manager

SUBJECT: **2010 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, 2011 through December 31, 2011. 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

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 27, 2010:

UAB Partners	Sq. Miles of USD by CC	Percent
Grand Rapids	45.36	35.182%
Walker	25.43	19.724%
Kentwood	14.00	10.859%
Cascade	20.45	15.861%
Grand Rapids Township	10.73	8.322%
Tallmadge Township	2.44	1.892%
East Grand Rapids	3.37	2.614%
Ada	7.15	5.546%
Total	128.93	100.000%

**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	\$ 62,011	12.50%
City & Customer Community Circuit Breaker	434,076	87.50%
Total	<u>\$ 496,087</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	\$ 434,076	100.00%
Less: Amount Applied in Current Rate Study	<u>(400,998)</u>	<u>-92.38%</u>
Total Revenue Credit- Next Year's Rate Study	<u>\$ 33,078</u>	<u>7.62%</u>

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
SYSTEM ADDITIONS AND IMPROVEMENTS
FOR THE YEAR ENDED JUNE 30, 2010
TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		TRUNK		INTERCEPTOR		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	4,578	0.87	6,122	1.16		0.00	10,700	2.03
Abandonment	(5,257)	(1.00)	(990)	(0.19)		0.00	(6,247)	(1.19)
CSO Construction	1,277	0.24	3,096	0.59	4,698	0.89	9,071	1.72
CSO Abandonment	(1,025)	(0.19)	(3,583)	(0.68)	(5,896)	(1.12)	(10,504)	(1.99)
	(427)	(0.08)	4,645	0.88	(1,198)	(0.23)	3,020	0.57
Kentwood								
Construction	7	0.00		0.00	21,374	4.05	21,381	4.05
Abandonment		0.00	(1,844)	(0.35)		0.00	(1,844)	(0.35)
	7	0.00	(1,844)	(0.35)	21,374	4.05	19,537	3.70
Cascade Twp.								
Construction		0.00		0.00	4,221	0.80	4,221	0.80
Abandonment		0.00		0.00		0.00	0	0.00
	0	0.00	0	0.00	4,221	0.80	4,221	0.80
G.R. Twp.								
Construction	120	0.02	5,047	0.96		0.00	5,167	0.98
Abandonment	(2,868)	(0.54)	(2,043)	(0.39)		0.00	(4,911)	(0.93)
	(2,748)	(0.52)	3,004	0.57	0	0.00	256	0.05
Tallmadge Twp.								
Construction		0.00		0.00		0.00	0	0.00
Abandonment		0.00		0.00		0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
Walker								
Construction	2,281	0.43		0.00		0.00	2,281	0.43
Abandonment		0.00		0.00		0.00	0	0.00
	2,281	0.43	0	0.00	0	0.00	2,281	0.43
Wright Twp								
Construction		0.00		0.00		0.00	0	0.00
Abandonment		0.00		0.00		0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	(887)	(0.17)	5,805	1.10	24,397	4.62	29,315	5.55

SEWER COSTS

COMMUNITY	COMMUNITY COST
Grand Rapids	\$ -
Kentwood	24,986
Cascade Twp.	-
Grand Rapids Twp.	(24,079)
Tallmadge Twp.	-
Walker	165,775
Wright Twp.	-
TOTAL	\$ 166,682

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
FISCAL YEAR ENDED JUNE 30, 2010

ACTIVITY CODE	ACTIVITY	EXPENSE BY ACTIVITY	WASTEWATER TREATMENT PLANT			WASTEWATER LIFT STATIONS			SEWER LINES			BULK METERING STATIONS	CUSTOMER ACCOUNTING	INDUSTRIAL PRETREAT.	ADMIN. EXPENSE
			INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR				
4423	WASTEWATER TREATMENT (LESS 442305)	\$ 15,506,065	\$ 322,678	\$ 162,418	\$ 462,878						\$ 11,490				
4425	SEWER MAINTENANCE	4,611,791													
4413	CUSTOMER SERVICE *	2,803,514											2,803,514		
442305	INDUSTRIAL PRETREATMENT	567,373												567,373	
	SUBTOTAL OPERATING EXPENSE	23,488,743	322,678	162,418	462,878						11,490		2,803,514	567,373	-
4410	ADMINISTRATION	2,403,827													2,403,827
	TOTAL	\$ 25,892,570	\$ 322,678	\$ 162,418	\$ 462,878	\$ 255,816	\$ 515,506	\$ 3,840,469	\$ 11,490	\$ 2,803,514	\$ 567,373	\$ 2,403,827			

* 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	93.812%														
	B. LIFT & METER STATIONS NO. OF STATIONS (58)	6.188%	(1)	(8)	(45)						(4)					
4425	SEWER MAINTENANCE TOTAL MILES	100.000%														
	A. INTERCEPTOR MILES	5.547%														
	B. TRUNK LINES MILES	11.178%														
	C. LOCAL COLLECTOR MILES	83.275%														
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
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2
FISCAL YEAR ENDED JUNE 30, 2010**

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	WRIGHT TOWNSHIP	CITY OF EAST GR	N KENT AREA	ADA TOWNSHIP	GAINES TOWNSHIP	MELIER-ALGOMA					
WASTEWATER TREATMENT	\$ 14,546,601	\$ 14,546,601																	
LIFT STATIONS:																			
A. INTERCEPTOR	322,678		322,678																
B. TRUNK	162,418		57,292	80,317		24,809													
C. LOCAL COLLECTOR	462,878		82,253	63,975		98,845	163,937	34,521	10,756						8,591				
SEWER LINES:																			
A. INTERCEPTOR	255,816		156,683	35,103	58,011	6,019													
B. TRUNK	515,506		171,309	132,433	123,814	44,586	28,312	14,439	613										
C. LOCAL COLLECTOR	3,840,469		2,408,743	478,830	373,501	228,085	285,500	42,744	22,966										
BULK METERING STATIONS	11,490				2,786														
CUSTOMER ACCOUNTING	2,803,514		2,220,383	208,301	165,884	64,060	131,513	4,710	8,663										
INDUSTRIAL PRETREATMENT	567,373																		
SUBTOTAL OPERATING EXPENSE	23,488,743		5,419,341	998,959	724,056	466,404	609,262	96,414	42,998						11,052				3,189
ADMINISTRATIVE EXPENSE	2,403,827		554,613	102,233	74,104	47,732	62,352	9,867	4,400						1,131				326
TOTAL	\$ 25,892,570		\$ 5,973,954	\$ 1,101,192	\$ 798,200	\$ 514,136	\$ 671,614	\$ 106,281	\$ 47,398						\$ 12,183				\$ 3,515

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT	NO. OF STATIONS	NO. OF METERS	PERCENTAGE																
A. TREATMENT PLANT	100.000%	100.000%	100.00%																
B. LIFT & METER STATIONS (1)	100.000%	58	(14)	(6)	(1)	(10)	(17)	(5)	(1)	(1)	(1)	(2)	(1)						
SEWER LINES:																			
TOTAL MILES:	903.98																		
A. INTERCEPTOR	50.14	50.14	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%
B. TRUNK LINES	101.05	101.05	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%	11.18%
C. LOCAL COLLECTOR	752.79	752.79	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%	83.27%
CUSTOMER ACCTG (2)	74,012.00	74,012.00	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%	8.19%
INDUSTRIAL PRETREATMENT																			
ADMINISTRATIVE EXPENSE (3)																			

NOTES:
 (1) 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 OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
FISCAL YEAR ENDED JUNE 30, 2010

ACTIVITY CODE	ACTIVITY	ADJUSTED EXPENSE BY ACTIVITY	WASTEWATER TREATMENT PLANT	WASTEWATER LIFT STATIONS			SEWER LINES			BULK METERING STATIONS	CUSTOMER ACCOUNTING	INDUSTRIAL PRETREAT.	ADMIN. EXPENSE
				INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR				
4423	WASTEWATER TREATMENT (LESS 442305)	\$ 14,048,817	\$ 13,045,279	\$ 337,500	\$ 169,880	\$ 484,141				\$ 12,017			
4425	SEWER MAINTENANCE	4,780,991					265,202	534,419	3,981,370				
4413	CUSTOMER SERVICE *	3,030,509								3,030,509			
442305	INDUSTRIAL PRETREATMENT	612,001									612,001		
4410	SUBTOTAL OPERATING EXPENSE	22,472,318	13,045,279	337,500	169,880	484,141	265,202	534,419	3,981,370	12,017	612,001		-
	ADMINISTRATION	2,432,748											2,432,748
	TOTAL	\$ 24,905,066	\$ 13,045,279	\$ 337,500	\$ 169,880	\$ 484,141	\$ 265,202	\$ 534,419	\$ 3,981,370	\$ 12,017	\$ 612,001	\$ 2,432,748	

* 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	92.857%											
	B. LIFT & METER STATIONS	7.143%	(58)	(1)	(8)	(45)				(4)			
	NO. OF STATIONS												
4425	SEWER MAINTENANCE	100.000%	903.98										
	TOTAL MILES												
	A. INTERCEPTOR	5.547%	50.14				5.547%						
	MILES												
	B. TRUNK LINES	11.178%	101.05				11.178%						
	MILES												
	C. LOCAL COLLECTOR	83.275%	752.79				83.275%						
	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 GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2010**

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	CITY OF WALKER			CITY OF KENTWOOD	RETAIL		CITY OF EAST GR	N. KENT AREA	WHOLESALE		MEIJER-ALGOMA
			GR	CITY OF WALKER	CITY OF KENTWOOD		CASCADE TOWNSHIP	TALLMADGE TOWNSHIP			ADA TOWNSHIP	GAINES TOWNSHIP	
WASTEWATER TREATMENT	\$ 13,045,279	\$ 13,045,279											
LIFT STATIONS:													
A. INTERCEPTOR	337,500												
B. TRUNK	169,880		84,007				25,949						
C. LOCAL COLLECTOR	484,141		66,913				103,366				8,986		
SEWER LINES:													
A. INTERCEPTOR	265,202		36,391				6,240						
B. TRUNK	534,419		137,292				46,222						
C. LOCAL COLLECTOR	3,981,370		496,397				236,454						
BULK METERING STATIONS	12,017					2,914							
CUSTOMER ACCOUNTING	3,030,509		225,167			179,315	69,247				2,574		3,335
INDUSTRIAL PRETREATMENT	612,001	612,001											
SUBTOTAL OPERATING EXPENSE	22,472,318	13,657,280	5,720,758	1,046,167	758,034	487,498	100,460	45,059	3,194	11,560	3,335		
ADMINISTRATIVE EXPENSE	2,452,748	1,478,474	619,302	113,253	82,061	52,774	10,878	4,878	346	1,251	361		
TOTAL	\$ 24,905,066	\$ 15,135,754	\$ 6,340,060	\$ 1,159,420	\$ 840,095	\$ 540,272	\$ 111,358	\$ 49,937	\$ 3,540	\$ 12,811	\$ 3,696	\$	\$

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT													
A. TREATMENT PLANT	100.000%	100.000%											
B. LIFT & METER STATIONS (1)	100.000%												
NO. OF STATIONS	(58)	(14)	(6)	(1)	(10)	(17)	(5)	(1)	(1)	(2)	(1)		
SEWER LINES:													
TOTAL MILES:	903.98												
A. INTERCEPTOR	100.000%	61.248%	13.722%	22.677%	2.353%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	50.14	30.71	6.88	11.37	1.18								
B. TRUNK LINES	100.000%	33.231%	25.690%	24.018%	8.649%	5.492%	2.801%	0.119%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	101.05	33.58	25.96	24.27	8.74	5.55	2.83	0.12					
C. LOCAL COLLECTOR	100.000%	62.720%	12.468%	9.728%	5.939%	7.434%	1.113%	0.598%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	752.79	472.15	93.86	73.23	44.71	55.96	8.38	4.50					
CUSTOMER ACCTG (2)	100.000%	79.200%	7.430%	5.917%	2.285%	4.691%	0.168%	0.309%					
NO. OF METERS	74,012.00	58,618.00	5,499.00	4,379.00	1,691.00	3,472.00	124.00	229.00					
INDUSTRIAL PRETREATMENT	100.000%												
ADMINISTRATIVE EXPENSE (3)	100.000%	100.000%	25.457%	3.373%	2.169%	2.843%	0.447%	0.201%	0.014%	0.000%	0.015%	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, 2010
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4410- ADMINISTRATION

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 14,868.96	\$ 4,216.84	\$ 19,085.80
706	PERMANENT EMPLOYEES	162,059.84	4,051.50	166,111.34
707	TEMPORARY EMPLOYEES	5,360.94	134.02	5,494.96
715	EMPLOYERS SOCIAL SECURITY	12,719.24	317.98	13,037.22
717	SPECIAL PENSION BENEFITS	8,654.64	-	8,654.64
719	HOSPITALIZATION INSURANCE	18,115.17	(90.58)	18,024.59
721	LONGEVITY PAY	2,057.66	-	2,057.66
722	RETIREMENT FUND CONTRIBUTION	10,294.25	7,662.01	17,956.26
725	FOOD/CLEAN/CAR ALLOW	2,262.00	-	2,262.00
	TOTAL PERSONAL SERVICES	<u>236,392.70</u>	<u>16,291.77</u>	<u>252,684.47</u>
728	SUPPLIES	1,078.54	-	1,078.54
730	POSTAGE	41.28	-	41.28
780	INVENTORY - COST OF GOODS SOLD	623.54	-	623.54
	TOTAL SUPPLIES	<u>1,743.36</u>	<u>-</u>	<u>1,743.36</u>
814	COMPUTER SERVICES	286,148.02	-	286,148.02
818	CONTRACTUAL SERVICES	291,958.89	195,480.00	487,438.89
872	PROFESSIONAL DEVELOPMENT	856.03	-	856.03
873	OTHER TRAVEL AND TRAINING	3,261.91	-	3,261.91
874	LOCAL BUSINESS EXPENSE	2,937.39	-	2,937.39
875	MEMBERSHIPS	1,963.67	-	1,963.67
876	PUBLICATIONS AND SUBSCRIPTIONS	108.87	-	108.87
900	PRINTING & PUBLISHING	27.15	-	27.15
912	CLAIMS/GENERAL INSURANCE	95,661.96	166,732.04	262,394.00
919	INSURANCE PREMIUMS	199,409.00	-	199,409.00
928	TELEPHONE	4,192.23	-	4,192.23
942	BUILDINGS RENTALS OR LEASE	19,149.23	-	19,149.23
947	VEHICLE RENTAL/CAR MILEAGE	6,208.16	-	6,208.16
	TOTAL OTHER SERVICES & CHARGES	<u>911,882.51</u>	<u>362,212.04</u>	<u>1,274,094.55</u>
999	OPERATING TRANSFERS OUT	1,253,808.04	(349,582.04)	904,226.00
	TOTAL TRANSFERS/FEEES	<u>1,253,808.04</u>	<u>(349,582.04)</u>	<u>904,226.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,403,826.61</u>	<u>\$ 28,921.77</u>	<u>\$ 2,432,748.38</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2010
RATE STUDY- TASKS NO. 4 & 5**

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

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
999	OPERATING TRANSFERS OUT *	\$ 2,803,514.00	\$ 226,994.99	\$ 3,030,508.99
	TOTAL TRANSFERS/FEEES	<u>2,803,514.00</u>	<u>226,994.99</u>	<u>3,030,508.99</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,803,514.00</u>	<u>\$ 226,994.99</u>	<u>\$ 3,030,508.99</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, 2010
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	\$ 334,332.90	\$ 94,816.81	\$ 429,149.71
706	PERMANENT EMPLOYEES	3,751,760.91	93,794.02	3,845,554.93
707	TEMPORARY EMPLOYEES	70.03	1.75	71.78
708	SHIFT DIFFERENTIAL	10,315.30	-	10,315.30
709	TIME & ONE-HALF	87,655.03	2,191.38	89,846.41
710	ACT.ASSIGNMENT	6,592.32	164.81	6,757.13
712	UNEMPLOYMENT COMPENSATION	3,616.40	-	3,616.40
714	REGULAR HOURLY RATE	3,248.64	81.22	3,329.86
715	EMPLOYERS SOCIAL SECURITY	289,148.96	7,228.72	296,377.68
719	HOSPITALIZATION INSURANCE	877,129.66	(4,385.65)	872,744.01
721	LONGEVITY PAY	35,679.44	-	35,679.44
722	RETIREMENT FUND CONTRIBUTION	360,051.31	267,986.19	628,037.50
	TOTAL PERSONAL SERVICES	<u>5,759,600.90</u>	<u>461,879.25</u>	<u>6,221,480.15</u>
728	SUPPLIES	948,028.56	-	948,028.56
730	POSTAGE	9.13	-	9.13
768	CLOTHING/CLEANING ALLOWANCE	5,104.57	-	5,104.57
771	INVENTORY	1,365.80	-	1,365.80
780	INVENTORY - COST OF GOODS SOLD	4,697.76	-	4,697.76
	TOTAL SUPPLIES	<u>959,205.82</u>	<u>-</u>	<u>959,205.82</u>
814	COMPUTER SERVICES	199,500.96	-	199,500.96
818	CONTRACTUAL SERVICES	5,450,580.76	(1,919,128.00)	3,531,452.76
835	FEES	21,585.00	-	21,585.00
872	PROFESSIONAL DEVELOPMENT	334.00	-	334.00
873	OTHER TRAVEL AND TRAINING	11,243.37	-	11,243.37
874	LOCAL BUSINESS EXPENSE	-	-	-
875	MEMBERSHIPS	6,806.50	-	6,806.50
876	PUBLICATIONS AND SUBSCRIPTIONS	631.63	-	631.63
900	PRINTING & PUBLISHING	621.66	-	621.66
921	ELECTRICITY	2,266,911.47	-	2,266,911.47
922	WATER	49,690.49	-	49,690.49
923	GAS	289,376.47	-	289,376.47
928	TELEPHONE	89,515.81	-	89,515.81
930	MAINTENANCE REPAIR	171,723.14	-	171,723.14
943	EQUIPMENT RENTALS OR LEASE	208,473.94	-	208,473.94
947	VEHICLE RENTAL/CAR MILEAGE	3,894.27	-	3,894.27
959	REFUSE COLLECTION CHARGES	3,808.14	-	3,808.14
	TOTAL OTHER SERVICES & CHARGES	<u>8,774,697.61</u>	<u>(1,919,128.00)</u>	<u>6,855,569.61</u>
974	LAND IMPROVEMENTS	37.50	-	37.50
982	EQUIPMENT	12,523.63	-	12,523.63
	TOTAL CAPITAL	<u>12,561.13</u>	<u>-</u>	<u>12,561.13</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 15,506,065.46</u>	<u>\$ (1,457,248.75)</u>	<u>\$ 14,048,816.71</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2010
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 442305- IND. PRETREATMENT

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 45,264.88	\$ 12,837.12	\$ 58,102.00
706	PERMANENT EMPLOYEES	323,319.63	8,082.99	331,402.62
708	SHIFT DIFFERENTIAL	13.69	-	13.69
709	TIME & ONE-HALF	911.96	22.80	934.76
715	EMPLOYERS SOCIAL SECURITY	24,054.56	601.36	24,655.92
719	HOSPITALIZATION INSURANCE	69,702.70	(348.51)	69,354.19
722	RETIREMENT FUND CONTRIBUTION	31,482.51	23,432.43	54,914.94
	TOTAL PERSONAL SERVICES	<u>494,749.93</u>	<u>44,628.19</u>	<u>539,378.12</u>
728	SUPPLIES	12,509.84	-	12,509.84
730	POSTAGE	1,211.78	-	1,211.78
	TOTAL SUPPLIES	<u>13,721.62</u>	<u>-</u>	<u>13,721.62</u>
818	CONTRACTUAL SERVICES	32,549.00	-	32,549.00
872	PROFESSIONAL DEVELOPMENT	198.00	-	198.00
873	OTHER TRAVEL AND TRAINING	65.00	-	65.00
874	LOCAL BUSINESS EXPENSE	45.00	-	45.00
875	MEMBERSHIPS	581.00	-	581.00
876	PUBLICATIONS AND SUBSCRIPTIONS	11.00	-	11.00
900	PRINTING & PUBLISHING	4,760.54	-	4,760.54
943	EQUIPMENT RENTALS OR LEASE	20,406.96	-	20,406.96
947	VEHICLE RENTAL/CAR MILEAGE	285.00	-	285.00
	TOTAL OTHER SERVICES & CHARGES	<u>58,901.50</u>	<u>-</u>	<u>58,901.50</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 567,373.05</u>	<u>\$ 44,628.19</u>	<u>\$ 612,001.24</u>

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2010
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4425- REPAIR & MAINTENANCE

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
703	RETIREE HEALTH CARE	\$ 115,196.46	\$ 32,669.72	\$ 147,866.18
706	PERMANENT EMPLOYEES	1,253,643.67	31,341.09	1,284,984.76
707	TEMPORARY EMPLOYEES	89,087.21	2,227.18	91,314.39
708	SHIFT DIFFERENTIAL	135.63	-	135.63
709	TIME & ONE-HALF	83,433.30	2,085.83	85,519.13
710	ACT.ASSIGNMENT	4,762.37	119.06	4,881.43
712	UNEMPLOYMENT COMPENSATION	33,357.24	-	33,357.24
714	REGULAR HOURLY RATE	483.60	12.09	495.69
715	EMPLOYERS SOCIAL SECURITY	108,175.72	2,704.39	110,880.11
718	SICK PAY ALLOWANCE	265.00	6.63	271.63
719	HOSPITALIZATION INSURANCE	327,059.66	(1,635.30)	325,424.36
721	LONGEVITY PAY	12,287.95	-	12,287.95
722	RETIREMENT FUND CONTRIBUTION	120,265.78	89,513.82	209,779.60
	TOTAL PERSONAL SERVICES	<u>2,148,153.59</u>	<u>159,044.51</u>	<u>2,307,198.10</u>
728	SUPPLIES	369,530.08	-	369,530.08
768	CLOTHING/CLEANING ALLOWANCE	4,317.10	-	4,317.10
	TOTAL SUPPLIES	<u>373,847.18</u>	<u>-</u>	<u>373,847.18</u>
814	COMPUTER SERVICES	2,121.96	-	2,121.96
818	CONTRACTUAL SERVICES	758,179.19	-	758,179.19
875	MEMBERSHIPS	510.50	-	510.50
876	PUBLICATIONS AND SUBSCRIPTIONS	69.00	-	69.00
900	PRINTING & PUBLISHING	1,135.23	-	1,135.23
912	CLAIMS	289,844.31	10,155.69	300,000.00
921	ELECTRICITY	10,988.95	-	10,988.95
922	WATER	7,018.15	-	7,018.15
923	GAS	25,420.63	-	25,420.63
928	TELEPHONE	4,832.67	-	4,832.67
930	MAINTENANCE REPAIR	3,265.67	-	3,265.67
931	HOME REPAIR	65,375.81	-	65,375.81
943	EQUIPMENT RENTALS OR LEASE	862,797.48	-	862,797.48
945	LAND RENTAL OR LEASE	3,669.64	-	3,669.64
947	VEHICLE RENTAL/CAR MILEAGE	1,140.00	-	1,140.00
959	REFUSE COLLECTION CHARGES	1,097.69	-	1,097.69
	TOTAL OTHER SERVICES & CHARGES	<u>2,037,466.88</u>	<u>10,155.69</u>	<u>2,047,622.57</u>
982	EQUIPMENT	6,263.62	-	6,263.62
	TOTAL CAPITAL	<u>6,263.62</u>	<u>-</u>	<u>6,263.62</u>
999	OPERATING TRANSFERS OUT	46,059.96	-	46,059.96
	TOTAL TRANSFERS/FEEES	<u>46,059.96</u>	<u>-</u>	<u>46,059.96</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 4,611,791.23</u>	<u>\$ 169,200.20</u>	<u>\$ 4,780,991.43</u>

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 27, 2010

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: FY 2010 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 2010

**CITY OF GRAND RAPIDS, MICHIGAN
INVENTORY OF SEWAGE PUMPING/METER STATIONS
FOR THE YEAR ENDED JUNE 30, 2010**

<u>Station</u>	<u>Physical Location</u>	<u>Type</u>	<u>FY'10 Expenses</u>
Market Avenue	Grand Rapids	Interceptor	\$ 322,678
Millbank	Grand Rapids	Local	4,219
Eastlake	Grand Rapids	Local	7,398
Eastern	Grand Rapids	Trunk	5,258
Middleboro	Grand Rapids	Trunk	494
Oak Hollow	Grand Rapids Twnsp	Local	13,292
Kingsbury	Walker	Trunk	25,594
Bona Vista	Grand Rapids	Trunk	36,360
Aberdeen	Grand Rapids	Local	12,830
O'Brien	Walker	Trunk	35,129
Leonard Heights	Walker	Trunk	19,594
Guild	Grand Rapids	Local	18,366
Orchard Vista	Cascade Twnsp	Local	7,441
Brookview	Grand Rapids	Trunk	15,180
Remembrance Road	Walker	Local	49,429
Kraft Avenue	Cascade Twnsp	Local	10,058
Thornapple	Cascade Twnsp	Trunk	24,809
Thornhills	Cascade Twnsp	Local	30,820
Greenbrier	Grand Rapids Twnsp	Local	10,880
Shore Haven	Grand Rapids Twnsp	Local	7,536
Ada	Ada	Local	8,591
Robinhood	Grand Rapids Twnsp	Local	18,108
Lincoln School	Grand Rapids Twnsp	Local	7,043
Reeds Lake Blvd.	Grand Rapids Twnsp	Local	9,342
6000 28th Street	Cascade Twnsp	Local	8,048
Ada	Ada	Meter	2,461
East Grand Rapids	East Grand Rapids	Meter	3,054
Gaines Township	Gaines Township	Meter	3,189
Kentwood	Kentwood	Meter	2,786
Rickman Avenue	Grand Rapids	Local	11,704
Michigan Street	Grand Rapids	Local	8,854
Eagle Crest	Grand Rapids Twnsp	Local	10,094
East Paris	Grand Rapids Twnsp	Local	13,441
Alpine Estates	Walker	Local	10,511
Elmdale	Grand Rapids	Local	7,526
Collindale	Walker	Local	4,035
Saddleback	Grand Rapids Twnsp	Local	4,763
Arbor Hills Lift Station	Grand Rapids Twnsp	Local	6,799
Cypress Trails	Grand Rapids Twnsp	Local	4,404
Bird Avenue	Grand Rapids Twnsp	Local	28,371
Valentine	Grand Rapids Twnsp	Local	3,232
Cascade Springs	Cascade Twnsp	Local	12,958
Churchill Downs	Grand Rapids	Local	7,016
Woodsboro Court	Grand Rapids Twnsp	Local	3,171
Meadowood Trails	Cascade Twnsp	Local	4,284
Stonebridge	Grand Rapids Twnsp	Local	10,981
Burton/Cacade	Cascade Twnsp	Local	14,094
Crahen	Grand Rapids Twnsp	Local	5,222
Jonathan Woods	Cascade Twnsp	Local	5,237
Watermark	Cascade Twnsp	Local	5,905
Mountain Ash	Tallmadge Twnsp	Local	5,746
Reeds Hollow	Grand Rapids Twnsp	Local	7,258
16th Avenue Lift Station	Marne	Local	10,756
Hayes West Lift Station	Tallmadge	Local	14,343
Hayes East Lift Station	Tallmadge	Local	4,324
8th & Leonard LS	Tallmadge	Local	5,164
Summit Ridge LS	Grand Rapids	Local	4,340
Lake Michigan Estates	Tallmadge	Local	4,944
			\$ 959,464

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Buhner 
Chief Financial Officer

SUBJECT: 2010 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, 2010**

Sub-Object - 703

The factor to establish calendar year 2011's retiree health care cost is 28.36%. Increase the total of fiscal year 2010's retiree health care (subobject 703) by this percent to establish the cost for calendar year 2011.

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

The wage increase factor to translate FY2010 actual costs to estimated calendar 2011 will be 2.5%.

Sub-Object - 715

Increase FY2010 actual FICA expense by 2.5% to account for the effect of the wage increases.

Sub-Object - 719

Decrease FY2010 health insurance actual by 0.5% to reflect rate changes effective in FY2011.

Sub-Object - 722

Increase FY2010 actual pension expense by 74.43% to reflect the effect of a General Pension rate change increase from 13.62% to 19.7% and an estimated wage increase of 2.5%.

Sub-Object - 999

Administration - Adjust FY2010 actual cost to reflect adjustments in charges for central services rendered by the Insurance Payment Fund and the General Operating Fund.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 4, 2010

TO: Linda Wagenmaker
Financial Analyst

FROM: Mike Lunn *Mike Lunn*
Acting Environmental Services Manager

SUBJECT: 2010 SEWER RATE STUDY- TASK #5- KNOWN COST
INCREASES/DECREASES

Known cost increases/decreases by which to adjust actual FY10 operating line-item costs include the decrease associated with the recent court settlement and carryovers:

<u>DESCRIPTION</u>	<u>ACCOUNT</u>	<u>AMOUNT</u>
CTE Settlement	WWTP- 4423-818	(707,585.00)
Comprehensive Master Plan	ADMIN- 4410-818	195,480.00
Comprehensive Master Plan	WWTP- 4423-818	78,039.00
DMR, MOR and Report Development	WWTP- 4423-818	128,800.00
GVRBA (expense reimbursement)	WWTP-4423-818	(1,418,381.74)

Please contact me if you have any questions. Thank you.

ML/LW

srs\stask5-Bio-2010

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 27, 2010

TO: Eric R. DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2010 SEWER RATE STUDY- TASK #6

The Sewage Disposal System Fund's revenues and volumes by governmental unit for the year ended June 30, 2010 are disclosed on the following page. In addition, actual volume comparisons for the past five (5) years by governmental unit are included herein.

LW

Attachment

srs\stask6 2010

**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, 2010:

RETAIL:	SALES REVENUE		3 YR AVE VOL BILLED
	METERED SALES	SURCHARGES	(GALLONS)
CITY OF GRAND RAPIDS (1)	\$ 32,523,783.08	\$ 543,884.30	5,477,517,980
CITY OF WALKER	4,454,482.39	58,467.64	670,676,248
CITY OF KENTWOOD	3,154,315.62	262,443.68	973,979,776
CASCADE TOWNSHIP	1,891,907.01		318,495,408
GRAND RAPIDS TOWNSHIP	2,286,412.47		306,635,120
TALLMADGE TOWNSHIP	250,383.58		13,500,652
WRIGHT TOWNSHIP (2)	259,318.42		17,052,078
SUB-TOTAL RETAIL (3)	<u>\$ 44,820,602.57</u>	<u>\$ 864,795.62</u>	<u>7,777,857,262</u>
WHOLESALE:			
CITY OF E. GRAND RAPIDS	\$ 736,722.36		468,514,300
ADA TOWNSHIP	715,413.27	388,909.56	322,414,211
GAINES TOWNSHIP	149,054.32		94,688,800
SUB-TOTAL WHOLESALE	<u>\$ 1,601,189.95</u>	<u>\$ 388,909.56</u>	<u>885,617,311</u>
TOTAL	<u>\$ 46,421,792.52</u>	<u>\$ 1,253,705.18</u>	<u>8,663,474,573</u>

REVENUE CLASSIFICATION:

4410 - 607054 ADA SEWAGE SERVICE CHARGE	\$ 715,413.27
4410 - 607055 RETAIL SEWAGE SERVICE CHARGE	44,741,495.13
4410 - 607056 WYOMING SEWAGE SERVICE CHARGE	79,107.44
4410 - 607060 E. GRAND RAPIDS SEWAGE SERVICE CHARGE	736,722.36
4410 - 607062 GAINES TWP SEWAGE SERVICE CHARGE	149,054.32
4423 - 607074 SEWAGE SURCHARGE	1,253,705.18
	<u>\$ 47,675,497.70</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 2010.
- (3) A REVENUE ACCRUAL OF \$1,084,523 (187,019,404 GALLONS) HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES HAVING COMMODITY RATES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2010.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
2010 RATE STUDY TASK NO. 6**

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

MUNICIPALITY	FY06		FY07		FY08		FY09		FY10		FY06-FY10	
	VOL BILLED	% CHANGE										
GRAND RAPIDS	6,159,389	-6.31%	5,770,856	-6.31%	5,858,480	1.52%	5,461,588	-6.77%	5,460,635	-0.02%	5,460,635	-11.34%
WALKER	740,908	-3.84%	712,455	-3.84%	731,427	2.66%	676,849	-7.46%	646,320	-4.51%	646,320	-12.77%
KENTWOOD	1,121,707	-3.81%	1,078,991	-3.81%	1,080,423	0.13%	942,037	-12.81%	962,119	2.13%	962,119	-14.23%
CASCADE	350,540	-0.75%	347,896	-0.75%	353,527	1.62%	327,208	-7.44%	294,901	-9.87%	294,901	-15.87%
GRAND RAPIDS TWP	319,053	-3.77%	307,009	-3.77%	321,566	4.74%	309,622	-3.71%	308,102	-0.49%	308,102	-3.43%
TALLMADGE	13,406	-12.54%	11,725	-12.54%	13,339	13.77%	14,664	9.93%	13,329	-9.10%	13,329	-0.57%
WRIGHT TWP	15,534	19.16%	18,511	19.16%	17,254	-6.79%	19,523	13.15%	14,379	-26.35%	14,379	-7.44%
EAST GRAND RAPIDS	462,344	1.71%	470,257	1.71%	429,912	-8.58%	518,933	20.71%	456,699	-11.99%	456,699	-1.22%
NORTH KENT AREA *	1,511,948	-1.62%	1,487,393	-1.62%	*	N/A	*	N/A	*	N/A	*	N/A
ADA TWP	327,601	-3.52%	316,064	-3.52%	320,565	1.42%	337,356	5.24%	309,321	-8.31%	309,321	-5.58%
GAINES TWP	103,447	2.99%	106,535	2.99%	103,612	-2.74%	112,141	8.23%	94,689	-15.56%	94,689	-8.47%
MEIJER - ALGOMA *	6,493	15.94%	7,528	15.94%	*	N/A	*	N/A	*	N/A	*	N/A
TOTAL	11,132,370	-4.47%	10,635,220	-4.47%	9,230,105	-13.21%	8,719,921	-5.53%	8,560,494	-1.83%	8,560,494	-23.10%

* Service ended 11/08.

GRAND RAPIDS VOLUME COMPARED TO
CUSTOMER COMMUNITIES

VOLUME = 1,000 GALLONS	FY06		FY07		FY08		FY09		FY10	
	% OF TOTAL	VOL BILLED								
GRAND RAPIDS	55.33%	5,770,856	54.26%	5,858,480	63.47%	5,461,588	62.63%	5,460,635	63.79%	5,460,635
CUSTOMER COMMUNITIES	44.67%	4,864,364	45.74%	3,371,625	36.53%	3,258,333	37.37%	3,099,859	36.21%	3,099,859
TOTAL	100.00%	10,635,220	100.00%	9,230,105	100.00%	8,719,921	100.00%	8,560,494	100.00%	8,560,494

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

OPERATING REVENUES OTHER THAN WASTEWATER RECEIPTS:

4410-476009	INDUSTRIAL PRETREATMENT PERMITS	\$ 60,810.80
4410-607001	MISCELLANEOUS SERVICE FEES	5,300.00
4410-607057	INDUSTRIAL DISCHARGE AUTHORIZATION	11,449.62
4410-607043	PRELIM/DESIGN/CONSTR ENGINEERING	44,277.25
4410-658002	PAYMENT IN LIEU OF FINES	-
		<u>\$ 121,837.67</u>

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

OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION

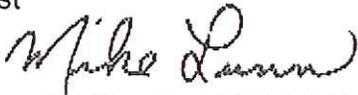
4410-607061	SEWAGE FRONT FOOTAGE	\$ 26,393.90
	AUDITOR'S ADJUSTMENT	-
		<u>\$ 26,393.90</u>
4410-607059	INTEGRATED SEWER CONNECTION	<u>\$ 650,954.50</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 29, 2010

TO: Linda Wagenmaker
Financial Analyst

FROM: Mike Lunn 
Acting Environmental Services Manager

SUBJECT: 2010 SEWER RATE STUDY- TASK #8

No significant changes in operating levels are anticipated to take effect by January 1, 2011, which would require adjustments to operating costs for the test period.

ML/LW

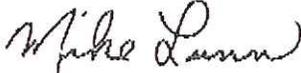
srs\stask8 2010.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 29, 2010

TO: Linda Wagenmaker
Financial Analyst

FROM: Mike Lunn 
Acting Environmental Services Manager

SUBJECT: 2010 SEWER RATE STUDY- TASK #9

No significant changes in sewer revenues are anticipated to take effect by January 1, 2011, which would require an adjustment to operating revenue estimates as a whole. However, please follow through with appropriate revisions as necessary recognizing the absence of United Building Centers (16 REU's) from Wright Township.

ML/LW

srs\stask9 2010

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 2, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE *C. Schroeder*
Hydraulic Engineer

SUBJECT: 2010 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, 2011.

<u>Description</u>	<u>Location</u>	<u>Amount</u>
Saddleback Trunk Sewer Contract 1 (Eng)	Kentwood	\$ 663,652
Saddleback Trunk Sewer Contract 2	Kentwood	6,773,132
Saddleback Trunk Sewer Contract 3 (Eng)	Cascade/Kentwood	145,306
Saddleback Trunk Sewer Contract 4	Cascade/Kentwood	3,154,588
Collindale LS back-up generator	Walker	70,538
Oak Hollow Dr LS back-up generator	Grand Rapids Twp	70,538
Meadowood Trails LS back-up generator	Cascade Twp	70,538
Chamberlain, Eastbrook & Clearbrook	Grand Rapids	162,399
Crahen & Bradford intersection	Grand Rapids Twp	73,464
Commerce, Williams & Bartlett	Grand Rapids	603,117
Bird Ave LS (replacement)	Grand Rapids Twp	766,890
WWTP Groundwater wells	Integrated	250,000
WWTP Process gate actuators	Integrated	1,068,192
WWTP Tunnel rehabilitation	Integrated	935,594
WWTP Final effluent screw pumps	Integrated	1,486,133
WWTP Flow equalization basin	Integrated	1,227,345

CRS\LW

srs\stask10 2010

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

"COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2010"

INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 1,633,122	\$ -	\$ -
LAND IMPROVEMENTS	15,356,334	11,367,656	706,236
BUILDINGS & STRUCTURES	47,778,004	25,944,046	878,207
PROCESS EQUIPMENT	56,373,643	27,423,194	1,386,660
AUXILIARY EQUIPMENT	26,243,694	22,590,370	347,591
MACHINERY & EQUIPMENT	4,867,536	4,373,436	147,249
OFFICE EQUIPMENT & FURNITURE	628,067	618,339	1,864
	<u>\$ 152,880,400</u>	<u>\$ 92,317,041</u>	<u>\$ 3,467,807</u>

NON-INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 1,470,573		
LAND IMPROVEMENTS	3,190,681	508,020	144,809
BUILDINGS & STRUCTURES	9,448,302	1,866,163	181,527
PROCESS EQUIPMENT	15,099,278	4,009,665	445,024
AUXILIARY EQUIPMENT	3,822,690	1,747,132	202,924
MACHINERY & EQUIPMENT	1,646,924	636,455	154,044
OFFICE EQUIPMENT & FURNITURE	68,632	68,632	4,576
SERVICEMAINS - GRAND RAPIDS	293,035,371	71,161,033	5,450,290
SERVICEMAINS - WALKER	38,421,391	11,416,266	751,078
SERVICEMAINS - KENTWOOD	31,460,701	10,922,386	563,591
SERVICEMAINS - CASCADE TWP	18,847,007	6,014,343	341,529
SERVICEMAINS - GRAND RAPIDS TWP	16,941,239	5,228,467	339,005
SERVICEMAINS - TALLMADGE TWP	5,661,019	790,504	120,789
SERVICEMAINS - WRIGHT TWP	125,288	11,276	2,506
	<u>\$ 439,239,096</u>	<u>\$114,380,342</u>	<u>\$ 8,701,692</u>
TOTAL	<u>\$ 592,119,496</u>	<u>\$206,697,383</u>	<u>\$ 12,169,499</u>

SOURCE: FINAL GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2010.

**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, 2010: \$ 1,399,547

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 = \$24,905,066 @ 90/365 = \$ 6,140,975

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$	1,399,547
12B PREPAYMENT OF OPERATING EXPENSES		-
12C 90 DAY OPERATING EXPENSES		6,140,975
		6,140,975
	\$	7,540,522

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
ZONEGATED FACILITIES
TASK #13
November 4, 2010**

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 FY10 characteristics. Jointly used pumping stations were also prorated based on B&V zoning report. All zoning work papers are on file at the Coldbrook Complex. Maps are on file in the City Engineer's Office.

LW

srs\stask13 2010

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	15,641.58
LESS: WHOLESALE BILLED FLOW	(860.71)
LESS: RETAIL BILLED FLOW	(7,699.78)
TOTAL RETAIL I/I & OTHER FLOW	<u>7,081.09</u>
2.) RETAIL INFLOW FROM SEPARATED AREAS (A)	607.94
RETAIL INFLOW FROM COMBINED AREAS - AMOUNT ESTIMATED (A)	848.64
LESS: ANNUAL BYPASS FROM (3) PUMPING STATIONS	-
LESS: IN-SYSTEM BYPASS & RETENTION BASIN OVERFLOW	(38.45)
TOTAL RETAIL INFLOW	<u>1,418.13</u>
3.) RETAIL INFILTRATION:	
TOTAL RETAIL I/I & OTHER FLOW	7,081.09
LESS: TOTAL RETAIL INFLOW (#2)	(1,418.13)
LESS: MARKET AVE RETENTION BASIN (MARB) CAPTURE	5,662.96
TOTAL RETAIL INFILTRATION & OTHER FLOW	<u>(201.93)</u>
4.) ALLOCATION OF RETAIL INFILTRATION & OTHER FLOW - APPORTIONED ON THE BASIS OF B&V SUMMARY OF 1997 MONITORED FLOW DATA (B)	
	5,461.03
	<u>5,461.03</u>

	MILLION GALLONS
PRORATA SHARE OF RETAIL INFILTRA- TION & OTHER	5,461.03
100.00000%	<u>5,461.03</u>
100.00000%	<u>5,461.03</u>

	MILLION GALLONS
GOVERNMENTAL UNIT(S)	5,461.03
UTILITY PARTNERS	<u>5,461.03</u>
TOTAL	<u>5,461.03</u>

(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)	INFILTRATION			TOTAL PLANT FLOW	PERCENT OF TOTAL	TOTAL PLANT FLOW (MGD)
		INFLOW (#2 ABOVE)	INFLTRATION & OTHER FLOW (#4 ABOVE)	MARB (A) (#3 ABOVE)			
GOVERNMENTAL UNIT(S)	8,465.80	1,418.13	5,461.03	199.70	15,544.66	99.3804%	42.5880
UTILITY PARTNERS	94.69	-	-	2.23	96.92	0.6196%	0.2655
GAINES TWP	8,560.49	1,418.13	5,461.03	201.93	15,641.58	100.0000%	42.8535
TOTAL							

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

MEMORANDUM

CITY OF GRAND RAPIDS

Date: August 14, 2010
To: Linda Wagenmaker, Utility Financial Officer
From: Mike Lunn *Mike Lunn*
 Acting Environmental Services Manager

FY10 Wastewater Plant Flow Data

Listed below is the flow data for the last completed fiscal year. Compared to last years report the plant flow decreased by 12.96% from 17,970.21 million gallons treated in FY09 to 15,641.58 million gallons treated in FY10.

Month Data	Total MG
July	1178.67
August	1294.03
September	1072.35
October	1356.18
November	1327.26
December	1336.85
January	1235.45
February	1051.07
March	1397.47
April	1406.38
May	1383.83
June	1602.04
Total	15641.58

Fiscal year data

Wastewater Treatment Plant (WWTP) avg. daily flow (MG)	42.8536
Rainfall recorded at WWTP (inches)	37.0
In-System overflows (MG) (report attached)	2.599
MARB Avenue Retention Basin (MARB) inflow (MG)	237.78
MARB Avenue Retention Basin (MARB) overflow (MG)	35.848

Copy Mark DeClercq, City Engineer

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 28, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Hydraulic Engineer 

SUBJECT: 2010 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. The zonegating model has been adjusted to recognize changes in flows related to the Saddleback Sewer project scheduled for completion in 2010.

CRSMW

srs\stask14 2010

**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	\$ 17,521,426	
	- TASK #11	591,314,496	
	- TASK #16/21	<u>(194,433,252)</u>	\$ 414,402,670
LESS: ACCUMULATED DEPRECIATION	- TASK #10	\$ -	
	TASK #11	206,584,206	
	TASK #16/21	<u>(35,793,330)</u>	<u>(170,790,876)</u>
			243,611,794
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 7,540,522	
			<u>7,540,522</u>
			251,152,316
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 183,159,437	
LESS: AMORTIZATION		(109,821,634)	
			<u>(73,337,803)</u>
CONSTRUCTION COST RATE BASE			<u>\$ 177,814,513</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 27, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Scott Saindon *SS*
Financial Analyst

**SUBJECT: 2010 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, 2011. 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, 2011 is as follows:

August, 2010 Index	218.312
August, 2009 Index	215.834
Increase (decrease)	2.478
Percentage increase (decrease)	1.15%

SS

Attachment

srs\stask15a 2010

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>1/01/10</u>	<u>1/01/11</u>
3/4 or less	\$ 2,650	\$ 2,680
1	4,400	4,480
1 ½	8,750	8,920
2	14,050	14,280
3	30,750	31,280
4	55,300	56,280
6 and over	122,950	125,080

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 2011 - ACCRUAL BASIS

DATE	SRF/REVENUE REFERENCE	REVENUE BONDS			STATE REVOLVING FUNDS			TOTAL			TOTAL PRINCIPAL & INTEREST	
		5073-SERIES	PRINCIPAL	INTEREST	EST. FEES	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	PRINCIPAL		INTEREST
07/01/11	N/A	1998	(1)	\$ 599,115.39	\$ 1,250.00						\$ 600,365.39	\$ 600,365.39
01/01/12	N/A	1998	(1)	\$ 599,115.39	1,250.00						600,365.39	2,112,260.39
07/01/11	N/A	2004	(2)	704,250.00	600.00						704,850.00	704,850.00
01/01/12	N/A	2004	(2)	704,250.00	600.00						704,850.00	704,850.00
07/01/11	N/A	2005	(3)	524,400.00	800.00						525,200.00	525,200.00
01/01/12	N/A	2005	(3)	524,400.00	800.00						525,200.00	525,200.00
07/01/11	N/A	2008	(4)	572,650.00	900.00						573,550.00	573,550.00
01/01/12	N/A	2008	(4)	572,650.00	900.00						573,550.00	1,048,550.00
07/01/11	N/A	2010A	(5)	283,949.12	0.00						283,949.12	283,949.12
01/01/12	N/A	2010A	(5)	260,769.60	0.00						260,769.60	260,769.60
04/01/11	01	1991				\$ 70,000.00		\$ 1,050.00	(6)	0.00	1,050.00	1,050.00
10/01/11		SRF						2,100.00		70,000.00	2,100.00	72,100.00
04/01/12								700.00	(6)	0.00	700.00	700.00
04/01/11	02/03	1992A				825,000.00		12,600.00	(6)	0.00	12,600.00	12,600.00
10/01/11		SRF						25,200.00		825,000.00	25,200.00	850,200.00
04/01/12								8,475.00	(6)	0.00	8,475.00	8,475.00
04/01/11	04	1992B				100,000.00		1,525.00	(6)	0.00	1,525.00	1,525.00
10/01/11		SRF						3,050.00		100,000.00	3,050.00	103,050.00
04/01/12								1,025.00	(6)	0.00	1,025.00	1,025.00
04/01/11	06	1993A				600,000.00		9,175.00	(6)	0.00	9,175.00	9,175.00
10/01/11		SRF						18,350.00		600,000.00	18,350.00	618,350.00
04/01/12								6,175.00	(6)	0.00	6,175.00	6,175.00
04/01/11	07	1993B				525,000.00		9,700.00	(6)	0.00	9,700.00	9,700.00
10/01/11		SRF						19,400.00		525,000.00	19,400.00	544,400.00
04/01/12								7,075.00	(6)	0.00	7,075.00	7,075.00
04/01/11	09	1994A				610,000.00		12,200.00	(6)	0.00	12,200.00	12,200.00
10/01/11		SRF						24,400.00		610,000.00	24,400.00	634,400.00
04/01/12								9,150.00	(6)	0.00	9,150.00	9,150.00
04/01/11	10	1994B				225,000.00		8,450.00	(6)	0.00	8,450.00	233,450.00
10/01/11		SRF						12,400.00		0.00	12,400.00	12,400.00
04/01/12								6,200.00	(6)	170,000.00	6,200.00	176,200.00
04/01/11	11	1995A				118,178.39		7,024.76	(6)	118,178.39	7,024.76	125,203.15
10/01/11		SRF						11,390.51		0.00	11,390.51	11,390.51
04/01/12								5,695.26	(6)	120,640.43	5,695.26	126,335.69
04/01/11	12	1995B				190,000.00		6,750.00	(6)	0.00	6,750.00	6,750.00
10/01/11		SRF						13,500.00		190,000.00	13,500.00	203,500.00
04/01/12								5,681.25	(6)	0.00	5,681.25	5,681.25
									\$5,540,713.82	\$5,601,091.28	\$11,141,805.10	

(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 ESTIMATED 2010A ISSUE. (\$13.93M)
 (6) PRORATED FOR APPLICABLE THREE (3) MONTH PERIOD IN CALENDAR YEAR 2011

**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 2011.

SOURCE: BLACK & VEATCH AND CHUCK SCHROEDER, HYDRAULIC ENGINEER OCTOBER 2010.

**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
2011	\$ 4,325,000.00	\$ 10,783,947.94	\$ 15,108,947.94
2012	4,530,000.00	10,684,743.76	15,214,743.76
2013	4,745,000.00	10,477,256.26	15,222,256.26
2014	4,975,000.00	10,255,856.26	15,230,856.26
2015	5,210,000.00	10,021,575.02	15,231,575.02
2016	5,460,000.00	9,768,437.52	15,228,437.52
2017	5,725,000.00	9,508,306.26	15,233,306.26
2018	6,015,000.00	9,223,881.26	15,238,881.26
2019	6,340,000.00	8,906,256.26	15,246,256.26
2020	6,670,000.00	8,571,431.26	15,241,431.26
2021	6,960,000.00	8,227,931.26	15,187,931.26
2022	9,820,000.00	7,864,981.26	17,684,981.26
2023	10,345,000.00	7,355,831.26	17,700,831.26
2024	10,875,000.00	6,838,350.02	17,713,350.02
2025	11,415,000.00	6,292,731.26	17,707,731.26
2026	11,995,000.00	5,719,550.00	17,714,550.00
2027	12,605,000.00	5,120,500.00	17,725,500.00
2028	13,230,000.00	4,491,300.00	17,721,300.00
2029	8,075,000.00	3,829,800.00	11,904,800.00
2030	8,485,000.00	3,426,050.00	11,911,050.00
2031	8,915,000.00	3,001,800.00	11,916,800.00
2032	9,365,000.00	2,556,050.00	11,921,050.00
2033	9,845,000.00	2,087,800.00	11,932,800.00
2034	10,345,000.00	1,595,550.00	11,940,550.00
2035	10,255,000.00	1,078,300.00	11,333,300.00
2036	3,800,000.00	598,750.00	4,398,750.00
2037	3,990,000.00	408,750.00	4,398,750.00
2038	4,185,000.00	209,250.00	4,394,250.00

**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	\$ 177,814,513
LESS: BONDED INDEBTEDNESS (ACCRUAL) - TASK NO. 17 / 20	(120,796,960)
NET SEWER SYSTEM EQUITY	<u>\$ 57,017,553</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>
08-Oct-09	4.060%	08-Apr-10	4.450%
15-Oct-09	4.320%	15-Apr-10	4.430%
22-Oct-09	4.310%	22-Apr-10	4.370%
29-Oct-09	4.390%	29-Apr-10	4.370%
05-Nov-09	4.410%	06-May-10	4.290%
12-Nov-09	4.400%	13-May-10	4.320%
19-Nov-09	4.350%	20-May-10	4.270%
24-Nov-09	4.330%	27-May-10	4.280%
03-Dec-09	4.240%	03-Jun-10	4.280%
10-Dec-09	4.190%	10-Jun-10	4.370%
17-Dec-09	4.180%	17-Jun-10	4.400%
23-Dec-09	4.210%	24-Jun-10	4.400%
30-Dec-09	4.250%	01-Jul-10	4.380%
07-Jan-10	4.310%	08-Jul-10	4.360%
14-Jan-10	4.310%	15-Jul-10	4.370%
21-Jan-10	4.300%	22-Jul-10	4.260%
28-Jan-10	4.390%	29-Jul-10	4.210%
04-Feb-10	4.360%	05-Aug-10	4.160%
11-Feb-10	4.340%	12-Aug-10	4.060%
18-Feb-10	4.380%	19-Aug-10	4.030%
25-Feb-10	4.360%	26-Aug-10	3.880%
04-Mar-10	4.340%	02-Sep-10	3.860%
11-Mar-10	4.330%	09-Sep-10	3.920%
18-Mar-10	4.320%	16-Sep-10	3.890%
25-Mar-10	4.440%	23-Sep-10	3.830%
31-Mar-10	4.440%	30-Sep-10	3.840%
		<u>52 WEEKS</u>	<u>4.260%</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	\$ 57,017,553	@ 5.260%	= \$ 2,999,123
SEWER SYSTEM INDEBTEDNESS (NON-CSO) IN THE CONSTRUCTION COST RATE BASE			
1998 ISSUE (REFIN. AMT. OF 1990 ISSUE)	14,527,226	@ 5.060%	= 735,078
2004 ISSUE	8,190,000	@ 4.970%	= 407,043
2005 ISSUE	27,145,000	@ 4.900%	= 1,330,105
2008 ISSUE (amount in CCRB)	41,309,734	@ 4.920%	= 2,032,439
2010 ISSUE	29,625,000	@ 5.000%	= 1,481,250
LESS INTEREST ON BOND RESERVE AND REPLACEMENT ACCOUNTS			(5,705)
	\$ 177,814,513		\$ 8,979,333
 COMPOSITE RATE OF RETURN ON INVESTMENT		 $\frac{\$ 8,979,333}{177,814,513} =$	 5.050%

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, 2010

PHYSICAL LOCATION

DESCRIPTION	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	
COST	\$ 157,847,664	\$ 116,667,697	\$ 39,106,998	\$ 29,556,607	\$ 18,399,167	\$ 19,700,332	\$ 4,911,989	\$ 118,230	\$ -	\$ -	\$ -	\$ 366,508,684	
LESS: ACCUMULATED DEPRECIATION	92,317,041	39,453,143	11,682,967	9,797,366	6,095,766	5,311,488	789,785	36,552	-	-	-	155,466,108	
NET BOOK VALUE	\$ 65,530,623	\$ 77,414,554	\$ 27,424,031	\$ 19,759,241	\$ 12,303,401	\$ 14,388,844	\$ 4,122,204	\$ 79,678	\$ -	\$ -	\$ -	\$ 221,022,576	
WORKING CAPITAL REQUIREMENT	4,582,753	1,861,302	371,069	245,896	174,412	231,343	26,769	27,825	4,524	10,557	4,072	7,540,522	
	\$ 70,113,376	\$ 79,275,856	\$ 27,795,100	\$ 20,005,137	\$ 12,477,813	\$ 14,620,187	\$ 4,148,973	\$ 107,503	\$ 4,524	\$ 10,557	\$ 4,072	\$ 228,563,098	
CONTRIBUTIONS	47,596,435	52,638,367	22,901,065	22,486,224	16,592,805	13,574,528	4,560,073	-	-	-	-	180,349,497	
LESS AMORTIZATION	(39,099,933)	(39,795,369)	(8,732,632)	(9,456,480)	(5,925,332)	(4,770,006)	(705,360)	-	-	-	-	(108,485,112)	
CONSTRUCTION COST RATE BASE	\$ (8,496,502)	\$ (12,842,996)	\$ (14,168,433)	\$ (13,029,744)	\$ (10,667,473)	\$ (6,804,522)	\$ (3,854,713)	\$ -	\$ -	\$ -	\$ -	\$ (71,864,365)	
	\$ 61,616,874	\$ 66,432,858	\$ 13,628,667	\$ 6,975,393	\$ 1,810,340	\$ 5,815,665	\$ 294,260	\$ 107,503	\$ 4,524	\$ 10,557	\$ 4,072	\$ 156,698,713	
RETURN ON INVESTMENT- TASK 20	\$ 3,111,652	\$ 3,354,859	\$ 688,147	\$ 352,257	\$ 91,422	\$ 293,691	\$ 14,860	\$ 5,429	\$ 228	\$ 533	\$ 206	\$ 7,913,284	
5.050%													
ZONEGATED													
COST	\$ -	\$ (1,770,428)	\$ 8,249,147	\$ 2,657,835	\$ 4,708,163	\$ 5,308,376	\$ 686,619	\$ 1,330,113	\$ 263,861	\$ 5,557,411	\$ 902,889	\$ 27,893,986	
LESS: ACCUMULATED DEPRECIATION	-	(655,281)	1,605,594	1,232,020	860,454	935,470	45,032	204,106	240,803	435,832	400,738	5,304,768	
NET BOOK VALUE	-	\$ (1,115,147)	\$ 6,643,553	\$ 1,425,815	\$ 3,847,709	\$ 4,372,906	\$ 641,587	\$ 1,126,007	\$ 23,058	\$ 5,121,579	\$ 502,151	\$ 22,589,218	
WORKING CAPITAL REQUIREMENT	-	-	-	-	-	-	-	-	-	-	-	-	
CONTRIBUTIONS	-	-	\$ 6,643,553	\$ 1,425,815	\$ 3,847,709	\$ 4,372,906	\$ 641,587	\$ 1,126,007	\$ 23,058	\$ 5,121,579	\$ 502,151	\$ 22,589,218	
LESS AMORTIZATION	-	-	(10,183)	1,332,834	321,365	124,951	150	162	-	209,378	810,897	2,809,940	
CONSTRUCTION COST RATE BASE	-	-	(10,183)	(666,417)	(160,692)	(63,459)	(150)	(162)	-	(104,689)	(330,770)	(1,336,522)	
	-	\$ -	\$ -	\$ (666,417)	\$ (160,693)	\$ (61,492)	\$ -	\$ -	\$ -	\$ (104,689)	\$ (480,127)	\$ (1,473,418)	
RETURN ON INVESTMENT- TASK 1921	\$ -	\$ (97,667)	\$ 581,975	\$ 66,523	\$ 322,983	\$ 377,680	\$ 56,203	\$ 98,638	\$ 2,020	\$ 439,480	\$ 1,112	\$ 1,848,927	
8.760%													
RETURN ON INVESTMENT- TASK 1921	\$ 3,111,652	\$ 3,257,172	\$ 1,270,122	\$ 418,780	\$ 414,405	\$ 671,371	\$ 71,063	\$ 104,067	\$ 2,248	\$ 440,013	\$ 1,318	\$ 9,762,211	
5.050%													
TOTAL RETURN ON INVESTMENT	\$ 3,111,652	\$ 3,257,172	\$ 1,270,122	\$ 418,780	\$ 414,405	\$ 671,371	\$ 71,063	\$ 104,067	\$ 2,248	\$ 440,013	\$ 1,318	\$ 9,762,211	

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART2
FISCAL YEAR ENDED JUNE 30, 2010

CONSTRUCTION COST

COST CENTER	AMOUNT	INTEGRATED SYSTEM				RETAIL				WHOLESALE				TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CITY OF TOWNSHIP	CITY OF GR	CITY OF TOWNSHIP	TALLMADE TOWNSHIP	WRICHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP		
BY PHYSICAL LOCATION- TASK 11		\$ 32,880,400	\$ 40,639,942	\$ 31,460,701	\$ 19,478,823	\$ 18,592,724	\$ 6,017,905	\$ 196,346					\$ 592,115,496	
ADD IN SERVICE- TASK 10		4,867,264	765,516	9,604,643	1,112,573	910,892	(615,311)	(78,116)					17,521,428	
MARINE CONNECTOR AGREEMENT			(211,573)										(805,000)	
TASK 111621- CSO FA AMT			(194,433,252)										(194,433,252)	
LIFT STATIONS / CHAMBERS														
FULLER-BROOKVIEW	1,252,893		(468,457)						468,457					
FULTON-MIDDLEBORROW	37,983		(37,407)						37,407					
WEALTHY ST EXT- CHAMBER	498,953		90,753				4,686							
WEALTHY	20,444		(12,215)				55						241	
MARKET	11,915,669		(2,088,626)				331,375		25,261				27,287	
VANPORTLET	44,816		6,190				(6,190)							
REMEMBRANCE /3 MILE	1,201,385		(188,967)						35,074				153,943	
16th AVENUE	71,058								(141,105)					
HAYES- WEST	141,105													
HAYES- EAST	215,841													
O'BRIEN	546,532													
KINGSBURY	323,154		22,424						25,900					
LEONARD HEIGHTS	122,954													
THORNAPPLE	254,216													
6000 28TH ST (NEW CAS)	111,401													
THORNHILLS	118,407													
ROBINHOOD	178,389													
CASCADE SPRINGS	65,478													
SHOREHAVEN	12,862													
EAGLE CREST	42,362													
GREENBRIER	42,362													
LINCOLN SCHOOL	153,651													
REEDS LAKE	962,888													
KRAFT	72,682													
ORCHARD VISTA	39,712													
BIRD AVE-ALPINE ESTATES	96,639													
EAST PARIS	323,478													
SERVICEMANS		(10,835,287)	5,051,571	(8,946,802)	2,515,934	4,330,853	146,133	1,007,527	263,861	5,557,411	902,889			
ADJUSTED BY ZONEGATING		\$ 157,847,664	\$ 115,097,269	\$ 47,256,145	\$ 32,214,442	\$ 23,107,330	\$ 5,598,608	\$ 1,448,343	\$ 263,861	\$ 5,557,411	\$ 902,889		\$ 414,402,670	
ZONEGATING ADJUSTMENT			(1,720,428)	8,249,147	4,708,163	5,308,376	686,619	1,330,113	263,861	5,557,411	902,889		\$ 27,893,966	
PHYSICAL LOCATION		\$ 157,847,664	\$ 116,867,697	\$ 29,105,998	\$ 29,556,607	\$ 18,399,167	\$ 19,700,332	\$ 118,230	\$ -	\$ -	\$ -		\$ 395,308,634	
		\$ 92,317,041	\$ 79,105,118	\$ 11,879,245	\$ 10,322,386	\$ 6,120,127	\$ 5,429,910	\$ 889,328	\$ 43,228	\$ -	\$ -		\$ 206,697,383	
BY PHYSICAL LOCATION- TASK 11			(91,652)					(16,848)	(6,676)				(113,177)	
ADD IN SERVICE- TASK 10			(35,793,330)										(35,793,330)	
MARINE CONNECTOR AGREEMENT														
TASK 111621- CSO ACC DEP														
LIFT STATIONS / CHAMBERS														
FULLER-BROOKVIEW	468,488		(174,420)						174,420					
FULTON-MIDDLEBORROW	36,705		(65,146)						36,148					
WEALTHY ST EXT- CHAMBER	90,566		(18,834)						925					
WEALTHY	20,444		(12,215)						55				241	
MARKET	3,238,968		(70,918)						90,077				7,417	
VANPORTLET	44,816		6,190						(6,190)					
REMEMBRANCE /3 MILE	188,956		(29,272)						5,425				23,847	
16th AVENUE	31,852								(40,362)					
HAYES- WEST	49,462													
HAYES- EAST	188,007													
O'BRIEN	31,804		7,714						8,910					
KINGSBURY	12,296													
LEONARD HEIGHTS	53,854													
THORNAPPLE	3,713													
6000 28TH ST (NEW CAS)	11,841													
THORNHILLS	23,787													
ROBINHOOD	24,009													
CASCADE SPRINGS	9,680													
SHOREHAVEN	15,233													
EAGLE CREST	3,222													
GREENBRIER	5,530													
LINCOLN SCHOOL	49,957													
REEDS LAKE	9,680													
KRAFT	2,647													
ORCHARD VISTA	93,328													
BIRD AVE-ALPINE ESTATES	64,656													
SERVICEMANS		(3,624,043)	995,417	(107,000)	838,093	525,403	(10,482)	123,239	240,803	455,832	400,738			
ADJUSTED BY ZONEGATING		\$ 92,317,041	\$ 38,797,865	\$ 13,288,561	\$ 11,029,386	\$ 6,956,220	\$ 824,817	\$ 242,658	\$ 249,803	\$ 435,832	\$ 400,738		\$ 170,790,876	
ZONEGATING ADJUSTMENT			(655,281)	\$ 1,605,594	\$ 1,720,020	\$ 960,494	\$ 45,032	\$ 204,106	\$ 240,803	\$ 435,832	\$ 400,738		\$ 5,304,786	
PHYSICAL LOCATION		\$ 92,317,041	\$ 39,453,143	\$ 11,682,967	\$ 9,797,366	\$ 6,065,706	\$ 5,311,488	\$ 789,795	\$ 39,552	\$ -	\$ -		\$ 105,486,108	

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART3
FISCAL YEAR ENDED JUNE 30, 2010

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	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP				
2009 RATE STUDY (LOCATION)		\$ 47,586,435	\$ 52,650,925	\$ 22,719,740	\$ 22,444,326	\$ 16,592,805	\$ 13,592,117	\$ 4,560,073	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 180,156,421
ADDITIONS:																
CONNECTION & FRONT FOOT FEES			(12,558)	15,550	16,912	-	6,480	-	-	-	-	-	-	-	-	26,384
FIXED ASSET CONTRIBUTIONS			-	165,775	24,986	-	(24,079)	-	-	-	-	-	-	-	-	166,682
PLASTER CREEK INTERCEPTOR GRANT	\$ 2,244,621															
INTERCEPTOR																
LIFT STATION																
ADJUSTED BY ZONEGATING		\$ 47,586,435	\$ 52,638,367	\$ 22,911,248	\$ 23,819,058	\$ 16,914,190	\$ 13,689,479	\$ 4,560,223	\$ 162	\$ -	\$ 810,897	\$ 209,378	\$ -	\$ -	\$ -	\$ 180,349,497
ZONEGATING ADJUSTMENT																
PHYSICAL LOCATION		\$ 47,586,435	\$ 52,638,367	\$ 22,901,065	\$ 22,486,224	\$ 16,592,805	\$ 13,574,528	\$ 4,560,073	\$ -	\$ -	\$ 810,897	\$ 209,378	\$ -	\$ -	\$ -	\$ 180,349,497

AMORTIZED CONTRIBUTIONS

2009 RATE STUDY (LOCATION)		\$ 38,020,446	\$ 38,742,602	\$ 8,309,300	\$ 9,009,101	\$ 5,593,476	\$ 4,501,740	\$ 614,113	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104,790,778
CURRENT YEAR ADJUSTMENT			1,079,487	423,332	447,379	331,856	288,266	91,247	-	-	-	-	-	-	-	3,694,334
PLASTER CREEK INTERCEPTOR GRANT																
INTERCEPTOR																
LIFT STATION																
ADJUSTED BY ZONEGATING		\$ 39,099,933	\$ 39,795,369	\$ 8,732,632	\$ 9,456,480	\$ 5,925,332	\$ 4,770,006	\$ 705,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108,485,112
ZONEGATING ADJUSTMENT																
PHYSICAL LOCATION		\$ 39,099,933	\$ 39,795,369	\$ 8,732,632	\$ 9,456,480	\$ 5,925,332	\$ 4,770,006	\$ 705,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108,485,112

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2010**

COST CENTER	AMOUNT	INTEGRATED SYSTEM				RETAIL				WHOLESALE				TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CITY OF 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		\$ 327,782,451	\$ 38,421,381	\$ 31,463,701	\$ 18,847,007	\$ 16,941,239	\$ 5,661,019	\$ 125,288	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 582,119,496
MARNE CONNECTOR AGREEMENT		765,516	70,538	9,684,643	1,112,573	910,882	(515,311)	(78,116)	-	-	-	-	-	17,521,426
TASK 11/16/21- CSO COST		(211,573)												(805,000)
		(194,433,232)												(194,433,232)
O'BRIEN		(546,532)	546,532											
VANPORTFLEET		(44,816)	44,816											
REMEMBRANCE / 3 MILE		(1,201,085)	1,201,085											
16th AVENUE		(71,058)												
HAYES- WEST		(141,105)												
HAYES- EAST		(215,841)												
KINGSBURY		(323,154)	323,154											
LEONARD HEIGHTS		(122,564)	122,564											
THORNAPPLE		(224,216)	224,216											
6000 28TH ST (NEW CAS)		(111,401)	111,401											
THORNHILLS		(118,407)	118,407											
ROBINHOOD		(178,369)	178,369											
CASCADE SPRINGS		(65,478)	65,478											
SHOREHAVEN		(72,602)	72,602											
EAGLECREST		(152,332)	152,332											
GREENBRIER (NEW GRT)		(48,486)	48,486											
LINCOLN SCHOOL (NEW GRT)		(153,651)	153,651											
REEDS LAKE (NEW GRT-110)		(962,899)	962,899											
KRAFT		(72,602)	72,602											
ORCHARD VISTA (NEW CAS)		(39,712)	39,712											
BIRD AVE-ALPINE ESTATES		(96,639)	96,639											
EAST PARIS		(323,478)	323,478											
SERVICE MAINS		(22,283,271)	(13,629,388)	(19,699,934)	(2,370,152)	(140,457)	(590,665)	-	-	-	-	-	-	(80,893,867)
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.		10,514,881	12,205,906	8,101,197	177,923	173	-	-	-	-	-	-	-	30,999,980
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.														
TOTAL- PHYSICAL LOCATION COST		\$ 157,847,664	\$ 38,106,968	\$ 29,556,607	\$ 18,359,167	\$ 19,700,332	\$ 4,911,989	\$ 118,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 386,508,693

COST CENTER	AMOUNT	INTEGRATED SYSTEM				RETAIL				WHOLESALE				TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CITY OF CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP			
CONSTRUCTION COST- ZONEGATING:														
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW		\$ 1,252,893	(488,457)	-	-	-	-	-	-	-	-	-	-	-
FULTON- MIDDLEBORROW		37,983	(37,407)	-	-	-	-	-	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER		458,953	90,753	(95,439)	4,686	-	-	-	-	-	-	-	-	-
WEALTHY MARKET		11,915,669	(2,098,626)	1,714,903	55	241	27,287	-	-	-	-	-	-	-
VANPORTFLEET		44,816	6,190	(6,190)	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE		1,201,085	(188,367)	-	-	-	-	-	-	-	-	-	-	-
16th AVENUE		71,058	-	-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST		141,105	-	-	-	-	-	-	-	-	-	-	-	-
HAYES- EAST		215,841	-	-	-	-	-	-	-	-	-	-	-	-
O'BRIEN		546,532	(48,324)	-	-	-	-	-	-	-	-	-	-	-
KINGSBURY		323,154	22,424	(48,324)	-	-	-	-	-	-	-	-	-	-
LEONARD HEIGHTS		122,964	-	-	-	-	-	-	-	-	-	-	-	-
THORNAPPLE		224,216	-	-	-	-	-	-	-	-	-	-	-	-
6000 28TH ST (NEW CAS)		111,401	-	-	-	-	-	-	-	-	-	-	-	-
THORNHILLS		118,407	-	-	-	-	-	-	-	-	-	-	-	-
ROBINHOOD		178,369	-	-	-	-	-	-	-	-	-	-	-	-
CASCADE SPRINGS		65,478	-	-	-	-	-	-	-	-	-	-	-	-
SHOREHAVEN		72,602	-	-	-	-	-	-	-	-	-	-	-	-
EAGLECREST		152,332	-	-	-	-	-	-	-	-	-	-	-	-
GREENBRIER (NEW GRT)		48,486	-	-	-	-	-	-	-	-	-	-	-	-
LINCOLN SCHOOL (NEW GRT)		153,651	-	-	-	-	-	-	-	-	-	-	-	-
REEDS LAKE (NEW GRT-110)		962,899	-	-	-	-	-	-	-	-	-	-	-	-
KRAFT		72,602	-	-	-	-	-	-	-	-	-	-	-	-
ORCHARD VISTA (NEW CAS)		39,712	-	-	-	-	-	-	-	-	-	-	-	-
BIRD AVE-ALPINE ESTATES		96,639	-	-	-	-	-	-	-	-	-	-	-	-
EAST PARIS		323,478	-	-	-	-	-	-	-	-	-	-	-	-
SERVICE MAINS- ZONEGATED COST		913,302	6,675,659	2,657,895	4,709,163	4,471,137	736,798	1,007,537	263,861	5,557,411	902,889	27,893,986		
TOTAL- ZONEGATED COST		\$ (1,770,426)	\$ 8,249,147	\$ 2,657,895	\$ 4,709,163	\$ 5,308,376	\$ 686,619	\$ 1,330,113	\$ 263,861	\$ 5,557,411	\$ 902,889	\$ 27,893,986		
GRAND TOTAL COST		\$ 157,847,664	\$ 47,386,115	\$ 32,214,442	\$ 23,107,330	\$ 25,008,708	\$ 5,598,608	\$ 1,448,343	\$ 263,861	\$ 5,557,411	\$ 902,889	\$ 414,402,669		

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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, 2010**

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	ADA TOWNSHIP	GAINES TOWNSHIP	
WASTEWATER TREATMENT	\$ 13,045,279	\$ 13,045,279											
LIFT STATIONS:													
A. INTERCEPTOR	337,500	278,052	48,573	-	-	-	9,386	716	773	-	-	-	-
B. TRUNK	169,880	57,818	77,927	-	-	-	6,445	1,741	-	-	-	-	-
C. LOCAL COLLECTOR	484,141	86,032	58,779	-	-	-	171,467	22,613	32,878	-	-	8,986	-
SEWER LINES:													
A. INTERCEPTOR	265,202	162,431	36,391	60,140	-	-	6,240	-	-	-	-	-	-
B. TRUNK	534,419	177,593	137,292	128,357	-	-	46,222	14,969	636	-	-	-	-
C. LOCAL COLLECTOR	3,981,370	2,497,114	496,397	387,308	-	-	236,454	295,975	23,809	-	-	-	-
D. ZONEGATING		(112,176)	25,228	(25,228)	-	-	32,368	(9,573)	15,443	-	-	19,992	8,832
BULK METERING STATIONS	12,017	-	-	2,914	-	-	-	-	-	-	-	2,574	3,335
CUSTOMER ACCOUNTING *	3,030,509	2,400,164	225,167	179,315	-	-	142,161	5,091	9,364	-	-	-	-
INDUSTRIAL PRETREATMENT	612,001	612,001											
SUBTOTAL OPERATING EXPENSE	22,472,318	13,657,280	1,105,754	732,806	519,866	689,532	79,870	82,903	13,560	31,552	12,167		
ADMINISTRATIVE EXPENSE	2,432,748	1,478,474	119,704	79,330	58,278	74,645	8,646	8,975	1,468	3,416	1,317		
TOTAL	\$ 24,905,066	\$ 15,135,754	\$ 1,225,458	\$ 812,136	\$ 576,144	\$ 764,177	\$ 88,516	\$ 91,878	\$ 15,028	\$ 34,968	\$ 13,484		

* 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)	(1)	-	-	-	-	-	-	-	-	-	-	-
B. TRUNK	(8)	(4)	(3)	(1)	-	-	-	-	-	-	-	-	-
C. LOCAL	(45)	(9)	(3)	(9)	(17)	(5)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
SEWER LINES:													
TOTAL MILES:	903.98												
A. INTERCEPTOR	100.000%	61,248%	13,722%	22,677%	2,353%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	50.14	30.71	6.88	11.37	1.18	-	-	-	-	-	-	-	-
B. TRUNK LINES	100.000%	33,231%	25,690%	24,018%	8,649%	5.492%	2.801%	0.119%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	101.05	33.58	25.96	24.27	8.74	5.55	2.83	0.12	-	-	-	-	-
C. LOCAL COLLECTOR	100.000%	62,720%	12,468%	9,728%	5,939%	7,434%	1,113%	0.598%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	752.79	472.15	93.86	73.23	44.71	55.96	8.38	4.50	-	-	-	-	-
D. ZONEGATING		(21.21)	4.77	(4.77)	6.12	6.57	(1.81)	2.92	1.96	3.78	1.67	(1)	(1)
BULK METERING STATIONS	(4)	-	-	(1)	-	-	-	-	(1)	(1)	(1)	(1)	(1)
CUSTOMER ACCTG (1)	100.000%	79,200%	7,430%	5,917%	2,285%	4,691%	0.168%	0.309%	0.000%	0.000%	0.000%	0.000%	0.000%
NO. OF METERS	74,012.00	58,618.00	5,499.00	4,379.00	1,691.00	3,472.00	124.00	229.00	-	-	-	-	-
INDUSTRIAL PRETREATMENT	100.000%	100.000%											
ADMINISTRATIVE EXPENSE (2)	100.000%	60,775%	24,684%	4,921%	2,313%	3,068%	0.355%	0.369%	0.060%	0.140%	0.054%	0.054%	0.054%

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	\$ 32,523,783	72.5643%	\$ 88,411
CITY OF WALKER	4,454,482	9.9385%	12,109
CITY OF KENTWOOD	3,154,316	7.0376%	8,574
CASCADE TOWNSHIP	1,891,907	4.2211%	5,143
GRAND RAPIDS TOWNSHIP	2,286,412	5.1013%	6,215
TALLMADGE TOWNSHIP	250,384	0.5586%	681
WRIGHT TOWNSHIP	259,318	0.5786%	705
	<u>\$ 44,820,602</u>	<u>100.0000%</u>	<u>\$ 121,838</u>

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24
FISCAL YEAR ENDED JUNE 30, 2010

COST CENTER	DEPRECIATION EXPENSE	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					
BY PHYSICAL LOCATION-TASK 11		\$ 3,467,807	\$ 6,424,415	\$ 843,635	\$ 563,591	\$ 362,590	\$ 384,166	\$ 120,789	\$ 2,506								\$ 12,169,499
ADD: IN SERVICE-TASK 10		165,575	15,310	2,351	193,893	23,152	24,929										425,250
MARNE CONNECTOR AGREEMENT			(12,959)														(24,829)
LESS: TASK 11/16/21- CSO DEP. EXP.			(3,810,141)														(3,810,141)
LIFT STATIONS / CHAMBERS:																	
FULLER-BROOKVIEW	\$ 46,649		(17,442)				17,442										
FULTON-MIDDLEBORROW	183		(180)				180										
WEALTHY ST EXT. CHAMBER	11,321		(2,355)	2,239				116									
WEALTHY																	
MARKET	465,514		(81,995)	66,997			12,946	987	1,066								
VANPORTFLEET																	
REMEMBRANCE / 3 MILE	62,019			(9,757)				1,808	7,949								
O'BRIEN	15,667			(1,385)				742									
KINGSBURY	10,772		643														
LEONARD HEIGHTS	4,089																
THORNAPPLE	7,474																
6000 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		(4,565)														
HAYES- WEST	7,052		(7,052)														
HAYES- EAST	9,893		(9,893)														
BIRD AVE-ALPINE ESTATES	3,221		(3,221)														
EAST PARIS	10,783		(10,783)														
SERVICEMAINS			(201,467)	91,811	(181,020)	49,787	85,222	2,876	20,002	110,802	17,952						
ADJUSTED BY ZONEGATING		3,633,382	2,276,314	995,891	576,464	435,569	538,889	126,904	41,577	110,802	17,952						8,799,779
LESS CONTRIBUTIONS AMORTIZED		(1,079,487)	(1,052,767)	(423,332)	(432,443)	(331,856)	(268,266)	(91,247)									(3,694,334)
TASK NO. 21		\$ 2,553,895	\$ 1,225,547	\$ 572,559	\$ 144,021	\$ 103,713	\$ 270,623	\$ 35,657	\$ 41,577	\$ 110,802	\$ 3,016						\$ 5,065,445
TOTAL																	

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2010

COST CENTER	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
OPERATION & MAINTENANCE EXPENSE- TASK NO. 22	\$ 15,135,754	\$ 6,147,523	\$ 1,225,458	\$ 812,136	\$ 576,144	\$ 764,177	\$ 88,516	\$ 91,878	\$ 15,028	\$ 34,968	\$ 13,484	\$ 24,905,066
DEPRECIATION EXPENSE TASK NO. 24	2,553,895	1,225,547	572,559	144,021	103,713	270,623	35,657	41,577	4,035	110,802	3,016	5,065,445
RETURN ON SYSTEM INVESTMENT TASK NO. 21	3,111,652	3,257,172	1,270,122	418,780	414,405	671,371	71,063	104,967	2,248	440,013	1,318	9,762,211
REVENUE CREDITS- TASK NO. 23		(88,411)	(12,109)	(6,574)	(5,143)	(6,215)	(681)	(705)				(121,838)
CSO DEBT SERVICE REQUIREMENTS ALLOCATE:		11,141,805										11,141,805
INTEGRATED CONN. FEE CREDIT		(401,406)	(61,279)	(76,533)	(34,603)	(26,829)	(2,921)	(1,871)	(24,585)	(20,928)	-	(650,956)
INTEGRATED SYSTEM (A)	(20,801,301)	12,747,443	1,946,038	2,430,467	1,098,914	851,994	92,778	59,412	780,759	664,611	128,885	-
LESS: CIRCUIT BREAKER (B)		-	-	(280,011)	(59,056)	(52,302)	-	(36,975)				(428,344)
	\$ -	\$ 34,029,673	\$ 4,940,789	\$ 3,440,286	\$ 2,094,374	\$ 2,472,819	\$ 284,412	\$ 257,383	\$ 777,485	\$ 1,229,466	\$ 146,703	\$ 49,673,390

(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 TH-
(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					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
OLD METHOD- PLANT FLOW	\$ 12,747,443		1,946,038	2,430,467	1,098,914	851,994	92,778	59,412	780,759	664,611	-	20,672,416
NEW METHOD- PLANT FLOW / LAND	\$ 12,747,443		1,946,038	2,430,467	1,098,914	851,994	92,778	59,412	780,759	664,611	128,885	20,801,301

**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 6/30/10</u>	<u>PRO FORMA *</u>
REVENUES:		
RETAIL/WHOLESALE SEWAGE SERVICE	\$ 46,421,791	\$ 48,587,722
CONNECTION FEES/FRONT FOOT FEES	677,349	700,000
ENGINEERING FEES	44,277	70,000
SEWAGE SURCHARGES	1,253,705	1,284,000
OTHER OPERATING REVENUES	78,361	116,000
INTEREST ON INVESTMENTS	600,918	229,400
MISCELLANEOUS	2,185,665	726,400
TOTAL REVENUES	<u>\$ 51,262,066</u>	<u>\$ 51,713,522</u>
OPERATING EXPENSES:		
OPERATIONS & MAINTENANCE	\$ 25,190,873	\$ 26,570,754
DEPRECIATION	12,169,499	12,169,499
TOTAL EXPENSES	<u>\$ 37,360,372</u>	<u>\$ 38,740,253</u>
ADDITIONS: DEPRECIATION	<u>12,169,499</u>	<u>12,169,499</u>
NET EARNINGS OF THE SYSTEM	<u>\$ 26,071,193</u>	<u>\$ 25,142,768</u>
DEBT SERVICE (CASH BASIS)		
SERIES 2010 BONDS	\$ -	\$ 1,378,385
SERIES 2008 BONDS	4,396,638	4,394,238
SERIES 2005 BONDS	2,956,319	2,948,569
SERIES 2004 BONDS	1,991,625	1,996,075
SERIES 1998 BONDS	5,903,743	4,391,681
TOTAL SENIOR DEBT SERVICE	<u>15,248,325</u>	<u>15,108,948</u>
SRF DEBT (JUNIOR LIEN)	<u>3,885,876</u>	<u>3,859,187</u>
	<u>\$ 19,134,201</u>	<u>\$ 18,968,135</u>
COVERAGE RATIO - SENIOR DEBT	<u>1.71</u>	<u>1.66</u>
COVERAGE RATIO - ALL DEBT	<u>1.36</u>	<u>1.33</u>

* SEWAGE SERVICES ADJUSTED FOR RATE REVISIONS OF 14.04% AND -3.30% EFFECTIVE 1/1/10 AND 1/1/11, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2011 FISCAL PLAN.

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SUMMARY

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

INITIAL SYSTEM REVENUE REQUIREMENTS \$ 50,101,734

REVENUES FROM CURRENT RATES

REU CHARGE \$ 263,874

MONTHLY METER CHARGE 14,367,394

MONTHLY BILLING CHARGE 2,997,136

COMMODITY CHARGE 33,739,013 (51,367,417)

INITIAL REQUIRED REVENUE INCREASE (DECREASE) \$ (1,265,683)

INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -2.46%

INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE \$ 50,101,734

LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL (428,344)

SYSTEM REVENUE REQUIREMENTS \$ 49,673,390

ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE) \$ (1,694,027)

ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -3.30%

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

METER SIZE	EQUIV. FACTOR	CITY OF GR METERS * EQUIV.	CITY OF WALKER METERS * EQUIV.	CITY OF KENTWOOD METERS * EQUIV.	CASCADE TWP METERS * EQUIV.	GR TWP METERS * EQUIV.	TALLMADGE TWP METERS * EQUIV.	WRIGHT TWP USERS* REU
A 3/4" or less	1.0000	54,422	4,903	3,378	1,257	3,128	103	-
B 1"	1.7778	2,333	356	477	218	230	13	-
C 1 1/4"	2.7778	-	-	-	-	-	-	-
D 1 1/2"	4.0000	896	137	308	143	69	3	-
E 2"	7.1111	774	85	182	65	36	2	-
F 3"	16.0000	88	9	18	6	6	2	-
G 4"	28.4444	89	7	13	2	3	1	-
H 6" and over	64.0000	16	2	3	-	-	-	-
Other- Wright Twp		N/A	N/A	N/A	N/A	N/A	N/A	229
TOTAL		58,618	72,622	4,379	7,602	3,472	4,250	229
								341.187

* Source: Grand Rapids Water/Sewage Meter/User Quantity Report, October 27, 2010.

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

SYSTEM REVENUE REQUIREMENTS \$ 34,029,673

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

72,622 meter equivalents x \$ 10.60 x 12 = \$ 9,237,518

MONTHLY BILLING CHARGE

58,618 meters x \$ 3.10 x 12 = 2,180,590

COMMODITY CHARGE

7,322,885 units (100 CF) x \$ 3.33 = 24,385,207 (35,803,315)

REQUIRED REVENUE INCREASE (DECREASE) \$ (1,773,642)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -4.95%

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

COMMODITY CHARGE:

$$\frac{\text{INTEGRATED SYSTEM COST}}{\text{BILLED UNITS}} = \frac{\$23,889,248}{7,322,885} = \underline{\underline{\$ 3.26 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 34,029,673
NEW COMMODITY CHARGE		
7,322,885 x \$ 3.26		\$ 23,872,605
NEW MONTHLY BILLING CHARGE		
58,618 x \$ 3.41 x 12	2,398,649	(26,271,254)
		\$ 7,758,419

$$\text{MONTHLY METER CHARGE} = \frac{\$7,758,419}{72,622 \times 12} = \underline{\underline{\$ 8.90 \text{ MONTHLY}}}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 8.90	\$ 3.41	\$ 12.31	\$ 13.70
1"	1.7778	15.82	3.41	19.23	21.94
1 1/4"	2.7778	24.72	3.41	28.13	32.54
1 1/2"	4.0000	35.60	3.41	39.01	45.50
2"	7.1111	63.29	3.41	66.70	78.48
3"	16.0000	142.40	3.41	145.81	172.70
4"	28.4444	253.16	3.41	256.57	304.61
6" and over	64.0000	569.60	3.41	573.01	681.50

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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

SYSTEM REVENUE REQUIREMENTS \$ 4,940,789

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

7,159 meter equivalents x \$ 27.73 x 12 = \$ 2,382,229

MONTHLY BILLING CHARGE

5,499 meters x \$ 3.10 x 12 = 204,563

COMMODITY CHARGE

896,626 units (100 CF) x \$ 2.78 = 2,492,620 (5,079,412)

REQUIRED REVENUE INCREASE (DECREASE) \$ (138,623)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -2.73%

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

SYSTEM REVENUE REQUIREMENTS * \$ 3,440,286

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

7,602 meter equivalents x \$ 3.62 x 12 = \$ 330,231

MONTHLY BILLING CHARGE

4,379 meters x \$ 3.10 x 12 = 162,899

COMMODITY CHARGE

1,302,112 units (100 CF) x \$ 2.33 = 3,033,921 (3,527,051)

REQUIRED REVENUE INCREASE (DECREASE) \$ (86,765)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -2.46%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 280,011

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

SYSTEM REVENUE REQUIREMENTS *	\$ 2,094,374
LESS: CASH CONTRIBUTION	-
SYSTEM REVENUE REQUIREMENTS	\$ 2,094,374

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
2,832 meter equivalents	x	\$ 28.63	x 12 = \$ 972,962
MONTHLY BILLING CHARGE			
1,691 meters	x	\$ 3.10	x 12 = 62,905
COMMODITY CHARGE			
425,796 units (100 CF)	x	\$ 2.61	= <u>1,111,328</u> <u>(2,147,195)</u>
REQUIRED REVENUE INCREASE (DECREASE)			\$ (52,821)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	-2.46%
--	--------

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 59,056

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

SYSTEM REVENUE REQUIREMENTS * \$ 2,472,819

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

4,250 meter equivalents x \$ 26.68 x 12 = \$ 1,360,680

MONTHLY BILLING CHARGE

3,472 meters x \$ 3.10 x 12 = 129,158

COMMODITY CHARGE

409,940 units (100 CF) x \$ 2.55 = 1,045,347 (2,535,185)

REQUIRED REVENUE INCREASE (DECREASE) \$ (62,366)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -2.46%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 52,302

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 *
 \$ 2.55 x 97.54%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 2,472,819
NEW COMMODITY CHARGE		
409,940 x \$ 2.49		\$ 1,020,751
NEW MONTHLY BILLING CHARGE		
3,472 x \$ 3.41 x 12	142,074	(1,162,825)
		<u>\$ 1,309,994</u>

MONTHLY METER CHARGE = $\frac{\$1,309,994}{4,250 \times 12} = \underline{\underline{\$ 25.69 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 25.69	\$ 3.41	\$ 29.10	\$ 29.78
1"	1.7778	45.67	3.41	49.08	50.53
1 1/4"	2.7778	71.36	3.41	74.77	77.21
1 1/2"	4.0000	102.76	3.41	106.17	109.82
2"	7.1111	182.68	3.41	186.09	192.82
3"	16.0000	411.04	3.41	414.45	429.98
4"	28.4444	730.74	3.41	734.15	762.00
6" and over	64.0000	1,644.16	3.41	1,647.57	1,710.62

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 52,302

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

SYSTEM REVENUE REQUIREMENTS	\$	284,412
LESS: CASH CONTRIBUTION		<u>(18,295)</u>
SYSTEM REVENUE REQUIREMENTS	\$	<u>266,117</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
212 meter equivalents	x	\$ 32.93	x 12 = \$ 83,774
MONTHLY BILLING CHARGE			
124 meters	x	\$ 3.10	x 12 = 4,613
COMMODITY CHARGE			
18,049 units (100 CF)	x	\$ 11.43	= <u>206,300</u> <u>(294,687)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ (28,570)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u><u>-9.70%</u></u>

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 *
 \$ 11.43 x 90.30%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 266,117
NET OF CONTRIBUTION OF \$ 18,295		
NEW COMMODITY CHARGE		
18,049 x \$ 10.32	\$ 186,266	
NEW MONTHLY BILLING CHARGE		
124 x \$ 3.41 x 12	<u>5,074</u>	<u>(191,340)</u>
		<u>\$ 74,777</u>

MONTHLY METER CHARGE = $\frac{\$74,777}{212 \times 12} = \underline{\underline{\$ 29.39 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 29.39	\$ 3.41	\$ 32.80	\$ 36.03
1"	1.7778	52.25	3.41	55.66	61.64
1 1/4"	2.7778	81.64	3.41	85.05	94.57
1 1/2"	4.0000	117.56	3.41	120.97	134.82
2"	7.1111	209.00	3.41	212.41	237.27
3"	16.0000	470.24	3.41	473.65	529.98
4"	28.4444	835.98	3.41	839.39	939.77
6" and over	64.0000	1,880.96	3.41	1,884.37	2,110.62

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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

SYSTEM REVENUE REQUIREMENTS *	\$	257,383
LESS: CASH CONTRIBUTION		(5,000)
SYSTEM REVENUE REQUIREMENTS	\$	252,383

REVENUES FROM CURRENT RATES

REU CHARGE		
341.187 meter equivalents	x \$ 64.45	x 12 = \$ 263,874
MONTHLY METER CHARGE		
341.187 meter equivalents	x \$ -	x 12 = -
MONTHLY BILLING CHARGE		
229 meters	x \$ -	x 12 = -
COMMODITY CHARGE		
22,797 units (100 CF)	x \$ -	= <u> </u> - <u> </u> (263,874)
REQUIRED REVENUE INCREASE (DECREASE)		\$ (11,491)
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-4.35%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 36,975

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

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS **}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$252,383}{341.187 \times 12} = \$ \underline{\underline{61.64}} \quad \text{MONTHLY REU CHARGE *}$$

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	\$ 61.64	7.5000	\$ 462.30	19.0000	\$ 1,171.16
1.5000	92.46	8.0000	493.12	20.0000	1,232.80
2.0000	123.28	8.5000	523.94	25.0000	1,541.00
2.5000	154.10	9.0000	554.76	30.0000	1,849.20
3.0000	184.92	9.5000	585.58	35.0000	2,157.40
3.5000	215.74	10.0000	616.40	40.0000	2,465.60
4.0000	246.56	11.0000	678.04	50.0000	3,082.00
4.4000	271.22	12.0000	739.68	60.0000	3,698.40
4.5000	277.38	13.0000	801.32	70.0000	4,314.80
5.0000	308.20	14.0000	862.96	80.0000	4,931.20
5.5000	339.02	15.0000	924.60	90.0000	5,547.60
6.0000	369.84	16.0000	986.24	100.0000	6,164.00
6.5000	400.66	17.0000	1,047.88	150.0000	9,246.00
7.0000	431.48	18.0000	1,109.52	200.0000	12,328.00

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 36,975

CITY OF EAST GRAND RAPIDS, MICHIGAN

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	756,174
COMMODITY CHARGE			
	468.514 units	x	\$ 1,575.00
			737,910
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>18,264</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	21,311
MONTHLY SERVICE CHARGE			
	\$2,374	x	12 MONTHS
			28,488
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>(7,177)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>1.45%</u>

CITY OF EAST GRAND RAPIDS, MICHIGAN

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

SYSTEM REVENUE REQUIREMENTS	\$ 777,485
NEW COMMODITY CHARGE *	
468.514 x \$ 1,614.00 =	(756,182)
	<hr/>
	<u>\$ 21,303</u>

MONTHLY SERVICE CHARGE * = \$ 21,303 / 12 = \$1,775

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 643,683
COMMODITY CHARGE		
322.414 units x \$ 1,892.00		610,007
		610,007
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$ 33,676
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 585,783
MONTHLY SERVICE CHARGE		
\$16,514 x 12 MONTHS		198,168
		198,168
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$ 387,615
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		52.13%

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,229,466
NEW COMMODITY CHARGE *	
322.414 x \$ 1,996.00 =	(643,538)
	<hr/>
	<u>\$ 585,928</u>

MONTHLY SERVICE CHARGE * = \$585,928 / 12 = \$48,827

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	128,885
COMMODITY CHARGE			
94.689 units	x	\$	1,229.00
			116,373
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>12,512</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	17,818
MONTHLY SERVICE CHARGE			
\$2,146	x		12 MONTHS
			25,752
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>(7,934)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>3.22%</u>

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

SYSTEM REVENUE REQUIREMENTS	\$ 146,703
NEW COMMODITY CHARGE *	
94.689 x \$ 1,361.00 =	(128,872)
	<hr/>
	<u>\$ 17,831</u>

MONTHLY SERVICE CHARGE * = \$ 17,831 / 12 = \$1,486

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 7, 2010

TO: Linda Wagenmaker
Financial Analyst

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

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

Enclosed are the Front Foot Rates for Sanitary Sewer (Task 28) and the costs for Sanitary Sewer Laterals (Task 29), for the Fiscal Year 2010.

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>2010</u>	<u>2011</u>	<u>% Increase</u>
Domestic Sewer User	\$ 60.00	\$ 58.00	-3.33%
Commercial - Industrial User (Sewer over 8 in. diameter)	\$ 81.00	\$ 78.00	-3.70%

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, 2009 through June, 2010. 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>2010</u>	<u>2011</u>	<u>% Increase</u>
50 ft.	\$1,800	\$1,600	-11.11%
60 ft.	\$2,100	\$1,800	-14.29%
66 ft.	\$2,300	\$2,000	-13.04%
80 ft.	\$2,750	\$2,400	-12.73%
100 ft.	\$3,400	\$2,900	-14.71%

MEMORANDUM

CITY OF GRAND RAPIDS

Date: October 29, 2010

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	Rate Study Year 2010	Wastewater Surcharges						
		Volume	BOD	TSS	Phos	NH3	Industrial	Other
Operation & Maintenance (See Part 2)	\$ 24,905,066	\$ 3,654,836	\$ 3,973,594	\$ 4,517,435	\$ 456,509	\$ 442,905	\$ 612,001	\$ 11,247,786
Depreciation (See Part 3)	5,065,445	715,525	777,916	884,388	89,361	86,705	-	2,511,550
Return on System Investment (See Part 3)	9,762,211	871,791	947,809	1,077,534	108,877	105,641	-	6,650,559
Total	\$ 39,732,722	\$ 5,242,152	\$ 5,699,319	\$ 6,479,357	\$ 654,747	\$ 635,251	\$ 612,001	\$ 20,409,895

Recommended Surcharge Rate - 2011

\$ 0.239 \$ 0.323 \$ 1.079 \$ 0.318

Actual Surcharge Rate - 2010

\$ 0.231 \$ 0.285 \$ 1.160 \$ 0.298

Change in Surcharge Rate - Amount- 2010 to 2011

\$ 0.008 \$ 0.038 \$ (0.081) \$ 0.020

Change in Surcharge Rate - Percent- 2010 to 2011

3.46% 13.33% -6.98% 6.71%

Task No. 30 - Part 2

City of Grand Rapids Michigan
Sewage Disposal Systems Fund
Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
Allocation of Operation & Maintenance Expense & Determination of WWTP Allocation Factors

	Primary Allocation		Component Allocation (3)									
	Base Year- 2010 Allocation (1)	Calendar Year- 2011 Allocation (2)	Allocation Basis	Line No. Ref.	Volume	BOD	TSS	Phos	NH3	Industrial	Other	
Wastewater Treatment Plant												
Pre-Treatment	\$ 980,337	\$ 1,003,380	WWTP	(1)	\$ 1,003,380	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Primary Treatment	1,793,848	1,836,013	WWTP	(2)	-	550,804	1,101,608	-	183,601	-	-	
Secondary Treatment	2,905,137	2,973,423	WWTP	(3)	743,355	1,486,712	594,685	-	148,671	-	-	
Disinfection/Dechlorination	985,888	1,009,061	WWTP	(4)	1,009,061	-	-	-	-	-	-	
Phosphorus Removal	675,865	691,751	WWTP	(5)	345,875	-	345,876	-	-	-	-	
Residue Handling/Disposal	5,404,615	5,531,651	WWTP	(6)	553,165	1,936,078	2,821,142	110,633	110,633	-	-	
	\$ 12,745,690	\$ 13,045,279			\$ 3,654,836	\$ 3,973,594	\$ 4,517,435	\$ 442,905	\$ -	\$ -		
Lift Stations												
Interceptor		337,500	Collection	(11)	-	-	-	-	-	-	337,500	
Trunk		169,880	Collection	(11)	-	-	-	-	-	-	169,880	
Local Collector		484,141	Collection	(11)	-	-	-	-	-	-	484,141	
Sewer Lines												
Interceptor		265,202	Collection	(11)	-	-	-	-	-	-	265,202	
Trunk		534,419	Collection	(11)	-	-	-	-	-	-	534,419	
Local Collector		3,981,370	Collection	(11)	-	-	-	-	-	-	3,981,370	
Bulk Meter Stations		12,017	Collection	(7)	-	-	-	-	-	-	12,017	
Customer Accounting		3,030,509	Admin	(8)	-	-	-	-	-	-	3,030,509	
Industrial Pretreatment		612,001	Industry	(9)	-	-	-	-	-	612,001	-	
Subtotal	\$ 22,472,318	\$ 24,432,748			\$ 3,654,836	\$ 3,973,594	\$ 4,517,435	\$ 442,905	\$ 612,001	\$ 8,815,038		
Admin		2,432,748	Admin	(10)	-	-	-	-	-	-	2,432,748	
Total	\$ 24,905,066	\$ 28,017%			\$ 3,654,836	\$ 3,973,594	\$ 4,517,435	\$ 442,905	\$ 612,001	\$ 11,247,786		
WWTP Allocation Factors	100.000%	28.017%			30.460%	34.629%	3.499%	3.395%	0.000%	0.000%		

(1) Based on October 11, 2010 update from M Lunn regarding 2010 WWTP Surcharge Rate Evaluation.

(2) Primary Allocation of Current Year for Calendar 2011, based on 2010 Base Year.

(3) Refer to Task 30- Part 4 as noted.

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)	\$ 2,553,895	\$ 715,525	\$ 777,916	\$ 884,388	\$ 89,361	\$ 86,705	\$ -	\$ -	
Other	2,511,550	-	-	-	-	-	-	2,511,550	
Total	\$ 5,065,445	\$ 715,525	\$ 777,916	\$ 884,388	\$ 89,361	\$ 86,705	\$ -	\$ 2,511,550	

Return on System Investment- Task 21

Description	Amount	Volume	Wastewater Surcharges					Industrial	Other
			BOD	TSS	Phos	NH3			
Integrated System (1)	\$ 3,111,652	\$ 871,791	\$ 947,809	\$ 1,077,534	\$ 108,877	\$ 105,641	\$ -	\$ -	
Other	6,650,559	-	-	-	-	-	-	6,650,559	
Total	\$ 9,762,211	\$ 871,791	\$ 947,809	\$ 1,077,534	\$ 108,877	\$ 105,641	\$ -	\$ 6,650,559	

(1) Allocated on WWTP Allocation Factors *

28.0170% 30.4600% 34.6290% 3.4990% 3.3950%

* 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	Total %	Allocation Basis	Volume %	Wastewater Surcharges					Industrial %	Other %
					BOD %	TSS %	Phos %	NH3 %			
(1)	Pre-Treatment	100.000%	WWTP	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(2)	Primary Treatment	100.000%	WWTP	0.000%	30.000%	60.000%	0.000%	10.000%	0.000%	0.000%	0.000%
(3)	Secondary Treatment	100.000%	WWTP	25.000%	50.000%	20.000%	0.000%	5.000%	0.000%	0.000%	0.000%
(4)	Disinfection/Dechlorination	100.000%	WWTP	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(5)	Phosphorus Removal	100.000%	WWTP	50.000%	0.000%	0.000%	50.000%	0.000%	0.000%	0.000%	0.000%
(6)	Residue Handling/Disposal	100.000%	WWTP	10.000%	35.000%	51.000%	2.000%	2.000%	0.000%	0.000%	0.000%
(7)	Bulk Metering Stations	100.000%	Collection	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%
(8)	Customer Accounting	100.000%	Admin	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%
(9)	Industrial Pretreatment	100.000%	Industry	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%	0.000%
(10)	Admin	100.000%	Admin	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%
(11)	Collection System	100.000%	Collection	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%

(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 2010 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 2011 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: 10/15/2010

Permit Fee: \$ 400.00

IPP Costs:

Labor: \$ 57.57 per hour
Vehicle: \$ 3.39 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: \$ 781.76
Amount Due: \$ 1,181.76

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 \$ 3.39 = \$ 20.34

Total IPP Composite Costs: \$ 505.76

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: \$ 701.76

Grab Samples: 4

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
vehicle hours = 0.0 x \$ 3.39 = \$ -

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: \$ 781.76

Permit No: Example 2

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

Permit Fee: \$ 400.00
Analytical Fee: \$ 65.96
Amount Due: \$ 465.96

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.39 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(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: \$ -

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 \$ 3.39 = \$ 3.39

Total IPP Grab Costs: \$ 60.96

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 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: \$ 65.96

Total Analytical Permit Costs: \$ 65.96

Permit No: Example 3

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

Permit Fee: \$ 400.00
Analytical Fee: \$ 100.96
Amount Due: \$ 500.96

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.39 = \$ -

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 \$ 3.39 = \$ 3.39

Total IPP Grab Costs: \$ 60.96

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: \$ 100.96

Total Analytical Permit Costs: \$ 100.96

Permit No: Example 4

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

Permit Fee: \$ 400.00
Analytical Fee: \$ 67.96
Amount Due: \$ 467.96

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 3.39 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(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: \$ -

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 \$ 3.39 = \$ 3.39

Total IPP Grab Costs: \$ 60.96

Laboratory Analysis: metals 1 x \$ 7.00 = \$ 7.00
(each grab) 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: \$ 7.00

Total Grab Sample Costs: \$ 67.96

Total Analytical Permit Costs: \$ 67.96

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 14, 2010

TO: Linda Wagenmaker
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Hydraulic Engineer *C. Schroeder*

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

Sanitary Sewer Oversizing rates are established as follows:

<u>Description</u>	<u>Amount</u> <u>(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, 2011 through December 31, 2011. 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 Drv, NE. If you have any questions regarding this matter, please call me at extension 3690 (456-3690).

CRS

crs\task32 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 28, 2010:

UAB Partners	Sq. Miles of USD by CC	Percent
Grand Rapids	45.36	38.551%
Walker	20.17	17.143%
Kentwood	14.28	12.137%
Cascade	16.21	13.777%
Grand Rapids Township	7.79	6.621%
Tallmadge Township	2.44	2.074%
Wright Township	0.89	0.756%
East Grand Rapids	3.37	2.864%
Ada	7.15	6.077%
Total	117.66	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	\$ 95,995	12.50%
City & Customer Community Circuit Breaker	671,962	87.50%
Total	<u>\$ 767,957</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	\$ 671,962	100.00%
Less: Amount Applied in Current Rate Study	(428,344)	-63.75%
Total Revenue Credit- Next Year's Rate Study	<u>\$ 243,618</u>	<u>36.25%</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 /MG</u>	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 \$/year</u>	
	<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 ⁵
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 \$/home/not removed</u>	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 \$/yr/cust.</u>	

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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INTRODUCTION OF RATE ORDINANCES

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 8, 2010

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2010 WATER/SEWER RATE REVIEW - PRELIMINARY REPORT

The preliminary report, recommending water and sewer rates as of January 1, 2011 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 \$158,006 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 Kentwood, Cascade Township, Grand Rapids Township and Wright Township.

Proposed 2011 water rates reflect decreased tank maintenance costs and increases for contractual services related to Comprehensive Master Plan work and the new Customer Information System. Proposed 2011 sewer rates reflect increases for Saddleback sewer project work and decreases for contractual large sewer cleaning, claims due to wet weather and the judgment awarded in the CTE lawsuit. Both systems saw decreases as a result of application of the new contract provisions of the fourth amendment to the uniform service agreements which use a 3 year average to smooth billed flow, and also reduced the rate of return on zoned fixed assets to The Bond Buyer Index of 20 Municipal Bonds plus 4.5% per annum (from 6%). These new contract provisions were recommended by the UAB Rate Review Sub-committee in response to interests expressed by the City and its partner communities.

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

1. Water Supply System revenue requirements will decrease \$2,753,885 or 6.27% less than revenues generated by existing rates and charges.
2. Sewage Disposal System revenue requirements will decrease \$1,694,027 or 3.3% less than revenues generated by existing rates and charges.

Attached is a schedule of comparative 2010/2011 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 2010/2011 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 2011 water and sewer rates to our UAB partners and other customer communities is scheduled for Friday, November 12, 2010. 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 21, 2010.

Resolutions are being prepared providing for publication of proposed ordinances amending the Water and Sewer Rates and Charges and establish December 7, 2010 as the date for public hearing and December 21, 2010 to consider adoption of the proposed ordinances.

LW

Attachment

TWater\Accountant\Rate Study\WSRS\10Prelim-Cover Memo.doc

**CITY OF GRAND RAPIDS, MICHIGAN
2010 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
November 8, 2010**

	APPROXIMATE QUARTERLY BILL		CHANGE	
	2010	2011	DOLLARS	PERCENT
GRAND RAPIDS				
WATER	\$ 75.69	\$ 71.79	\$ (3.90)	-5.15%
SEWER	101.04	95.61	(5.43)	-5.37%
	<u>\$ 176.73</u>	<u>\$ 167.40</u>	<u>\$ (9.33)</u>	-5.28%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 80.13	\$ 75.90	\$ (4.23)	-5.28%
SEWER	142.53	138.96	(3.57)	-2.50%
	<u>\$ 222.66</u>	<u>\$ 214.86</u>	<u>\$ (7.80)</u>	-3.50%
RATIO TO GR	1.26	1.28		
KENTWOOD				
WATER	\$ 92.67	\$ 86.13	\$ (6.54)	-7.06%
SEWER	62.10	61.14	(0.96)	-1.55%
	<u>\$ 154.77</u>	<u>\$ 147.27</u>	<u>\$ (7.50)</u>	-4.85%
RATIO TO GR	0.88	0.88		
CASCADE TWP				
WATER	\$ 127.02	\$ 114.09	\$ (12.93)	-10.18%
SEWER	142.17	139.05	(3.12)	-2.19%
	<u>\$ 269.19</u>	<u>\$ 253.14</u>	<u>\$ (16.05)</u>	-5.96%
RATIO TO GR	1.52	1.51		
GRAND RAPIDS TWP				
WATER	\$ 100.74	\$ 92.64	\$ (8.10)	-8.04%
SEWER	135.24	132.12	(3.12)	-2.31%
	<u>\$ 235.98</u>	<u>\$ 224.76</u>	<u>\$ (11.22)</u>	-4.75%
RATIO TO GR	1.34	1.34		
TALLMADGE TWP				
WATER	\$ 124.38	\$ 116.70	\$ (7.68)	-6.17%
SEWER	313.83	303.42	(10.41)	-3.32%
	<u>\$ 438.21</u>	<u>\$ 420.12</u>	<u>\$ (18.09)</u>	-4.13%
RATIO TO GR	2.48	2.51		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER QUARTERLY CONSUMPTION OF : WATER- 24.00 UNITS OR 17,952 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 25 and 18 units, respectively).

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

WRIGHT TWP- Contribution of \$17,000 for 2010, \$0 for 2011.

SEWER (No. of REU 1.00)	<u>\$ 193.35</u>	<u>\$ 188.58</u>	<u>\$ (4.77)</u>	-2.47%
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**CITY OF GRAND RAPIDS, MICHIGAN
 2010 PRELIMINARY WATER/SEWER RATE STUDY
 IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
 November 8, 2010**

	<u>2010</u>	<u>2011</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$ 18,821.00	\$ 16,119.00	-14.36%
- COMMODITY (100 CF)	1.27	1.19	-6.30%
SEWER - SERVICE (MONTHLY)	2,374.00	1,775.00	-25.23%
- COMMODITY (MG)	1,575.00	1,614.00	2.48%
ADA TWP			
WATER - SERVICE	\$ 44,124.00	\$ 35,517.00	-19.51%
- COMMODITY	1.36	1.30	-4.41%
SEWER - SERVICE	16,514.00	48,827.00	195.67%
- COMMODITY	1,892.00	1,996.00	5.50%
OTTAWA COUNTY			
WATER - SERVICE	\$ -	\$ -	N/A
- COMMODITY	1.34	1.28	-4.48%
GAINES TWP			
SEWER - SERVICE	\$ 2,146.00	\$ 1,486.00	-30.75%
- COMMODITY	1,229.00	1,361.00	10.74%

*79856 Com. Kelly, supported by Com. Gutowski, moved adoption of the following resolution under the Consent Agenda:

RESOLVED that the following Ordinance to amend Sections 2.34, 2.35, 2.40, 2.41 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 7, 2010, 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 21, 2010.

**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. 2010-
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: \$53.00;

(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: \$80.00.

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:

<u>Integrated Water Connection Base Fee Schedule</u>	
Water Meter	
(or equivalent)	
<u>Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$ 2,680
1	4,480
1 ½	8,920
2	14,280
3	31,280
4	56,280
6 and over	125,080

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.

	<u>Commodity Rate</u>
Domestic	\$1.72 per 100 cubic feet
Commercial	\$1.72 per 100 cubic feet
Industrial	\$1.72 per 100 cubic feet
	<u>Monthly Service Charge</u>
<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$ 10.17
1 inch	15.12
1 1/4 inch	21.48
1 1/2 inch	29.25
2 inches	49.04
3 inches	105.57
4 inches	184.72
6 inches or larger	410.85"

Section 4. That Section 2.41 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.41 Fire Protection Charge.

The fire protection charge is a flat fee for fire protection based on the size of the fire protection connection pipe. The charge is payable in advance and shall be:

Fire Connection		
Pipe Size (inches)	Monthly	Quarterly
6	\$16.00	\$48.00
8	28.40	85.20
10	44.48	133.44
12	64.00	192.00"

Section 5. 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, 2.40 and 2.41 shall be effective on January 1, 2011."

* 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 16, 2010.



Lauri S. Parks, City Clerk

*79857 Com. Kelly, supported by Com. Gutowski, moved adoption of the following resolution under the Consent Agenda:

RESOLVED that the following Ordinance to amend Sections 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 7, 2010, 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 21, 2010.

**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. 2010-**

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: \$58.00;

(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: \$78.00.

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:

<u>Integrated Sewer Connection Base Fee Schedule</u>	
Water Meter (or equivalent)	
<u>Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$ 2,680
1	4,480
1 ½	8,920
2	14,280
3	31,280
4	56,280
6 and over	125,080

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	\$3.26 per 100 cubic feet
Commercial	\$3.26 per 100 cubic feet
Industrial	\$3.26 per 100 cubic feet
	<u>Monthly Service Charge</u>
<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$ 12.31
1 inch	19.23
1 1/4 inches	28.13
1 1/2 inches	39.01
2 inches	66.70
3 inches	145.81
4 inches	256.57
6 inches or larger	573.01"

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-three and nine-tenth cents (\$0.239) per pound of BOD and thirty-two and three-tenth cents (\$0.323) per pound of TSS and one dollar and seven and nine-tenth cents (\$1.079) 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-one and eight-tenth cents (\$0.318) 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	3.39 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, 2011.”

* 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 16, 2010.



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 27, 2010

Customer Name:

CITY OF GRAND RAPIDS RTL

Sheryl L DeVriendt
Sheryl L DeVriendt

Subscribed and sworn to before me this 1st day of December A.D. 2010

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 2011

will be held at 7:00 p.m. on Tuesday, December 7, 2010, 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 2010 Rate Study" report, which is the basis for recommending rates to become effective January 1, 2011 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 7, 2010.

5228904-01

2.00

Affidavit \$ 0.00

Words/Lines \$ 112.00

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

IN THE MATTER OF

CITY OF GRAND RAPIDS RTL
CITY CLERK'S OFFICE
CITY HALL
GRAND RAPIDS MI 49503

Received and filed this 1st day of December A.D. 2010

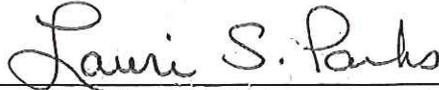
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PUBLIC HEARINGS - GRAND RAPIDS ORDINANCES

79943 Pursuant to Commission File No. 79856, dated November 16, 2010, a public hearing was held on this date to consider an Ordinance to amend various Sections of Chapter 26 of Title II of the City Code – 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 7, 2010.



Lauri S. Parks, City Clerk

79944 Pursuant to Commission File No. 79857, dated November 16, 2010, a public hearing was held on this date to consider an Ordinance to amend various Sections of Chapter 27 of Title II of the City Code – 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 7, 2010.

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

79958 An Ordinance to amend Chapter 26 of the City Code amending Water Rates and Charges was presented to the City Commission on November 16, 2010 under File No. 79856 and a hearing was held on December 7, 2010 under File No. 79943. The aforementioned ordinance shall be considered for adoption

Com. Kelly, supported by Com. Bliss, moved adoption of 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. 2010-72

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: \$53.00;
 - (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: \$80.00.

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	\$ 2,680
1	4,480
1 1/2	8,920
2	14,280
3	31,280
4	56,280
6 and over	125,080

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 forgoing 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.

	<u>Commodity Rate</u>	
Domestic		\$1.72 per 100 cubic feet
Commercial		\$1.72 per 100 cubic feet
Industrial		\$1.72 per 100 cubic feet

	<u>Monthly Service Charge</u>	
<u>Size of Meter</u>		<u>Charge</u>
3/4 inch or less		\$ 10.17
1 inch		15.12
1 1/4 inch		21.48
1 1/2 inch		29.25
2 inches		49.04
3 inches		105.57
4 inches		184.72
6 inches or larger		410.85"

Section 4. That Section 2.41 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.41 Fire Protection Charge.

The fire protection charge is a flat fee for fire protection based on the size of the fire protection connection pipe. The charge is payable in advance and shall be:

Fire Connection			
Pipe (inches)	Size	Monthly	Quarterly
6		\$16.00	\$ 48.00
8		28.40	85.20
10		44.48	133.44
12		64.00	192.00"

Section 5. 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.

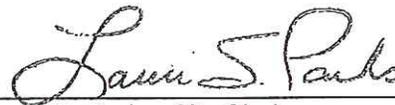
The rates, charges and fees set forth in Section 2.34, 2.35, 2.40 and 2.41 shall be effective on January 1, 2011."

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

Com. Kelly, supported by Com. Bliss, moved that the appropriation 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 21, 2010.



Lauri S. Parks, City Clerk

79959 An Ordinance to amend Chapter 27 of the City Code amending Sewer Rates and Charges was presented to the City Commission on November 16, 2010 under File No. 79857 and a hearing was held on December 7, 2010 under File No. 79944. The aforementioned ordinance shall be considered for adoption.

Com. Kelly, supported by Com. Gutowski, moved adoption of 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. 2010-73

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: \$58.00;
 - (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: \$78.00.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	\$ 2,680
1	4,480
1 1/2	8,920
2	14,280
3	31,280
4	56,280
6 and over	125,080

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 forgoing 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		\$3.26 per 100 cubic feet
Commercial		\$3.26 per 100 cubic feet
Industrial		\$3.26 per 100 cubic feet

	<u>Monthly Service Charge</u>	
<u>Size of Meter</u>		<u>Charge</u>
3/4 inch or less		\$ 12.31
1 inch		19.23
1 1/4 inches		28.13
1 1/2 inches		39.01
2 inches		66.70
3 inches		145.81
4 inches		256.57
6 inches or larger		573.01"

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-

three and nine-tenth cents (\$0.239) per pound of BOD and thirty two and three-tenth cents (\$0.323) per pound of TSS and one dollar and seven and nine-tenth cents (\$1.079) 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 one and eight-tenth cents (\$0.318) 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	3.39	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.

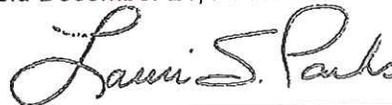
The rates, charges and fees set forth in Section 2.95, 2.96, 2.101 and 2.102 shall be effective on January 1, 2011."

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

Com. Kelly, supported by Com. Bliss, moved that the appropriation 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 21, 2010.



Lauri S. Parks, City Clerk

INTRODUCTION OF RESOLUTION APPROVING CUSTOMER COMMUNITIES' RATES

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: December 14, 2010

TO: Eric DeLong
Deputy City Manager

FROM: Linda Wagenmaker *LW*
Utility Financial Officer

SUBJECT: 2011 CUSTOMER COMMUNITY WATER-SEWER RATES

The 2010 Preliminary Water-Sewer Rate Study recommended water and sewer rate adjustments as of January 1, 2011 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 12, 2010. The water-sewer service agreements provide customer communities a thirty-day comment period following notification of rate adjustments. Wright Township has elected to contribute \$5,000 and Tallmadge Township has elected to contribute \$18,295 to reduce sewer rates effective January 1, 2011. In summary, Water Supply System revenue requirements reflect a decrease of \$2,753,885 or 6.27% less than revenues generated by existing rates and charges, and Sewage Disposal System revenue requirements reflect a decrease of \$1,717,322 or 3.34% less 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 2011. 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 2010 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 2009, and,

WHEREAS, The 2010 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2009 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, 2011.

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
2010 FINAL RATE STUDY
SUMMARY OF WATER REVENUE REQUIREMENT CHANGES
December 14, 2010

	TOTAL REVENUE REQUIREMENTS- HISTORICAL METHOD	CHANGE IN REVENUE REQUIREMENTS FOR PENALTY FEES	TOTAL INITIAL REVENUE REQUIREMENTS- NEW METHOD	DECREASE IN REVENUE REQUIREMENTS- APPLICATION OF CITY-COMM. CIRCUIT BRKR	LESS: CUSTOMER COMMUNITY CONTRIBUTIONS	TOTAL REVENUE REQUIREMENTS- NEW METHOD	TOTAL PROJECTED REVENUE-PER CURRENT RATES	CHANGE	PERCENT
	\$	AMOUNT	\$	\$	\$	\$	\$	AMOUNT	PERCENT
GRAND RAPIDS	24,863,973	225,735	24,889,708	(256,509)	-	24,633,199	26,025,567	(1,392,368)	-5.35%
WALKER	3,365,171	47,180	3,412,351	(135,318)	-	3,277,033	3,462,264	(185,231)	-5.35%
KENTWOOD	4,198,764	97,258	4,296,022	-	-	4,296,022	4,623,558	(327,536)	-7.08%
CASCADE TWP	3,095,074	75,246	3,170,320	-	-	3,170,320	3,523,770	(353,450)	-10.03%
GRAND RAPIDS TWP	2,196,694	37,514	2,234,208	-	-	2,234,208	2,434,247	(200,039)	-8.22%
TALLMADGE TWP	146,286	2,889	149,175	(9,171)	-	140,004	147,918	(7,914)	-5.35%
EAST GRAND RAPIDS	912,857	2,760	915,617	-	-	915,617	996,597	(80,980)	-8.13%
ADA TWP	1,325,807	3,601	1,329,408	-	-	1,329,408	1,474,383	(144,975)	-9.83%
OTTAWA COUNTY	1,200,392	3,904	1,204,296	-	-	1,204,296	1,265,688	(61,392)	-4.85%
SYSTEM	\$ 41,105,018	\$ 496,087	\$ 41,601,105	\$ (400,988)	\$ -	\$ 41,200,107	\$ 43,953,992	\$ (2,753,885)	-6.27%

SUMMARY OF CIRCUIT BREAKER

CITY/COMMUNITY CB	\$ 434,076
INDIVIDUAL CB	62,011
TOTAL	\$ 496,087
CITY/COMMUNITY CB	\$ 434,076
LESS: AMT USED NEXT YR CR.	(400,988)
	\$ 33,078

SUMMARY OF SYSTEM CHANGE

TOTAL INITIAL REVENUE REQUIREMENTS	\$ 41,601,105
LESS: PROJECTED REVENUES	(43,953,992)
TOTAL INITIAL CHANGE-AMOUNT	\$ (2,352,887)
TOTAL INITIAL CHANGE-PERCENT	-5.35%

CITY OF GRAND RAPIDS, MICHIGAN
2010 FINAL RATE STUDY
SUMMARY OF SEWER REVENUE REQUIREMENT CHANGES
December 14, 2010

	TOTAL REVENUE REQUIREMENTS- HISTORICAL METHOD (BEFORE CIRCUIT BREAKER)	CHANGE IN REVENUE REQUIREMENTS FOR PENALTY FEES	TOTAL INITIAL REVENUE REQUIREMENTS- NEW METHOD	DECREASE IN REVENUE REQUIREMENTS- APPLICATION OF CITY- COMM. CIRCUIT BRKR	LESS: CUSTOMER COMMUNITY CONTRIBUTIONS	TOTAL REVENUE REQUIREMENTS- NEW METHOD	TOTAL PROJECTED REVENUE- PER CURRENT RATES	CHANGE	PERCENT
	\$	AMOUNT	\$	\$	\$	\$	\$	AMOUNT	PERCENT
GRAND RAPIDS	33,406,164	623,509	34,029,673	-	-	34,029,673	35,803,315	(1,773,642)	-4.95%
WALKER	4,886,538	54,251	4,940,789	-	-	4,940,789	5,079,412	(138,623)	-2.73%
KENTWOOD	3,678,790	41,507	3,720,297	(280,011)	-	3,440,286	3,527,051	(86,765)	-2.46%
CASCADE TWP	2,138,749	14,681	2,153,430	(59,056)	-	2,094,374	2,147,195	(52,821)	-2.46%
GRAND RAPIDS TWP	2,489,866	35,255	2,525,121	(52,302)	-	2,472,819	2,535,185	(62,366)	-2.46%
TALLMADGE TWP	283,531	881	284,412	-	(18,295)	266,117	294,687	(28,570)	-9.70%
WRIGHT TWP	292,189	2,169	294,358	(36,975)	(5,000)	252,383	263,874	(11,491)	-4.35%
EAST GRAND RAPIDS	779,557	(2,072)	777,485	-	-	777,485	766,398	11,087	1.45%
ADA TWP	1,231,309	(1,843)	1,229,466	-	-	1,229,466	808,175	421,291	52.13%
GAINES TWP	147,084	(381)	146,703	-	-	146,703	142,125	4,578	3.22%
SYSTEM	49,333,777	767,957	50,101,734	(428,344)	(23,295)	49,650,095	51,367,417	(1,717,322)	-3.34%

SUMMARY OF CIRCUIT BREAKER

CITY/COMMUNITY CB	\$ 671,962	CITY/COMMUNITY CB	\$ 671,962
INDIVIDUAL CB	95,995	LESS: AMT USED	(428,344)
TOTAL	\$ 767,957	NEXT YR CR.	\$ 243,618

SUMMARY OF SYSTEM CHANGE

TOTAL INITIAL REVENUE REQUIREMENTS	\$ 50,101,734
LESS: PROJECTED REVENUES	(51,367,417)
TOTAL INITIAL CHANGE-AMOUNT	\$ (1,265,683)
TOTAL INITIAL CHANGE-PERCENT	-2.46%

Page has been removed from the published Rate Study.

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APPROVAL OF CUSTOMER COMMUNITIES' RATES

*79984 Com. Shaffer, supported by Com. Kelly, 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 2009, and,

WHEREAS, The 2010 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2009 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, 2011.

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 21, 2010.



Lauri S. Parks, City Clerk

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December 28, 2010

Ms. Sarah Bydalek, City Clerk
City of Walker
4243 Remembrance Road NW
Grand Rapids, MI 49504

Dear Sarah:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 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/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CITY OF WALKER, MICHIGAN

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.61 /100 CF *
 \$ 1.70 x 94.65%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 3,277,033
NEW COMMODITY CHARGE		
1,287,661 x \$ 1.61	\$ 2,073,134	
NEW MONTHLY BILLING CHARGE		
6,006 x \$ 3.81 x 12	274,594	
MONTHLY FIRE PROTECTION CHARGE	88,992	
ANNUAL HYDRANT CHARGE	-	(2,436,720)
		<u>\$ 840,313</u>

MONTHLY METER CHARGE = $\frac{\$840,313}{8,135 \times 12} = \underline{\underline{\$ 8.61 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 8.61	\$ 3.81	\$ 12.42	\$ 13.11
1"	1.7778	15.31	3.81	19.12	20.40
1 1/4"	2.7778	23.92	3.81	27.73	29.77
1 1/2"	4.0000	34.44	3.81	38.25	41.22
2"	7.1111	61.23	3.81	65.04	70.37
3"	16.0000	137.76	3.81	141.57	153.66
4"	28.4444	244.91	3.81	248.72	270.26
6" and over	64.0000	551.04	3.81	554.85	603.42

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 135,318

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.70 /100 CF *
 \$ 2.78 x 97.27%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 4,940,789
NEW COMMODITY CHARGE		
896,626 x \$ 2.70		\$ 2,420,890
NEW MONTHLY BILLING CHARGE		
5,499 x \$ 3.41 x 12	225,019	(2,645,909)
		\$ 2,294,880

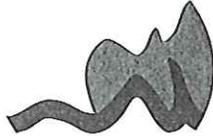
MONTHLY METER CHARGE = $\frac{\$2,294,880}{7,159 \times 12} = \underline{\underline{\$ 26.71 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 26.71	\$ 3.41	\$ 30.12	\$ 30.83
1"	1.7778	47.49	3.41	50.90	52.40
1 1/4"	2.7778	74.20	3.41	77.61	80.13
1 1/2"	4.0000	106.84	3.41	110.25	114.02
2"	7.1111	189.94	3.41	193.35	200.29
3"	16.0000	427.36	3.41	430.77	446.78
4"	28.4444	759.75	3.41	763.16	791.86
6" and over	64.0000	1,709.44	3.41	1,712.85	1,777.82

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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CITY CLERK



CITY OF GRAND RAPIDS

December 28, 2010

Mr. Dan Kasunic, Clerk
City of Kentwood
4900 Breton Avenue SE
Kentwood, MI 49518-8848

Dear Dan:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 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/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CITY OF KENTWOOD, MICHIGAN

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.63 /100 CF *
 \$ 1.75 x 92.92%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 4,296,022
NEW COMMODITY CHARGE		
1,667,433 x \$ 1.63		\$ 2,717,916
NEW MONTHLY BILLING CHARGE		
4,703 x \$ 3.81 x 12		215,021
MONTHLY FIRE PROTECTION CHARGE		158,544
ANNUAL HYDRANT CHARGE		<u>-</u>
		<u>(3,091,481)</u>
		<u>\$ 1,204,541</u>

MONTHLY METER CHARGE = $\frac{\$1,204,541}{8,466 \times 12}$ = \$ 11.86 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 11.86	\$ 3.81	\$ 15.67	\$ 16.89
1"	1.7778	21.08	3.81	24.89	27.12
1 1/4"	2.7778	32.94	3.81	36.75	40.27
1 1/2"	4.0000	47.44	3.81	51.25	56.34
2"	7.1111	84.34	3.81	88.15	97.25
3"	16.0000	189.76	3.81	193.57	214.14
4"	28.4444	337.35	3.81	341.16	377.78
6" and over	64.0000	759.04	3.81	762.85	845.34

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.27 /100 CF *
 \$ 2.33 x 97.54%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 3,440,286
NEW COMMODITY CHARGE		
1,302,112 x \$ 2.27		\$ 2,955,794
NEW MONTHLY BILLING CHARGE		
4,379 x \$ 3.41 x 12	<u>179,189</u>	<u>(3,134,983)</u>
		<u>\$ 305,303</u>

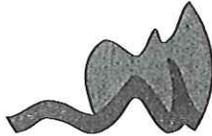
MONTHLY METER CHARGE = $\frac{\$305,303}{7,602 \times 12} = \underline{\underline{\$ 3.35 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 3.35	\$ 3.41	\$ 6.76	\$ 6.72
1"	1.7778	5.96	3.41	9.37	9.54
1 1/4"	2.7778	9.31	3.41	12.72	13.16
1 1/2"	4.0000	13.40	3.41	16.81	17.58
2"	7.1111	23.82	3.41	27.23	28.84
3"	16.0000	53.60	3.41	57.01	61.02
4"	28.4444	95.29	3.41	98.70	106.07
6" and over	64.0000	214.40	3.41	217.81	234.78

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 280,011

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December 28, 2010

Mr. Ronald Goodyke, Clerk
Cascade Charter Township
2865 Thornhills SE
Grand Rapids, MI 49546-7192

Dear Mr. Goodyke:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 Cascade Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

A handwritten signature in black ink that reads "Lauri S. Parks". The signature is written in a cursive, flowing style.

Lauri S. Parks
City Clerk

LSP/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
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 \$ 2.17 /100 CF *
 \$ 2.41 x 89.97%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 3,170,320
NEW COMMODITY CHARGE	
883,388 x \$ 2.17	\$ 1,916,952
NEW MONTHLY BILLING CHARGE	
3,094 x \$ 3.81 x 12	141,458
MONTHLY FIRE PROTECTION CHARGE	83,520
ANNUAL HYDRANT CHARGE	<u>38,960</u>
	<u>(2,180,890)</u>
	<u>\$ 989,430</u>

MONTHLY METER CHARGE = $\frac{\$989,430}{4,889 \times 12} = \underline{\underline{\$ 16.86 \text{ MONTHLY}}}$

<u>METER SIZE</u>	<u>EQUIVALENT</u>	<u>MONTHLY SERVICE CHARGE</u>			<u>PRESENT</u>
		<u>METER</u>	<u>BILLING</u>	<u>TOTAL</u>	
3/4" or less	1.0000	\$ 16.86	\$ 3.81	\$ 20.67	\$ 23.06
1"	1.7778	29.97	3.81	33.78	38.09
1 1/4"	2.7778	46.83	3.81	50.64	57.41
1 1/2"	4.0000	67.44	3.81	71.25	81.02
2"	7.1111	119.89	3.81	123.70	141.13
3"	16.0000	269.76	3.81	273.57	312.86
4"	28.4444	479.57	3.81	483.38	553.29
6" and over	64.0000	1,079.04	3.81	1,082.85	1,240.22

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.55 /100 CF *
 \$ 2.61 x 97.54%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 2,094,374
NEW COMMODITY CHARGE 425,796 x \$ 2.55	\$ 1,085,780
NEW MONTHLY BILLING CHARGE 1,691 x \$ 3.41 x 12	<u>69,196</u> (1,154,976)
	<u>\$ 939,398</u>

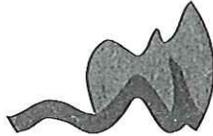
MONTHLY METER CHARGE = $\frac{\$939,398}{2,832 \times 12} = \underline{\underline{\$ 27.64 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 27.64	\$ 3.41	\$ 31.05	\$ 31.73
1"	1.7778	49.14	3.41	52.55	54.00
1 1/4"	2.7778	76.78	3.41	80.19	82.63
1 1/2"	4.0000	110.56	3.41	113.97	117.62
2"	7.1111	196.55	3.41	199.96	206.69
3"	16.0000	442.24	3.41	445.65	461.18
4"	28.4444	786.20	3.41	789.61	817.46
6" and over	64.0000	1,768.96	3.41	1,772.37	1,835.42

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 59,056

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December 28, 2010

Ms. Janice Hulbert, Clerk
Grand Rapids Charter Township
1836 East Beltline NE
Grand Rapids, MI 49525

Dear Janice:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 Grand Rapids 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/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
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 \$ 1.85 /100 CF *
 \$ 2.02 x 91.78%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 2,234,208
NEW COMMODITY CHARGE		
705,406 x \$ 1.85		\$ 1,305,001
NEW MONTHLY BILLING CHARGE		
3,885 x \$ 3.81 x 12		177,622
MONTHLY FIRE PROTECTION CHARGE		26,316
ANNUAL HYDRANT CHARGE		<u>-</u>
		<u>(1,508,939)</u>
		<u>\$ 725,269</u>

MONTHLY METER CHARGE = $\frac{\$725,269}{4,926 \times 12} = \underline{\underline{\$ 12.27 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 12.27	\$ 3.81	\$ 16.08	\$ 17.42
1"	1.7778	21.81	3.81	25.62	28.06
1 1/4"	2.7778	34.08	3.81	37.89	41.74
1 1/2"	4.0000	49.08	3.81	52.89	58.46
2"	7.1111	87.25	3.81	91.06	101.02
3"	16.0000	196.32	3.81	200.13	222.62
4"	28.4444	349.01	3.81	352.82	392.86
6" and over	64.0000	785.28	3.81	789.09	879.26

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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 *
 \$ 2.55 x 97.54%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 2,472,819
NEW COMMODITY CHARGE		
409,940 x \$ 2.49		\$ 1,020,751
NEW MONTHLY BILLING CHARGE		
3,472 x \$ 3.41 x 12	142,074	(1,162,825)
		<u>\$ 1,309,994</u>

MONTHLY METER CHARGE = $\frac{\$1,309,994}{4,250 \times 12} = \underline{\underline{\$ 25.69 \text{ MONTHLY}}}$

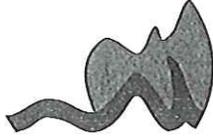
METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 25.69	\$ 3.41	\$ 29.10	\$ 29.78
1"	1.7778	45.67	3.41	49.08	50.53
1 1/4"	2.7778	71.36	3.41	74.77	77.21
1 1/2"	4.0000	102.76	3.41	106.17	109.82
2"	7.1111	182.68	3.41	186.09	192.82
3"	16.0000	411.04	3.41	414.45	429.98
4"	28.4444	730.74	3.41	734.15	762.00
6" and over	64.0000	1,644.16	3.41	1,647.57	1,710.62

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 52,302

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CITY CLERK



CITY OF GRAND RAPIDS

December 28, 2010

Ms. Lenore Cook, Clerk
Tallmadge Township Offices
0-1451 Leonard Street NW
Grand Rapids, MI 49504

Dear Ms. Cook:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 Tallmadge 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/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

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 *
\$ 4.05 x 94.65%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 140,004
NEW COMMODITY CHARGE 25,474 x \$ 3.83	\$	97,565
NEW MONTHLY BILLING CHARGE 137 x \$ 3.81 x 12		6,264
MONTHLY FIRE PROTECTION CHARGE		7,020
ANNUAL HYDRANT CHARGE		<u>16,704</u>
		<u>(127,553)</u>
		<u>\$ 12,451</u>

MONTHLY METER CHARGE = $\frac{\$12,451}{233 \times 12}$ = \$ 4.45 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 4.45	\$ 3.81	\$ 8.26	\$ 9.06
1"	1.7778	7.91	3.81	11.72	13.20
1 1/4"	2.7778	12.36	3.81	16.17	18.52
1 1/2"	4.0000	17.80	3.81	21.61	25.02
2"	7.1111	31.64	3.81	35.45	41.57
3"	16.0000	71.20	3.81	75.01	88.86
4"	28.4444	126.58	3.81	130.39	155.06
6" and over	64.0000	284.80	3.81	288.61	344.22

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011
** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 9,171

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 *
 \$ 11.43 x 90.30%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS		\$ 266,117
NET OF CONTRIBUTION OF \$ 18,295		
NEW COMMODITY CHARGE		
18,049 x \$ 10.32	\$ 186,266	
NEW MONTHLY BILLING CHARGE		
124 x \$ 3.41 x 12	<u>5,074</u>	<u>(191,340)</u>
		<u>\$ 74,777</u>

MONTHLY METER CHARGE = $\frac{\$74,777}{212 \times 12} = \underline{\underline{\$ 29.39 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 29.39	\$ 3.41	\$ 32.80	\$ 36.03
1"	1.7778	52.25	3.41	55.66	61.64
1 1/4"	2.7778	81.64	3.41	85.05	94.57
1 1/2"	4.0000	117.56	3.41	120.97	134.82
2"	7.1111	209.00	3.41	212.41	237.27
3"	16.0000	470.24	3.41	473.65	529.98
4"	28.4444	835.98	3.41	839.39	939.77
6" and over	64.0000	1,880.96	3.41	1,884.37	2,110.62

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2011

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December 28, 2010

Ms. Linda Way, Township Clerk
Wright Township
1565 Jackson
P.O. Box 255
Marne, MI 49435

Dear Ms. Way:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 schedule 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/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

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

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS **}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$252,383}{341.187 \times 12} = \$ \underline{\underline{61.64}} \quad \text{MONTHLY REU CHARGE *}$$

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	\$ 61.64	7.5000	\$ 462.30	19.0000	\$ 1,171.16
1.5000	92.46	8.0000	493.12	20.0000	1,232.80
2.0000	123.28	8.5000	523.94	25.0000	1,541.00
2.5000	154.10	9.0000	554.76	30.0000	1,849.20
3.0000	184.92	9.5000	585.58	35.0000	2,157.40
3.5000	215.74	10.0000	616.40	40.0000	2,465.60
4.0000	246.56	11.0000	678.04	50.0000	3,082.00
4.4000	271.22	12.0000	739.68	60.0000	3,698.40
4.5000	277.38	13.0000	801.32	70.0000	4,314.80
5.0000	308.20	14.0000	862.96	80.0000	4,931.20
5.5000	339.02	15.0000	924.60	90.0000	5,547.60
6.0000	369.84	16.0000	986.24	100.0000	6,164.00
6.5000	400.66	17.0000	1,047.88	150.0000	9,246.00
7.0000	431.48	18.0000	1,109.52	200.0000	12,328.00

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 36,975



December 28, 2010

Ms. Karen Brower, Clerk
City of East Grand Rapids
750 Lakeside Drive SE
East Grand Rapids, MI 49506

Dear Karen:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
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	\$ 915,617
NEW COMMODITY CHARGE *	
606,886 x \$1.19 =	(722,194)
	<hr/>
	<u>\$ 193,423</u>

MONTHLY SERVICE CHARGE * = \$ 193,423 / 12 = \$16,119

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

CITY OF EAST GRAND RAPIDS, MICHIGAN

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

SYSTEM REVENUE REQUIREMENTS	\$ 777,485
NEW COMMODITY CHARGE *	
468.514 x \$ 1,614.00 =	(756,182)
	<hr/>
	<u>\$ 21,303</u>

MONTHLY SERVICE CHARGE * = \$ 21,303 / 12 = \$1,775

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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December 28, 2010

Ms. Susan Burton, Clerk
Ada Township
7330 Thornapple River Drive
P.O. Box 370
Ada, MI 49301

Dear Susan:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 Ada Township are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

A handwritten signature in black ink that reads "Lauri S. Parks". The signature is written in a cursive, flowing style.

Lauri S. Parks
City Clerk

LSP/slz

Enclosures

cc: Scott Buhrer, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

ADA TOWNSHIP

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,329,408
NEW COMMODITY CHARGE *	
694,776 x \$1.30 =	(903,209)
	<hr/>
	<u>\$ 426,199</u>

MONTHLY SERVICE CHARGE * = \$426,199 / 12 = \$35,517

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,229,466
NEW COMMODITY CHARGE *	
322.414 x \$ 1,996.00 =	(643,538)
	<hr/>
	<u>\$ 585,928</u>

MONTHLY SERVICE CHARGE * = \$585,928 / 12 = \$48,827

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

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December 28, 2010

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 "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 water rate schedule for Ottawa County are attached for your information.

If you need any further information, please call me at 456-3015.

Sincerely,

A handwritten signature in black ink that reads "Lauri S. Parks".

Lauri S. Parks
City Clerk

LSP/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

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

SYSTEM REVENUE REQUIREMENTS \$ 1,204,296

NEW COMMODITY CHARGE * (1,209,015)
944,543 x \$1.28 =

\$ (4,719)

MONTHLY SERVICE CHARGE * = \$ - / 12 = \$0

* NEW RATES EFFECTIVE ON JANUARY 1, 2011



December 28, 2010

Ms. Crystal Osterink, Clerk
Gaines Charter Township
8555 Kalamazoo Ave., S.E.
Caledonia, MI 49316-8270

Dear Crystal:

The "2010 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, 2010, followed by a thirty-day comment period.

On December 21, 2010, 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 sewer rate schedule for Gaines 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/slz

Enclosures

cc: Scott Buhner, Assistant to the City Manager, Fiscal Services
Linda Wagenmaker, Financial Analyst

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

SYSTEM REVENUE REQUIREMENTS	\$ 146,703
NEW COMMODITY CHARGE *	
94.689 x \$ 1,361.00 =	(128,872)
	<hr/>
	<u>\$ 17,831</u>

MONTHLY SERVICE CHARGE * = \$ 17,831 / 12 = \$1,486

* NEW RATES EFFECTIVE ON JANUARY 1, 2011

**CITY OF GRAND RAPIDS, MICHIGAN
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2011**

WATER RATES

COMMODITY	METER CODE	GRAND RAPIDS	WALKER	KENTWOOD	CASCADE	GR. RAPIDS TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP
CHARGE (HCF)		\$ 1.72	\$ 1.61	\$ 1.63	\$ 2.17	\$ 1.85	\$ 3.83	NA
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 10.17	\$ 12.42	\$ 15.67	\$ 20.67	\$ 16.08	\$ 8.26	NA
1"	B	\$ 15.12	\$ 19.12	\$ 24.89	\$ 33.78	\$ 25.62	\$ 11.72	NA
1-1/4"	C	\$ 21.48	\$ 27.73	\$ 36.75	\$ 50.64	\$ 37.89	\$ 16.17	NA
1-1/2"	D	\$ 29.25	\$ 38.25	\$ 51.25	\$ 71.25	\$ 52.89	\$ 21.61	NA
2"	E	\$ 49.04	\$ 65.04	\$ 88.15	\$ 123.70	\$ 91.06	\$ 35.45	NA
3"	F	\$ 105.57	\$ 141.57	\$ 193.57	\$ 273.57	\$ 200.13	\$ 75.01	NA
4"	G	\$ 184.72	\$ 248.72	\$ 341.16	\$ 483.38	\$ 352.82	\$ 130.39	NA
6" & Over	H	\$ 410.85	\$ 554.85	\$ 762.85	\$ 1,082.85	\$ 789.09	\$ 288.61	NA

SEWER RATES

COMMODITY	METER CODE	GRAND RAPIDS	WALKER	KENTWOOD	CASCADE	GR. RAPIDS TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP
CHARGE (HCF)		\$ 3.26	\$ 2.70	\$ 2.27	\$ 2.55	\$ 2.49	\$ 10.32	NA
REU Charge (Monthly) *		NA	NA	NA	NA	NA	NA	\$ 61.64
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 12.31	\$ 30.12	\$ 6.76	\$ 31.05	\$ 29.10	\$ 32.80	NA
1"	B	\$ 19.23	\$ 50.90	\$ 9.37	\$ 52.55	\$ 49.08	\$ 55.66	NA
1-1/4"	C	\$ 28.13	\$ 77.61	\$ 12.72	\$ 80.19	\$ 74.77	\$ 85.05	NA
1-1/2"	D	\$ 39.01	\$ 110.25	\$ 16.81	\$ 113.97	\$ 106.17	\$ 120.97	NA
2"	E	\$ 66.70	\$ 193.35	\$ 27.23	\$ 199.96	\$ 186.09	\$ 212.41	NA
3"	F	\$ 145.81	\$ 430.77	\$ 57.01	\$ 445.65	\$ 414.45	\$ 473.65	NA
4"	G	\$ 256.57	\$ 763.16	\$ 98.70	\$ 789.61	\$ 734.15	\$ 839.39	NA
6" & Over	H	\$ 573.01	\$ 1,712.85	\$ 217.81	\$ 1,772.37	\$ 1,647.57	\$ 1,884.37	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, 2011**

	<u>RATES</u>
EAST GRAND RAPIDS	
WATER - SERVICE (MONTHLY)	\$ 16,119.00
- COMMODITY (100 CF)	1.19
SEWER - SERVICE (MONTHLY)	1,775.00
- COMMODITY (MG)	1,614.00
ADA TWP	
WATER - SERVICE	\$ 35,517.00
- COMMODITY	1.30
SEWER - SERVICE	48,827.00
- COMMODITY	1,996.00
OTTAWA COUNTY	
WATER - SERVICE	\$ -
- COMMODITY	1.28
GAINES TWP	
SEWER - SERVICE	\$ 1,486.00
- COMMODITY	1,361.00

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