

A photograph of a construction site for a sewer system. In the foreground, there is a large concrete structure with several large, dark-colored pipes protruding from it. A yellow excavator is visible on the right side of the site. To the left, there is a building with large arched windows. The ground is dirt and there are some orange and white traffic barrels. The sky is overcast.

**City of Grand Rapids**  
**Water & Sewer**  
**Rate Study**

**2024**

**Final**

# MEMORANDUM

CITY OF GRAND RAPIDS

**DATE:** January 1, 2025

**TO:** Mark Washington, City Manager  
Members of the Utility Advisory Board

**FROM:** Tai Verbrugge  
Utility Financial Officer

**SUBJECT: 2024 WATER/SEWER RATE STUDY – FINAL REPORT**

The final study, setting water and sewer rates effective January 1, 2025, for Grand Rapids and the retail and wholesale partner communities it serves, is submitted herein for reference and/or retention. The annual study consists of a comprehensive review of the operating and capital costs by community, in conjunction with customer base variation and usage, and calculates recommended commodity and service rates based upon adherence to: (a) the uniform rate-setting methodology established in 1976-77 for customer communities not party to the uniform water and sewer service agreements; and (b) rate methodology changes contractually agreed to in the uniform water and sewer service agreements for Utility Advisory Board (UAB) member customer communities. The methodology yields consistent performance in providing for the long-term needs of the water and sewage systems and ensuring adequate debt service coverage pursuant to the systems' master bond ordinance covenants. A table of contents immediately precedes the report's three sections and lists the respective tasks performed in reviewing the operating and financial performance of the utility systems.

The City's 2024 review marked the 48<sup>th</sup> annual water/sewer rate study report and resulted in utility rate increases as follows:

1. Water Supply System revenue requirements increased \$1,517,161 or 2.80% more than revenue generated by existing rates and charges.
2. Sewage Disposal System revenue requirements increased \$1,887,796 or 2.91% more than revenue generated by existing rates and charges.

The final rate study continues to provide funding from the penalty fees and non-operating income to support both of the City's circuit breaker programs. A contribution of \$233,690 will support the Individual Circuit Breaker program aimed at helping eligible retail customers pay their water/sewer bills. Sufficient funding was also available to apply the City and Customer Community Circuit Breaker relief to the water and sewer utility rates in the City of Grand Rapids, City of Walker,

City of Kentwood, Cascade Township, and Grand Rapids Township to limit each retail service area's revenue requirement change to a level in line with the overall systems' average change.

Five schedules supplement and immediately follow this memo. The first schedule summarizes the revenue requirement changes by customer community. The second and third schedules show water and sewer rate adjustment impacts to typical domestic and commercial customers with the system average quarterly consumption in each retail community. They also include a comparison of the approximate monthly charge for Wright Township's residential equivalent unit (REU) rate structure. The final two schedules show comparative water and sewer monthly service and commodity rate adjustments for the City's retail and wholesale customer communities.

The proposed 2025 water and sewer rates were made available to the UAB partners and other customer communities on November 7, 2024. All partner communities participated in a thirty (30) day comment period following notification of the rates as provided in the water/sewer service agreements.

Pursuant to Section 2.33 and 2.94 of the City Code, on November 12, 2024, the preliminary rate study, along with explanatory materials, was filed with the City Clerk, made available online at [www.grandrapidsmi.gov/ratestudy](http://www.grandrapidsmi.gov/ratestudy), and notice of availability of such information was published in the newspaper at least twenty (20) days prior to adoption of the resolution to provide for opportunities for public comment. The City Commission approved the final water and sewer rates by resolution on December 17, 2024.

Attachments as named

TCV

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 FINAL WATER/SEWER RATE STUDY  
SUMMARY OF REVENUE REQUIREMENT CHANGES  
FOR RATES EFFECTIVE JANUARY 1, 2025**

	<u>WATER (1)</u>		<u>SEWER (1)</u>		
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>	
RETAIL COMMUNITIES	GRAND RAPIDS	\$ 1,387,267	4.34%	\$ 926,080	2.15%
	WALKER	220,558	5.34%	287,134	4.98%
	KENTWOOD	203,096	3.98%	261,400	4.85%
	CASCADE TWP	(377,079)	-8.61%	130,328	3.99%
	GRAND RAPIDS TWP	39,906	1.35%	158,511	5.03%
	TALLMADGE TWP	(10,548)	-3.70%	(4,518)	-0.78%
	WRIGHT TWP	N/A	N/A	9,928	3.43%
WHOLESALE COMMUNITIES	EAST GRAND RAPIDS	33,505	3.44%	55,152	4.33%
	ADA TWP	6,088	0.37%	53,573	3.35%
	OTTAWA COUNTY	14,368	0.51%	NA	NA
	GAINES TWP	N/A	N/A	14,702	6.97%
	CALEDONIA TWP	N/A	N/A	(4,495)	-1.86%
<hr/>					
SYSTEM	\$ 1,517,161	2.80%	\$ 1,887,796	2.91%	
<hr/>					

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

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

	<u>WATER</u>		<u>SEWER</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
SYSTEM REVENUE REQUIREMENT	\$ 55,750,731	2.80%	\$ 66,702,105	2.91%
ADD: CCCCB RELIEF	468,631	0.86%	607,197	0.94%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ 56,219,362</u>	<u>3.66%</u>	<u>\$ 67,309,302</u>	<u>3.85%</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 FINAL WATER/SEWER RATE STUDY  
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS  
BY CUSTOMER COMMUNITY \*  
FOR RATES EFFECTIVE JANUARY 1, 2025**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2024</u>	<u>2025</u>	<u>DOLLARS</u>	<u>PERCENT</u>
<b>GRAND RAPIDS</b>				
WATER	\$ 118.42	\$ 123.58	\$ 5.16	4.36%
SEWER	144.09	147.06	2.97	2.06%
	<u>\$ 262.51</u>	<u>\$ 270.64</u>	<u>\$ 8.13</u>	3.10%
BASE RATIO	1.00	1.00		
<b>WALKER</b>				
WATER	\$ 108.76	\$ 114.59	\$ 5.83	5.36%
SEWER	165.57	173.67	8.10	4.89%
	<u>\$ 274.33</u>	<u>\$ 288.26</u>	<u>\$ 13.93</u>	5.08%
RATIO TO GR	1.05	1.07		
<b>KENTWOOD</b>				
WATER	\$ 111.89	\$ 116.41	\$ 4.52	4.04%
SEWER	101.22	105.84	4.62	4.56%
	<u>\$ 213.11</u>	<u>\$ 222.25</u>	<u>\$ 9.14</u>	4.29%
RATIO TO GR	0.81	0.82		
<b>CASCADE TWP</b>				
WATER	\$ 160.89	\$ 146.87	\$ (14.02)	-8.71%
SEWER	194.79	202.32	7.53	3.87%
	<u>\$ 355.68</u>	<u>\$ 349.19</u>	<u>\$ (6.49)</u>	-1.82%
RATIO TO GR	1.35	1.29		
<b>GRAND RAPIDS TWP</b>				
WATER	\$ 128.34	\$ 130.05	\$ 1.71	1.33%
SEWER	157.50	165.27	7.77	4.93%
	<u>\$ 285.84</u>	<u>\$ 295.32</u>	<u>\$ 9.48</u>	3.32%
RATIO TO GR	1.09	1.09		
<b>TALLMADGE TWP</b>				
WATER	\$ 99.77	\$ 94.95	\$ (4.82)	-4.83%
SEWER	273.00	270.90	(2.10)	-0.77%
	<u>\$ 372.77</u>	<u>\$ 365.85</u>	<u>\$ (6.92)</u>	-1.86%
RATIO TO GR	1.42	1.35		

\* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER  
QUARTERLY CONSUMPTION OF: WATER- 32.00 UNITS OR 23,936 GALLONS  
SEWER - 21.00 UNITS OR 15,708 GALLONS  
NO. OF MONTHS: 3

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

<b>WRIGHT TWP-</b>				
SEWER (No. of REU 1.00)	<u>\$ 171.24</u>	<u>\$ 177.12</u>	<u>\$ 5.88</u>	3.43%

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 FINAL WATER/SEWER RATE STUDY  
IMPACT OF RATE ADJUSTMENTS ON COMMERCIAL USERS  
BY CUSTOMER COMMUNITY  
FOR RATES EFFECTIVE JANUARY 1, 2025**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2024</u>	<u>2025</u>	<u>DOLLARS</u>	<u>PERCENT</u>
<b>GRAND RAPIDS</b>				
WATER	\$ 586.79	\$ 614.87	\$ 28.08	4.79%
SEWER	977.88	1,008.21	30.33	3.10%
	<u>\$ 1,564.67</u>	<u>\$ 1,623.08</u>	<u>\$ 58.41</u>	3.73%
BASE RATIO	1.00	1.00		
<b>WALKER</b>				
WATER	\$ 494.21	\$ 521.89	\$ 27.68	5.60%
SEWER	794.40	833.85	39.45	4.97%
	<u>\$ 1,288.61</u>	<u>\$ 1,355.74</u>	<u>\$ 67.13</u>	5.21%
RATIO TO GR	0.82	0.84		
<b>KENTWOOD</b>				
WATER	\$ 479.35	\$ 498.41	\$ 19.06	3.98%
SEWER	744.99	781.59	36.60	4.91%
	<u>\$ 1,224.34</u>	<u>\$ 1,280.00</u>	<u>\$ 55.66</u>	4.55%
RATIO TO GR	0.78	0.79		
<b>CASCADE TWP</b>				
WATER	\$ 692.13	\$ 631.12	\$ (61.01)	-8.81%
SEWER	906.36	943.11	36.75	4.05%
	<u>\$ 1,598.49</u>	<u>\$ 1,574.23</u>	<u>\$ (24.26)</u>	-1.52%
RATIO TO GR	1.02	0.97		
<b>GRAND RAPIDS TWP</b>				
WATER	\$ 568.29	\$ 576.09	\$ 7.80	1.37%
SEWER	738.39	775.59	37.20	5.04%
	<u>\$ 1,306.68</u>	<u>\$ 1,351.68</u>	<u>\$ 45.00</u>	3.44%
RATIO TO GR	0.84	0.83		
<b>TALLMADGE TWP</b>				
WATER	\$ 594.49	\$ 570.24	\$ (24.25)	-4.08%
SEWER	1,962.06	1,946.70	(15.36)	-0.78%
	<u>\$ 2,556.55</u>	<u>\$ 2,516.94</u>	<u>\$ (39.61)</u>	-1.55%
RATIO TO GR	1.63	1.55		

\* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE COMMERCIAL CUSTOMER  
QUARTERLY CONSUMPTION OF : WATER- 214.00 UNITS OR 160,072 GALLONS  
SEWER - 204.00 UNITS OR 152,592 GALLONS  
NO. OF MONTHS: 3

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

<b>WRIGHT TWP</b>				
SEWER (No. of REU 1.00)	<u>\$ 171.24</u>	<u>\$ 177.12</u>	<u>\$ 5.88</u>	3.43%

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 FINAL WATER/SEWER RATE STUDY  
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES  
EFFECTIVE JANUARY 1, 2025**

**WATER RATES**

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 2.57	\$ 2.08	\$ 1.91	\$ 2.41	\$ 2.25	\$ 2.61	NA
<b>MONTHLY SERVICE CHARGE BY METER SIZE</b>								
3/4" & Less	A	\$ 13.78	\$ 16.01	\$ 18.43	\$ 23.25	\$ 19.35	\$ 3.81	NA
1"	B	\$ 21.63	\$ 25.59	\$ 29.89	\$ 38.46	\$ 31.53	\$ 3.90	NA
1-1/4"	C	\$ 31.72	\$ 37.91	\$ 44.63	\$ 58.02	\$ 47.19	\$ 4.02	NA
1-1/2"	D	\$ 44.05	\$ 52.97	\$ 62.65	\$ 81.93	\$ 66.33	\$ 4.17	NA
2"	E	\$ 75.44	\$ 91.30	\$ 108.51	\$ 142.78	\$ 115.05	\$ 4.54	NA
3"	F	\$ 165.13	\$ 200.81	\$ 239.53	\$ 316.65	\$ 254.25	\$ 5.61	NA
4"	G	\$ 290.69	\$ 354.13	\$ 422.96	\$ 560.06	\$ 449.13	\$ 7.10	NA
6" & Over	H	\$ 649.45	\$ 792.17	\$ 947.05	\$ 1,255.53	\$ 1,005.93	\$ 11.37	NA

**SEWER RATES**

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 4.53	\$ 3.20	\$ 3.61	\$ 3.55	\$ 2.94	\$ 8.84	NA
REU Charge (Monthly) *		NA	NA	NA	NA	NA	NA	\$ 59.04
<b>MONTHLY SERVICE CHARGE BY METER SIZE</b>								
3/4" & Less	A	\$ 17.31	\$ 35.49	\$ 10.01	\$ 42.59	\$ 34.51	\$ 28.42	NA
1"	B	\$ 28.03	\$ 60.35	\$ 15.05	\$ 72.97	\$ 58.61	\$ 47.78	NA
1-1/4"	C	\$ 41.81	\$ 92.31	\$ 21.53	\$ 112.03	\$ 89.59	\$ 72.67	NA
1-1/2"	D	\$ 58.65	\$ 131.37	\$ 29.45	\$ 159.77	\$ 127.45	\$ 103.09	NA
2"	E	\$ 101.52	\$ 230.80	\$ 49.61	\$ 281.29	\$ 223.83	\$ 180.53	NA
3"	F	\$ 224.01	\$ 514.89	\$ 107.21	\$ 628.49	\$ 499.21	\$ 401.77	NA
4"	G	\$ 395.49	\$ 912.61	\$ 187.85	\$ 1,114.57	\$ 884.74	\$ 711.51	NA
6" & Over	H	\$ 885.45	\$ 2,048.97	\$ 418.25	\$ 2,503.37	\$ 1,986.25	\$ 1,596.49	NA

\* REU - Residential Equivalent Unit (Wright Township Only)

**FIRE PROTECTION RATES- ALL GOVERNMENTAL UNITS**

6"	H	\$ 22.98		10"	J	\$ 63.87
8"	I	\$ 40.76		12"	K	\$ 91.91

**NOTE:** Monthly defined as 1/12th of 365 days.

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 FINAL WATER/SEWER RATE STUDY  
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE CUSTOMER COMMUNITIES  
EFFECTIVE JANUARY 1, 2025**

	<u>2024</u>	<u>2025</u>	<u>PERCENTAGE CHANGE</u>
<b>EAST GRAND RAPIDS</b>			
WATER - SERVICE (MONTHLY)	\$17,047.00	\$19,839.00	16.38%
- COMMODITY (100 CF)	\$1.31	\$1.31	0.00%
SEWER - SERVICE (MONTHLY)	\$2,184.00	\$2,104.00	-3.66%
- COMMODITY (MG)	\$2,959.00	\$3,092.00	4.49%
<b>ADA TWP</b>			
WATER - SERVICE	\$60,124.00	\$61,151.00	1.71%
- COMMODITY	\$1.50	\$1.49	-0.67%
SEWER - SERVICE	\$40,984.00	\$41,633.00	1.58%
- COMMODITY	\$4,012.00	\$4,178.00	4.14%
<b>OTTAWA COUNTY</b>			
WATER - SERVICE	\$0.00	\$0.00	N/A
- COMMODITY	\$1.43	\$1.44	0.70%
<b>GAINES TWP</b>			
SEWER - SERVICE	\$1,619.00	\$1,759.00	8.65%
- COMMODITY	\$2,574.00	\$2,749.00	6.80%
<b>CALEDONIA TWP</b>			
SEWER - SERVICE	\$728.00	\$743.00	2.06%
- COMMODITY	\$7,618.00	\$7,465.00	-2.01%

**NOTE: Monthly defined as 1/12th of 365 days.**



**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ANNUAL 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, 2024  
TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		INTERMEDIATE		PRIMARY		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	16,242	3.08	4,825	0.91	1,677	0.32	22,744	4.31
Abandonment	(6,828)	(1.29)	(3,814)	(0.72)	(6,224)	(1.18)	(16,866)	(3.19)
CSO Construction	0	0.00	0	0.00	0	0.00	0	0.00
CSO Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>9,414</u>	<u>1.79</u>	<u>1,011</u>	<u>0.19</u>	<u>(4,547)</u>	<u>(0.86)</u>	<u>5,878</u>	<u>1.12</u>
Kentwood								
Construction	1,008	0.19	0	0.00	0	0.00	1,008	0.19
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>1,008</u>	<u>0.19</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>1,008</u>	<u>0.19</u>
Cascade Twp.								
Construction	9,176	1.74	6,324	1.20	0	0.00	15,500	2.94
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>9,176</u>	<u>1.74</u>	<u>6,324</u>	<u>1.20</u>	<u>0</u>	<u>0.00</u>	<u>15,500</u>	<u>2.94</u>
G.R. Twp.								
Construction	7,221	1.37	395	0.07	0	0.00	7,616	1.44
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>7,221</u>	<u>1.37</u>	<u>395</u>	<u>0.07</u>	<u>0</u>	<u>0.00</u>	<u>7,616</u>	<u>1.44</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	11,207	2.12	376	0.07	0	0.00	11,583	2.19
Abandonment	0	0.00	(126)	(0.02)	0	0.00	(126)	(0.02)
	<u>11,207</u>	<u>2.12</u>	<u>250</u>	<u>0.05</u>	<u>0</u>	<u>0.00</u>	<u>11,457</u>	<u>2.17</u>
<b>*TOTAL*</b>	<u><u>38,026</u></u>	<u><u>7.21</u></u>	<u><u>7,980</u></u>	<u><u>1.51</u></u>	<u><u>(4,547)</u></u>	<u><u>(0.86)</u></u>	<u><u>41,459</u></u>	<u><u>7.86</u></u>

	CONTRIBUTIONS		
	COMM	OTHER	TOTAL
Integrated	\$ -	\$ -	\$ -
Grand Rapids	6,136,635	-	6,136,635
Walker	1,217,094	-	1,217,094
Kentwood	130,827	-	130,827
Cascade Twp.	4,771,067	-	4,771,067
Grand Rapids Twp.	627,974	-	627,974
Tallmadge Twp.	-	-	-
<b>*TOTAL*</b>	<u><u>\$ 12,883,597</u></u>	<u><u>\$ -</u></u>	<u><u>\$ 12,883,597</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, 2024**

	ACTIVITY	EXPENSE BY ACTIVITY	FILTRATION PLANT	PUMPING STATIONS		WATERMAINS			RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
				PRIMARY	INTERM.	PRIMARY TRANSPORT	INTERMED. TRANSPORT	LOCAL DISTRIBUTION			
253 (4010) 5910	TREASURER-CUSTOMER SERVICE	\$ 1,250,203							\$ 1,250,203		
536 (2110 / 2700) 5910	WATER-CUSTOMER SERVICE *	3,183,885							3,183,885		
536 (3010:70) 5910	ENGINEERING	1,409,232								1,409,232	
536 (4510:80) 5910	COLDBROOK DISTRIBUTION	2,915,980		-	2,915,980						
536 (6010 / 6370) 5910	FIELD OPERATIONS	8,077,599				411,473	2,143,956	5,522,170			
536 (6500:90) 5910	FILTRATION	10,385,788	10,385,788								
	SUBTOTAL OPERATING EXPENSE	27,222,687	10,385,788	-	2,915,980	411,473	2,143,956	5,522,170	4,434,088	1,409,232	-
536 (1000:10 / 8000) 5910	ADMINISTRATION	3,475,646									3,475,646
	TOTAL	\$ 30,698,333	\$ 10,385,788	\$ -	\$ 2,915,980	\$ 411,473	\$ 2,143,956	\$ 5,522,170	\$ 4,434,088	\$ 1,409,232	\$ 3,475,646

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

**METHOD OF DISTRIBUTION**

253 (4010) 5910	TREASURER-CUSTOMER SERVICE		100.000%						100.000%		
536 (2110 / 2700) 5910	WATER-CUSTOMER SERVICE		100.000%						100.000%		
536 (3010:70) 5910	ENGINEERING		100.000%							100.000%	
536 (4510:80) 5910	COLDBROOK DISTRIBUTION		100.000%	0.000%	100.000%						
536 (6010 / 6370) 5910	FIELD OPERATIONS		100.000%			5.094%	26.542%	68.364%			
	TOTAL MILES OF MAIN	1,203.85				61.33	319.53	822.99			
536 (6500:90) 5910	FILTRATION		100.000%	100.000%							
536 (1000:10 / 8000) 5910	ADMINISTRATION		100.000%								100.000%

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2  
FISCAL YEAR ENDED JUNE 30, 2024**

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	\$ 10,385,788	\$ 10,385,788										
PUMPING STATIONS:												
A. PRIMARY TRANSPORT	-	-										
B. INTERMEDIATE TRANSPORT	2,915,980		2,915,980	-	-	-	-	-	-	-	-	-
WATERMAINS:												
A. PRIMARY TRANSPORT	411,473		341,564	21,672	30,729	11,270	6,238	-	-	-	-	-
B. INTERMEDIATE TRANSPORT	2,143,956		797,853	466,525	378,901	291,063	179,749	29,865	-	-	-	-
C. LOCAL DISTRIBUTION	5,522,170		3,992,584	450,057	386,552	314,432	358,168	20,377	-	-	-	-
RETAIL CUSTOMER METERING	4,434,088		3,245,441	373,129	312,071	228,710	253,586	21,151				
SUBTOTAL OPERATING EXPENSE	25,813,456	10,385,788	11,293,422	1,311,383	1,108,253	845,475	797,741	71,393	-	-	-	-
ENGINEERING SERVICES	1,409,232	567,005	616,539	71,589	60,498	46,152	43,545	3,904	-	-	-	-
ADMINISTRATIVE EXPENSE	3,475,646	1,025,530	2,041,917	129,482	109,422	83,475	78,759	7,060	-	-	-	-
TOTAL	<u>\$ 30,698,333</u>	<u>\$ 11,978,323</u>	<u>\$ 13,951,879</u>	<u>\$ 1,512,454</u>	<u>\$ 1,278,173</u>	<u>\$ 975,102</u>	<u>\$ 920,045</u>	<u>\$ 82,357</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

**METHOD OF DISTRIBUTION**

FILTRATION PLANT		100.00%	100.00%									
PUMPING STATIONS:												
A. PRIMARY TRANSPORT		100.00%	100.00%									
B. INTERMEDIATE TRANSPORT		100.00%		100.000%								
WATERMAINS												
TOTAL MILES:	1,203.85											
A. PRIMARY TRANSPORT		100.000%		83.010%	5.267%	7.468%	2.739%	1.516%				
MILES	61.33			50.91	3.23	4.58	1.68	0.93	-	-	-	-
B. INTERMEDIATE TRANSPORT		100.000%		37.214%	21.760%	17.673%	13.576%	8.384%	1.393%			
MILES	319.53			118.91	69.53	56.47	43.38	26.79	4.45	-	-	-
C. LOCAL DISTRIBUTION		100.000%		72.301%	8.150%	7.000%	5.694%	6.486%	0.369%			
MILES	822.99			595.03	67.07	57.61	46.86	53.38	3.04	-	-	-
RETAIL CUSTOMER METERING (1)		100.000%		73.193%	8.415%	7.038%	5.158%	5.719%	0.477%			
NUMBER OF METERS	81,816			59,884	6,885	5,758	4,220	4,679	390			
ENGINEERING SERVICES (2)		100.000%	40.235%	43.750%	5.080%	4.293%	3.275%	3.090%	0.277%			
ADMINISTRATIVE EXPENSE (3)		100.000%	29.507%	58.749%	3.725%	3.148%	2.402%	2.266%	0.203%			

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, 2024**

	ACTIVITY	ADJUSTED EXPENSE BY ACTIVITY	FILTRATION PLANT	PUMPING STATIONS		WATERMAINS			RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
				PRIMARY	INTERM.	PRIMARY TRANSPORT	INTERMED. TRANSPORT	LOCAL DISTRIBUTION			
253 (4010) 5910	TREASURER-CUSTOMER SERVICE	\$ 1,260,510							\$ 1,260,510		
536 (2110 / 2700) 5910	WATER-CUSTOMER SERVICE *	2,051,207							2,051,207		
536 (3010:70) 5910	ENGINEERING	1,469,581								1,469,581	
536 (4510:80) 5910	COLDBROOK DISTRIBUTION	2,959,316		421,331	2,537,985						
536 (6010 / 6370) 5910	FIELD OPERATIONS	7,371,377				375,498	1,956,511	5,039,368			
536 (6500:90) 5910	FILTRATION	10,510,520	10,510,520								
	SUBTOTAL OPERATING EXPENSE	25,622,511	10,510,520	421,331	2,537,985	375,498	1,956,511	5,039,368	3,311,717	1,469,581	-
536 (1000:10 / 8000) 5910	ADMINISTRATION	4,453,420									4,453,420
	TOTAL	<u>\$ 30,075,931</u>	<u>\$ 10,510,520</u>	<u>\$ 421,331</u>	<u>\$ 2,537,985</u>	<u>\$ 375,498</u>	<u>\$ 1,956,511</u>	<u>\$ 5,039,368</u>	<u>\$ 3,311,717</u>	<u>\$ 1,469,581</u>	<u>\$ 4,453,420</u>

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

**METHOD OF DISTRIBUTION**

253 (4010) 5910	TREASURER-CUSTOMER SERVICE	100.000%							100.000%		
536 (2110 / 2700) 5910	WATER-CUSTOMER SERVICE	100.000%							100.000%		
536 (3010:70) 5910	ENGINEERING	100.000%								100.000%	
536 (4510:80) 5910	COLDBROOK DISTRIBUTION	100.000%		14.240%	85.760%						
536 (6010 / 6370) 5910	FIELD OPERATIONS	100.000%				5.094%	26.542%	68.364%			
	TOTAL MILES OF MAIN 1,203.85					61.33	319.53	822.99			
536 (6500:90) 5910	FILTRATION	100.000%	100.000%								
536 (1000:10 / 8000) 5910	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, 2024**

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	\$ 10,510,520	\$ 10,510,520										
PUMPING STATIONS:												
A. PRIMARY TRANSPORT	421,331	421,331										
B. INTERMEDIATE TRANSPORT	2,537,985		2,101,829	23,462	412,694	-	-	-				
WATERMAINS:												
A. PRIMARY TRANSPORT	375,498		311,701	19,777	28,042	10,285	5,693	-	-	-	-	-
B. INTERMEDIATE TRANSPORT	1,956,511		728,096	425,737	345,774	265,616	164,034	27,254	-	-	-	-
C. LOCAL DISTRIBUTION	5,039,368		3,643,514	410,708	352,756	286,942	326,853	18,595	-	-	-	-
RETAIL CUSTOMER METERING	3,311,717		2,423,945	278,681	233,079	170,818	189,397	15,797				
SUBTOTAL OPERATING EXPENSE	24,152,930	10,931,851	9,209,085	1,158,365	1,372,345	733,661	685,977	61,646	-	-	-	-
ENGINEERING SERVICES	1,469,581	665,147	560,322	70,481	83,502	44,646	41,736	3,747	-	-	-	-
ADMINISTRATIVE EXPENSE	4,453,420	1,596,185	2,271,427	169,137	200,383	107,139	100,156	8,993	-	-	-	-
TOTAL	<u>\$ 30,075,931</u>	<u>\$ 13,193,183</u>	<u>\$ 12,040,834</u>	<u>\$ 1,397,983</u>	<u>\$ 1,656,230</u>	<u>\$ 885,446</u>	<u>\$ 827,869</u>	<u>\$ 74,386</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

**METHOD OF DISTRIBUTION**

FILTRATION PLANT		100.00%	100.00%									
PUMPING STATIONS:												
A. PRIMARY TRANSPORT		100.00%	100.00%									
B. INTERMEDIATE TRANSPORT		100.00%		82.815%	0.924%	16.261%						
WATERMAINS												
TOTAL MILES:	1,203.85											
A. PRIMARY TRANSPORT		100.000%		83.010%	5.267%	7.468%	2.739%	1.516%				
MILES	61.33			50.91	3.23	4.58	1.68	0.93	-	-	-	-
B. INTERMEDIATE TRANSPORT		100.000%		37.214%	21.760%	17.673%	13.576%	8.384%	1.393%			
MILES	319.53			118.91	69.53	56.47	43.38	26.79	4.45	-	-	-
C. LOCAL DISTRIBUTION		100.000%		72.301%	8.150%	7.000%	5.694%	6.486%	0.369%			
MILES	822.99			595.03	67.07	57.61	46.86	53.38	3.04	-	-	-
RETAIL CUSTOMER METERING (1)		100.000%		73.193%	8.415%	7.038%	5.158%	5.719%	0.477%			
NUMBER OF METERS	81,816			59,884	6,885	5,758	4,220	4,679	390			
ENGINEERING SERVICES (2)		100.000%	45.261%	38.128%	4.796%	5.682%	3.038%	2.840%	0.255%			
ADMINISTRATIVE EXPENSE (3)		100.000%	35.841%	51.004%	3.798%	4.500%	2.406%	2.249%	0.202%			

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, 2024**  
**RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: ADMINISTRATION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST FACTORS	CURRENT ANNUAL EXPENSES
7020	PERMANENT EMPLOYEES	\$ 555,955.82	\$ 24,361.98	\$ 580,317.80
7025	ACT.ASSIGNMENT	\$ 145.50	6.38	151.88
7040	TEMPORARY EMPLOYEES	\$ 123,102.28	5,394.34	128,496.62
7055	TIME & ONE-HALF	\$ 3,147.85	137.94	3,285.79
7105	EMPLOYERS SOCIAL SECURITY	\$ 50,721.81	2,222.63	52,944.44
7110	HOSPITALIZATION INSURANCE	\$ 96,256.37	8,095.16	104,351.53
7115	RETIREE HEALTH CARE	\$ 18,147.30	2,881.79	21,029.09
7120	RETIREMENT FUND CONTRIBUTION	\$ 127,432.41	3,759.26	131,191.67
7135	UNEMPLOYMENT COMPENSATION	\$ 5,124.15	-	5,124.15
7150	LONGEVITY PAY	\$ 825.00	-	825.00
7165	SHIFT DIFFERENTIAL	\$ 8.00	-	8.00
7175	FOOD/CLEAN/CAR ALLOW	\$ 1,195.83	-	1,195.83
	TOTAL PERSONAL SERVICES	982,062.32	46,859.48	1,028,921.80
7520	SUPPLIES	\$ 4,031.93	-	4,031.93
7670	CLOTHING/CLEANING ALLOWANCE	\$ 550.25	-	550.25
7800	INVENTORY - COST OF GOODS SOLD	\$ 169,521.10	-	169,521.10
7910	SUBSCRIPTIONS AND PUBLICATIONS	\$ 169.99	-	169.99
	TOTAL SUPPLIES	174,273.27	-	174,273.27
6931	GAIN-LOSS ON SALE OF ASSETS-FA	\$ 51,727.00	-	51,727.00
8010	CONTRACTUAL SERVICES	\$ 282,984.85	868,620.99	1,151,605.84
8011	CONTRACT EMPLOYEES - TEMP SERVICES	\$ 6,705.64	-	6,705.64
8015	CONTRACT SERVICES-TRAINING	\$ 4,750.00	-	4,750.00
8016	CONTRACTS- EXTERNAL LEGAL SERVICES	\$ 1,193.25	-	1,193.25
8030	ADMINISTRATIVE SERVICES (ICB)	\$ 40,279.34	(40,279.34)	-
8240	FEES	\$ 37,103.16	-	37,103.16
8400	INSURANCE PREMIUMS	\$ 416,453.00	-	416,453.00
8450	GENERAL LIABILITY INSURANCE/CLAIMS	\$ 236,485.00	13,356.00	249,841.00
8500	TELEPHONE	\$ 2,072.85	-	2,072.85
8510	POSTAGE	\$ (174.95)	-	(174.95)
8800	COMMUNITY PROMOTION	\$ 4,685.17	-	4,685.17
9000	PRINTING & PUBLISHING	\$ 4,440.98	-	4,440.98
9560	PROFESSIONAL DEVELOPMENT	\$ 16,988.43	-	16,988.43
9561	OTHER TRAVEL & TRAINING	\$ 19,253.59	-	19,253.59
9563	FOOD-BEVERAGE	\$ 309.87	-	309.87
9580	MEMBERSHIPS	\$ 52,430.70	-	52,430.70
9280	WATER	\$ 3,668.67	-	3,668.67
9290	REFUSE COLLECTION CHARGES	\$ 5,893.68	-	5,893.68
9200	ELECTRICITY	\$ 48,245.99	(58,174.20)	(9,928.21)
9210	NATURAL GAS	\$ 21,273.12	-	21,273.12
9340	MAINTENANCE SERVICE	\$ 42,618.28	-	42,618.28
9400	LAND RENTAL OR LEASE	\$ 4,219.15	-	4,219.15
8282	ENGINEERING SERVICES	\$ 14,963.75	-	14,963.75
8283	VEHICLE USAGE/CAR MILEAGE	\$ 4,177.31	-	4,177.31
8284	COMPUTER SERVICES	\$ 28,920.00	1,267.00	30,187.00
9650	BAD DEBT WRITE-OFFS	\$ 15.48	-	15.48
8287	FACILITIES MANAGEMENT CHARGES	\$ 2,187.12	-	2,187.12
	TOTAL OTHER SERVICES & CHARGES	1,353,870.43	784,790.45	2,138,660.88
9760	EQUIPMENT/VEHICLES	\$ 24,180.38	-	24,180.38
9800	FURNITURE	\$ 34,457.62	-	34,457.62
9840	SOFTWARE/SOFTWARE MAINTENANCE	\$ 3,210.53	-	3,210.53
	TOTAL CAPITAL	61,848.53	-	61,848.53
8285	A-87 COST ALLOCATION	\$ 903,591.00	146,125.00	1,049,716.00
	TOTAL TRANSFERS/FEES	903,591.00	146,125.00	1,049,716.00
	ORGANIZATIONAL UNIT TOTAL	\$ 3,475,645.55	\$ 977,774.93	\$ 4,453,420.48



**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: CUSTOMER SERVICES

OBJ	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
7020	PERMANENT EMPLOYEES	\$ 1,699,826.69	\$ 74,486.41	\$ 1,774,313.10
7025	ACT.ASSIGNMENT	\$ 2,444.72	107.13	2,551.85
7050	REGULAR HOURLY RATE	\$ 869.20	38.09	907.29
7055	TIME & ONE-HALF	\$ 110,674.04	4,849.74	115,523.78
7105	EMPLOYERS SOCIAL SECURITY	\$ 131,999.96	5,784.24	137,784.20
7110	HOSPITALIZATION INSURANCE	\$ 449,968.70	37,842.37	487,811.07
7115	RETIREE HEALTH CARE	\$ 56,452.33	8,964.63	65,416.96
7120	RETIREMENT FUND CONTRIBUTION	\$ 396,954.51	11,710.16	408,664.67
7135	UNEMPLOYMENT COMPENSATION	\$ 2,437.89	-	2,437.89
7150	LONGEVITY PAY	\$ 17,430.00	-	17,430.00
7165	SHIFT DIFFERENTIAL	\$ 1,895.00	-	1,895.00
7170	ELECTION WRKR-BRD MEMBERS PAY	\$ 400.00	-	400.00
7175	FOOD/CLEAN/CAR ALLOW	\$ 600.00	-	600.00
	TOTAL PERSONAL SERVICES	<u>2,871,953.04</u>	<u>143,782.77</u>	<u>3,015,735.81</u>
7520	SUPPLIES	\$ 1,101,316.19	-	1,101,316.19
7670	CLOTHING/CLEANING ALLOWANCE	\$ 8,499.62	-	8,499.62
	TOTAL SUPPLIES	<u>1,109,815.81</u>	<u>-</u>	<u>1,109,815.81</u>
			-	-
8010	CONTRACTUAL SERVICES	\$ 293,926.66	-	293,926.66
8011	CONTRACT EMPLOYEES - TEMP SERVICES	\$ 85,346.81	-	85,346.81
8015	CONTRACT SERVICES-TRAINING	\$ 1,800.00	-	1,800.00
8240	FEES	\$ 30.00	-	30.00
8500	TELEPHONE	\$ 20,627.53	-	20,627.53
8510	POSTAGE	\$ 186,011.39	-	186,011.39
8800	COMMUNITY PROMOTION	\$ 12,243.76	-	12,243.76
9560	PROFESSIONAL DEVELOPMENT	\$ 145.00	-	145.00
9561	OTHER TRAVEL & TRAINING	\$ 5,039.50	-	5,039.50
9580	MEMBERSHIPS	\$ 500.00	-	500.00
9340	MAINTENANCE SERVICE	\$ 659.36	-	659.36
9410	EQUIPMENT RENTALS OR LEASE	\$ 2,782.68	-	2,782.68
8280	FLEET MANAGEMENT EQUIPMENT	\$ 158,024.81	-	158,024.81
8281	311 CALL CENTER SERVICES	\$ 551,878.49	-	551,878.49
8283	VEHICLE RENTAL/CAR MILEAGE	\$ 12,320.68	-	12,320.68
8284	COMPUTER SERVICES	\$ 135,120.00	5,907.00	141,027.00
9550	MISCELLANEOUS	\$ 150.00	-	150.00
9650	BAD DEBT WRITE-OFFS	\$ (467.86)	-	(467.86)
	TOTAL OTHER SERVICES & CHARGES	<u>1,466,138.81</u>	<u>5,907.00</u>	<u>1,472,045.81</u>
9760	EQUIPMENT/VEHICLES	\$ 9,637.01	-	9,637.01
9800	FURNITURE	\$ 10,071.85	-	10,071.85
9840	SOFTWARE/SOFTWARE MAINTENANCE	\$ 444,923.47	-	444,923.47
	TOTAL CAPITAL	<u>464,632.33</u>	<u>-</u>	<u>464,632.33</u>
8285	A-87 COST ALLOCATION	\$ 75,782.00	15,216.00	90,998.00
	TOTAL TRANSFERS/FEES	<u>75,782.00</u>	<u>15,216.00</u>	<u>90,998.00</u>
	ORGANIZATIONAL UNIT TOTAL (GROSS)	\$ 5,988,321.99	\$ 164,905.77	\$ 6,153,227.76
	LESS: SDSF CONTRIBUTION *	(2,804,437.00)	(1,297,583.93)	(4,102,020.93)
	ORGANIZATIONAL UNIT TOTAL (NET)	<u>\$ 3,183,884.99</u>	<u>\$ (1,132,678.16)</u>	<u>\$ 2,051,206.83</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, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: ENGINEERING

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 733,976.37	\$ 32,162.84	\$ 766,139.21
7040	TEMPORARY EMPLOYEES	\$ 1,925.23	84.36	2,009.59
7055	TIME & ONE-HALF	\$ 5,485.22	240.36	5,725.58
7105	EMPLOYERS SOCIAL SECURITY	\$ 55,456.08	2,430.09	57,886.17
7110	HOSPITALIZATION INSURANCE	\$ 168,449.90	14,166.64	182,616.54
7115	RETIREE HEALTH CARE	\$ 24,371.39	3,870.18	28,241.57
7120	RETIREMENT FUND CONTRIBUTION	\$ 172,164.10	5,078.84	177,242.94
7135	UNEMPLOYMENT COMPENSATION	\$ 1,129.26	-	1,129.26
7150	LONGEVITY PAY	\$ 7,444.25	-	7,444.25
	TOTAL PERSONAL SERVICES	<u>1,170,401.80</u>	<u>58,033.31</u>	<u>1,228,435.11</u>
7520	SUPPLIES	\$ 4,118.25	-	4,118.25
7670	CLOTHING/CLEANING ALLOWANCE	\$ 337.94	-	337.94
7910	SUBSCRIPTIONS AND PUBLICATIONS	\$ 21,171.90	-	21,171.90
	TOTAL SUPPLIES	<u>25,628.09</u>	<u>-</u>	<u>25,628.09</u>
8010	CONTRACTUAL SERVICES	\$ 100,243.16	-	100,243.16
8500	TELEPHONE	\$ 4,914.52	-	4,914.52
9561	OTHER TRAVEL & TRAINING	\$ 400.00	-	400.00
9563	FOOD-BEVERAGE	\$ 221.17	-	221.17
9580	MEMBERSHIPS	\$ 475.00	-	475.00
9340	MAINTENANCE SERVICE	\$ 885.00	-	885.00
8280	FLEET MANAGEMENT EQUIPMENT	\$ 17,586.72	-	17,586.72
8283	VEHICLE RENTAL/CAR MILEAGE	\$ 1,018.68	-	1,018.68
8284	COMPUTER SERVICES	\$ 53,028.00	2,316.00	55,344.00
	TOTAL OTHER SERVICES & CHARGES	<u>178,772.25</u>	<u>2,316.00</u>	<u>181,088.25</u>
9840	SOFTWARE/SOFTWARE MAINTENANCE	\$ 12,231.39	-	12,231.39
	TOTAL CAPITAL	<u>12,231.39</u>	<u>-</u>	<u>12,231.39</u>
9954	OPERATING TRANS-DEV CENTER	\$ 22,198.00	-	22,198.00
	TOTAL TRANSFERS/FEES	<u>22,198.00</u>	<u>-</u>	<u>22,198.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,409,231.53</u>	<u>\$ 60,349.31</u>	<u>\$ 1,469,580.84</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: DISTRIBUTION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 513,214.95	\$ 22,489.08	\$ 535,704.03
7025	ACT.ASSIGNMENT	\$ 4,624.55	202.65	4,827.20
7055	TIME & ONE-HALF	\$ 22,186.03	972.19	23,158.22
7105	EMPLOYERS SOCIAL SECURITY	\$ 37,517.12	1,644.00	39,161.12
7110	HOSPITALIZATION INSURANCE	\$ 136,620.97	11,489.82	148,110.79
7115	RETIREE HEALTH CARE	\$ 16,116.88	2,559.36	18,676.24
7120	RETIREMENT FUND CONTRIBUTION	\$ 113,395.17	3,345.16	116,740.33
7135	UNEMPLOYMENT COMPENSATION	\$ 679.41	-	679.41
7150	LONGEVITY PAY	\$ 7,997.50	-	7,997.50
7165	SHIFT DIFFERENTIAL	\$ 16.45	-	16.45
	TOTAL PERSONAL SERVICES	<u>852,369.03</u>	<u>42,702.26</u>	<u>895,071.29</u>
7520	SUPPLIES	\$ 41,445.54	-	41,445.54
7670	CLOTHING/CLEANING ALLOWANCE	\$ 1,374.06	-	1,374.06
	TOTAL SUPPLIES	<u>42,819.60</u>	<u>-</u>	<u>42,819.60</u>
8010	CONTRACTUAL SERVICES	\$ 292,541.08	-	292,541.08
8240	FEES	\$ 39.00	-	39.00
8500	TELEPHONE	\$ 11,317.20	-	11,317.20
9280	WATER	\$ 5,745.99	-	5,745.99
9200	ELECTRICITY	\$ 1,311,918.82	-	1,311,918.82
9210	NATURAL GAS	\$ 75,233.88	-	75,233.88
9340	MAINTENANCE SERVICE	\$ 9,503.94	-	9,503.94
9410	EQUIPMENT RENTALS OR LEASE	\$ 47,102.17	-	47,102.17
8280	FLEET MANAGEMENT EQUIPMENT	\$ 106,755.18	-	106,755.18
8284	COMPUTER SERVICES	\$ 14,460.00	634.00	15,094.00
	TOTAL OTHER SERVICES & CHARGES	<u>1,874,617.26</u>	<u>634.00</u>	<u>1,875,251.26</u>
9760	EQUIPMENT/VEHICLES	\$ 95,356.90	-	95,356.90
9840	SOFTWARE/SOFTWARE MAINTENANCE	\$ 50,817.43	-	50,817.43
	TOTAL CAPITAL	<u>146,174.33</u>	<u>-</u>	<u>146,174.33</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,915,980.22</u>	<u>\$ 43,336.26</u>	<u>\$ 2,959,316.48</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: FIELD OPERATIONS

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 1,830,550.72	\$ 80,214.73	\$ 1,910,765.45
7025	ACT.ASSIGNMENT	\$ 3,912.22	171.43	4,083.65
7040	TEMPORARY EMPLOYEES	\$ 4,625.26	202.68	4,827.94
7055	TIME & ONE-HALF	\$ 184,925.44	8,103.43	193,028.87
7105	EMPLOYERS SOCIAL SECURITY	\$ 148,230.64	6,495.47	154,726.11
7110	HOSPITALIZATION INSURANCE	\$ 456,907.47	38,425.92	495,333.39
7115	RETIREE HEALTH CARE	\$ 60,468.72	9,602.43	70,071.15
7120	RETIREMENT FUND CONTRIBUTION	\$ 428,963.44	12,654.42	441,617.86
7135	UNEMPLOYMENT COMPENSATION	\$ 2,789.47	-	2,789.47
7150	LONGEVITY PAY	\$ 27,002.72	-	27,002.72
7165	SHIFT DIFFERENTIAL	\$ 1,023.75	-	1,023.75
7175	FOOD/CLEAN/CAR ALLOW	\$ 450.00	-	450.00
	TOTAL PERSONAL SERVICES	<u>3,149,849.85</u>	<u>155,870.51</u>	<u>3,305,720.36</u>
7520	SUPPLIES	\$ 829,103.82	-	829,103.82
7670	CLOTHING/CLEANING ALLOWANCE	\$ 11,451.97	-	11,451.97
7910	SUBSCRIPTIONS AND PUBLICATIONS	\$ 3,915.00	-	3,915.00
	TOTAL SUPPLIES	<u>844,470.79</u>	<u>-</u>	<u>844,470.79</u>
8010	CONTRACTUAL SERVICES	\$ 2,713,984.98	(868,620.99)	1,845,363.99
8011	CONTRACT EMPLOYEES - TEMP SERVICES	\$ 89,547.18	-	89,547.18
8015	CONTRACT SERVICES-TRAINING	\$ 1,050.00	-	1,050.00
8500	TELEPHONE	\$ 28,700.83	-	28,700.83
9560	PROFESSIONAL DEVELOPMENT	\$ 2,009.98	-	2,009.98
9200	ELECTRICITY	\$ 2,029.01	-	2,029.01
9340	MAINTENANCE SERVICE	\$ 4,835.42	-	4,835.42
9410	EQUIPMENT RENTALS OR LEASE	\$ 53,758.70	-	53,758.70
8280	FLEET MANAGEMENT EQUIPMENT	\$ 926,749.24	-	926,749.24
8283	VEHICLE USAGE/CAR MILEAGE	\$ 650.00	-	650.00
8284	COMPUTER SERVICES	\$ 149,292.00	6,528.00	155,820.00
	TOTAL OTHER SERVICES & CHARGES	<u>3,972,607.34</u>	<u>(862,092.99)</u>	<u>3,110,514.35</u>
9760	EQUIPMENT/VEHICLES	\$ 64,383.58	-	64,383.58
9800	FURNITURE	\$ 4,019.96	-	4,019.96
9840	SOFTWARE/SOFTWARE MAINTENANCE	\$ 2,267.57	-	2,267.57
	TOTAL CAPITAL	<u>70,671.11</u>	<u>-</u>	<u>70,671.11</u>
9955	OPERATING TRANS-MISC	\$ 40,000.00	-	40,000.00
	TOTAL TRANSFERS/FEES	<u>40,000.00</u>	<u>-</u>	<u>40,000.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 8,077,599.09</u>	<u>\$ (706,222.48)</u>	<u>\$ 7,371,376.61</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: LAKE MI. FILTRATION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 2,138,068.97	\$ 93,690.18	\$ 2,231,759.15
7025	ACT.ASSIGNMENT	\$ 11,984.38	525.16	12,509.54
7050	REGULAR HOURLY RATE	\$ 4,670.08	204.64	4,874.72
7055	TIME & ONE-HALF	\$ 128,646.77	5,637.30	134,284.07
7105	EMPLOYERS SOCIAL SECURITY	\$ 166,731.02	7,306.15	174,037.17
7110	HOSPITALIZATION INSURANCE	\$ 516,968.98	43,477.09	560,446.07
7115	RETIREE HEALTH CARE	\$ 69,066.61	10,967.78	80,034.39
7120	RETIREMENT FUND CONTRIBUTION	\$ 486,265.00	14,344.82	500,609.82
7135	UNEMPLOYMENT COMPENSATION	\$ 3,010.40	-	3,010.40
7150	LONGEVITY PAY	\$ 20,130.00	-	20,130.00
7165	SHIFT DIFFERENTIAL	\$ 13,067.99	-	13,067.99
	TOTAL PERSONAL SERVICES	<u>3,558,610.20</u>	<u>176,153.12</u>	<u>3,734,763.32</u>
7520	SUPPLIES	\$ 438,355.25	-	438,355.25
7530	PROCESS CHEMICALS	\$ 1,885,428.91	-	1,885,428.91
7670	CLOTHING/CLEANING ALLOWANCE	\$ 22,086.06	-	22,086.06
7800	INVENTORY - COST OF GOODS SOLD	\$ 24,417.72	-	24,417.72
7910	SUBSCRIPTIONS AND PUBLICATIONS	\$ 979.05	-	979.05
	TOTAL SUPPLIES	<u>2,371,266.99</u>	<u>-</u>	<u>2,371,266.99</u>
8010	CONTRACTUAL SERVICES	\$ 968,216.55	-	968,216.55
8011	CONTRACT EMPLOYEES - TEMP SERVICES	\$ 134,725.02	-	134,725.02
8015	CONTRACT SERVICES-TRAINING	\$ 3,500.00	-	3,500.00
8240	FEES	\$ 400.00	-	400.00
8500	TELEPHONE	\$ 14,451.89	-	14,451.89
8510	POSTAGE	\$ 802.70	-	802.70
9560	PROFESSIONAL DEVELOPMENT	\$ 2,025.00	-	2,025.00
9561	OTHER TRAVEL & TRAINING	\$ 591.47	-	591.47
9563	FOOD-BEVERAGE	\$ 157.75	-	157.75
9290	REFUSE COLLECTION CHARGES	\$ 2,576.52	-	2,576.52
9200	ELECTRICITY	\$ 2,066,563.02	(58,174.20)	2,008,388.82
9210	NATURAL GAS	\$ 119,386.43	-	119,386.43
9310	EQUIPMENT REPAIRS	\$ 25,139.03	-	25,139.03
9340	MAINTENANCE SERVICE	\$ 481,570.38	-	481,570.38
9410	EQUIPMENT RENTALS OR LEASE	\$ (20,292.97)	-	(20,292.97)
8280	FLEET MANAGEMENT EQUIPMENT	\$ 51,382.76	-	51,382.76
8283	VEHICLE USAGE/CAR MILEAGE	\$ 5,575.52	-	5,575.52
8284	COMPUTER SERVICES	\$ 154,248.00	6,753.00	161,001.00
	TOTAL OTHER SERVICES & CHARGES	<u>4,011,019.07</u>	<u>(51,421.20)</u>	<u>3,959,597.87</u>
9750	BUILDING	\$ 303,090.31	-	303,090.31
9760	EQUIPMENT/VEHICLES	\$ 127,816.16	-	127,816.16
9800	FURNITURE	\$ 765.66	-	765.66
9840	SOFTWARE/SOFTWARE MAINTENANCE	\$ 13,219.77	-	13,219.77
	TOTAL CAPITAL	<u>444,891.90</u>	<u>-</u>	<u>444,891.90</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 10,385,788.16</u>	<u>\$ 124,731.92</u>	<u>\$ 10,510,520.08</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: TREASURER - CUSTOMER SERV'S

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 100,636.99	\$ 4,409.91	\$ 105,046.90
7025	ACT.ASSIGNMENT	\$ 100.79	4.42	105.21
7055	TIME & ONE-HALF	\$ 251.58	11.02	262.60
7105	EMPLOYERS SOCIAL SECURITY	\$ 7,071.77	309.88	7,381.65
7110	HOSPITALIZATION INSURANCE	\$ 27,144.52	2,282.85	29,427.37
7115	RETIREE HEALTH CARE	\$ 3,039.98	482.75	3,522.73
7120	RETIREMENT FUND CONTRIBUTION	\$ 21,311.35	628.68	21,940.03
7135	UNEMPLOYMENT COMPENSATION	\$ 129.73	-	129.73
7150	LONGEVITY PAY	\$ 146.25	-	146.25
7170	ELECTION WRKR-BRD MEMBERS PAY	\$ 43.75	-	43.75
	TOTAL PERSONAL SERVICES	<u>159,876.71</u>	<u>8,129.51</u>	<u>168,006.22</u>
8011	CONTRACT EMPLOYEES - TEMP SERVICES	\$ 12,178.95	-	12,178.95
8240	FEES	\$ 1,027,098.02	-	1,027,098.02
8450	GENERAL LIABILITY INSURANCE/CLAIMS	\$ 1,708.00	901.00	2,609.00
8500	TELEPHONE	\$ 26.25	-	26.25
8283	VEHICLE USAGE/CAR MILEAGE	\$ 20,780.80	-	20,780.80
8284	COMPUTER SERVICES	\$ 20,496.00	1,276.00	21,772.00
8287	FACILITIES MANAGEMENT CHARGES	\$ 8,038.44	-	8,038.44
	TOTAL OTHER SERVICES & CHARGES	<u>1,090,326.46</u>	<u>2,177.00</u>	<u>1,092,503.46</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,250,203.17</u>	<u>\$ 10,306.51</u>	<u>\$ 1,260,509.68</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL SUMMARY

OBJ	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED	ADJUSTED
			COST FACTORS	CURRENT ANNUAL CURRENT
7020	PERMANENT EMPLOYEES	\$ 7,572,230.51	\$ 331,815.13	\$ 7,904,045.64
7025	ACT.ASSIGNMENT	23,212.16	1,017.17	24,229.33
7040	TEMPORARY EMPLOYEES	129,652.77	5,681.38	135,334.15
7050	REGULAR HOURLY RATE	5,539.28	242.73	5,782.01
7055	TIME & ONE-HALF	455,316.93	19,951.98	475,268.91
7105	EMPLOYERS SOCIAL SECURITY	597,728.40	26,192.46	623,920.86
7110	HOSPITALIZATION INSURANCE	1,852,316.91	155,779.85	2,008,096.76
7115	RETIREE HEALTH CARE	247,663.21	39,328.92	286,992.13
7120	RETIREMENT FUND CONTRIBUTION	1,746,485.98	51,521.34	1,798,007.32
7135	UNEMPLOYMENT COMPENSATION	15,300.31	-	15,300.31
7150	LONGEVITY PAY	80,975.72	-	80,975.72
7165	SHIFT DIFFERENTIAL	16,011.19	-	16,011.19
7170	ELECTION WRKR-BRD MEMBERS PAY	443.75	-	443.75
7175	FOOD/CLEAN/CAR ALLOW	2,245.83	-	2,245.83
	TOTAL PERSONAL SERVICES	<u>12,745,122.95</u>	<u>631,530.96</u>	<u>13,376,653.91</u>
7520	SUPPLIES	2,418,370.98	-	2,418,370.98
7530	PROCESS CHEMICALS	1,885,428.91	-	1,885,428.91
7670	CLOTHING/CLEANING ALLOWANCE	44,299.90	-	44,299.90
7800	INVENTORY - COST OF GOODS SOLD	193,938.82	-	193,938.82
7910	SUBSCRIPTIONS AND PUBLICATIONS	26,235.94	-	26,235.94
	TOTAL SUPPLIES	<u>4,568,274.55</u>	<u>-</u>	<u>4,568,274.55</u>
6931	GAIN-LOSS ON SALE OF ASSETS-FA	51,727.00	-	51,727.00
8010	CONTRACTUAL SERVICES	4,651,897.28	-	4,651,897.28
8011	CONTRACT EMPLOYEES - TEMP SERVICES	328,503.60	-	328,503.60
8015	CONTRACT SERVICES-TRAINING	11,100.00	-	11,100.00
8016	CONTRACTS- EXTERNAL LEGAL SERVICES	1,193.25	-	1,193.25
8030	ADMINISTRATIVE SERVICES	40,279.34	(40,279.34)	-
8240	FEES	1,064,670.18	-	1,064,670.18
8400	INSURANCE PREMIUMS	416,453.00	-	416,453.00
8450	GENERAL LIABILITY INSURANCE / CLAIMS	238,193.00	14,257.00	252,450.00
8500	TELEPHONE	82,111.07	-	82,111.07
8510	POSTAGE	186,639.14	-	186,639.14
8800	COMMUNITY PROMOTION	16,928.93	-	16,928.93
9000	PRINTING & PUBLISHING	4,440.98	-	4,440.98
9560	PROFESSIONAL DEVELOPMENT	21,168.41	-	21,168.41
9561	OTHER TRAVEL AND TRAINING	25,284.56	-	25,284.56
9563	FOOD-BEVERAGE	688.79	-	688.79
9580	MEMBERSHIPS	53,405.70	-	53,405.70
9280	WATER	9,414.66	-	9,414.66
9290	REFUSE COLLECTION CHARGES	8,470.20	-	8,470.20
9200	ELECTRICITY	3,428,756.84	(116,348.40)	3,312,408.44
9210	NATURAL GAS	215,893.43	-	215,893.43
9310	EQUIPMENT REPAIRS	25,139.03	-	25,139.03
9340	MAINTENANCE SERVICE	540,072.38	-	540,072.38
9400	LAND RENTAL OR LEASE	4,219.15	-	4,219.15
9410	EQUIPMENT RENTALS OR LEASE	83,350.58	-	83,350.58
8280	FLEET MANAGEMENT EQUIPMENT	1,260,498.71	-	1,260,498.71
8281	311 CALL CENTER SERVICES	551,878.49	-	551,878.49
8282	ENGINEERING SERVICES	14,963.75	-	14,963.75
8283	VEHICLE RENTAL/CAR MILEAGE	44,522.99	-	44,522.99
8284	COMPUTER SERVICES	555,564.00	24,681.00	580,245.00
9550	MISCELLANEOUS	150.00	-	150.00
9650	BAD DEBT WRITE-OFFS	(452.38)	-	(452.38)
8287	FACILITIES MANAGEMENT CHARGES	10,225.56	-	10,225.56
	TOTAL OTHER SERVICES & CHARGES	<u>13,947,351.62</u>	<u>(117,689.74)</u>	<u>13,829,661.88</u>
9750	BUILDING	303,090.31	-	303,090.31
9760	EQUIPMENT/VEHICLES	321,374.03	-	321,374.03
9800	FURNITURE	49,315.09	-	49,315.09
9840	SOFTWARE/SOFTWARE MAINTENANCE	526,670.16	-	526,670.16
	TOTAL CAPITAL	<u>1,200,449.59</u>	<u>-</u>	<u>1,200,449.59</u>
8285	A-87 COST ALLOCATION	979,373.00	161,341.00	1,140,714.00
9954	OPERATING TRANS-DEV CENTER	22,198.00	-	22,198.00
9955	OPERATING TRANS-MISC	40,000.00	-	40,000.00
	TOTAL TRANSFERS/FEES	<u>1,041,571.00</u>	<u>161,341.00</u>	<u>1,202,912.00</u>
	GRAND TOTAL- EXPENDITURES	\$ 33,502,769.71	\$ 675,182.22	\$ 34,177,951.93
	LESS: SDSF CONTRIBUTION	(2,804,437.00)	(1,297,583.93)	(4,102,020.93)
	NET TOTAL- EXPENDITURES	<u>\$ 30,698,332.71</u>	<u>\$ (622,401.71)</u>	<u>\$ 30,075,931.00</u>

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 30, 2024

TO: Molly J. Clarin  
Chief Financial Officer

FROM: Tai Verbrugge  
Utility Financial Officer

**SUBJECT: 2024 WATER RATE STUDY TASK #4  
FY24 OPERATING EXPENSES - WATER PUMPING FACILITIES**

This schedule allocates the integrated and non-integrated adjusted expenses for operating and maintaining the distribution system's pumping stations based on electricity costs. The operating expenses consist of direct labor, utilities, operating and maintenance supplies, repairs and maintenance, and equipment rental.

Attachment

TCV



ALLOCATION OF COLDBROOK PUMPING TO WATER PUMPING FACILITIES

STATION	ENERGY COST	PERCENT	EXPENDITURE ALLOCATION	
			ACTUAL	ADJUSTED
ALGER	\$ 46,863	3.58%	\$ 104,161	\$ 105,709
BOOSTER A	10,499	0.80%	23,336	23,683
BOOSTER D	22,597	1.72%	50,226	50,972
BRISTOL	10,401	0.79%	23,118	23,462
COLDBROOK	60,522	4.61%	134,522	136,521
COVELL	72,069	5.49%	160,187	162,567
EAST PARIS	182,955	13.95%	406,651	412,694
FRANKLIN	344,102	26.23%	764,830	776,196
LIVINGSTON	327,417	24.96%	727,744	738,560
WILSON	86,585	6.60%	192,451	195,311
BURTON	39,677	3.02%	88,189	89,500
DEAN LAKE	108,232	8.25%	240,565	244,141
TOTAL	<u>\$ 1,311,919</u>	<u>100.00%</u>	<u>\$ 2,915,980</u>	<u>\$ 2,959,316</u>

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 23, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Molly Clarin  
Chief Financial Officer

**SUBJECT: 2024 WATER RATE STUDY TASK #5  
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY24 operating costs are listed below.

Expense Object – 7020, 7025, 7030, 7035, 7040, 7045, 7050, 7055, 7060, 7190

GREIU wages were increased by 2.00% in FY2025 while APA wages were increased by 1.00%. Labor negotiations will begin shortly for the next contract which begins with FY2026. As the outcome of these negotiations are unknown at this time, a 5.00% wage increase has been presumed for both labor unions for FY2026. After converting these increases from a 2024 fiscal year to a 2025 calendar year basis, the result is a 4.549% factor for GREIU employees and a 3.526% factor for APA employees. A blended rate was then computed by weighting the calendar year percentages according to the percentage of Water Fund employees in each union (84% GREIU and 16% APA). Executive and non-reps amounted to only 1.5% of the population and were therefore excluded. **The wage increase factor to translate FY2024 actual costs to estimated calendar 2025 will be 4.382% [4.549 X 84% + 3.526 X 16%].**

Expense Object – 8284/8450/8285

Adjust FY2024 actual cost to reflect adjustments in charges for central services rendered by the Information Technology Fund (data charges), the Insurance Payment Fund (workers compensation and general liability) and the General Operating Fund (cost allocation). The “Exhibit” workbook (inclusive of cost center allocations) maintained by the Budget Office has been utilized to blend FY2025 and FY2026 budget amounts thus arriving at an estimated 2025 calendar year rate as follows:

<b>8284-Data Charges</b>			
Cost Center	FY2025 Request	FY2026 Forecast	Calendar 2025 Estimate
253-4010-5910	\$21,746	\$21,797	<b>\$21,772</b>
536-1000-5910	\$30,151	\$30,223	<b>\$30,187</b>
536-2110-5910	\$140,859	\$141,195	<b>\$141,027</b>
536-3010-5910	\$55,278	\$55,410	<b>\$55,344</b>
536-4510-5910	\$15,076	\$15,112	<b>\$15,094</b>
536-6010-5910	\$155,634	\$156,005	<b>\$155,820</b>
536-6510-5910	\$160,809	\$161,192	<b>\$161,001</b>

Total	\$579,553	\$580,934	\$580,244

<b>8450-General Liability Insurance</b>			
Cost Center	FY2025 Request	FY2026 Forecast	Calendar 2025 Estimate
253-4010-5910	\$2,545	\$2,672	<b>\$2,609</b>
536-1000-5910	\$243,747	\$255,934	<b>\$249,841</b>
Total	\$246,292	\$258,606	\$252,449

<b>8285-Contributions to Other Funds (Cost Allocation)</b>			
Cost Center	FY2025 Request	FY2026 Forecast	Calendar 2025 Estimate
536-1000-5910	\$1,087,073	\$1,012,359	<b>\$1,049,716</b>
536-2110-5910	\$90,097	\$91,899	<b>\$90,998</b>
Total	\$1,177,170	\$1,104,258	\$1,140,714

Expense Object - 7105

Increase FY2024 actual FICA expense by 4.382% consistent with the known wage increase factor noted above.

Expense Object - 7110

The calendar 2025 Trend Report is not completed at this time. However, unfavorable health insurance cost trends were anticipated in the calendar 2024 report. Both the medical trend increase assumption (6.5%) and the prescription drug trend increase assumption (7.5%) remained the same in the 2024 report as in the 2023 report. The health insurance fund surplus reduction implemented in the 2021 report is also less favorable for calendar 2025 rates than it was for calendar 2024 rates. Although the overall health insurance trend is still unfavorable, the 2024 report was less unfavorable than the 2023 report. The City entering contracts with new third-party administrators for health insurance and prescription drug plans is contributing to this. The new medical third-party administrator provided a one-time implementation credit of \$250,000 that was factored into the implemented rates in the 2024 report. The analysis of moving to a new prescription drug plan administrator indicates significant savings. However, to be conservative, a portion, but not all of the expected savings are reflected in the 2024 Trend Report. Finally, three-year smoothing of plan gains or losses is more favorable for calendar 2025 rates than it was for calendar 2024 rates. Smoothing favorable trends has contributed to limiting projected annual increases in health insurance costs or has provided for further decreases when applicable. **Increase FY2024 health insurance actual by 8.41% to reflect these anticipated rate changes.**

The budgeted FY2025 (\$18,159.00) and FY2026 (\$19,965.00) health insurance rates were blended into a 2025 calendar year rate estimate and divided by the FY2024 base budget amount (\$17,584.00) to arrive at the increase factor [(((((\$18,159.00 + \$19,965.00) / 2)) / \$17,584.00) - 1) \* 100].

Expense Object - 7115

Retiree health care (“RHC”) rates are projected to trend up in FY2025 (to 3.59%) and FY2026 (to 3.69%) from a base year rate of 3.28% in FY2024.

The RHC factor after consideration of the above rate and wage adjustments is 116.06% (or an increase of 16.06%) for GREIU members and 114.93% (or an increase of 14.93%) for APA members. These factors are then weighted in accordance with union membership within the Water Fund [(16.06 \* 84%) + (14.93 \* 16%)].

The factor to establish calendar year 2025’s retiree health care cost is 15.88%.  
**Increase the total of fiscal year 2024’s retiree health care by this percent to establish the cost for calendar year 2025.**

Expense Object - 7120

The pension expense factor to translate FY2024 actual costs to estimated calendar 2025 will be 2.95%. **Increase the total of fiscal year 2024’s pension expense by this percent to establish the cost for calendar year 2025.** This reflects the effect of a General Pension rate change increase from FY24 of 23.59% to a calendar 2025 rate of 23.27% and the projected wage adjustments discussed above. The calendar 2025 rate is a blend of the FY2025 rate (23.43%) and the FY2026 rate (23.11%).

The pension factor after consideration of the above rate and wage adjustments is 103.11% (or an increase of 3.11%) for GREIU members. The pension factor after consideration of the above rate and wage adjustments is 102.10% (or an increase of 2.10%) for APA members. These factors are then weighted in accordance with union membership within the Water Fund [(3.11 \* 84%) + (2.10 \* 16%)].

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 17, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Wayne Jernberg, PE  
Water System Manager

**SUBJECT: 2024 WATER RATE STUDY TASK #5  
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY24 operating costs are listed below:

<u>ACCOUNT</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
5910-536-6010-8010	Private Lead Service Line Replacement FY24 Expenses (adjust to admin unit 1000 to allocate GR only)	\$868,620.99
5910-536-1000-8030	Kent County Community Action Program (ICB) (adjusting FY24 to zero, as this program is not funded by water rates)	(\$40,279.34)
5910-536-6510-9200	Consumers Energy Green Generation participation (adjust to admin unit 1000 to allocate GR only)	\$58,174.20

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 30, 2024

TO: Molly J. Clarin  
Chief Financial Officer

FROM: Tai Verbrugge  
Utility Financial Officer

**SUBJECT: 2024 WATER RATE STUDY TASK #6**

The Water Supply System Fund's revenue by governmental unit for the year ending June 30, 2024, are disclosed on the attached page, along with the three-year average billed volume used to calculate expected revenue in the next calendar year (see Task 26 and 27). In addition, annual volume comparisons for the past five (5) years by governmental unit are included herein.

Attachments

TCV

**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, 2024:

	SALES REVENUE		3 YR AVE VOL BILLED	3 YR AVE VOL BILLED
	A	B	(GALLONS)	(HCF)
RETAIL:				
CITY OF GRAND RAPIDS (1)	\$ 30,378,414.99		6,202,963,536	8,292,732
CITY OF WALKER	3,961,098.90		931,017,648	1,244,676
CITY OF KENTWOOD	4,968,136.71		1,269,467,452	1,697,149
CASCADE TOWNSHIP	4,127,820.23		718,090,472	960,014
GRAND RAPIDS TOWNSHIP	2,776,576.48		546,774,536	730,982
TALLMADGE TOWNSHIP	251,092.98	56,091.84	55,208,384	73,808
SUB-TOTAL RETAIL (2)	<u>\$ 46,463,140.29</u>	<u>\$ 56,091.84</u>	<u>9,723,522,028</u>	<u>12,999,361</u>
WHOLESAL:				
CITY OF E. GRAND RAPIDS	\$ 875,040.02		439,583,144	587,678
OTTAWA CO. (3)	2,692,866.03	13,636.80	1,465,107,600	1,958,700
ADA TOWNSHIP	1,568,770.80		466,680,940	623,905
SUB-TOTAL WHOLESAL	<u>\$ 5,136,676.85</u>	<u>\$ 13,636.80</u>	<u>2,371,371,684</u>	<u>3,170,283</u>
TOTAL	<u>\$ 51,599,817.14</u>	<u>\$ 69,728.64</u>	<u>12,094,893,712</u>	<u>16,169,644</u>

REVENUE CLASSIFICATION:

A) 536-1000-5910-6431 RETAIL METERED WATER SALES	46,459,131.06
536-1000-5910-6433 WHOLESAL WATER SALES	5,136,676.85
536-1000-5910-6435 WYOMING WATER SALES	<u>4,009.23</u>
SUB-TOTAL	<u>\$ 51,599,817.14</u>
B) 536-1000-5910-6171 FIRE HYDRANT BILLINGS	<u>69,728.64</u>
TOTAL	<u>\$ 51,669,545.78</u>

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

(2) A NET REVENUE ACCRUAL OF \$884,385.60 HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2024.

(3) OTTAWA COUNTY RATES ARE CALCULATED BASED ON MOST RECENT FISCAL YEAR BILLED VOLUME PER CONTRACT.

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
2024 RATE STUDY TASK NO. 6**

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

<b>MUNICIPALITY</b>	<b>FY20</b>		<b>FY21</b>		<b>FY22</b>		<b>FY23</b>		<b>FY24</b>		<b>FY20 - FY24 % CHANGE</b>
	<b>VOL BILLED</b>	<b>VOL BILLED</b>	<b>% CHANGE</b>	<b>VOL BILLED</b>	<b>% CHANGE</b>	<b>VOL BILLED</b>	<b>% CHANGE</b>	<b>VOL BILLED</b>	<b>% CHANGE</b>		
GRAND RAPIDS	5,899,570	6,288,343	6.59%	6,151,371	-2.18%	6,325,990	2.84%	6,131,530	-3.07%	3.93%	
WALKER	835,703	952,327	13.96%	923,869	-2.99%	943,276	2.10%	925,908	-1.84%	10.79%	
KENTWOOD	1,190,449	1,305,704	9.68%	1,270,170	-2.72%	1,270,658	0.04%	1,267,574	-0.24%	6.48%	
CASCADE TWP	585,011	686,898	17.42%	697,931	1.61%	716,807	2.70%	739,534	3.17%	26.41%	
GRAND RAPIDS TWP	462,801	573,570	23.93%	528,741	-7.82%	579,069	9.52%	532,514	-8.04%	15.06%	
TALLMADGE TWP	37,831	48,587	28.43%	52,057	7.14%	53,593	2.95%	59,974	11.91%	58.53%	
EAST GRAND RAPIDS**	422,907	430,073	1.69%	429,664	-0.10%	479,864	11.68%	409,223	-14.72%	-3.24%	
OTTAWA COUNTY***	1,299,136	1,492,668	14.90%	1,426,225	-4.45%	1,471,115	3.15%	1,465,108	-0.41%	12.78%	
ADA TWP	417,313	466,832	11.87%	461,794	-1.08%	487,813	5.63%	450,435	-7.66%	7.94%	
<b>TOTAL</b>	<b>11,150,721</b>	<b>12,245,001</b>	<b>9.81%</b>	<b>11,941,820</b>	<b>-2.48%</b>	<b>12,328,184</b>	<b>3.24%</b>	<b>11,981,799</b>	<b>-2.81%</b>	<b>7.45%</b>	

VOLUME PUMPED	12,735,000	13,381,000	13,365,000	13,651,000	12,899,000
% BILLED TO PUMPED	87.6%	91.5%	89.4%	90.3%	92.9%

GRAND RAPIDS VOLUME COMPARED TO  
CUSTOMER COMMUNITIES

VOLUME = 1,000 GALLONS	<b>FY20</b>		<b>FY21</b>		<b>FY22</b>		<b>FY23</b>		<b>FY24</b>	
	<b>VOL BILLED</b>	<b>VOL BILLED</b>	<b>% OF TOTAL</b>	<b>VOL BILLED</b>	<b>% OF TOTAL</b>	<b>VOL BILLED</b>	<b>% OF TOTAL</b>	<b>VOL BILLED</b>	<b>% OF TOTAL</b>	
GRAND RAPIDS	5,899,570	6,288,343	51.35%	6,151,371	51.51%	6,325,990	51.31%	6,131,530	51.17%	
CUSTOMER COMMUNITIES	5,251,151	5,956,658	48.65%	5,790,449	48.49%	6,002,195	48.69%	5,850,269	48.83%	
<b>TOTAL</b>	<b>11,150,721</b>	<b>12,245,001</b>	<b>100.00%</b>	<b>11,941,820</b>	<b>100.00%</b>	<b>12,328,184</b>	<b>100.00%</b>	<b>11,981,799</b>	<b>100.00%</b>	

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

\*\* Volume adjusted in FY22 for East Grand Rapids due to faulty meter calibration.

\*\*\* Volume adjusted in FY21 and FY22 for Ottawa County due to faulty meter conversion factor.



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

OPERATING REVENUES OTHER THAN FROM SALES OF WATER:

536-1000-5910			
4788	CONTRACTOR UNDERGROUND LICENSE	\$	4,020.00
4916	TAPPING PERMITS		49,125.00
6260	SERVICE FEES-GENERAL		271,595.00
6265	SERVICES FOR CONTRACTORS		24,633.72
6140	INSPECTION FEES - UTILITIES		108,530.00
6151	METER SETTING FEES		51,340.00
6423	SALE OF SCRAP MATERIAL		50,240.94
6461	INVENTORY WITHDRAWALS		7,652.32
6434	UNMETERED WATER		177,377.52
6723	PENALTIES ON SPECIAL ASSESSMENTS		8,789.51
			<u>8,789.51</u>
		\$	<u>753,304.01</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR	\$	<u>233,040.84</u>
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INTEGRATED SYSTEM CREDITS

536-1000-5910			
6152	INTEGRATED WATER CONNECTION		529,812.50
6871	REFUNDS-REBATES		2,790.52
		\$	<u>532,603.02</u>

OFFSETTING CREDIT TO CUSTOMER ACCOUNTING ACTIVITY EXPENSES:

536-1000-5910			
6342	BILLABLE EXPENSE - SEWAGE DISPOSAL SYSTEM*	\$	<u>2,809,504.00</u>

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

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 9, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Wayne Jernberg, PE  
Water System Manager

**SUBJECT: 2024 WATER RATE STUDY – TASK #8  
CHANGES IN OPERATING LEVELS**

No significant changes in operating levels are anticipated to take effect by January 1, 2025, which would require adjustments to operating costs for the test period.

WJ

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 9, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Wayne Jernberg, PE  
Water System Manager

**SUBJECT: 2024 WATER RATE STUDY – TASK #9  
CHANGES IN OPERATING REVENUES**

No significant changes in water revenues are anticipated to take effect by January 1, 2025, which would require an adjustment to operating revenue estimates as a whole.

WJ

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 30, 2024

TO: Molly J. Clarin  
Chief Financial Officer

FROM: Tai Verbrugge  
Utility Financial Officer

**SUBJECT: 2024 WATER RATE STUDY- TASK #10**

The following are water system projects that should be considered operative as of January 1, 2025.

<u>Description</u>	<u>Location</u>	<u>Proj. Code</u>	<u>Cost</u>
LMFP Pretreatment – Sediment Basins	Integrated	591117045	\$1,637,867
Livingston Ventilation and Sound Impr.	Grand Rapids	Operations	\$260,850
Woodland Drive Watermain	Grand Rapids	Operations	\$11,278
Lyon Square Watermain	Grand Rapids	Contribution	\$620,000
Scribner Northwest Watermain	Grand Rapids	Contribution	\$250,000
Hope Village Watermain	Grand Rapids	Contribution	\$99,195
1417 Robinson Rd Watermain	Grand Rapids	Contribution	\$23,330
Deloney Avenue Watermain	Grand Rapids	Contribution	\$18,000
Franklin Pump Station Electrical Impr.*	Grand Rapids	591222035L	\$6,198,606
Cesar Chavez – Clyde Park to Hall	Grand Rapids	591124057	\$2,266,363
28 <sup>th</sup> /36 <sup>th</sup> St PRVs and Alger Flow Meter	Grand Rapids	591123045	\$1,996,933
Omena – Burton to Onaway	Grand Rapids	591124041	\$868,118
Division – Fulton to Michigan	Grand Rapids	591121059	\$605,175
Eleanor – Plainfield to Diamond	Grand Rapids	591224046L	\$582,980
Hall / Paris / Adams	Grand Rapids	591224042L	\$394,436
Robinson – Youell to Plymouth	Grand Rapids	591122047	\$90,538
State – Lafayette to Madison	Grand Rapids	591118001	\$53,507
Walker Ave – Northridge to 4 Mile	Walker	Contribution	\$430,971
Savannah at Waterford Village	Walker	Contribution	\$205,490
Riverbend Drain Crossing	Walker	Contribution	\$127,403
Tallman Woods	Walker	Contribution	\$108,175
Reserve at Knapp Bluff	GR Township	Contribution	\$335,000
Meadowood Townhomes	GR Township	Contribution	\$280,400
Sedona Hills	GR Township	Contribution	\$222,175

Total: \$17,686,790

\*Zoned asset

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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, 2024

**INTEGRATED SYSTEM**

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND & EASEMENTS	\$ 2,706,824	\$ -	\$ -
LAND IMPROVEMENTS	5,452,020	2,586,479	233,920
BUILDINGS & STRUCTURES	54,353,648	32,437,927	1,261,625
STORAGE	10,453,838	7,802,531	163,604
PROCESS EQUIPMENT	74,308,232	47,446,140	1,391,206
AUXILIARY EQUIPMENT	19,533,508	8,699,651	1,113,300
MACHINERY & EQUIPMENT	5,714,599	3,416,406	358,382
WATERMAINS	56,676,525	25,191,141	730,298
	<u>\$ 229,199,194</u>	<u>\$ 127,580,275</u>	<u>\$ 5,252,335</u>

**NON-INTEGRATED SYSTEM**

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND & EASEMENTS	\$ 3,954,384	\$ -	\$ -
LAND IMPROVEMENTS	1,427,824	1,239,695	27,629
BUILDINGS & STRUCTURES	17,302,264	6,622,427	403,269
STORAGE	16,072,933	8,414,965	399,243
PROCESS EQUIPMENT	10,502,244	4,573,525	358,268
AUXILIARY EQUIPMENT	9,521,687	4,808,645	497,517
MACHINERY & EQUIPMENT	653,984	491,904	51,499
OFFICE EQUIPMENT & FURNITURE	274,277	274,277	-
WATERMAINS - GRAND RAPIDS	246,171,862	53,541,130	3,033,964
WATERMAINS - WALKER	33,367,846	10,377,702	442,119
WATERMAINS - KENTWOOD	33,194,518	11,443,738	442,309
WATERMAINS - CASCADE TWP	24,630,185	8,528,571	325,441
WATERMAINS - GRAND RAPIDS TWP	22,475,492	6,683,801	299,079
WATERMAINS - TALLMADGE TWP	3,103,088	690,939	41,434
	<u>\$ 422,652,588</u>	<u>\$ 117,691,319</u>	<u>\$ 6,321,771</u>
TOTAL	<u>\$ 651,851,782</u>	<u>\$ 245,271,594</u>	<u>\$ 11,574,106</u>

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2024.

**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, 2024: \$ 2,921,469

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 = \$ 30,075,931 @ 90/365 = \$ 7,415,983

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$ 2,921,469
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	<u>7,415,983</u>
	<u><u>\$ 10,337,452</u></u>

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: August 16, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Wayne Jernberg, PE  
Water System Manager

**SUBJECT: 2024 WATER RATE STUDY- TASK #13**

Lengths and costs of all zoned primary and intermediate transmission mains, as well as jointly used storage tanks and pumping stations, are allocated to customer communities based on the 2020 Comprehensive Master Plan and the current hydraulic model for the Water System. Costs are adjusted annually for the changes in billed flow for each customer community.

There have been no changes in 2024 to the Zoning maps for the Water System.

All zoning work papers and maps are on file at the Water Administration Building located at 1900 Oak Industrial Dr. NE, Grand Rapids, MI 49505.

LMS



# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: August 16, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Wayne Jernberg, PE  
Water System Manager

**SUBJECT: 2024 WATER RATE STUDY- TASK #14**

There have been no changes in 2024 to the Zoning maps for the Water System.

All zoning work papers and maps are on file at the Water Administration Building located at 1900 Oak Industrial Dr. NE, Grand Rapids, MI 49505.

LMS

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

COMPUTE CONSTRUCTION COST RATE BASE (NET BOOK VALUE OF ASSETS, PLUS WORKING CAPITAL, LESS CONTRIBUTIONS BY OTHERS).

ORIGINAL CONSTRUCTION COST	- TASK #10	\$ 17,686,790	
	- TASK #11	651,851,782	
		<hr/>	\$ 669,538,572
LESS: ACCUMULATED DEPRECIATION	- TASK #11	\$ 245,271,594	
		<hr/>	(245,271,594)
			<hr/>
			424,266,978
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 10,337,452	
		<hr/>	10,337,452
			<hr/>
			434,604,430
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 124,651,018	
LESS: AMORTIZATION		(44,717,094)	
		<hr/>	(79,933,924)
CONSTRUCTION COST RATE BASE			<hr/> <hr/>
			\$ 354,670,507

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# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: August 30, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Lindsay Sagorski Munsell  
Acting Assistant Water System Manager

**SUBJECT: 2024 Water Rate Study Integrated Connection Fees Task #15A**

Attached is the Integrated Water Connection Fee Schedule of rates effective January 1, 2025. Per the Fifth Amendment to the Water & Sanitary Sewer Service Agreements, adopted by City Commission on March 27, 2018 (Res. 87571), the methodology for connection to the water and sewer systems is calculated based on the cost of connection to the System and is evaluated annually as part of the Rate Study and shall be administered the same across the retail system.

The integrated connection fees effective January 1, 2025, shall be as follows:

Residential Users (three residential units or less)

Plan Review and Connection Fee (PRC Fee)			
Meter Size	2024	2025	% Change
3/4 inch	\$390	\$395	1.28%
1 inch	\$410	\$415	1.22%
1-1/2 inch	\$410	\$415	1.22%

All other Users (including residential of more than 3 units, commercial, industrial, governmental and religious)

Plan Review and Connection Fee (PRC Fee)			
Meter Size	2024	2025	% Change
3/4 inch	\$755	\$765	1.32%
1 inch	\$1,010	\$1,030	1.98%
1-1/2 inch	\$1,340	\$1,370	2.24%
2 inch	\$1,850	\$1,890	2.16%
3 inch	\$2,305	\$2,355	2.17%
4 inch	\$3,320	\$3,390	2.11%
6 inch	\$4,675	\$4,780	2.25%

Plus a Meter Capacity Fee based on the meter size (when water and sanitary sewer connections are made at the same time only one Meter Capacity Fee shall be charged) as follows:

<b>Meter Capacity Charge</b>			
<b>Meter Size</b>	<b>2024</b>	<b>2025</b>	<b>% Change</b>
¾ inch	\$210	\$210	0.00%
1 inch	\$300	\$295	-1.67%
1 ½ inch	\$750	\$985	31.33%
2 inch	\$880	\$1,155	31.25%
3 inch	\$2,162	\$2,355	8.93%
4 inch	At Cost	\$3,146	NA
6 inch	At Cost	\$5,201	NA
8 inch	At Cost	\$10,480	NA
10 inch	At Cost	\$13,675	NA

Irrigation/Fire Protection Review Fee

<b>Irrigation/Fire Service Review Fee</b>			
	<b>2024</b>	<b>2025</b>	<b>% Change</b>
All Sizes	\$790	\$800	1.27%

Commercial Plan Assessment Fee – For instances where there is an established connection or property has been previously reviewed to allow for connection to the System which require less System resources to verify system connection requirements.

<b>Commercial Plan Assessment Fee</b>			
	<b>2024</b>	<b>2025</b>	<b>% Change</b>
All Sizes	\$125	\$125	0.00%

Further information on the new integrated connection fee methodology can be provided through the Utility Business Office.

LMS

Cc: Wayne Jernberg  
Brian Bradley

James Ouzts

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

INCLUDE MAJOR 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	BUDGET YEAR
1	FULLER WM REPLACEMENT	500,000	2023
2	INTERMEDIATE PD TANK	5,750,000	2023
3	O'BRIEN WM EXTENSION	1,300,000	2024
4	4 MILE RD WM LOOPING WITH ALPINE INTERCONNECTION	1,475,000	2024
5	GODFREY WM REPLACEMENT	3,600,000	2025
6	KENDALL WM REPLACEMENT	800,000	2025
7	STEVENS WM REPLACEMENT	1,000,000	2025
8	FRUITWOOD WM REPLACEMENT	700,000	2025
9	DIVISION WM REPLACEMENT	1,100,000	2025
10	GARFIELD WM REPLACEMENT	900,000	2025
11	GRANDVILLE WM REPLACEMENT	1,000,000	2025
12	LEONARD & CRAHAN WM	2,600,000	2025
13	OAKLEY WM REPLACEMENT	500,000	2025
14	WALKER FRUIT RIDGE WM RELOCATION	600,000	2025
15	CASCADE PFAS WATERMAIN EXTENSION	11,263,050	2025
16	CALEDONIA WHOLESALE WATER IMPROVEMENTS	2,081,950	2025
17	BURTON WM REPLACEMENT	4,207,200	2025
18	BURTON WM REPLACEMENT	4,040,800	2025
19	LEAD SERVICE LINE REPLACEMENTS (ROTOMILLS)	9,000,000	2025
20	BOSTON WM REPLACEMENT	3,091,400	2025
21	ALGER TANK IMPROVEMENTS	500,000	2026
22	BERKSHIRE, GIDDINGS, SHANGRI-LA WM REPLACEMENTS	2,000,000	2026
23	JEFFERSON WM REPLACEMENT	900,000	2026
24	OAKWOOD AVE WM REPLACEMENT	1,600,000	2026
25	VALLEY, 3RD & 4TH WM REPLACEMENT	3,000,000	2026
26	MILLBANK & DERBYSHIRE WM REPLACEMENT	850,000	2026
27	PLYMOUTH WM REPLACEMENT	2,000,000	2026
28	LEAD SERVICE LINE REPLACEMENTS (ROTOMILLS)	9,000,000	2026
29	BUCHANAN WM REPLACEMENT	1,900,000	2026
30	ALGER WM REPLACEMENT	1,540,000	2027

31	LEAD SERVICE LINE REPLACEMENTS (ROTOMILLS)	9,000,000	2027
32	BUCHANAN WM REPLACEMENT	1,200,000	2027
33	2ND ST WM REPLACEMENT	1,000,000	2027
34	SHERMAN WM REPLACEMENT	650,000	2027
35	BUTTERWORTH WM REPLACEMENT	525,000	2027
36	60TH WM IN KENTWOOD	2,000,000	2027
37	BUTTERWORTH WM REPLACEMENT	1,100,000	2028
38	LEAD SERVICE LINE REPLACEMENTS (ROTOMILLS)	9,000,000	2028
39	HALL WM REPLACEMENT	1,000,000	2028
40	DIVISION WM REPLACEMENT	3,700,000	2029
41	LOGAN WM REPLACEMENT	1,000,000	2029
42	BROOKLYN WM IMPROVEMENT	1,700,000	2029
43	DIAMOND WM REPLACEMENT	1,300,000	2029
44	PATTERSON TANK IMPROVEMENTS	500,000	2029
45	LEAD SERVICE LINE REPLACEMENTS (ROTOMILLS)	9,000,000	2029
		<u>\$ 121,474,400</u>	

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2024. COSTS SHOWN ARE IN 2023 DOLLARS AND ARE TAKEN FROM THE FISCAL YEARS 2025-2029 CAPITAL PROJECT PLAN.

SOURCE: WAYNE JERNBERG, WATER SYSTEM MANAGER, SEPTEMBER 2024

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

**BONDS - PRINCIPAL & INTEREST PAYMENTS (SENIOR)**

FISCAL YEAR ENDING JUNE 30,	PRINCIPAL	INTEREST	PRIN & INT
2025	\$ 3,875,000	\$ 5,208,950	\$ 9,083,950
2026	4,080,000	5,020,150	9,100,150
2027	4,285,000	4,820,950	9,105,950
2028	4,515,000	4,611,800	9,126,800
2029	4,450,000	4,388,850	8,838,850
2030	4,665,000	4,166,350	8,831,350
2031	4,900,000	3,933,100	8,833,100
2032	5,140,000	3,697,050	8,837,050
2033	5,385,000	3,449,350	8,834,350
2034	5,640,000	3,189,750	8,829,750
2035	5,930,000	2,907,750	8,837,750
2036	3,970,000	2,611,250	6,581,250
2037	4,165,000	2,412,750	6,577,750
2038	4,380,000	2,204,500	6,584,500
2039	4,600,000	1,985,500	6,585,500
2040	3,070,000	1,755,500	4,825,500
2041	3,230,000	1,602,000	4,832,000
2042	3,390,000	1,440,500	4,830,500
2043	3,555,000	1,271,000	4,826,000
2044	3,735,000	1,093,250	4,828,250
2045	3,925,000	906,500	4,831,500
2046	4,125,000	710,250	4,835,250
2047	3,330,000	504,000	3,834,000
2048	3,500,000	337,500	3,837,500
2049	1,585,000	162,500	1,747,500
2050	1,665,000	83,250	1,748,250
	<u>\$ 105,090,000</u>	<u>\$ 64,474,300</u>	<u>\$ 169,564,300</u>



**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	\$ 354,670,507
LESS: BONDED INDEBTEDNESS in CCRB (CASH BASIS) - TASK NO. 20	(135,258,180)
NET WATER SYSTEM EQUITY	<u>\$ 219,412,327</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>
14-Sep-23	3.870%	14-Mar-24	3.520%
21-Sep-23	3.900%	21-Mar-24	3.550%
28-Sep-23	4.090%	28-Mar-24	3.580%
05-Oct-23	4.120%	04-Apr-24	3.680%
12-Oct-23	3.970%	11-Apr-24	3.760%
19-Oct-23	4.190%	18-Apr-24	3.790%
26-Oct-23	4.190%	25-Apr-24	4.070%
02-Nov-23	4.170%	02-May-24	4.070%
09-Nov-23	3.930%	09-May-24	3.930%
16-Nov-23	3.830%	16-May-24	3.930%
22-Nov-23	3.740%	23-May-24	4.000%
30-Nov-23	3.490%	30-May-24	4.130%
07-Dec-23	3.410%	06-Jun-24	3.970%
14-Dec-23	3.460%	13-Jun-24	3.940%
21-Dec-23	3.370%	20-Jun-24	3.900%
28-Dec-23	3.260%	27-Jun-24	3.930%
04-Jan-24	3.310%	03-Jul-24	3.960%
11-Jan-24	3.310%	11-Jul-24	3.940%
18-Jan-24	3.390%	18-Jul-24	3.920%
25-Jan-24	3.430%	25-Jul-24	3.940%
01-Feb-24	3.340%	01-Aug-24	3.940%
08-Feb-24	3.490%	08-Aug-24	3.850%
15-Feb-24	3.540%	15-Aug-24	3.880%
22-Feb-24	3.540%	22-Aug-24	3.880%
29-Feb-24	3.540%	29-Aug-24	3.870%
07-Mar-24	3.520%	05-Sep-24	3.860%
		<u>52 WEEKS</u>	<u>3.773%</u>

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

DETERMINE COMPOSITE RATE OF RETURN ON A CONSTRUCTION COST RATE BASE

	RATE BASE	RATE OF RETURN	RETURN ON INVESTMENT
WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE (CCRB)	\$ 219,412,327	@ 4.773%	= \$ 10,472,297
WATER SYSTEM INDEBTEDNESS IN THE CCRB			
2011 DWRF BONDS	801,301	@ 2.50%	= 20,033
2011 DWRF BONDS	1,406,024	@ 2.50%	= 35,151
2012 DWRF BONDS	1,830,930	@ 2.50%	= 45,773
2012 DWRF BONDS	343,514	@ 2.00%	= 6,870
2013 BONDS	995,000	@ 3.19%	= 31,716
2014 DWRF BONDS	1,747,840	@ 2.50%	= 43,696
2015 BONDS (refunded 2009 Bonds)	18,690,000	@ 5.00%	= 934,500
2015 DWRF BONDS	6,533,063	@ 2.50%	= 163,327
2016 DWRF BONDS	1,423,008	@ 2.50%	= 35,575
2016 BONDS (refunded 2009)	31,320,000	@ 5.00%	= 1,566,000
2018 BONDS (refunded 1993)	28,980,000	@ 4.88%	= 1,412,775
2020 BONDS	25,105,000	@ 5.00%	= 1,255,250
2022 DWRF BONDS	4,567,500	@ 1.88%	= 85,641
2022 DWRF BONDS	11,515,000	@ 1.88%	= 215,906
LESS INTEREST ON BOND RESERVE ACCOUNTS			106,391
	\$ 354,670,507		\$ 16,430,901
COMPOSITE RATE OF RETURN ON INVESTMENT		$\frac{\$ 16,430,901}{\$ 354,670,507} =$	4.633%
<b>Noted Disclosure:</b>			
TOTAL BONDED INDEBTEDNESS IN CCRB (from above)	\$ 135,258,180	TASK NO. 18	

**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, 2024**

**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	\$ 230,837,061	\$ 281,832,358	\$ 34,837,076	\$ 43,183,092	\$ 25,794,923	\$ 21,790,588	\$ 3,103,088	\$ 693,540	\$ -	\$ -	\$ 642,071,726	
LESS: ACCUMULATED DEPRECIATION	127,580,275	69,052,476	10,778,087	14,417,915	8,528,301	6,083,499	690,939	-	-	-	237,131,492	
NET BOOK VALUE	\$ 103,256,786	\$ 212,779,882	\$ 24,058,989	\$ 28,765,177	\$ 17,266,622	\$ 15,707,089	\$ 2,412,149	\$ 693,540	\$ -	\$ -	\$ 404,940,234	
WORKING CAPITAL REQUIREMENT	4,678,834	3,576,862	498,989	605,051	458,983	380,315	28,635	22,432	-	87,351	10,337,452	
	\$ 107,935,620	\$ 216,356,744	\$ 24,557,978	\$ 29,370,228	\$ 17,725,605	\$ 16,087,404	\$ 2,440,784	\$ 715,972	\$ -	\$ 87,351	\$ 415,277,686	
CONTRIBUTIONS	580,137	33,044,355	25,038,286	20,177,689	25,695,563	16,958,619	3,086,740	-	-	-	124,581,389	
LESS AMORTIZATION	(91,725)	(16,131,442)	(8,133,493)	(7,156,495)	(7,378,336)	(5,056,097)	(699,877)	-	-	-	(44,647,465)	
	\$ (488,412)	\$ (16,912,913)	\$ (16,904,793)	\$ (13,021,194)	\$ (18,317,227)	\$ (11,902,522)	\$ (2,386,863)	\$ -	\$ -	\$ -	\$ (79,933,924)	
CONSTRUCTION COST RATE BASE	\$ 107,447,208	\$ 199,443,831	\$ 7,653,185	\$ 16,349,034	\$ (591,621)	\$ 4,184,882	\$ 53,921	\$ 715,972	\$ -	\$ 87,351	\$ 335,343,763	
RETURN ON INVESTMENT- TASK 4/5											\$ -	
RETURN ON INVESTMENT- TASK 20	4.633%	\$ 4,978,029	\$ 9,240,233	\$ 354,572	\$ 757,451	\$ (27,410)	\$ 193,886	\$ 2,498	\$ 33,171	\$ -	\$ 4,047	\$ 15,536,477

**ZONEGATED**

COST	\$ -	\$ (12,547,020)	\$ 4,404,244	\$ 4,442,306	\$ 14,690,102	\$ 7,635,460	\$ 366,516	\$ 1,633,322	\$ -	\$ 6,841,917	\$ 27,466,847
LESS: ACCUMULATED DEPRECIATION	-	(7,054,649)	1,330,689	2,373,725	5,852,017	2,385,955	148,082	767,769	-	2,336,514	8,140,102
NET BOOK VALUE	\$ -	\$ (5,492,371)	\$ 3,073,555	\$ 2,068,581	\$ 8,838,085	\$ 5,249,505	\$ 218,434	\$ 865,553	\$ -	\$ 4,505,403	\$ 19,326,745
WORKING CAPITAL REQUIREMENT	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ (5,492,371)	\$ 3,073,555	\$ 2,068,581	\$ 8,838,085	\$ 5,249,505	\$ 218,434	\$ 865,553	\$ -	\$ 4,505,403	\$ 19,326,745
CONTRIBUTIONS	-	-	-	8,967	6,478	25,220	-	-	-	28,964	69,629
LESS AMORTIZATION	-	-	-	(8,967)	(6,478)	(25,220)	-	-	-	(28,964)	(69,629)
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CONSTRUCTION COST RATE BASE	\$ -	\$ (5,492,371)	\$ 3,073,555	\$ 2,068,581	\$ 8,838,085	\$ 5,249,505	\$ 218,434	\$ 865,553	\$ -	\$ 4,505,403	\$ 19,326,745
RETURN ON INVESTMENT- TASK 19/20	\$ -	\$ (454,378)	\$ 254,272	\$ 171,131	\$ 731,165	\$ 434,285	\$ 18,071	\$ 71,606	\$ -	\$ 372,727	\$ 1,598,879
RETURN ON INVESTMENT- TASK 19/20	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%		8.273%	
TOTAL RETURN ON INVESTMENT	\$ 4,978,029	\$ 8,785,855	\$ 608,844	\$ 928,582	\$ 703,755	\$ 628,171	\$ 20,569	\$ 104,777	\$ -	\$ 376,774	\$ 17,135,356

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART 2  
FISCAL YEAR ENDED JUNE 30, 2024**

**CONSTRUCTION COST**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 229,199,194	\$ 293,776,190	\$ 34,307,688	\$ 44,359,945	\$ 24,630,185	\$ 22,475,492	\$ 3,103,088	\$ -	\$ -	\$ -	\$ 651,851,782
IN SERVICE- TASK 10		1,637,867	10,169,775	872,039	2,310,604	1,165,390	837,575	-	693,540	-	-	17,686,790
PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 3,967,519		(2,814,478)	-	184,462	198,207	1,376,924	-	-	-	1,054,885	-
LIVINGSTON	4,434,386		(1,362,849)	-	102,554	84,557	649,563	-	-	-	526,175	-
FRANKLIN	8,541,087		(5,858,120)	-	3,130,129	1,874,283	-	-	853,708	-	-	-
LEFFINGWELL	141,009		(85,152)	-	10,966	7,922	30,843	-	-	-	35,421	-
BRISTOL	719,950		-	-	-	-	-	-	-	-	-	-
EAST PARIS	7,226,437		429,054	-	(2,796,223)	2,367,169	-	-	-	-	-	-
BURTON	219,892		-	-	-	-	-	-	-	-	-	-
COLDBROOK PS PUMP 2	389,279		(5,521)	-	-	-	5,521	-	-	-	-	-
COVELL	1,563,604		(869,049)	869,049	-	-	-	-	-	-	-	-
WILSON	4,335,618		(3,093,856)	2,955,135	-	-	-	138,721	-	-	-	-
LIVINGSTON EIPD	5,708,345		(24,260)	-	-	-	24,260	-	-	-	-	-
STORAGE TANKS:												
ELKS	509,594		(183,416)	182,391	-	-	-	-	1,025	-	-	-
KNAPP	126,446		(88,310)	-	5,789	6,241	43,141	-	-	-	33,139	-
CAMBRIDGE	471,529		(65,693)	-	65,693	-	-	-	-	-	-	-
PATTERSON	3,938,991		258,464	-	(3,217,993)	2,959,529	-	-	-	-	-	-
WATERMAINS			(20,897,441)	55,018	3,469,472	7,191,542	3,982,729	226,770	779,614	-	5,192,297	1
ADJUSTED BY ZONEGATING		\$ 230,837,061	\$ 269,285,338	\$ 39,241,320	\$ 47,625,398	\$ 40,485,025	\$ 29,426,048	\$ 3,469,604	\$ 2,326,862	\$ -	\$ 6,841,917	\$ 669,538,573
LESS: ZONEGATING ADJUSTMENT		\$ -	\$ (12,547,020)	\$ 4,404,244	\$ 4,442,306	\$ 14,690,102	\$ 7,635,460	\$ 366,516	\$ 1,633,322	\$ -	\$ 6,841,917	\$ 27,466,847
PHYSICAL LOCATION		\$ 230,837,061	\$ 281,832,358	\$ 34,837,076	\$ 43,183,092	\$ 25,794,923	\$ 21,790,588	\$ 3,103,088	\$ 693,540	\$ -	\$ -	\$ 642,071,726

**ACCUMULATED DEPRECIATION**

BY PHYSICAL LOCATION- TASK 11		\$ 127,580,275	\$ 75,015,472	\$ 10,989,437	\$ 15,783,099	\$ 8,528,571	\$ 6,683,801	\$ 690,939	\$ -	\$ -	\$ -	\$ 245,271,594
IN SERVICE- TASK 10		-	-	-	-	-	-	-	-	-	-	-
PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 2,951,496		(2,093,733)	-	137,224	147,449	1,024,315	-	-	-	784,745	-
LIVINGSTON	1,694,323		(520,728)	-	39,185	32,308	248,190	-	-	-	201,045	-
FRANKLIN	5,628,335		(3,860,337)	-	2,062,667	1,235,100	-	-	562,570	-	-	-
LEFFINGWELL	141,009		(85,152)	-	10,966	7,922	30,843	-	-	-	35,421	-
BRISTOL	449,927		-	-	-	-	-	-	-	-	-	-
EAST PARIS	3,220,178		191,191	-	(1,246,027)	1,054,836	-	-	-	-	-	-
BURTON	161,808		-	-	-	-	-	-	-	-	-	-
COLDBROOK PS PUMP 2	142,736		(2,024)	-	-	-	2,024	-	-	-	-	-
COVELL	869,548		(483,293)	483,293	-	-	-	-	-	-	-	-
WILSON	664,885		(474,455)	453,182	-	-	-	21,273	-	-	-	-
LIVINGSTON EIPD	725,970		(3,085)	-	-	-	3,085	-	-	-	-	-
STORAGE TANKS:												
ELKS	251,950		(90,684)	90,177	-	-	-	507	-	-	-	-
KNAPP	116,520		(81,378)	-	5,335	5,751	39,755	-	-	-	30,537	-
CAMBRIDGE	234,556		(32,678)	-	32,678	-	-	-	-	-	-	-
PATTERSON	1,119,183		73,437	-	(914,326)	840,889	-	-	-	-	-	-
WATERMAINS			(5,554,726)	92,687	880,839	2,527,492	437,441	126,302	205,199	-	1,284,766	-
ADJUSTED BY ZONEGATING		\$ 127,580,275	\$ 61,997,827	\$ 12,108,776	\$ 16,791,640	\$ 14,380,318	\$ 8,469,454	\$ 839,021	\$ 767,769	\$ -	\$ 2,336,514	\$ 245,271,594
LESS: ZONEGATING ADJUSTMENT		\$ -	\$ (7,054,649)	\$ 1,330,689	\$ 2,373,725	\$ 5,852,017	\$ 2,385,955	\$ 148,082	\$ 767,769	\$ -	\$ 2,336,514	\$ 8,140,102
PHYSICAL LOCATION		\$ 127,580,275	\$ 69,052,476	\$ 10,778,087	\$ 14,417,915	\$ 8,528,301	\$ 6,083,499	\$ 690,939	\$ -	\$ -	\$ -	\$ 237,131,492

**CITY OF GRAND RAPIDS, MICHIGAN  
 WATER SUPPLY SYSTEM FUND  
 CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART 3  
 FISCAL YEAR ENDED JUNE 30, 2024**

**CONTRIBUTIONS BY OTHERS**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
2023 RATE STUDY- LOCATION		\$ 580,137	\$ 26,641,436	\$ 23,760,812	\$ 20,046,862	\$ 20,924,496	\$ 16,256,163	\$ 3,058,480	\$ -	\$ -	\$ -	\$111,268,386
ADDITIONS:												
FRONT FOOT FEES			266,284	60,380	-	-	74,482	28,260	-	-	-	429,406
FIXED ASSET CONTRIBUTIONS		-	6,136,635	1,217,094	130,827	4,771,067	627,974	-	-	-	-	12,883,597
OTHER CONTRIBUTIONS		-	-	-	-	-	-	-	-	-	-	-
		580,137	33,044,355	25,038,286	20,177,689	25,695,563	16,958,619	3,086,740	-	-	-	124,581,389
PUMPING STATIONS:												
LEFFINGWELL	\$ 115,303			-	8,967	6,478	25,220	-	-	-	28,964	69,629
ADJUSTED BY ZONEGATING		580,137	33,044,355	25,038,286	20,186,656	25,702,041	16,983,839	3,086,740	-	-	28,964	124,651,018
LESS: ZONEGATING ADJUSTMENT		-	-	-	8,967	6,478	25,220	-	-	-	28,964	69,629
PHYSICAL LOCATION		580,137	33,044,355	25,038,286	20,177,689	25,695,563	16,958,619	3,086,740	-	-	-	124,581,389
<b>AMORTIZED CONTRIBUTIONS</b>												
2023 RATE STUDY- LOCATION		\$ 83,990	\$ 15,450,941	\$ 7,795,783	\$ 6,884,977	\$ 7,034,445	\$ 4,827,964	\$ 658,720	\$ -	\$ -	\$ -	\$ 42,736,820
CURRENT YEAR ADJUSTMENTS		7,735	422,037	337,710	271,518	343,891	228,133	41,157				1,652,181
PRIOR PERIOD ADJUSTMENT			258,464									258,464
		91,725	16,131,442	8,133,493	7,156,495	7,378,336	5,056,097	699,877	-	-	-	44,647,465
PUMPING STATIONS:												
LEFFINGWELL	115,303			-	8,967	6,478	25,220	-	-	-	28,964	69,629
ADJUSTED BY ZONEGATING		91,725	16,131,442	8,133,493	7,165,462	7,384,814	5,081,317	699,877	-	-	28,964	44,717,094
LESS: ZONEGATING ADJUSTMENT		-	-	-	8,967	6,478	25,220	-	-	-	28,964	69,629
PHYSICAL LOCATION		91,725	16,131,442	8,133,493	7,156,495	7,378,336	5,056,097	699,877	-	-	-	44,647,465

**CITY OF GRAND RAPIDS, MICHIGAN**  
**WATER SUPPLY SYSTEM FUND**  
**RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING**  
**FISCAL YEAR ENDED JUNE 30, 2024**

**CONSTRUCTION COST- BY PHYSICAL LOCATION**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
COST BY PHYSICAL LOCATION- TASK 11		\$ 229,199,194	\$ 305,881,459	\$ 33,367,846	\$ 33,194,518	\$ 24,630,185	\$ 22,475,492	\$ 3,103,088	\$ -	\$ -	\$ -	\$ 651,851,782
IN SERVICE- TASK 10		1,637,867	10,169,775	872,039	2,310,604	1,165,390	837,575	-	693,540	-	-	17,686,790
BRISTOL			(719,950)	719,950								-
EAST PARIS			(7,226,437)		7,226,437							-
BURTON			(219,892)	219,892								-
PATTERSON TANK			(3,938,991)		3,938,991							-
WATERMAINS												-
LESS: WATERMAINS-TOTAL SUBS-HOME COMM			(35,827,728)	(725,425)	(10,825,800)	(6,200)	(2,208,247)	-	-	-	-	(49,593,400)
ADD: WATERMAINS-TOTAL ADDS-HOME COMM			13,714,121	382,774	7,338,342	5,548	685,768	-	-	-	-	22,126,553
TOTAL-PHYSICAL LOCATION COST		<u>\$ 230,837,061</u>	<u>\$ 281,832,358</u>	<u>\$ 34,837,076</u>	<u>\$ 43,183,091</u>	<u>\$ 25,794,923</u>	<u>\$ 21,790,588</u>	<u>\$ 3,103,088</u>	<u>\$ 693,540</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 642,071,725</u>

**CONSTRUCTION COST- ZONEGATING**

PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 3,967,519		\$ (2,814,478)	\$ -	\$ 184,462	\$ 198,207	\$ 1,376,924	\$ -	\$ -	\$ -	\$ 1,054,885	\$ -
LIVINGSTON	4,434,386		(1,362,849)	-	102,554	84,557	649,563	-	-	-	526,175	-
FRANKLIN	8,541,087		(5,858,120)	-	3,130,129	1,874,283	-	-	853,708	-	-	-
LEFFINGWELL	141,009		(85,152)	-	10,966	7,922	30,843	-	-	-	35,421	-
BRISTOL	719,950		-	-	-	-	-	-	-	-	-	-
EAST PARIS	7,226,437		429,054	-	(2,796,223)	2,367,169	-	-	-	-	-	-
BURTON	219,892		-	-	-	-	-	-	-	-	-	-
COLDBROOK PS PUMP 2	389,279		(5,521)	-	-	-	5,521	-	-	-	-	-
COVELL	1,563,604		(869,049)	869,049	-	-	-	-	-	-	-	-
WILSON	4,335,618		(3,093,856)	2,955,135	-	-	-	138,721	-	-	-	-
LIVINGSTON EIPD	5,708,345		(24,260)	-	-	-	24,260	-	-	-	-	-
STORAGE TANKS:												
ELKS	509,594		(183,416)	182,391	-	-	-	1,025	-	-	-	-
KNAPP	126,446		(88,310)	-	5,789	6,241	43,141	-	-	-	33,139	-
CAMBRIDGE	471,529		(65,693)	-	65,693	-	-	-	-	-	-	-
PATTERSON	3,938,991		258,464	-	(3,217,993)	2,959,529	-	-	-	-	-	-
WATERMAINS- ZONEGATED COST			1,216,166	397,669	6,956,929	7,192,194	5,505,208	226,770	779,614	-	5,192,297	27,466,847
TOTAL- ZONEGATED COST		<u>\$ -</u>	<u>\$ (12,547,020)</u>	<u>\$ 4,404,244</u>	<u>\$ 4,442,306</u>	<u>\$ 14,690,102</u>	<u>\$ 7,635,460</u>	<u>\$ 366,516</u>	<u>\$ 1,633,322</u>	<u>\$ -</u>	<u>\$ 6,841,917</u>	<u>\$ 27,466,847</u>
GRAND TOTAL- COST		<u>\$ 230,837,061</u>	<u>\$ 269,285,338</u>	<u>\$ 39,241,320</u>	<u>\$ 47,625,397</u>	<u>\$ 40,485,025</u>	<u>\$ 29,426,048</u>	<u>\$ 3,469,604</u>	<u>\$ 2,326,862</u>	<u>\$ -</u>	<u>\$ 6,841,917</u>	<u>\$ 669,538,572</u>

**ACCUMULATED DEPRECIATION-BY PHYSICAL LOCATION**

ACC DEP REC BY PHYSICAL LOCATION- TASK 11	\$ 127,580,275	\$ 79,966,568	\$ 10,377,702	\$ 11,443,738	\$ 8,528,571	\$ 6,683,801	\$ 690,939	\$ -	\$ -	\$ -	\$ -	\$ 245,271,594
BRISTOL		(449,927)	449,927									-
EAST PARIS		(3,220,178)		3,220,178								-
BURTON		(161,808)	161,808									-
PATTERSON		(1,119,183)		1,119,183								-
WATERMAINS												-
LESS: WATERMAINS-TOTAL SUBS-HOME COMM		(8,967,415)	(483,199)	(3,496,531)	(2,563)	(840,142)	-	-	-	-	-	(13,789,850)
ADD: WATERMAINS-TOTAL ADDS-HOME COMM		3,004,418	271,848	2,131,347	2,293	239,839	-	-	-	-	-	5,649,745
TOTAL-PHYSICAL LOCATION ACC DEP	<u>\$ 127,580,275</u>	<u>\$ 69,052,475</u>	<u>\$ 10,778,086</u>	<u>\$ 14,417,915</u>	<u>\$ 8,528,301</u>	<u>\$ 6,083,498</u>	<u>\$ 690,939</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 237,131,489</u>

**ACCUMULATED DEPRECIATION-ZONEGATING**

PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 2,951,496		\$ (2,093,733)	\$ -	\$ 137,224	\$ 147,449	\$ 1,024,315	\$ -	\$ -	\$ -	\$ 784,745	\$ -
LIVINGSTON	1,694,323		(520,728)	-	39,185	32,308	248,190	-	-	-	201,045	-
FRANKLIN	5,628,335		(3,860,337)	-	2,062,667	1,235,100	-	-	562,570	-	-	-
LEFFINGWELL	141,009		(85,152)	-	10,966	7,922	30,843	-	-	-	35,421	-
BRISTOL	449,927		-	-	-	-	-	-	-	-	-	-
EAST PARIS	3,220,178		191,191	-	(1,246,027)	1,054,836	-	-	-	-	-	-
BURTON	161,808		-	-	-	-	-	-	-	-	-	-
COLDBROOK PS PUMP 2	142,736		(2,024)	-	-	-	2,024	-	-	-	-	-
COVELL	869,548		(483,293)	483,293	-	-	-	-	-	-	-	-
WILSON	664,885		(474,455)	453,182	-	-	-	21,273	-	-	-	-
LIVINGSTON EIPD	725,970		(3,085)	-	-	-	3,085	-	-	-	-	-
STORAGE TANKS:												
ELKS	251,950		(183,416)	182,391	-	-	-	1,025	-	-	-	-
KNAPP	116,520		(81,378)	-	5,335	5,751	39,755	-	-	-	30,537	-
CAMBRIDGE	234,556		(32,678)	-	32,678	-	-	-	-	-	-	-
PATTERSON	1,119,183		73,437	-	(914,326)	840,889	-	-	-	-	-	-
WATERMAINS- ZONEGATED ACC DEP			408,270	304,037	2,246,023	2,527,762	1,037,743	126,302	205,199	-	1,284,766	8,140,102
TOTAL- ZONEGATED ACC DEP		<u>\$ -</u>	<u>\$ (7,147,381)</u>	<u>\$ 1,422,903</u>	<u>\$ 2,373,725</u>	<u>\$ 5,852,017</u>	<u>\$ 2,385,955</u>	<u>\$ 148,600</u>	<u>\$ 767,769</u>	<u>\$ -</u>	<u>\$ 2,336,514</u>	<u>\$ 8,140,102</u>
GRAND TOTAL- ACC DEP		<u>\$ 127,580,275</u>	<u>\$ 61,905,094</u>	<u>\$ 12,200,989</u>	<u>\$ 16,791,640</u>	<u>\$ 14,380,318</u>	<u>\$ 8,469,453</u>	<u>\$ 839,539</u>	<u>\$ 767,769</u>	<u>\$ -</u>	<u>\$ 2,336,514</u>	<u>\$ 245,271,591</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ADJUSTED OPERATING EXPENSE ZONEGATED BY GOVERNMENTAL UNIT - TASK #22  
FISCAL YEAR ENDED JUNE 30, 2024**

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	\$ 10,510,520	\$ 10,510,520										
PUMPING STATIONS:												
A. PRIMARY TRANSPORT	421,331	421,331										
B. INTERMEDIATE TRANSPORT	2,537,985		1,358,905	23,462	464,167	271,695	207,149	-	49,244	-	163,363	
WATERMAINS:												
A. PRIMARY TRANSPORT	375,498		213,925	32,939	48,612	39,735	20,510	184	3,124	-	16,469	
B. INTERMEDIATE TRANSPORT	1,956,511		716,767	420,161	315,096	303,220	144,567	32,322	-	-	24,378	
C. LOCAL DISTRIBUTION	5,039,368		3,643,514	410,708	352,756	286,942	326,853	18,595	-	-	-	
RETAIL CUSTOMER METERING *	3,311,717		2,423,945	278,681	233,079	170,818	189,397	15,797				
SUBTOTAL OPERATING EXPENSE	24,152,929	10,931,851	8,357,055	1,165,951	1,413,710	1,072,410	888,476	66,898	52,368	-	204,210	
ENGINEERING SERVICES	1,469,581	665,146	508,490	70,937	86,015	65,249	54,066	4,071	3,189	-	12,418	
ADMINISTRATIVE EXPENSE	4,453,420	1,596,185	2,147,043	170,230	206,413	156,582	129,745	9,769	7,653	-	29,800	
TOTAL	\$ 30,075,931	\$ 13,193,182	\$ 11,012,588	\$ 1,407,118	\$ 1,706,138	\$ 1,294,241	\$ 1,072,287	\$ 80,738	\$ 63,210	\$ -	\$ 246,428	

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

**METHOD OF DISTRIBUTION**

FILTRATION PLANT		100.00%	100.00%									
PUMPING STATIONS												
A. PRIMARY TRANSPORT		100.00%	100.00%									
B. INTERMEDIATE TRANSPORT		100.00%		53.543%	0.924%	18.289%	10.705%	8.162%	1.940%		6.437%	
WATERMAINS												
TOTAL MILES:	1,203.85											
A. PRIMARY TRANSPORT		100.000%		56.971%	8.772%	12.946%	10.582%	5.462%	0.049%	0.832%	4.386%	
MILES	61.33			34.94	5.38	7.94	6.49	3.35	0.03	0.51	-	2.69
B. INTERMEDIATE TRANSPORT		100.000%		36.635%	21.475%	16.105%	15.498%	7.389%	1.652%		1.246%	
MILES	319.53			117.06	68.62	51.46	49.52	23.61	5.28	-	-	3.98
C. LOCAL DISTRIBUTION		100.000%		72.301%	8.150%	7.000%	5.694%	6.486%	0.369%			
MILES	822.99			595.03	67.07	57.61	46.86	53.38	3.04	-	-	-
RETAIL CUSTOMER METERING (1)		100.000%		73.193%	8.415%	7.038%	5.158%	5.719%	0.477%			
NUMBER OF METERS	81,816			59,884	6,885	5,758	4,220	4,679	390			
ENGINEERING SERVICES (2)		100.000%	45.261%	34.601%	4.827%	5.853%	4.440%	3.679%	0.277%	0.217%		0.845%
ADMINISTRATIVE EXPENSE (3)		100.000%	35.843%	48.211%	3.822%	4.635%	3.516%	2.913%	0.219%	0.172%		0.669%

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 AND UNDERUTILIZED PENALTY CREDIT FROM PREVIOUS YEAR TO EACH GOVERNMENTAL ENTITY - TASK NO. 7

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

	<u>RETAIL BILLINGS</u>	<u>PERCENTAGE OF TOTAL</u>	<u>ALLOCATION</u>
CITY OF GRAND RAPIDS	\$ 30,378,415	65.3817%	\$ 644,889
CITY OF WALKER	3,961,099	8.5253%	84,089
CITY OF KENTWOOD	4,968,137	10.6926%	105,466
CASCADE TOWNSHIP	4,127,820	8.8841%	87,628
GRAND RAPIDS TOWNSHIP	2,776,576	5.9759%	58,943
TALLMADGE TOWNSHIP	251,093	0.5404%	5,330
	<u>\$ 46,463,140</u>	<u>100.0000%</u>	<u>\$ 986,345</u>

**CITY OF GRAND RAPIDS, MICHIGAN**  
**WATER SUPPLY SYSTEM FUND**  
**ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24**  
**FISCAL YEAR ENDED JUNE 30, 2024**

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		\$ 5,252,335	\$ 4,545,271	\$ 477,586	\$ 632,960	\$ 325,441	\$ 299,079	\$ 41,434	\$ -	\$ -	\$ -	\$ 11,574,106	
IN SERVICE- TASK 10		54,596	314,524	48,978	97,440	49,145	11,168	-	29,247	-	-	605,098	
PUMPING STATIONS:													
KNAPP SERVICE CENTER	\$ 89,499		(63,489)	-	4,161	4,471	31,061	-	-	-	23,796	-	
LIVINGSTON	132,366		(40,680)	-	3,061	2,524	19,389	-	-	-	15,706	-	
FRANKLIN	301,852		(207,032)	-	110,622	66,239	-	-	30,171	-	-	-	
LEFFINGWELL	-		-	-	-	-	-	-	-	-	-	-	
BRISTOL	23,020												
EAST PARIS	210,021		12,470	-	(81,267)	68,797	-	-	-	-	-	-	
BURTON	12,447												
COLDBROOK PS PUMP 2	12,976		(184)	-	-	-	184	-	-	-	-	-	
COVELL	57,743		(32,093)	32,093	-	-	-	-	-	-	-	-	
WILSON	169,453		(120,920)	115,498	-	-	-	5,422	-	-	-	-	
LIVINGSTON EIPD	241,989		(1,028)	-	-	-	1,028	-	-	-	-	-	
STORAGE TANKS:													
ELKS	7,807		(2,810)	2,794	-	-	-	16	-	-	-	-	
KNAPP	225		(157)	-	10	11	77	-	-	-	59	-	
CAMBRIDGE	23,697		(3,301)	-	3,301	-	-	-	-	-	-	-	
PATTERSON	101,837		6,682	-	(83,196)	76,514	-	-	-	-	-	-	
WATERMAINS			(274,664)	734	44,169	94,719	52,989	3,024	9,870	-	69,159	-	
ADJUSTED BY ZONEGATING		5,306,931	4,132,589	677,683	731,261	687,861	414,975	49,896	69,288	-	108,720	12,179,204	
LESS DEPR ON CIS (TASK 4/5)			-									-	
LESS CONTRIBUTIONS AMORTIZED													
TASK NO. 21		(7,735)	(422,037)	(337,710)	(271,518)	(343,891)	(228,133)	(41,157)	-	-	-	(1,652,181)	
TOTAL		\$ 5,299,196	\$ 3,710,552	\$ 339,973	\$ 459,743	\$ 343,970	\$ 186,842	\$ 8,739	\$ 69,288	\$ -	\$ 108,720	\$ 10,527,023	

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**CITY OF GRAND RAPIDS, MICHIGAN  
WATER SUPPLY SYSTEM FUND  
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25  
FISCAL YEAR ENDED JUNE 30, 2024**

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	\$ 13,193,182	\$ 11,012,588	\$ 1,407,118	\$ 1,706,138	\$ 1,294,241	\$ 1,072,287	\$ 80,738	\$ 63,210	\$ -	\$ 246,428	\$ 30,075,931
DEPRECIATION EXPENSE TASK NO. 24	5,299,196	3,710,552	339,973	459,743	343,970	186,842	8,739	69,288	-	108,720	10,527,023
RETURN ON SYSTEM INVESTMENT TASK NO. 21	4,978,029	8,785,855	608,844	928,582	703,755	628,171	20,569	104,777	-	376,774	17,135,356
REVENUE CREDITS- TASK NO. 23	-	(644,889)	(84,089)	(105,466)	(87,628)	(58,943)	(5,330)	-	-	-	(986,345)
ALLOCATE:											
INTEG CONN. FEE CREDIT (A)	-	(286,036)	(57,808)	(62,039)	(46,209)	(30,956)	(4,503)	(20,397)	-	(24,655)	(532,603)
INTEGRATED SYSTEM (A)	(23,470,407)	11,092,859	2,241,863	2,405,947	1,792,037	1,200,516	174,660	791,049	2,815,309	956,167	-
LESS: CIRCUIT BREAKER (B)		(336,352)	(107,185)	(25,094)	-	-	-				(468,631)
	<u>\$ -</u>	<u>\$ 33,334,578</u>	<u>\$ 4,348,716</u>	<u>\$ 5,307,811</u>	<u>\$ 4,000,166</u>	<u>\$ 2,997,917</u>	<u>\$ 274,873</u>	<u>\$ 1,007,927</u>	<u>\$ 2,815,309</u>	<u>\$ 1,663,434</u>	<u>\$ 55,750,731</u>

(A) ALLOCATED ON THE BASIS OF RELATIVE BILLED VOLUME & LAND AREA TO UAB PARTNERS. OTTAWA'S ALLOCATION IS BASED ON OLD CONTRACT AND EXCLUDES ANY COST OF COLDBROOK PUMPING.

(B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

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

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

	<u>YEAR ENDED</u> <u>6/30/24</u>	<u>PRO FORMA *</u> <u>6/30/25</u>
<b>REVENUES:</b>		
RETAIL/WHOLESALE WATER SALES	\$ 51,669,546	\$ 56,464,021
CONNECTION FEES/FRONT FOOT FEES	959,219	625,000
BILLABLE TO SDS FUND	2,809,504	3,425,095
OTHER OPERATING REVENUES	2,046,889	1,654,000
INTEREST ON INVESTMENTS	2,209,805	1,752,962
MISCELLANEOUS	748,572	420,833
TOTAL REVENUES	<u>\$ 60,443,535</u>	<u>\$ 64,341,911</u>
<b>OPERATING EXPENSES:</b>		
OPERATIONS & MAINTENANCE	\$ 33,502,770	\$ 36,798,600
DEPRECIATION	11,574,106	11,574,106
TOTAL EXPENSES	<u>\$ 45,076,876</u>	<u>\$ 48,372,706</u>
ADDITIONS: DEPRECIATION	<u>11,574,106</u>	<u>11,574,106</u>
NET EARNINGS OF THE SYSTEM	<u>\$ 26,940,765</u>	<u>\$ 27,543,311</u>
<b>DEBT SERVICE</b>		
SERIES 2020 BONDS	\$ 1,748,750	\$ 1,745,250
SERIES 2018 BONDS	2,087,850	2,086,100
SERIES 2016 BONDS	2,752,500	2,751,000
SERIES 2015 BONDS	2,252,250	2,249,500
SERIES 2013 BONDS	242,481	252,100
SENIOR LIEN	9,083,831	9,083,950
JUNIOR LIEN **	1,743,045	2,407,291
TOTAL	<u>10,826,877</u>	<u>11,491,241</u>
COVERAGE RATIO - SENIOR DEBT	<u>2.97</u>	<u>3.03</u>
COVERAGE RATIO - ALL DEBT	<u>2.49</u>	<u>2.40</u>

\* WATER SALES ADJUSTED FOR RATE REVISIONS OF 6.50% AND 2.80% EFFECTIVE 1/1/24 AND 1/1/25, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2024 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS AND KNOWN ADJUSTMENTS.

\*\* AMOUNTS IN PRO FORMA ARE BASED ON MAXIMUM PRINCIPAL AND DO NOT INCLUDE PRINCIPAL FORGIVENESS IF NOT YET FINALIZED.

**SUMMARY**

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

INITIAL SYSTEM REVENUE REQUIREMENTS		\$ 56,219,362
REVENUES FROM CURRENT RATES		
MONTHLY METER CHARGE	\$ 14,895,660	
MONTHLY BILLING CHARGE	3,514,054	
COMMODITY CHARGE	34,755,853	
MONTHLY FIRE PROTECTION	1,011,911	
ANNUAL HYDRANT CHARGE	<u>56,092</u>	<u>(54,233,570)</u>
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		<u>\$ 1,985,792.00</u>
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>3.66%</u>
INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE		\$ 56,219,362
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL		(468,631)
SYSTEM REVENUE REQUIREMENTS		<u>\$ 55,750,731</u>
ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)		<u>\$ 1,517,161</u>
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>2.80%</u>

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

METER SIZE	EQUIV. FACTOR	CITY OF GR		CITY OF WALKER		CITY OF KENTWOOD		CASCADE TWP		GR TWP		TALLMADGE TWP	
		METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.
A 3/4" or less	1.0000	53,567	53,567	5,536	5,536	3,817	3,817	3,087	3,087	3,948	3,948	307	307
B 1"	1.7778	2,606	4,633	551	980	688	1,223	394	700	354	629	36	64
C 1 1/4"	2.7778	-	-	-	-	-	-	-	-	-	-	-	-
D 1 1/2"	4.0000	1,281	5,124	280	1,120	456	1,824	300	1,200	174	696	17	68
E 2"	7.1111	780	5,547	110	782	196	1,394	95	676	38	270	1	7
F 3"	16.0000	130	2,080	15	240	23	368	10	160	11	176	1	16
G 4"	28.4444	75	2,133	7	199	12	341	2	57	4	114	1	28
H 6" and over	64.0000	16	1,024	2	128	3	192	-	-	1	64	-	-
		<u>58,455</u>	<u>74,108</u>	<u>6,501</u>	<u>8,985</u>	<u>5,195</u>	<u>9,159</u>	<u>3,888</u>	<u>5,880</u>	<u>4,530</u>	<u>5,897</u>	<u>363</u>	<u>490</u>
<b>FIRE PROTECTION SERVICE</b>													
H 6"		1,097		256		319		188		128		22	
I 8"		297		99		211		115		20		3	
J 10"		15		6		9		2		-		-	
K 12"		20		23		24		27		1		2	
		<u>1,429</u>		<u>384</u>		<u>563</u>		<u>332</u>		<u>149</u>		<u>27</u>	
	TOTAL	<u>59,884</u>		<u>6,885</u>		<u>5,758</u>		<u>4,220</u>		<u>4,679</u>		<u>390</u>	
	TOTAL											<u>81,816</u>	

Source: City of Grand Rapids, Michigan, Water/Sewer Customer Accounts/Meters Report, dated November 1, 2024.

**CITY OF GRAND RAPIDS, MICHIGAN**

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

SYSTEM REVENUE REQUIREMENTS\* \$ 33,334,578

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

74,108 meter equivalents x \$ 9.63 x 12 = \$ 8,563,920

MONTHLY BILLING CHARGE

58,455 meters x \$ 3.71 x 12 = 2,602,417

COMMODITY CHARGE

8,292,732 units (100 CF) x \$ 2.45 = 20,317,193

MONTHLY FIRE PROTECTION

463,781

ANNUAL HYDRANT CHARGE

- (31,947,311)

REQUIRED REVENUE INCREASE (DECREASE)

\$ 1,387,267

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

4.34%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 336,352



**CITY OF GRAND RAPIDS, MICHIGAN**

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

COMMODITY CHARGE:

$$\frac{\text{COMMODITY CHARGE @ 64\%}}{\text{BILLED UNITS}} = \frac{\$21,334,130}{8,292,732} = \underline{\underline{\$ 2.57 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 33,334,578
NEW COMMODITY CHARGE 8,292,732 x \$ 2.57	\$ 21,312,321
NEW MONTHLY BILLING CHARGE 58,455 x \$ 3.69 x 12	2,588,387
MONTHLY FIRE PROTECTION CHARGE	463,781
ANNUAL HYDRANT CHARGE	-
	<u>(24,364,489)</u>
	<u><u>\$ 8,970,089</u></u>

$$\text{MONTHLY METER CHARGE} = \frac{\$8,970,089}{74,108 \times 12} = \underline{\underline{\$ 10.09 \text{ MONTHLY}}}$$

<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	\$ 10.09	\$ 3.69	\$ 13.78	\$ 13.34
1"	1.7778	17.94	3.69	21.63	20.83
1 1/4"	2.7778	28.03	3.69	31.72	30.46
1 1/2"	4.0000	40.36	3.69	44.05	42.23
2"	7.1111	71.75	3.69	75.44	72.19
3"	16.0000	161.44	3.69	165.13	157.79
4"	28.4444	287.00	3.69	290.69	277.63
6" and over	64.0000	645.76	3.69	649.45	620.03

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

\*\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 336,352

**CITY OF WALKER, MICHIGAN**

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

SYSTEM REVENUE REQUIREMENTS*	\$ 4,348,716
LESS: CASH CONTRIBUTION	-
SYSTEM REVENUE REQUIREMENTS	<u>\$ 4,348,716</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE  
8,985 meter equivalents x \$ 11.53 x 12 = \$ 1,243,165

MONTHLY BILLING CHARGE  
6,501 meters x \$ 3.71 x 12 = 289,425

COMMODITY CHARGE  
1,244,676 units (100 CF) x \$ 1.97 = 2,452,012

MONTHLY FIRE PROTECTION 143,556

ANNUAL HYDRANT CHARGE - (4,128,158)

REQUIRED REVENUE INCREASE (DECREASE) \$ 220,558

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 5.34%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 107,185

**CITY OF WALKER, MICHIGAN**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.08 /100 CF \*  
 \$ 1.97 x 105.34%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 4,348,716
NEW COMMODITY CHARGE 1,244,676 x \$ 2.08	\$ 2,588,926
NEW MONTHLY BILLING CHARGE 6,501 x \$ 3.69 x 12	287,864
MONTHLY FIRE PROTECTION CHARGE	143,556
ANNUAL HYDRANT CHARGE	<u>-</u> <span style="float:right">(3,020,346)</span>
	<u><u>\$ 1,328,370</u></u>

MONTHLY METER CHARGE =  $\frac{\$1,328,370}{8,985 \times 12}$  = \$ 12.32 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	\$ 12.32	\$ 3.69	\$ 16.01	\$ 15.24
1"	1.7778	21.90	3.69	25.59	24.21
1 1/4"	2.7778	34.22	3.69	37.91	35.74
1 1/2"	4.0000	49.28	3.69	52.97	49.83
2"	7.1111	87.61	3.69	91.30	85.70
3"	16.0000	197.12	3.69	200.81	188.19
4"	28.4444	350.44	3.69	354.13	331.67
6" and over	64.0000	788.48	3.69	792.17	741.63

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

\*\*REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 107,185

**CITY OF KENTWOOD, MICHIGAN**

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

SYSTEM REVENUE REQUIREMENTS\* \$ 5,307,811

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

9,159 meter equivalents x \$ 13.96 x 12 = \$ 1,534,316

MONTHLY BILLING CHARGE

5,195 meters x \$ 3.71 x 12 = 231,281

COMMODITY CHARGE

1,697,149 units (100 CF) x \$ 1.84 = 3,122,754

MONTHLY FIRE PROTECTION

216,364

ANNUAL HYDRANT CHARGE

- (5,104,715)

REQUIRED REVENUE INCREASE (DECREASE)

\$ 203,096

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

3.98%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 25,094

**CITY OF KENTWOOD, MICHIGAN**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.91 /100 CF \*  
 \$ 1.84 x 103.98%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 5,307,811
NEW COMMODITY CHARGE 1,697,149 x \$ 1.91	\$ 3,241,555
NEW MONTHLY BILLING CHARGE 5,195 x \$ 3.69 x 12	230,035
MONTHLY FIRE PROTECTION CHARGE	216,364
ANNUAL HYDRANT CHARGE	<u>-</u> <span style="float:right"><u>(3,687,954)</u></span>
	<u>\$ 1,619,857</u>

MONTHLY METER CHARGE =  $\frac{\$1,619,857}{9,159 \times 12}$  = \$ 14.74 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 14.74	\$ 3.69	\$ 18.43	\$ 17.67
1"	1.7778	26.20	3.69	29.89	28.53
1 1/4"	2.7778	40.94	3.69	44.63	42.49
1 1/2"	4.0000	58.96	3.69	62.65	59.55
2"	7.1111	104.82	3.69	108.51	102.98
3"	16.0000	235.84	3.69	239.53	227.07
4"	28.4444	419.27	3.69	422.96	400.79
6" and over	64.0000	943.36	3.69	947.05	897.15

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025  
 \*\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 25,094

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

SYSTEM REVENUE REQUIREMENTS\* \$ 4,000,166

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
5,880 meter equivalents	x	\$ 21.76	x 12 = \$ 1,535,386
MONTHLY BILLING CHARGE			
3,888 meters	x	\$ 3.71	x 12 = 173,094
COMMODITY CHARGE			
960,014 units (100 CF)	x	\$ 2.64	= 2,534,437
MONTHLY FIRE PROTECTION			134,328
ANNUAL HYDRANT CHARGE			- <u>(4,377,245)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ (377,079)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u><u>-8.61%</u></u>

**CASCADE TOWNSHIP**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.41 /100 CF \*  
 \$ 2.64 x 91.39%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 4,000,166
NEW COMMODITY CHARGE 960,014 x \$ 2.41	\$ 2,313,634
NEW MONTHLY BILLING CHARGE 3,888 x \$ 3.69 x 12	172,161
MONTHLY FIRE PROTECTION CHARGE	134,328
ANNUAL HYDRANT CHARGE	<u>-</u> (2,620,123)
	<u><u>\$ 1,380,043</u></u>

MONTHLY METER CHARGE =  $\frac{\$1,380,043}{5,880 \times 12} = \underline{\underline{\$ 19.56 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 19.56	\$ 3.69	\$ 23.25	\$ 25.47
1"	1.7778	34.77	3.69	38.46	42.39
1 1/4"	2.7778	54.33	3.69	58.02	64.15
1 1/2"	4.0000	78.24	3.69	81.93	90.75
2"	7.1111	139.09	3.69	142.78	158.45
3"	16.0000	312.96	3.69	316.65	351.87
4"	28.4444	556.37	3.69	560.06	622.66
6" and over	64.0000	1,251.84	3.69	1,255.53	1,396.35

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

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

SYSTEM REVENUE REQUIREMENTS\* \$ 2,997,917

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
	5,897 meter equivalents x \$ 15.39 x 12 = \$	1,089,058	
MONTHLY BILLING CHARGE			
	4,530 meters x \$ 3.71 x 12 =	201,676	
COMMODITY CHARGE			
	730,982 units (100 CF) x \$ 2.22 =	1,622,780	
MONTHLY FIRE PROTECTION		44,497	
ANNUAL HYDRANT CHARGE		-	<u>(2,958,011)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ 39,906</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>1.35%</u>



**GRAND RAPIDS TOWNSHIP**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.25 /100 CF \*  
 \$ 2.22 x 101.35%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 2,997,917
NEW COMMODITY CHARGE	
730,982 x \$ 2.25	\$ 1,644,710
NEW MONTHLY BILLING CHARGE	
4,530 x \$ 3.69 x 12	200,588
MONTHLY FIRE PROTECTION CHARGE	44,497
ANNUAL HYDRANT CHARGE	<u>-</u> (1,889,795)
	<u>\$ 1,108,122</u>

MONTHLY METER CHARGE =  $\frac{\$1,108,122}{5,897 \times 12}$  = \$ 15.66 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	\$ 15.66	\$ 3.69	\$ 19.35	\$ 19.10
1"	1.7778	27.84	3.69	31.53	31.07
1 1/4"	2.7778	43.50	3.69	47.19	46.46
1 1/2"	4.0000	62.64	3.69	66.33	65.27
2"	7.1111	111.36	3.69	115.05	113.15
3"	16.0000	250.56	3.69	254.25	249.95
4"	28.4444	445.44	3.69	449.13	441.47
6" and over	64.0000	1,002.24	3.69	1,005.93	988.67

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

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

SYSTEM REVENUE REQUIREMENTS\* \$ 274,873

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
490 meter equivalents	x	\$ 0.64	x 12 = \$ 3,763
MONTHLY BILLING CHARGE			
363 meters	x	\$ 3.71	x 12 = 16,161
COMMODITY CHARGE			
73,808 units (100 CF)	x	\$ 2.71	= 200,020
MONTHLY FIRE PROTECTION <span style="float: right;">9,385</span>			
ANNUAL HYDRANT CHARGE <span style="float: right;">56,092</span>			
			<u>(285,421)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ (10,548)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u><u>-3.70%</u></u>

**TALLMADGE TOWNSHIP**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.61 /100 CF \*  
 \$ 2.71 x 96.30%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 274,873
NEW COMMODITY CHARGE 73,808 x \$ 2.61	\$ 192,639
NEW MONTHLY BILLING CHARGE 363 x \$ 3.69 x 12	16,074
MONTHLY FIRE PROTECTION CHARGE	9,385
ANNUAL HYDRANT CHARGE	<u>56,092</u>
	<u>(274,190)</u>
	<u>\$ 683</u>

MONTHLY METER CHARGE =  $\frac{\$683}{490 \times 12} = \underline{\underline{\$ 0.12 \text{ MONTHLY}}}$

<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	\$ 0.12	\$ 3.69	\$ 3.81	\$ 4.35
1"	1.7778	0.21	3.69	3.90	\$ 4.85
1 1/4"	2.7778	0.33	3.69	4.02	\$ 5.49
1 1/2"	4.0000	0.48	3.69	4.17	\$ 6.27
2"	7.1111	0.85	3.69	4.54	\$ 8.26
3"	16.0000	1.92	3.69	5.61	\$ 13.95
4"	28.4444	3.41	3.69	7.10	\$ 21.91
6" and over	64.0000	7.68	3.69	11.37	\$ 44.67

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

**CITY OF EAST GRAND RAPIDS, MICHIGAN**

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS *		\$	770,652
COMMODITY CHARGE			
(100CF) 587,678 units	x	\$ 1.31	769,858
			<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$	<u>794</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$	237,275
MONTHLY SERVICE CHARGE			
\$17,047	x	12 MONTHS	204,564
			<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$	<u>32,711</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>3.44%</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	\$ 1,007,927
NEW COMMODITY CHARGE *	
587,678 x \$1.31 =	(769,858)
	<hr/>
	<u>\$ 238,069</u>

MONTHLY SERVICE CHARGE \* = \$238,069 / 12 = \$19,839

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS *		\$ 931,512
COMMODITY CHARGE		
(100CF) 623,905 units x \$ 1.50		935,858
		_____
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		<u><u>\$ (4,346)</u></u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 731,922
MONTHLY SERVICE CHARGE		
\$60,124 x 12 MONTHS		721,488
		_____
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		<u><u>\$ 10,434</u></u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u><u>0.37%</u></u>

\* NET OF INTEGRATED CONNECTION FEE CREDIT.

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,663,434
NEW COMMODITY CHARGE *	
623,905 x         \$1.49 =	(929,618)
	<hr/>
	<u>\$ 733,816</u>

MONTHLY SERVICE CHARGE \* = \$ 733,816 / 12 = \$61,151

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ 2,815,309
COMMODITY CHARGE	
(100CF) 1,958,700 units x \$ 1.43	2,800,941
	<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	<u>\$ 14,368</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ -
MONTHLY SERVICE CHARGE	
\$0 x 12 MONTHS	-
	<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	<u>\$ -</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	<u>0.51%</u>



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

SYSTEM REVENUE REQUIREMENTS	\$ 2,815,309
NEW COMMODITY CHARGE * 1,958,700 x \$1.44 =	(2,820,528)
	<hr/>
	<u>\$ (5,219)</u>

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

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025

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

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

Water User Type	Definition	2024 Rate	2025 Rate	% Change
Domestic	Property is domicile for single or multiple family use, such as homes, apartments, duplexes, condominium, etc.	\$ 130.00	\$ 150.00	15.38%
Commercial - Industrial	Property used to offer services and / or products, such as retail/wholesale stores, gas stations, restaurants, hotels, schools, churches, etc., and manufacturing or processing facilities (industrial).	\$ 220.00	\$ 230.00	4.55%

The above 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 1, 2023 through June 30, 2024. 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:

Service Size	Year	50' R.O.W.	60' R.O.W.	66' R.O.W.	80' R.O.W.	100' R.O.W.
1" Water Service	2024	\$ 3,500	\$ 4,000	\$ 4,200	\$ 4,800	\$ 5,700
	2025	\$ 3,900	\$ 4,300	\$ 4,600	\$ 5,200	\$ 6,200
1-1/2" Water Service	2024	\$ 5,000	\$ 5,600	\$ 5,900	\$ 6,600	\$ 7,800
	2025	\$ 5,700	\$ 6,300	\$ 6,700	\$ 6,700	\$ 8,800
2" Water Service	2024	\$ 5,900	\$ 6,500	\$ 6,800	\$ 7,500	\$ 8,500
	2025	\$ 6,500	\$ 7,100	\$ 7,500	\$ 8,500	\$ 9,800

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

Service Size	50' R.O.W.	60' R.O.W.	66' R.O.W.	80' R.O.W.	100' R.O.W.
1" Water Service	11.43%	7.50%	9.52%	8.33%	8.77%
1-1/2" Water Service	14.00%	12.50%	13.56%	1.52%	12.82%
2" Water Service	10.17%	9.23%	10.29%	13.33%	15.29%

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 17, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Samarhia Giffel  
Administrative Services Officer II

**SUBJECT:** 2024 WATER RATE STUDY TASK #30  
FEES, CHARGES, and PENALTIES

Fees, charges, and penalties have been reviewed and determined in accordance with the Water System Rules and Regulations and are approved for use beginning January 1, 2025.

The following are recommended changes in fee amounts, aligned to support resource requirements and cost recovery:

#### **Fire Protection Monthly**

- Fee increases 3.773% for all sizes based on Bond Buyer Index (BBI) referenced from Task 19.

#### **Meter Reading**

- Final or actual read increases 8.33% from \$60 to \$65 to account for associated administrative costs for clerical tasks and field work including city vehicle mileage and fuel.
- Meter interface unit replacement increases 17.65% from \$170 to \$200 to account for the smart endpoint device cost, associated administrative and field work performed by the service worker including the city vehicle mileage and fuel.

#### **Meter Replacement**

- Fee increases 31% for 1 ½" and 2" meters, and 9% for 3" meters, due to manufacturer and distributor price increases.
- 4" and larger added to the display costs.
- 1" decreases 1.67% due to manufacturer price reductions.

#### **Miscellaneous**

- Fees increased and aligned to support Water Engineering resource requirements and cost recovery.

Please see the attached fee, charges, and penalties schedule in entirety.

SG

Cc: Wayne Jernberg, Water System Manager

James Ouzts, Environmental Services Manager

Lindsay Sagorski-Munsell, Acting Assistant Water System Manager

Chad Reul, Utility Field Operations Superintendent

**Fees, Charges, and Penalties**

**2024 Fee (\$) 2025 Fee (\$) % Change**

<b>Fire Protection Monthly</b>			
6"	\$22.14	\$22.98	3.773%
8"	\$39.28	\$40.76	3.773%
10"	\$61.55	\$63.87	3.773%
12"	\$88.57	\$91.91	3.773%

*\*BBI referenced from Task 19*

<b>Hydrant Use Per Season</b>			
Hydrant Use Permit Fee (Non-Metered Hydrant Connection - Residential Customers)	\$50	\$50	0%
Hydrant Use Permit Fee (Metered Hydrant Connection)	\$300	\$300	0%
Non-Metered Hydrant Connection Use Fee (pool filling per connection)	\$100 (RD) + \$75/week	\$100 (RD) + \$75/week	0%
Metered Hydrant Connection Use Fee * (per connection)	\$500 (RD) + \$25/week	\$500 (RD) + \$25/week	0%

**RD=Refundable Deposit**

*\*Plus metered volume (Commodity Charges at City of Grand Rapids Rate)*

*A \$100 Services fee applies for all hydrant connection assistance requests*

<b>Tapping Permits</b>			
All sizes	\$375	\$375	0%

<b>Meter Set/Installation and Service On/Off Requests</b>			
<i>All non-emergency service requests must be scheduled (normal service Hours 8am - 7pm M-F)</i>			
All sizes	\$75	\$75	0.00%
Inspection/Repair Scheduled On & Off Request (may also need meter set/install)	\$75	\$75	0.00%

<b>Meter Reading</b>			
Final or Actual Reading	\$60	\$65	8.33%
Meter Interface Unit Replacement (includes Smart Endpoint Device)	\$170	\$200	17.65%

<b>Meter Testing</b>			
<i>Meter Testing Fee: Charged and paid by customer prior to test, if test results find the meter to read in error beyond AWWA acceptance and in the benefit of the Water System, the fee will be refunded, and a new meter will be set.</i>			
<i>*In addition to the Meter Testing fee a Service On/Off Requests fee applies.</i>			
¾" and 1"	\$150	\$150	0%
1 ½ "	\$200	\$200	0%
2"	\$350	\$350	0%
3"	\$500	\$500	0%
4" or larger	Cost	Cost	0%

*\*Ultrasonic Meters charged at costs*

<b>Security Deposit</b>			
Minimum Deposit Amount	\$500	\$500	0%

**Fees, Charges, and Penalties**

**2024 Fee (\$)**   **2025 Fee (\$)**   **% Change**

**Meter Replacement (Non-System Planned/Scheduled Replacement)**

*Meter Replacement Fee: Charged to customer at time of discovery of a system known meter that requires replacement outside of Water System planned replacement program scheduling as a result of infrastructure loss (Frozen/Missing/Stolen/Damaged), unnecessary replacement, and/or customer request. Customer requested meter replacement requires meter testing prior to approval. In addition to the Meter Replacement fee a Meter Set/Installation fee applies. Note: If standard meter is unavailable, Ultrasonic meters will be charged at cost.*

	2024 Fee (\$)	2025 Fee (\$)	% Change
¾"	\$210	\$210	0%
1"	\$300	\$295	-1.67%
1 ½"	\$750	\$985	31.33%
2"	\$880	\$1,155	31.25%
3"	\$2,162	\$2,355	8.93%
4"	At Cost	\$3,146	N/A
6"	At Cost	\$5,201	N/A
8"	At Cost	\$10,480	N/A
10"	At Cost	\$13,675	N/A

**Miscellaneous**

	2024 Fee (\$)	2025 Fee (\$)	% Change
Street Opening Permit (Water/ESD, City Engineering, Streets)	\$300	\$300	0%
Water Inspection Permit (Within City Limits)	\$90	\$95	5.56%
Water Inspection Permit (Outside City Limits)	\$105	\$110	4.76%
Sanitary Service Line Inspection Permit (Within City Limits)	\$90	\$95	5.56%
Sanitary Service Line Inspection Permit (Outside City Limits)	\$105	\$110	4.76%
Storm Service Line Inspection Permit (Within City Limits)	\$90	\$95	5.56%
Storm Service Line Inspection Permit (Outside City Limits)	\$105	\$110	4.76%
Footing Drain Lateral Inspection Permit (Within City Limits)	\$90	\$95	5.56%
Footing Drain Lateral Inspection Permit (Outside City Limits)	\$105	\$110	4.76%
Sewer Lateral Service Demolition/Cap off Inspection Fee (Within City Limits)	\$90	\$95	5.56%
Sewer Later Service Demolition/Cap off Inspection Fee (Outside City Limits)	\$105	\$110	4.76%
Plumbing Service Re-inspection Fee	\$90	\$95	5.56%
Cross Connection Re-inspection Fee	\$75	\$75	0%

<b>Fees, Charges, and Penalties</b>	<b>2024 Fee (\$)</b>	<b>2025 Fee (\$)</b>	<b>% Change</b>
<b>Miscellaneous Cont...</b>			
Irrigation Service Cut/Cap Administrative Fee	\$70	\$70	0%
Delinquent Commercial Backflow Test Fee (Test fees will be applied, per device, upon the dues dates of the 1 <sup>st</sup> notice and final notice)	\$35	\$35	0%
Hydrant Flow Test	\$200	\$200	0%

<b>Services</b>			
Customer requested on-site service visit (hydrant connection assistance requests, internal plumbing, customer issue)	\$100	\$100	0%

<b>Penalties</b>			
Late Payment Penalty	10% of Net	10% of Net	0%
Return check or payment charge (City Treasurer processing fee)	\$30	\$30	0%
Administrative/Research Fee (Review or processing of account for non-payment, returned payment, shut-off, posting of property, and/or backflow non-compliance) (Documentation creation for account of location information- FOIA request may still be required)	\$70	\$70	0%
Missed Appointment	\$50	\$50	0%
Unauthorized operation, tampering, or removal of any Water or Sanitary Sewer System owned or maintained, valve, asset, infrastructure, or equipment (for example, but not limited to, valves, meters, meter reading equipment, hydrants, and curb stops & box) ** & ***	\$500	\$500	0%
Unauthorized or Illegal connection to any Water or Sanitary Sewer System owned pipe, property, and/or private plumbing system served by the Water and/or Sanitary Sewer System ** & ***	\$500	\$500	0%
Failure to return or return of damaged beyond repair/ repairable hydrant connection equipment	Cost + 10%	Cost + 10%	0%
Repair/Replace damage to a fire hydrant	Cost + 10%	Cost + 10%	0%
Permit infractions/violations ** & ***	\$100	\$100	0%
Unauthorized service tap of Water or Sewer main** & ***	\$500	\$500	0%

**\*\* Plus double the commodity rate for estimated volume and any unbilled readiness to serve charges that may apply**

**\*\*\* Penalties shall double with each subsequent infraction**

<b>Miscellaneous Damage or Loss</b>			
Any cost recovery due to damage caused or undue oversight of any location, account, or infrastructure of the Water and/or Sanitary Sewer System will be charged in accordance with cost recovery methodology for time and materials, including a 10% administrative charge for processing	Cost + 10%	Cost +10%	0%



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

*THERE IS NO TASK 31 FOR THE WATER RATE STUDY.*

# MEMORANDUM

CITY OF GRAND RAPIDS

**DATE:** August 30, 2024

**TO:** Tai Verbrugge  
Utility Financial Officer

**FROM:** Lindsay Sagorski Munsell  
Acting Assistant Water System Manager

**SUBJECT:** **2024 WATER RATE STUDY- TASK #32, WATER MAIN OVERSIZING RATES**

Water main oversizing rates are established for this year as noted below:

<u>Pipe Size</u>	<u>2023 Rate</u>	<u>2024 Rate</u>	<u>2025 Rate</u>	<u>2024 to 2025 % Change</u>
8"-12"	\$30.17/ft	\$41.75/ft	\$40.97/ft	-1.87%
12"-16"	\$57.40/ft	\$69.76/ft	\$27.75/ft	-60.22%
8"-16"	\$87.57/ft	\$111.51/ft	\$68.22/ft	-38.82%

These rates have been determined in accordance with the Water System Rules and Regulations, and are approved for use from January 1, 2025 through December 31, 2025. Background information and calculations to establish these rates are on file in the Utility Engineering, Distribution and Collection Office.

The economic marketplace and supply chain issues we have seen over the last few years have started to subside and we are starting to see material prices return to pre-inflation rates. As a result of the price reductions, we are seeing parallel changes in the Oversizing Rates.

These costs will be reviewed and may be adjusted again next year. If you have any questions regarding this matter, please call me at 616-456-4000.

LS/AO

Cc: Wayne Jernberg  
Cindy Irving  
Jeff McCaul

Tim Burkman  
James Ouzts  
Brian Bradley

**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 June 30, 2024:

UAB Partners	Sq. Miles of USD by CC	Percent
Grand Rapids	45.344	35.106%
Walker	24.842	19.233%
Kentwood	13.523	10.469%
Cascade	21.132	16.360%
Grand Rapids Township	10.960	8.485%
Tallmadge Township	2.780	2.152%
East Grand Rapids	3.370	2.609%
Ada	7.215	5.586%
Total	129.166	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 (ICB)*	\$ 146,947	23.87%
City & Customer Community Circuit Breaker (CCCCB)	468,631	76.13%
Total	<u>\$ 615,578</u>	<u>100.00%</u>

The following tables summarize the amount, if any, of the 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	\$ 468,631	100.00%
Less: Amount Applied in Current Rate Study	(468,631)	-100.00%
Total CCCCCB Revenue Credit- Next Year's Rate Study	<u>\$ (0)</u>	<u>0.00%</u>

\*Per City Commission Resolution 84923 adopted on September 8, 2015, the Water and Sanitary Sewer Systems are authorized to utilize non-operating revenue to provide supplemental funding to the ICB. \$146,947 includes \$80,000 of facility rental revenue from fiscal year 2024 to supplement the 2025 ICB.

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

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**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
SYSTEM ADDITIONS AND IMPROVEMENTS  
FOR THE YEAR ENDED JUNE 30, 2024  
TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		TRUNK		INTERCEPTOR		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	6,810	1.29	1,065	0.20	1,511	0.29	9,386	1.78
Abandonment	0	0.00	(1,119)	(0.21)	0	0.00	(1,119)	(0.21)
CSO Construction	0	0.00	0	0.00	0	0.00	0	0.00
CSO Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>6,810</u>	<u>1.29</u>	<u>(54)</u>	<u>(0.01)</u>	<u>1,511</u>	<u>0.29</u>	<u>8,267</u>	<u>1.57</u>
Kentwood								
Construction	2,933	0.56	0	0.00	0	0.00	2,933	0.56
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>2,933</u>	<u>0.56</u>	<u>0</u>	<u>0.00</u>	<u>0</u>	<u>0.00</u>	<u>2,933</u>	<u>0.56</u>
Cascade Twp.								
Construction	990	0.19	1,417	0.27	0	0.00	2,407	0.46
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>990</u>	<u>0.19</u>	<u>1,417</u>	<u>0.27</u>	<u>0</u>	<u>0.00</u>	<u>2,407</u>	<u>0.46</u>
G.R. Twp.								
Construction	4,475	0.85	3,127	0.59	0	0.00	7,602	1.44
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	<u>4,475</u>	<u>0.85</u>	<u>3,127</u>	<u>0.59</u>	<u>0</u>	<u>0.00</u>	<u>7,602</u>	<u>1.44</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	6,705	1.27	1,114	0.21	0	0.00	7,819	1.48
Abandonment	0	0.00	(129)	(0.02)	0	0.00	(129)	(0.02)
	<u>6,705</u>	<u>1.27</u>	<u>985</u>	<u>0.19</u>	<u>0</u>	<u>0.00</u>	<u>7,690</u>	<u>1.46</u>
Wright 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>
<b>*TOTAL*</b>	<u><u>21,913</u></u>	<u><u>4.16</u></u>	<u><u>5,475</u></u>	<u><u>1.04</u></u>	<u><u>1,511</u></u>	<u><u>0.29</u></u>	<u><u>28,899</u></u>	<u><u>5.49</u></u>

	CONTRIBUTIONS		TOTAL
	COMM	OTHER	
Integrated			\$ -
Grand Rapids	10,608,675		10,608,675
Kentwood	480,463		480,463
Cascade Twp.	331,000		331,000
Grand Rapids Twp.	615,430		615,430
Tallmadge Twp.	-		-
Walker	765,817		765,817
Wright Twp.	-		-
<b>*TOTAL*</b>	<u><u>\$ 12,801,385</u></u>	<u><u>\$ -</u></u>	<u><u>\$ 12,801,385</u></u>

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1  
FISCAL YEAR ENDED JUNE 30, 2024**

Dept-Unit-Fund	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				
527 (3000:70) 5900	WASTEWATER TREATMENT (LESS 527 - 3040 - 5900)	\$ 22,995,214	\$ 22,044,186	\$ 291,257	\$ 181,471	\$ 475,155				\$ 3,145			
527 (4000 / 4290) 5900	SEWER MAINTENANCE	6,351,858					322,230	758,666	5,270,962				
527 (2000) 5900	CUSTOMER SERVICE*	2,804,437								2,804,437			
527 (3040) 5900	INDUSTRIAL PRETREATMENT	1,141,706									1,141,706		
	SUBTOTAL OPERATING EXPENSE	33,293,215	22,044,186	291,257	181,471	475,155	322,230	758,666	5,270,962	3,145	2,804,437	1,141,706	-
527 (1000:10 / 8000) 5900	ADMINISTRATION	3,055,332											3,055,332
	TOTAL	<u>\$ 36,348,547</u>	<u>\$ 22,044,186</u>	<u>\$ 291,257</u>	<u>\$ 181,471</u>	<u>\$ 475,155</u>	<u>\$ 322,230</u>	<u>\$ 758,666</u>	<u>\$ 5,270,962</u>	<u>\$ 3,145</u>	<u>\$ 2,804,437</u>	<u>\$ 1,141,706</u>	<u>\$ 3,055,332</u>

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

**METHOD OF DISTRIBUTION**

527 (3000:70) 5900	WASTEWATER TREATMENT	100.000%										
	A. TREATMENT PLANT		95.864%									
	B. LIFT & METER STATIONS		4.136%									
	NO. OF STATIONS (59)			(1)	(8)	(45)				(5)		
527 (4000 / 4290) 5900	SEWER MAINTENANCE											
	TOTAL MILES 941.14	100.000%										
	A. INTERCEPTOR MILES 47.74	5.073%					5.073%					
	B. TRUNK LINES MILES 112.41	11.944%						11.944%				
	C. LOCAL COLLECTOR MILES 780.99	82.983%							82.983%			
527 (2000) 5900	CUSTOMER SERVICE	100.000%									100.000%	
527 (3040) 5900	INDUSTRIAL PRETREATMENT	100.000%										100.000%
527 (1000:10 / 8000) 5900	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, 2024**

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	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP
WASTEWATER TREATMENT	\$ 22,044,186	\$ 22,044,186											
LIFT STATIONS:													
A. INTERCEPTOR	291,257		291,257	-	-	-	-	-	-	-	-	-	-
B. TRUNK	181,471		42,059	99,145	-	31,910	8,358	-	-	-	-	-	-
C. LOCAL COLLECTOR	475,155		100,479	48,111	-	89,690	180,490	33,173	8,613	-	-	14,600	-
SEWER LINES:													
A. INTERCEPTOR	322,230		184,131	46,640	82,414	9,045	-	-	-	-	-	-	-
B. TRUNK	758,666		270,905	188,369	169,607	67,218	42,652	19,103	812	-	-	-	-
C. LOCAL COLLECTOR	5,270,962		3,552,877	382,265	518,979	315,941	412,031	58,508	30,361	-	-	-	-
BULK METERING STATIONS	3,145		-	-	2,317	-	-	-	-	673	-	54	101
CUSTOMER ACCOUNTING	2,804,437		2,146,488	220,401	189,019	76,842	150,374	12,844	8,469				
INDUSTRIAL PRETREATMENT	1,141,706	1,141,706											
SUBTOTAL OPERATING EXPENSE	33,293,215	23,185,892	6,588,195	984,930	962,336	590,646	793,905	123,628	48,255	673	-	14,654	101
ADMINISTRATIVE EXPENSE	3,055,332	2,087,264	651,264	88,666	86,633	53,172	71,470	11,129	4,344	61	-	1,319	9
<b>TOTAL</b>	<b>\$ 36,348,547</b>	<b>\$ 25,273,156</b>	<b>\$ 7,239,459</b>	<b>\$ 1,073,596</b>	<b>\$ 1,048,969</b>	<b>\$ 643,818</b>	<b>\$ 865,375</b>	<b>\$ 134,757</b>	<b>\$ 52,599</b>	<b>\$ 734</b>	<b>\$ -</b>	<b>\$ 15,973</b>	<b>\$ 110</b>

**METHOD OF DISTRIBUTION**

WASTEWATER TREATMENT													
A. TREATMENT PLANT	100.00%	100.00%											
B. LIFT & METER STATIONS (1)	100.00%												
NO. OF STATIONS (59)			(13)	(6)	(2)	(10)	(18)	(5)	(1)	(1)	-	(2)	(1)
SEWER LINES:													
TOTAL MILES: 941.14													
A. INTERCEPTOR	100.00%		57.143%	14.474%	25.576%	2.807%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES 47.74			27.28	6.91	12.21	1.34	-	-	-	-	-	-	-
B. TRUNK LINES	100.00%		35.708%	24.829%	22.356%	8.860%	5.622%	2.518%	0.107%	0.000%	0.000%	0.000%	0.000%
MILES 112.41			40.14	27.91	25.13	9.96	6.32	2.83	0.12	-	-	-	-
C. LOCAL COLLECTOR	100.00%		62.044%	12.613%	9.846%	5.994%	7.817%	1.110%	0.576%	0.000%	0.000%	0.000%	0.000%
MILES 780.99			484.55	98.51	76.90	46.81	61.05	8.67	4.50	-	-	-	-
CUSTOMER ACCTG (2)	100.00%		76.841%	7.859%	6.740%	2.740%	5.362%	0.458%	0.302%				
NO. OF METERS 76,608.00			58,635.00	6,021.00	5,163.00	2,099.00	4,108.00	351.00	231.00				
INDUSTRIAL PRETREATMENT	100.00%	100.00%											
ADMINISTRATIVE EXPENSE (3)	100.00%	68.317%	21.316%	2.902%	2.835%	1.740%	2.339%	0.364%	0.142%	0.002%	0.000%	0.043%	0.000%

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, 2024**

Dept-Unit-Fund	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				
527 (3000:70) 5900	WASTEWATER TREATMENT (LESS 527 - 3040 - 5900)	\$ 24,915,514	\$ 23,873,439	\$ 319,141	\$ 198,844	\$ 520,644				\$ 3,446			
527 (4000 / 4290) 5900	SEWER MAINTENANCE	6,509,752					330,240	777,525	5,401,987				
527 (2000) 5900	CUSTOMER SERVICE *	3,245,802									3,245,802		
527 (3040) 5900	INDUSTRIAL PRETREATMENT	1,197,632										1,197,632	
	SUBTOTAL OPERATING EXPENSE	35,868,699	23,873,439	319,141	198,844	520,644	330,240	777,525	5,401,987	3,446	3,245,802	1,197,632	-
527 (1000:10 / 8000) 5900	ADMINISTRATION	5,187,162											5,187,162
	TOTAL	\$ 41,055,861	\$ 23,873,439	\$ 319,141	\$ 198,844	\$ 520,644	\$ 330,240	\$ 777,525	\$ 5,401,987	\$ 3,446	\$ 3,245,802	\$ 1,197,632	\$ 5,187,162

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

**METHOD OF DISTRIBUTION**

527 (3000:70) 5900	WASTEWATER TREATMENT		100.000%										
	A. TREATMENT PLANT		95.818%										
	B. LIFT & METER STATIONS		4.182%										
	NO. OF STATIONS	(59)		(1)	(8)	(45)				(5)			
527 (4000 / 4290) 5900	SEWER MAININTENANCE												
	TOTAL MILES	941.14	100.000%										
	A. INTERCEPTOR												
	MILES	47.74	5.073%				5.073%						
	B. TRUNK LINES												
	MILES	112.41	11.944%					11.944%					
	C. LOCAL COLLECTOR												
	MILES	780.99	82.983%						82.983%				
527 (2000) 5900	CUSTOMER SERVICE		100.000%								100.000%		
527 (3040) 5900	INDUSTRIAL PRETREATMENT		100.000%									100.000%	
527 (1000:10 / 8000) 5900	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, 2024**

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	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP
WASTEWATER TREATMENT	\$ 23,873,439	\$ 23,873,439											
LIFT STATIONS:													
A. INTERCEPTOR	319,141		319,141	-	-	-	-	-	-	-	-	-	-
B. TRUNK	198,844		46,085	108,637	-	34,964	9,158	-	-	-	-	-	-
C. LOCAL COLLECTOR	520,644		110,098	52,717	-	98,276	197,770	36,349	9,437	-	-	15,997	-
SEWER LINES:													
A. INTERCEPTOR	330,240		188,709	47,799	84,462	9,270	-	-	-	-	-	-	-
B. TRUNK	777,525		277,639	193,052	173,823	68,889	43,712	19,578	832	-	-	-	-
C. LOCAL COLLECTOR	5,401,987		3,351,609	681,353	531,880	323,795	422,273	59,962	31,115	-	-	-	-
BULK METERING STATIONS	3,446		-	-	2,539	-	-	-	-	737	-	59	111
CUSTOMER ACCOUNTING	3,245,802		2,484,304	255,088	218,767	88,935	174,040	14,866	9,802				
INDUSTRIAL PRETREATMENT	1,197,632	1,197,632											
SUBTOTAL OPERATING EXPENSE	35,868,699	25,071,071	6,777,585	1,338,646	1,011,471	624,129	846,953	130,755	51,186	737	-	16,056	111
ADMINISTRATIVE EXPENSE	5,187,162	3,584,999	1,027,324	191,417	144,634	89,246	121,109	18,697	7,319	105	-	2,296	16
<b>TOTAL</b>	<b>\$ 41,055,861</b>	<b>\$ 28,656,070</b>	<b>\$ 7,804,909</b>	<b>\$ 1,530,063</b>	<b>\$ 1,156,105</b>	<b>\$ 713,375</b>	<b>\$ 968,062</b>	<b>\$ 149,452</b>	<b>\$ 58,505</b>	<b>\$ 842</b>	<b>\$ -</b>	<b>\$ 18,352</b>	<b>\$ 127</b>

**METHOD OF DISTRIBUTION**

WASTEWATER TREATMENT													
A. TREATMENT PLANT	100.000%	100.00%											
B. LIFT & METER STATIONS (1)	100.000%												
NO. OF STATIONS (59)			(13)	(6)	(2)	(10)	(18)	(5)	(1)	(1)	-	(2)	(1)
SEWER LINES:													
TOTAL MILES: 941.14													
A. INTERCEPTOR	100.000%		57.143%	14.474%	25.576%	2.807%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES 47.74			27.28	6.91	12.21	1.34	-	-	-	-	-	-	-
B. TRUNK LINES	100.000%		35.708%	24.829%	22.356%	8.860%	5.622%	2.518%	0.107%	0.000%	0.000%	0.000%	0.000%
MILES 112.41			40.14	27.91	25.13	9.96	6.32	2.83	0.12	-	-	-	-
C. LOCAL COLLECTOR	100.000%		62.044%	12.613%	9.846%	5.994%	7.817%	1.110%	0.576%	0.000%	0.000%	0.000%	0.000%
MILES 780.99			484.55	98.51	76.90	46.81	61.05	8.67	4.50	-	-	-	-
CUSTOMER ACCTG (2)	100.000%		76.539%	7.859%	6.740%	2.740%	5.362%	0.458%	0.302%				
NO. OF METERS 76,608.00			58,635.00	6,021.00	5,163.00	2,099.00	4,108.00	351.00	231.00				
INDUSTRIAL PRETREATMENT	100.000%	100.00%											
ADMINISTRATIVE EXPENSE (3)	100.000%	69.114%	19.805%	3.690%	2.788%	1.721%	2.335%	0.360%	0.141%	0.002%	0.000%	0.044%	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, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: ADMINISTRATION

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 569,294.90	\$ 22,316.36	\$ 591,611.26
7025	ACT.ASSIGNMENT	4.62	0.18	4.80
7040	TEMPORARY EMPLOYEES	4,526.31	177.43	4,703.74
7055	TIME & ONE-HALF	10,653.67	417.62	11,071.29
7105	EMPLOYERS SOCIAL SECURITY	41,792.17	1,638.25	43,430.42
7110	HOSPITALIZATION INSURANCE	98,090.03	15,606.12	113,696.15
7115	RETIREE HEALTH CARE	18,111.13	(3,006.45)	15,104.68
7120	RETIREMENT FUND CONTRIBUTION	126,694.69	10,845.07	137,539.76
7135	UNEMPLOYMENT COMPENSATION	956.11	-	956.11
7150	LONGEVITY PAY	787.50	-	787.50
7175	FOOD/CLEAN/CAR ALLOW	1,196.59	-	1,196.59
	TOTAL PERSONAL SERVICES	<u>872,107.72</u>	<u>47,994.58</u>	<u>920,102.30</u>
7520	SUPPLIES	18,287.83	-	18,287.83
7670	CLOTHING/CLEANING ALLOWANCE	1,652.06	-	1,652.06
7800	INVENTORY - COST OF GOODS SOLD	(97,790.95)	-	(97,790.95)
7910	SUBSCRIPTIONS AND PUBLICATIONS	21,179.99	-	21,179.99
	TOTAL SUPPLIES	<u>(56,671.07)</u>	<u>-</u>	<u>(56,671.07)</u>
6931	GAIN-LOSS ON SALE OF ASSETS-FA	429,041.58	-	429,041.58
8010	CONTRACTUAL SERVICES	196,392.11	-	196,392.11
8011	CONTRACT EMPLOYEES - TEMP SERVICES	12,148.15	-	12,148.15
8016	CONTRACTS-EXTERNAL LEGAL SERVICES	1,630.25	-	1,630.25
8030	ADMINISTRATIVE SERVICES	51,264.61	(51,264.61)	-
8240	FEES	99.90	-	99.90
8400	INSURANCE PREMIUMS	378,265.00	-	378,265.00
8450	GENERAL LIABILITY INSURANCE/CLAIMS	296,483.00	11,092.00	307,575.00
8500	TELEPHONE	685.00	-	685.00
9000	PRINTING & PUBLISHING	713.92	-	713.92
9010	ADVERTISING - ANY MEDIA	333.21	-	333.21
9560	PROFESSIONAL DEVELOPMENT	2,513.98	-	2,513.98
9561	OTHER TRAVEL & TRAINING	2,623.22	-	2,623.22
9562	LOCAL BUSINESS EXPENSE	55.00	-	55.00
9563	FOOD-BEVERAGE	238.75	-	238.75
9580	MEMBERSHIPS	5,042.90	-	5,042.90
9200	ELECTRICITY	-	58,174.20	58,174.20
8287	FACILITIES MANAGEMENT CHARGES	27,551.28	-	27,551.28
9330	SOFTWARE MAINTENANCE AGREEMENTS	12,000.00	-	12,000.00
8283	VEHICLE USAGE/CAR MILAGE	4,516.27	-	4,516.27
8284	COMPUTER SERVICES	16,164.00	(1,102.00)	15,062.00
9650	BAD DEBT WRITE-OFFS	28.66	-	28.66
	TOTAL OTHER SERVICES & CHARGES	<u>1,437,790.79</u>	<u>16,899.59</u>	<u>1,454,690.38</u>
9760	EQUIPMENT	401.27	2,000,000.00	2,000,401.27
9800	FURNITURE	28,632.96	-	28,632.96
	TOTAL CAPITAL	<u>29,034.23</u>	<u>2,000,000.00</u>	<u>2,029,034.23</u>
8285	A-87 COST ALLOCATION	773,070.00	66,936.00	840,006.00
	TOTAL TRANSFERS/FEES	<u>773,070.00</u>	<u>66,936.00</u>	<u>840,006.00</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 3,055,331.67</u>	<u>\$ 2,131,830.17</u>	<u>\$ 5,187,161.84</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: SDSF - CUST.SERV'S

<u>EXPENDITURE SUB-OBJECT</u>		<u>OPERATING</u>	<u>ADJUSTED</u>	<u>ADJUSTED</u>
<u>OBJ</u>	<u>DESCRIPTION</u>	<u>EXPENSES</u>	<u>COST</u>	<u>CURRENT</u>
			<u>FACTORS</u>	<u>ANNUAL</u>
				<u>EXPENSES</u>
8286	UTILITY CUSTOMER SERVICE	\$ 2,804,437.00	\$ 441,365.07	\$ 3,245,802.07
	TOTAL OTHER SERVICES & CHARGES	<u>2,804,437.00</u>	<u>441,365.07</u>	<u>3,245,802.07</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 2,804,437.00</u>	<u>\$ 441,365.07</u>	<u>\$ 3,245,802.07</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, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: WASTEWATER

OBJ	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
7020	PERMANENT EMPLOYEES	\$ 5,078,804.67	\$ 199,089.14	\$ 5,277,893.81
7025	ACT.ASSIGNMENT	23,217.38	910.12	24,127.50
7040	TEMPORARY EMPLOYEES	32,419.44	1,270.84	33,690.28
7050	REGULAR HOURLY RATE	7,156.14	280.52	7,436.66
7055	TIME & ONE-HALF	190,022.21	7,448.87	197,471.08
7105	EMPLOYERS SOCIAL SECURITY	385,284.62	15,103.16	400,387.78
7110	HOSPITALIZATION INSURANCE	1,261,127.70	200,645.42	1,461,773.12
7115	RETIREE HEALTH CARE	165,016.45	(27,392.73)	137,623.72
7120	RETIREMENT FUND CONTRIBUTION	1,160,775.07	99,362.35	1,260,137.42
7135	UNEMPLOYMENT COMPENSATION	8,344.88	-	8,344.88
7150	LONGEVITY PAY	35,576.00	-	35,576.00
7165	SHIFT DIFFERENTIAL	21,904.60	-	21,904.60
	TOTAL PERSONAL SERVICES	<u>8,369,649.16</u>	<u>496,717.69</u>	<u>8,866,366.85</u>
7520	SUPPLIES	1,188,235.41	-	1,188,235.41
7530	PROCESS CHEMICALS	1,030,280.60	-	1,030,280.60
7670	CLOTHING/CLEANING ALLOWANCE	75,949.44	-	75,949.44
	TOTAL SUPPLIES	<u>2,294,465.45</u>	<u>-</u>	<u>2,294,465.45</u>
8010	CONTRACTUAL SERVICES	8,159,933.86	500,000.00	8,659,933.86
8011	CONTRACT EMPLOYEES - TEMP SERVICES	43,228.16	-	43,228.16
8015	CONTRACT SERV-TRAINING	4,367.36	-	4,367.36
8240	FEES	115,491.76	-	115,491.76
8500	TELEPHONE	52,920.83	-	52,920.83
8510	POSTAGE	2,792.41	-	2,792.41
9560	PROFESSIONAL DEVELOPMENT	17,872.46	-	17,872.46
9561	OTHER TRAVEL & TRAINING	44,072.35	-	44,072.35
9563	FOOD-BEVERAGE	376.25	-	376.25
9580	MEMBERSHIPS	46,629.80	-	46,629.80
9280	WATER	96,283.28	-	96,283.28
9290	REFUSE COLLECTION CHARGES	5,073.20	-	5,073.20
9200	ELECTRICITY	1,330,920.03	(58,174.20)	1,272,745.83
9210	NATURAL GAS	997,422.81	-	997,422.81
9310	EQUIPMENT REPAIRS	18,911.60	-	18,911.60
9330	SOFTWARE MAINTENANCE AGREEMENTS	242,884.36	-	242,884.36
9340	MAINTENANCE SERVICE	36,505.64	-	36,505.64
9410	EQUIPMENT RENTALS OR LEASE	58,766.76	-	58,766.76
8280	FLEET MANAGEMENT EQUIPMENT	321,138.93	-	321,138.93
8281	311 CALL CENTER SERVICES	1,724.00	-	1,724.00
8283	VEHICLE USAGE/CAR MILAGE	1,307.02	-	1,307.02
8284	COMPUTER SERVICES	268,500.00	(18,244.00)	250,256.00
9550	MISCELLANEOUS	792.40	-	792.40
	TOTAL OTHER SERVICES & CHARGES	<u>11,867,915.27</u>	<u>423,581.80</u>	<u>12,291,497.07</u>
9760	EQUIPMENT	461,669.93	1,000,000.00	1,461,669.93
9800	FURNITURE	37.99	-	37.99
9840	SOFTWARE	1,476.24	-	1,476.24
	TOTAL CAPITAL	<u>463,184.16</u>	<u>1,000,000.00</u>	<u>1,463,184.16</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 22,995,214.04</u>	<u>\$ 1,920,299.49</u>	<u>\$ 24,915,513.53</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: IND. PRETREATMENT

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
7020	PERMANENT EMPLOYEES	\$ 622,959.15	\$ 24,420.00	\$ 647,379.15
7025	ACT.ASSIGNMENT	1,388.23	54.42	1,442.65
7055	TIME & ONE-HALF	1,882.03	73.78	1,955.81
7105	EMPLOYERS SOCIAL SECURITY	45,863.63	1,797.85	47,661.48
7110	HOSPITALIZATION INSURANCE	130,165.06	20,709.26	150,874.32
7115	RETIREE HEALTH CARE	20,276.59	(3,365.91)	16,910.68
7120	RETIREMENT FUND CONTRIBUTION	142,949.56	12,236.48	155,186.04
7135	UNEMPLOYMENT COMPENSATION	875.12	-	875.12
7150	LONGEVITY PAY	4,700.00	-	4,700.00
	TOTAL PERSONAL SERVICES	<u>971,059.37</u>	<u>55,925.88</u>	<u>1,026,985.25</u>
7520	SUPPLIES	20,872.11	-	20,872.11
7670	CLOTHING/CLEANING ALLOWANCE	8,765.64	-	8,765.64
7910	SUBSCRIPTIONS AND PUBLICATIONS	413.00	-	413.00
	TOTAL SUPPLIES	<u>30,050.75</u>	<u>-</u>	<u>30,050.75</u>
8010	CONTRACTUAL SERVICES	47,909.21	-	47,909.21
8500	TELEPHONE	(230.72)	-	(230.72)
8510	POSTAGE	2,195.78	-	2,195.78
9000	PRINTING & PUBLISHING	2,208.50	-	2,208.50
9560	PROFESSIONAL DEVELOPMENT	3,130.00	-	3,130.00
9561	OTHER TRAVEL & TRAINING	6,731.73	-	6,731.73
9562	LOCAL BUSINESS EXPENSE	1,038.80	-	1,038.80
9580	MEMBERSHIPS	1,580.00	-	1,580.00
9310	EQUIPMENT REPAIRS	6,673.41	-	6,673.41
9330	SOFTWARE MAINTENANCE AGREEMENTS	44,560.00	-	44,560.00
8282	ENGINEERING SERVICES	24,799.43	-	24,799.43
	TOTAL OTHER SERVICES & CHARGES	<u>140,596.14</u>	<u>-</u>	<u>140,596.14</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,141,706.26</u>	<u>\$ 55,925.88</u>	<u>\$ 1,197,632.14</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5 SUPPORT**

ORGANIZATIONAL UNIT: REPAIR & MAINTENANCE

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
OBJ	DESCRIPTION	EXPENSES	COST FACTORS	CURRENT ANNUAL EXPENSES
7020	PERMANENT EMPLOYEES	\$ 1,642,550.80	\$ 64,387.99	\$ 1,706,938.79
7025	ACT.ASSIGNMENT	4,847.39	190.02	5,037.41
7055	TIME & ONE-HALF	162,822.53	6,382.64	169,205.17
7105	EMPLOYERS SOCIAL SECURITY	132,604.63	5,198.10	137,802.73
7110	HOSPITALIZATION INSURANCE	410,429.26	65,299.30	475,728.56
7115	RETIREE HEALTH CARE	54,423.99	(9,034.38)	45,389.61
7120	RETIREMENT FUND CONTRIBUTION	384,690.24	32,929.48	417,619.72
7135	UNEMPLOYMENT COMPENSATION	2,355.81	-	2,355.81
7150	LONGEVITY PAY	16,966.50	-	16,966.50
7165	SHIFT DIFFERENTIAL	309.85	-	309.85
7175	FOOD/CLEAN/CAR ALLOW	50.00	-	50.00
	TOTAL PERSONAL SERVICES	<u>2,812,051.00</u>	<u>165,353.15</u>	<u>2,977,404.15</u>
7520	SUPPLIES	467,214.07	-	467,214.07
7670	CLOTHING/CLEANING ALLOWANCE	14,073.06	-	14,073.06
7910	SUBSCRIPTIONS AND PUBLICATIONS	3,915.00	-	3,915.00
	TOTAL SUPPLIES	<u>485,202.13</u>	<u>-</u>	<u>485,202.13</u>
8010	CONTRACTUAL SERVICES	1,123,179.60	-	1,123,179.60
8011	CONTRACT EMPLOYEES - TEMP SERVICES	67,272.37	-	67,272.37
8015	CONTRACT SERV-TRAINING	1,050.00	-	1,050.00
8040	HOME REPAIRS	31,323.38	-	31,323.38
8500	TELEPHONE	17,022.50	-	17,022.50
9561	OTHER TRAVEL & TRAINING	363.44	-	363.44
9340	MAINTENANCE SERVICE	1,122.65	-	1,122.65
9400	LAND RENTAL OR LEASE	5,776.93	-	5,776.93
9410	EQUIPMENT RENTALS OR LEASE	90,069.67	-	90,069.67
8280	FLEET MANAGEMENT EQUIPMENT	1,040,034.12	-	1,040,034.12
8281	311 CALL CENTER SERVICES	22,885.00	-	22,885.00
8282	ENGINEERING SERVICES	3,765.00	-	3,765.00
8283	VEHICLE USAGE/CAR MILAGE	50.00	-	50.00
8284	COMPUTER SERVICES	109,824.00	(7,459.00)	102,365.00
	TOTAL OTHER SERVICES & CHARGES	<u>2,513,738.66</u>	<u>(7,459.00)</u>	<u>2,506,279.66</u>
9760	EQUIPMENT	278,670.33	-	278,670.33
	TOTAL CAPITAL	<u>278,670.33</u>	<u>-</u>	<u>278,670.33</u>
9955	OPERATING TRANS-MISC	262,195.44	-	262,195.44
	TOTAL TRANSFERS/FEES	<u>262,195.44</u>	<u>-</u>	<u>262,195.44</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 6,351,857.56</u>	<u>\$ 157,894.15</u>	<u>\$ 6,509,751.71</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
ADJUSTED ACTUAL EXPENSE  
YEAR ENDED JUNE 30, 2024  
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL SUMMARY

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	CURRENT
7020	PERMANENT EMPLOYEES	\$ 7,913,609.52	\$ 310,213.49	\$ 8,223,823.01
7025	ACT.ASSIGNMENT	29,457.62	1,154.74	30,612.36
7040	TEMPORARY EMPLOYEES	36,945.75	1,448.27	38,394.02
7050	REGULAR HOURLY RATE	7,156.14	280.52	7,436.66
7055	TIME & ONE-HALF	365,380.44	14,322.91	379,703.35
7105	EMPLOYERS SOCIAL SECURITY	605,545.05	23,737.36	629,282.41
7110	HOSPITALIZATION INSURANCE	1,899,812.05	302,260.10	2,202,072.15
7115	RETIREE HEALTH CARE	257,828.16	(42,799.47)	215,028.69
7120	RETIREMENT FUND CONTRIBUTION	1,815,109.56	155,373.38	1,970,482.94
7135	UNEMPLOYMENT COMPENSATION	12,531.92	-	12,531.92
7150	LONGEVITY PAY	58,030.00	-	58,030.00
7165	SHIFT DIFFERENTIAL	22,214.45	-	22,214.45
7175	FOOD/CLEAN/CAR ALLOW	1,246.59	-	1,246.59
	TOTAL PERSONAL SERVICES	<u>13,024,867.25</u>	<u>765,991.30</u>	<u>13,790,858.55</u>
7520	SUPPLIES	1,694,609.42	-	1,694,609.42
7530	PROCESS CHEMICALS	1,030,280.60	-	1,030,280.60
7670	CLOTHING/CLEANING ALLOWANCE	100,440.20	-	100,440.20
7800	INVENTORY - COST OF GOODS SOLD	(97,790.95)	-	(97,790.95)
7910	SUBSCRIPTIONS AND PUBLICATIONS	25,507.99	-	25,507.99
	TOTAL SUPPLIES	<u>2,753,047.26</u>	<u>-</u>	<u>2,753,047.26</u>
6931	GAIN-LOSS ON SALE OF ASSETS-FA	429,041.58	-	429,041.58
8010	CONTRACTUAL SERVICES	9,527,414.78	500,000.00	10,027,414.78
8011	CONTRACT EMPLOYEES - TEMP SERVICES	122,648.68	-	122,648.68
8015	CONTRACT SERV-TRAINING	5,417.36	-	5,417.36
8016	CONTRACTS-EXTERNAL LEGAL SERVICES	1,630.25	-	1,630.25
8030	ADMINISTRATIVE SERVICES	51,264.61	(51,264.61)	-
8040	HOME REPAIRS	31,323.38	-	31,323.38
8240	FEES	115,591.66	-	115,591.66
8400	INSURANCE PREMIUMS	378,265.00	-	378,265.00
8450	GENERAL LIABILITY INSURANCE/CLAIMS	296,483.00	11,092.00	307,575.00
8500	TELEPHONE	70,397.61	-	70,397.61
8510	POSTAGE	4,988.19	-	4,988.19
9000	PRINTING & PUBLISHING	2,922.42	-	2,922.42
9010	ADVERTISING - ANY MEDIA	333.21	-	333.21
9560	PROFESSIONAL DEVELOPMENT	23,516.44	-	23,516.44
9561	OTHER TRAVEL & TRAINING	53,790.74	-	53,790.74
9562	LOCAL BUSINESS EXPENSE	1,093.80	-	1,093.80
9563	FOOD-BEVERAGE	615.00	-	615.00
9580	MEMBERSHIPS	53,252.70	-	53,252.70
9280	WATER	96,283.28	-	96,283.28
9290	REFUSE COLLECTION CHARGES	5,073.20	-	5,073.20
9200	ELECTRICITY	1,330,920.03	-	1,330,920.03
9210	NATURAL GAS	997,422.81	-	997,422.81
8287	FACILITIES MANAGEMENT CHARGES	27,551.28	-	27,551.28
9310	EQUIPMENT REPAIRS	25,585.01	-	25,585.01
9330	SOFTWARE MAINTENANCE AGREEMENTS	299,444.36	-	299,444.36
9340	MAINTENANCE SERVICE	37,628.29	-	37,628.29
9400	LAND RENTAL OR LEASE	5,776.93	-	5,776.93
9410	EQUIPMENT RENTALS OR LEASE	148,836.43	-	148,836.43
8280	FLEET MANAGEMENT EQUIPMENT	1,361,173.05	-	1,361,173.05
8281	311 CALL CENTER SERVICES	24,609.00	-	24,609.00
8282	ENGINEERING SERVICES	28,564.43	-	28,564.43
8283	VEHICLE USAGE/CAR MILAGE	5,873.29	-	5,873.29
8284	COMPUTER SERVICES	394,488.00	(26,805.00)	367,683.00
8286	UTILITY CUSTOMER SERVICE	2,804,437.00	441,365.07	3,245,802.07
9550	MISCELLANEOUS	792.40	-	792.40
9650	BAD DEBT WRITE-OFFS	28.66	-	28.66
	TOTAL OTHER SERVICES & CHARGES	<u>18,764,477.86</u>	<u>874,387.46</u>	<u>19,638,865.32</u>
9760	EQUIPMENT	740,741.53	3,000,000.00	3,740,741.53
9800	FURNITURE	28,670.95	-	28,670.95
9840	SOFTWARE	1,476.24	-	1,476.24
	TOTAL CAPITAL	<u>770,888.72</u>	<u>3,000,000.00</u>	<u>3,770,888.72</u>
8285	A-87 COST ALLOCATION	773,070.00	66,936.00	840,006.00
9955	OPERATING TRANS-MISC	262,195.44	-	262,195.44
	TOTAL TRANSFERS/FEES	<u>1,035,265.44</u>	<u>66,936.00</u>	<u>1,102,201.44</u>
	GRAND TOTAL- EXPENDITURES	<u>\$ 36,348,546.53</u>	<u>\$ 4,707,314.76</u>	<u>\$ 41,055,861.29</u>



# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2024

TO: Molly J. Clarin  
Chief Financial Officer

FROM: Tai Verbrugge  
Utility Financial Officer

**SUBJECT: 2024 SEWER RATE STUDY TASK #4  
FY24 OPERATING EXPENSES - SEWAGE PUMPING STATIONS**

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

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

See attachment

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE PUMPING STATIONS OPERATING COSTS  
FOR THE YEAR ENDED JUNE 30, 2024**

<u>Station</u>	<u>Physical Location</u>	<u>Type</u>	<b>FY2024</b>
			<b>5900 Expenses</b>
Market Avenue Pump Station	Grand Rapids	Interceptor	\$291,256.67
Millbank Lift Station	Grand Rapids	Local	\$5,125.44
Eastlake Lift Station	Grand Rapids	Local	\$7,516.94
Eastern Lift Station	Grand Rapids	Trunk	\$7,153.31
Oak Hollow Lift Station	Grand Rapids Twmsp	Local	\$8,605.10
Kingsbury Lift Station	Walker	Trunk	\$26,556.17
Bona Vista Lift Station	Grand Rapids	Trunk	\$15,065.81
Aberdeen Lift Station	Grand Rapids	Local	\$31,364.38
O'Brien Lift Station	Walker	Trunk	\$53,284.02
Leonard Heights Lift Station	Walker	Trunk	\$19,304.84
Guild Lift Station	Grand Rapids	Local	\$8,090.86
Orchard Vista Lift Station	Cascade Twmsp	Local	\$7,868.00
Brookview Lift Station	Grand Rapids	Trunk	\$19,839.87
Remembrance Road Lift Station	Walker	Local	\$32,655.59
Kraft Avenue Lift Station	Cascade Twmsp	Local	\$8,516.82
Thornapple Lift Station	Cascade Twmsp	Trunk	\$31,909.53
Thornhills Lift Station	Cascade Twmsp	Local	\$15,453.41
Greenbrier Lift Station	Grand Rapids Twmsp	Local	\$6,119.29
Shore Haven Lift Station	Grand Rapids Twmsp	Local	\$6,601.42
Ada Lift Station	Ada	Local	\$14,599.65
Robinhood Lift Station	Grand Rapids Twmsp	Local	\$13,989.06
Lincoln School Lift Station	Grand Rapids Twmsp	Local	\$3,327.34
Reeds Lake Blvd. Lift Station	Grand Rapids Twmsp	Local	\$15,960.89
6000 28th Street Lift Station	Cascade Twmsp	Local	\$6,025.35
Ada Meter Station	Ada	Meter	\$54.01
East Grand Rapids Meter Station	East Grand Rapids	Meter	\$672.75
Rickman Avenue Lift Station	Grand Rapids	Local	\$6,657.50
Michigan Street Lift Station	Grand Rapids	Local	\$6,446.84
Eagle Crest Lift Station	Grand Rapids Twmsp	Local	\$11,561.90
East Paris Lift Station	Grand Rapids Twmsp	Local	\$24,136.29
Alpine Estates Lift Station	Walker	Local	\$9,520.13
Elmdale Lift Station	Grand Rapids	Local	\$17,253.53
Collindale Lift Station	Walker	Local	\$5,934.89
Bird Avenue Lift Station	Grand Rapids Twmsp	Local	\$33,324.22
Valentine Lift Station	Grand Rapids Twmsp	Local	\$3,448.30
Cascade Springs Lift Station	Cascade Twmsp	Local	\$7,261.61
Churchill Downs Lift Station	Grand Rapids	Local	\$7,263.45
Woodsboro Court Lift Station	Grand Rapids Twmsp	Local	\$8,186.32
Meadowood Trails Lift Station	Cascade Twmsp	Local	\$13,238.77
Gaines Township Meter Station	Gaines Township	Meter	\$101.05
Kentwood Meter Station	Kentwood	Meter	\$1,206.16
Stonebridge Lift Station	Grand Rapids Twmsp	Local	\$5,911.04
Burton/Cacade Lift Station	Cascade Twmsp	Local	\$16,582.27
Crahen Lift Station	Grand Rapids Twmsp	Local	\$8,419.65
Jonathan Woods Lift Station	Cascade Twmsp	Local	\$7,591.48
Watermark Lift Station	Cascade Twmsp	Local	\$7,152.56
Mountain Ash Lift Station	Tallmadge Twmsp	Local	\$5,522.76
Reeds Hollow Lift Station	Grand Rapids Twmsp	Local	\$5,383.73
Celebration Village Lift Station	Grand Rapids Twmsp	Trunk	\$8,357.61
Saddleback Lift Station	Grand Rapids Twmsp	Local	\$8,240.21
Arbor Hills Lift Station	Grand Rapids Twmsp	Local	\$11,835.45
16th Avenue Lift Station	Marne	Local	\$8,612.71
Hayes West Lift Station	Wright TWP	Local	\$8,427.01
Hayes East Lift Station	Wright TWP	Local	\$8,327.94
Cypress Trails Lift Station	Grand Rapids Twmsp	Local	\$5,439.98
8th & Leonard Lift Station	Tallmadge Twmsp	Local	\$5,783.23
Summit Ridge Lift Station	Grand Rapids	Local	\$10,759.70
Lake Michigan Estates	Tallmadge Twmsp	Local	\$5,112.27
Bretonfield Meter Station	Kentwood	Meter	\$1,110.78
Caledonia Meter Station	Caledonia	Meter	\$0.00

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**\$951,027.86**

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# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 23, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Molly Clarin  
Chief Financial Officer

**SUBJECT: 2024 SEWER RATE STUDY TASK #5  
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY24 operating costs are listed below.

Expense Object – 7020, 7025, 7030, 7035, 7040, 7045, 7050, 7055, 7060, 7190

GREIU wages were increased by 2.00% in FY2025 while APA wages were increased by 1.00%. Labor negotiations will begin shortly for the next contract which begins with FY2026. As the outcome of these negotiations are unknown at this time, a 5.00% wage increase has been presumed for both labor unions for FY2026. After converting these increases from a 2024 fiscal year to a 2025 calendar year basis, the result is a 4.549% factor for GREIU employees and a 3.526% factor for APA employees. A blended rate was then computed by weighting the calendar year percentages according to the percentage of Sewer Fund employees in each union (79% GREIU and 21% APA). Executive and non-reps amounted to only 1.5% of the population and were therefore excluded. **The wage increase factor to translate FY2024 actual costs to estimated calendar 2025 will be 4.333%** [4.549 X 79% + 3.526 X 21%].

Expense Object – 8284/8450/8285

Adjust FY2024 actual cost to reflect adjustments in charges for central services rendered by the Information Technology Fund (data charges), the Insurance Payment Fund (workers compensation and general liability) and the General Operating Fund (cost allocation). The “Exhibit” workbook (inclusive of cost center allocations) maintained by the Budget Office has been utilized to blend FY2025 and FY2026 budget amounts thus arriving at an estimated 2025 calendar year rate as follows:

<b>8284-Data Charges</b>			
Cost Center	FY2025 Request	FY2026 Forecast	Calendar 2025 Estimate
527-1000-5900	\$15,044	\$15,080	<b>\$15,062</b>
527-3000-5900	\$249,958	\$250,554	<b>\$250,256</b>
527-4010-5900	\$102,243	\$102,486	<b>\$102,365</b>
Total	\$367,245	\$368,120	\$367,683

<b>8450-General Liability Insurance</b>			
Cost Center	FY2025 Request	FY2026 Forecast	Calendar 2025 Estimate
527-1000-5900	\$300,073	\$315,077	<b>\$307,575</b>

<b>8285-Contributions to Other Funds (Cost Allocation)</b>			
Cost Center	FY2025 Request	FY2026 Forecast	Calendar 2025 Estimate
527-1000-5900	\$844,267	\$835,744	<b>\$840,006</b>

Expense Object - 7105

Increase FY2024 actual FICA expense by 4.333% consistent with the known wage increase factor noted above.

Expense Object - 7110

The calendar 2025 Trend Report is not completed at this time. However, unfavorable health insurance cost trends were anticipated in the calendar 2024 report. Both the medical trend increase assumption (6.5%) and the prescription drug trend increase assumption (7.5%) remained the same in the 2024 report as in the 2023 report. The health insurance fund surplus reduction implemented in the 2021 report is also less favorable for calendar 2025 rates than it was for calendar 2024 rates. Although the overall health insurance trend is still unfavorable, the 2024 report was less unfavorable than the 2023 report. The City entering contracts with new third-party administrators for health insurance and prescription drug plans is contributing to this. The new medical third-party administrator provided a one-time implementation credit of \$250,000 that was factored into the implemented rates in the 2024 report. The analysis of moving to a new prescription drug plan administrator indicated significant savings. However, to be conservative, a portion, but not all of the expected savings are reflected in the 2024 Trend Report. Finally, three-year smoothing of plan gains or losses is more favorable for calendar 2025 rates than it was for calendar 2024 rates. Smoothing favorable trends has contributed to limiting projected annual increases in health insurance costs or has provided for further decreases when applicable. **Increase FY2024 health insurance actual by 8.41% to reflect these anticipated rate changes.**

The budgeted FY2025 (\$18,159.00) and FY2026 (\$19,965.00) health insurance rates were blended into a 2025 calendar year rate estimate and divided by the FY2024 base budget amount (\$17,584.00) to arrive at the increase factor [(((((\$18,159.00 + \$19,965.00) / 2)) / \$17,584.00) - 1) \* 100].

Expense Object - 7115

Retiree health care (“RHC”) rates are projected to trend up in FY2025 (to 3.59%) and FY2026 (to 3.69%) from a base year rate of 3.28% in FY2024.

The RHC factor after consideration of the above rate and wage adjustments is 116.06% (or an increase of 16.06%) for GREIU members and 114.93% (or an increase of 14.93%) for APA members. These factors are then weighted in accordance with union membership within the Sewer Fund  $[(16.06 * 79\%) + (14.93 * 21\%)]$ .

The factor to establish calendar year 2025’s retiree health care cost is 15.82%. **Increase the total of fiscal year 2024's retiree health care by this percent to establish the cost for calendar year 2025.**

Expense Object - 7120

The pension expense factor to translate FY2024 actual costs to estimated calendar 2025 will be 2.90%. **Increase the total of fiscal year 2024's pension expense by this percent to establish the cost for calendar year 2025.** This reflects the effect of a General Pension rate change increase from FY24 of 23.59% to a calendar 2025 rate of 23.27% and the projected wage adjustments discussed above. The calendar 2025 rate is a blend of the FY2025 rate (23.43%) and the FY2026 rate (23.11%).

The pension factor after consideration of the above rate and wage adjustments is 103.11% (or an increase of 3.11%) for GREIU members. The pension factor after consideration of the above rate and wage adjustments is 102.10% (or an increase of 2.10%) for APA members. These factors are then weighted in accordance with union membership within the Sewer Fund  $[(3.11 * 79\%) + (2.10 * 21\%)]$ .

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 18, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: James Ouzts  
Environmental Services Manager

**SUBJECT: 2024 SEWER RATE STUDY TASK #5  
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY24 operating costs are listed below:

<u>ACCOUNT/User Code</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
5900-527-1000-8030	Kent County Community Action Program (ICB) (adjusting FY24 to zero, as this program is not funded by sewer rates)	(\$51,264.61)
5900-527-1000-9760	SCADA System Overhaul	\$2,000,000.00
5900-527-3000-9200	Consumers Energy Green Generation Participation (adjust to admin unit 1000 to allocate to GR Only)	\$58,174.20
5900-527-3000-8010	Engineering Studies for Service Expansion	\$500,000.00
5900-527-3000-9760	WRRF and Collection System Upgrades	\$1,000,000.00

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2024

TO: Molly J. Clarin  
Chief Financial Officer

FROM: Tai Verbrugge  
Utility Financial Officer

**SUBJECT: 2024 SEWER RATE STUDY TASK #6**

The Sewage Disposal System Fund's revenues by governmental unit for the year ended June 30, 2024, are disclosed on the attached page, along with the three-year average billed volume used to calculate expected revenue in the next calendar year (see Task 26 and 27). In addition, annual volume comparisons for the past five (5) years by governmental unit are included herein.

See attachments

**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, 2024:

	SALES REVENUE	3 YR AVE BILLED VOL (GALLONS)	3 YR AVE BILLED VOL (HCF)
<b>RETAIL:</b>			
CITY OF GRAND RAPIDS (1)	\$ 42,406,016.69	4,844,720,452	6,476,899
CITY OF WALKER	5,520,726.26	625,351,188	836,031
CITY OF KENTWOOD	5,295,110.07	984,866,168	1,316,666
CASCADE TOWNSHIP	3,201,734.39	355,872,968	475,766
GRAND RAPIDS TOWNSHIP	2,968,368.02	292,938,492	391,629
TALLMADGE TOWNSHIP	593,606.47	34,538,900	46,175
WRIGHT TOWNSHIP (2)	262,504.23	15,128,244	20,225
SUB-TOTAL RETAIL (3)	<u>\$ 60,248,066.13</u>	<u>7,153,416,412</u>	<u>9,563,391</u>
<b>WHOLESALE:</b>			
CITY OF E. GRAND RAPIDS	\$ 1,077,302.19	421,929,333	564,077
CALEDONIA TOWNSHIP	240,964.69	30,572,000	40,872
ADA TOWNSHIP	1,574,369.41	275,826,333	368,752
GAINES TOWNSHIP (4)	212,350.47	74,400,000	99,465
SUB-TOTAL WHOLESALE	<u>\$ 3,104,986.76</u>	<u>802,727,666</u>	<u>1,073,166</u>
TOTAL	<u><u>\$ 63,353,052.89</u></u>	<u><u>7,956,144,078</u></u>	<u><u>10,636,557</u></u>

REVENUE CLASSIFICATION:

527-1000-5900-6281 RETAIL SEWAGE SERVICE CHARGE	\$ 60,154,774.28
527-1000-5900-6284 WYOMING SEWAGE SERVICE CHARGE	93,291.85
527-1000-5900-6282 WHOLESALE SEWAGE SERVICE CHARGE	<u>3,104,986.76</u>
TOTAL	<u><u>\$ 63,353,052.89</u></u>

- (1) THE VOLUME & REVENUE 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 WRRF'S LIFT STATION PUMPING REPORT FOR FY 2024.
- (3) A NET REVENUE ACCRUAL OF \$1,080,035.13 HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2024, AND ADJUST FOR PREVIOUS FISCAL YEAR ACCRUAL.
- (4) GAINES TWP RATES ARE CALCULATED BASED ON MOST RECENT FISCAL YEAR BILLED VOLUME PER CONTRACT.



**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
2024 RATE STUDY TASK NO. 6**

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

<u>MUNICIPALITY</u>	<u>FY20</u>		<u>FY21</u>		<u>FY22</u>		<u>FY23</u>		<u>FY24</u>		<u>FY20 - FY24</u> <u>% CHANGE</u>
	<u>VOL BILLED</u>	<u>VOL BILLED</u>	<u>% CHANGE</u>	<u>VOL BILLED</u>	<u>% CHANGE</u>	<u>VOL BILLED</u>	<u>% CHANGE</u>	<u>VOL BILLED</u>	<u>% CHANGE</u>		
GRAND RAPIDS	4,782,754	4,706,480	-1.59%	4,848,898	3.03%	4,889,314	0.83%	4,795,951	-1.91%	0.28%	
WALKER	596,412	604,510	1.36%	628,004	3.89%	634,824	1.09%	613,225	-3.40%	2.82%	
KENTWOOD	976,528	1,001,673	2.57%	991,359	-1.03%	999,662	0.84%	963,578	-3.61%	-1.33%	
CASCADE	330,505	335,188	1.42%	351,062	4.74%	358,418	2.10%	358,140	-0.08%	8.36%	
GRAND RAPIDS TWP	278,126	284,929	2.45%	291,121	2.17%	301,740	3.65%	285,954	-5.23%	2.81%	
TALLMADGE	25,812	27,089	4.95%	29,628	9.37%	36,870	24.45%	37,119	0.67%	43.80%	
WRIGHT TWP	20,025	12,023	-39.96%	15,037	25.07%	17,363	15.47%	12,984	-25.22%	-35.16%	
EAST GRAND RAPIDS	498,507	359,057	-27.97%	459,754	28.04%	447,512	-2.66%	358,522	-19.89%	-28.08%	
ADA TWP	292,738	264,616	-9.61%	276,776	4.60%	276,304	-0.17%	274,399	-0.69%	-6.26%	
CALEDONIA TWP	25,910	21,012	-18.90%	30,777	46.47%	31,098	1.04%	29,841	-4.04%	15.17%	
GAINES TWP	122,183	103,780	-15.06%	116,742	12.49%	116,500	-0.21%	74,400	-36.14%	-39.11%	
<b>TOTAL</b>	<b>7,949,500</b>	<b>7,720,357</b>	<b>-2.88%</b>	<b>8,039,158</b>	<b>4.13%</b>	<b>8,109,605</b>	<b>0.88%</b>	<b>7,804,112</b>	<b>-3.77%</b>	<b>-1.83%</b>	

GRAND RAPIDS VOLUME COMPARED TO  
CUSTOMER COMMUNITIES

VOLUME = 1,000 GALLONS	<u>FY20</u>		<u>FY21</u>		<u>FY22</u>		<u>FY23</u>		<u>FY24</u>	
	<u>VOL BILLED</u>	<u>VOL BILLED</u>	<u>% OF TOTAL</u>	<u>VOL BILLED</u>	<u>% OF TOTAL</u>	<u>VOL BILLED</u>	<u>% OF TOTAL</u>	<u>VOL BILLED</u>	<u>% OF TOTAL</u>	
GRAND RAPIDS	4,782,754	4,706,480	60.96%	4,848,898	60.32%	4,889,314	60.29%	4,795,951	61.45%	
CUSTOMER COMMUNITIES	3,166,746	3,013,877	39.04%	3,190,260	39.68%	3,220,292	39.71%	3,008,161	38.55%	
<b>TOTAL</b>	<b>7,949,500</b>	<b>7,720,357</b>	<b>100.00%</b>	<b>8,039,158</b>	<b>100.00%</b>	<b>8,109,605</b>	<b>100.00%</b>	<b>7,804,112</b>	<b>100.00%</b>	

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

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

OPERATING REVENUES OTHER THAN WASTEWATER RECEIPTS:

527-1000-5900

6260	MISCELLANEOUS SERVICE FEES	\$ 1,872.94
6140	INSPECTION FEES - UTILITIES	30,480.00
6461	INVENTORY WITHDRAWALS (SALES)	15,421.52
6723	INTEREST/PENALTIES ON SPEC ASSM	5,107.45

527-(30XXs)-5900

4912	INDUSTRIAL PRETREATMENT PERMITS	\$ 58,622.12
6423	SALES OF SCRAP MATERIAL	2,452.14
6461	INVENTORY WITHDRAWALS (SALES)	17,329.52
		<u>\$ 131,285.69</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR \$ 203,139.24

INTEGRATED SYSTEM CREDITS

527-1000/3000-5900

6152	INTEGRATED SEWER CONNECTION	\$ 264,707.50
6283	SEWAGE SURCHARGE	2,455,953.31
6424	RENEWABLE NATURAL GAS SALES*	1,545,509.62
6671	RENTALS-FACILITIES	25,000.00
6871	REFUNDS-REBATES	2,194.08
		<u>\$ 4,293,364.51</u>

\*Renewable Natural Gas Sales totaled \$3,045,509.62 in FY2024. This figure was reduced by \$1.5M for the 2024 Rate Study as future revenues are expected to decline due to changes in government

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 9, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Jared Grabinski  
Assistant Environmental Services Manager

**SUBJECT: 2024 SEWER RATE STUDY – TASK #8  
CHANGE IN OPERATING LEVELS**

While some minor optimizations and upgrades have been implemented this year, no significant changes in operating levels are anticipated to take effect by January 1, 2025, which would require adjustments to the operating costs in our FY25 Budget.

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 28, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Jared Grabinski  
Assistant Environmental Services Manager

**SUBJECT: 2024 SEWER RATE STUDY – TASK #9  
CHANGES IN OPERATING REVENUES**

Further optimization efforts on the Digestion and Renewable Natural Gas processes and the staff's continuous improvement in equipment efficiencies have had positive effects on gas production. However, regulatory changes mandated by the US Environmental Protection Agency (EPA) have resulted in the cancellation of our existing partnership to sell gas and renewable energy credits through DTE. We are currently considering our options for future sales of our gas and renewable energy credits, but we anticipate a temporary lapse in this revenue stream.

As such, we are marking down the Renewable Natural Gas Sales in Task 7 by \$1,500,000. Although the system did receive \$3,045,509.62 for these sales in FY2024, the 2025 rates should not reflect that full amount, as FY2025 will likely see these revenues drop by ~50%.

No other significant changes in sewer revenues are anticipated to take effect by January 1, 2025, which would require an adjustment to operating revenue estimates as a whole.

# MEMORANDUM

CITY OF GRAND RAPIDS

**DATE:** October 24, 2024

**TO:** Molly J. Clarin  
Chief Financial Officer

**FROM:** Tai Verbrugge  
Utility Financial Officer

**SUBJECT:** 2024 SEWER RATE STUDY- TASK #10

The following are sewage system projects that should be considered operative as of January 1, 2025.

<u>Description</u>	<u>Location</u>	<u>Proj. Code</u>	<u>Cost</u>
SPE Express – Lab Equipment	Integrated	Operations	\$21,119
WRRF Ash Lagoon	Grand Rapids	590224060	\$885,764
Michigan/Fuller Intersection	Grand Rapids	590225071	\$248,938
MCC Replacements	Grand Rapids	590223034	\$117,687
WRRF Decant Pump Replacement	Grand Rapids	590222020	\$92,476
MARB Chemical Storage Tank	Grand Rapids	590122066	\$84,600
Robinson Rd – Youell to Plymouth	Grand Rapids	590222047	\$70,659
Hope Village	Grand Rapids	Contribution	\$65,948
MAPS VFD Replacement	Grand Rapids	590222021	\$29,243
Kingsbury Lift Station	Walker	590121064	\$1,693,302
Walker Ave – Northridge to 4 Mile	Walker	Contribution	\$1,050,350
Remembrance Lift Station Upgrades	Walker	590222024	\$275,613
Meadowood Townhomes	GR Township	Contribution	\$189,600
Tallman Woods	Walker	Contribution	\$134,485
Savannah at Waterford Village	Walker	Contribution	\$60,922
East Paris Lift Station – Conduit	GR Township	590224036	\$17,600
Collindale Gravity Sewer/LS Improv	Walker	590222019	\$7,525
			<u>\$5,045,830</u>

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

COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2024

**INTEGRATED SYSTEM**

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND & EASEMENTS	\$ 1,509,913	\$ -	\$ -
LAND IMPROVEMENTS	19,542,933	16,128,995	391,986
BUILDINGS & STRUCTURES	67,000,229	40,950,814	1,360,821
PROCESS EQUIPMENT	97,719,057	31,670,064	3,470,950
AUXILIARY EQUIPMENT	36,703,589	17,428,184	2,158,977
MACHINERY & EQUIPMENT	3,874,316	2,812,079	206,921
OFFICE EQUIPMENT & FURNITURE	11,720	5,274	235
WATERMAIN	1,367,480	17,903	16,962
	<u>\$ 227,729,237</u>	<u>\$ 109,013,313</u>	<u>\$ 7,606,852</u>

**NON-INTEGRATED SYSTEM**

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND & EASEMENTS	\$ 4,399,555	\$ -	\$ -
LAND IMPROVEMENTS	3,486,637	2,887,872	164,757
BUILDINGS & STRUCTURES	12,918,901	5,353,121	280,995
PROCESS EQUIPMENT	15,589,624	9,949,360	520,209
AUXILIARY EQUIPMENT	4,405,940	3,603,571	125,637
MACHINERY & EQUIPMENT	1,671,790	1,671,790	-
SERVICEMAINS - GRAND RAPIDS	424,270,820	169,850,836	8,043,008
SERVICEMAINS - WALKER	43,597,632	22,333,383	797,962
SERVICEMAINS - KENTWOOD	44,510,953	22,153,610	800,129
SERVICEMAINS - CASCADE TWP	22,665,632	11,873,615	413,939
SERVICEMAINS - GRAND RAPIDS TWP	20,762,257	10,304,215	377,947
SERVICEMAINS - TALLMADGE TWP	6,408,677	2,464,389	128,331
SERVICEMAINS - WRIGHT TWP	125,288	46,357	2,509
	<u>\$ 604,813,706</u>	<u>\$ 262,492,119</u>	<u>\$ 11,655,423</u>
TOTAL	<u>\$ 832,542,943</u>	<u>\$ 371,505,432</u>	<u>\$ 19,262,275</u>

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2024.

**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, 2024: \$ 1,318,222

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 = \$ 41,055,861 @ 90/365 = \$ 10,123,363

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$ 1,318,222
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	10,123,363
	\$ 11,441,585

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 23, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Tiffany Berry  
Assistant Environmental Services Manager

**SUBJECT: 2024 SEWER RATE STUDY- TASK #13  
ZONEGATING & JOINT USE ALLOCATION METHODS**

Lengths and costs of all zoned interceptor and trunk sewer mains as well as jointly used lift stations are allocated to customer communities based on the 2016 Comprehensive Master Plan update performed by Black & Veatch, Ltd. and adjusted annually for the changes in billed flow for each customer community. A separate Zoning Study was also performed by Fishbeck in 2022. That study resulted in modifications to flow allocations throughout the collection system.



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	14,701.60
LESS: WHOLESALE BILLED FLOW	(737.16)
LESS: RETAIL BILLED FLOW	(7,066.94)
TOTAL RETAIL I/I & OTHER FLOW	6,897.50
2.) RETAIL INFLOW FROM SEPARATED AREAS (A)	374.30
RETAIL INFLOW FROM COMBINED AREAS - AMOUNT ESTIMATED (A)	498.81
LESS: ANNUAL BYPASS FROM (3) PUMPING STATIONS	-
LESS: IN-SYSTEM BYPASS & RETENTION BASIN OVERFLOW	-
TOTAL RETAIL INFLOW	873.11
3.) RETAIL INFILTRATION:	
TOTAL RETAIL I/I & OTHER FLOW	6,897.50
LESS: TOTAL RETAIL INFLOW (#2)	(873.11)
	6,024.39
LESS: MARKET AVE RETENTION BASIN (MARB) CAPTURE	(18.64)
TOTAL RETAIL INFILTRATION & OTHER FLOW	6,005.75
4.) ALLOCATION OF RETAIL INFILTRATION & OTHER FLOW - APPORTIONED ON THE BASIS OF B&V SUMMARY OF 2018 MONITORED FLOW DATA (B)	

	PRORATA SHARE OF RETAIL INFILTRA- TION & OTHER	MILLION GALLONS
GOVERNMENTAL UNIT(S)		
UTILITY PARTNERS	100.0000%	6,005.75
TOTAL	100.0000%	6,005.75

(A) BASED ON RECORDED RAINFALL @ WWTP & APPORTIONED PER BLACK & VEATCH'S SUMMARY OF 2018 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)

<u>GOVERNMENTAL UNIT(S)</u>	<u>BILLED FLOW (TASK #6)</u>	<u>INFLOW (#2 ABOVE)</u>	<u>INFILTRATION &amp; OTHER FLOW (#4 ABOVE)</u>	<u>MARB (A) (#3 ABOVE)</u>	<u>TOTAL PLANT FLOW</u>	<u>PERCENT OF TOTAL</u>	<u>TOTAL PLANT FLOW (MGD)</u>
UTILITY PARTNERS	7,729.70	873.11	6,005.75	18.46	14,627.02	99.4927%	40.0740
GAINES TWP	74.40	-	-	0.18	74.58	0.5073%	0.2043
TOTAL	<u>7,804.10</u>	<u>873.11</u>	<u>6,005.75</u>	<u>18.64</u>	<u>14,701.60</u>	<u>100.0000%</u>	<u>40.2783</u>

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

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 13, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Andrew Meyer  
Acting Wastewater Plant Superintendent

**SUBJECT: 2024 SEWER RATE STUDY – WRRF FLOW DATA**

Listed below is the Water Resource Recovery Facility (WRRF) flow data measured in million gallons (MG) for the last three completed fiscal years. Plant flow decreased by 1.87% from 14,982 MG treated in FY2023 to 14701.6 MG treated in FY2024. The final, in-system Combined Sewer Overflow point was eliminated July 13, 2015 and is no longer applicable to this report.

Month	FY 2022	FY 2023*	FY 2024*	% incr (decr)
July	1283.2	1100.7	1305.9	18.64%
August	1150.3	1120.8	1227.5	9.52%
September	1031.1	999.7	1086.2	8.65%
October	1307.3	1069.1	1237.2	15.72%
November	1220.3	1052.0	1142.3	8.58%
December	1193.5	1210.8	1128.1	(6.83%)
January	1124.9	1273.4	1388.5	9.04%
February	1209.0	1262.6	1254.1	(0.68%)
March	1382.6	1712.4	1319.7	(22.93%)
April	1610.2	1823.5	1264.6	(30.65%)
May	1509.1	1280.1	1218.8	(4.79%)
June	1144.0	1077.0	1128.9	4.82%
<b>Total</b>	<b>15165.5</b>	<b>14982.0</b>	<b>14701.6</b>	<b>(1.87%)</b>

Data Measured	FY 2022	FY 2023*	FY 2024*	% incr (decr)
Water Resource Recovery Facility (WRRF) avg daily flow (MG)	41.5	41.0	40.3	(1.71%)
Rainfall Recorded at WRRF (inches)	35.36	47.72	22.78	(52.26%)
Market Ave Retention Basin (MARB) inflow (MG)	18.71	11.21	18.64	66.28%
Market Ave Retention Basin (MARB) outflow (MG)	0	0	0	N/A

\* FY 2023/24 data was generated using ESD eRIS software. Future reports will utilize the same query to maintain consistency.

cc: Jeff McCaul, P.E. - Assistant City Engineer

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# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: September 23, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Tiffany Berry  
Assistant ESD Manager

**SUBJECT: 2024 SEWER RATE STUDY – TASK #14**

Zonegating maps for the sewage system are included in the Comprehensive Master Plan Update 2020 from Fishbeck (finalized July, 2021). 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. A follow-up report was also prepared by Fishbeck in October, 2022 which specifically focused on Zonegating flow allocations. All zonegating work papers are on file at the Water Resource Recovery Administration Building located at 1300 Market Ave., SW, Grand Rapids, MI 49503.

TLB/tlb

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

COMPUTE CONSTRUCTION COST RATE BASE (NET BOOK VALUE OF ASSETS, 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	\$ 5,045,830	
	- TASK #11/21	604,008,706	
	- TASK #16/21	<u>(187,300,597)</u>	\$ 421,753,939
LESS: ACCUMULATED DEPRECIATION	- TASK #10	\$ -	
	TASK #11/21	262,463,853	
	TASK #16/21	<u>(88,609,997)</u>	<u>(173,853,856)</u>
			247,900,083
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 11,441,585	
		<u>11,441,585</u>	11,441,585
			259,341,668
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 216,850,497	
LESS: AMORTIZATION		(163,503,316)	
		<u>(53,347,181)</u>	<u>(53,347,181)</u>
CONSTRUCTION COST RATE BASE			<u>\$ 205,994,487</u>

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: August 30, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Lindsay Sagorski Munsell  
Acting Assistant Water System Manager

**SUBJECT: 2024 Sewer Rate Study Integrated Connection Fees Task #15A**

Below is the Integrated Sewer Connection Fee Schedule of rates effective January 1, 2025. Per the Fifth Amendment to the Water & Sanitary Sewer Service Agreements, adopted by City Commission on March 27, 2018 (Res. 87571), the methodology for connection to the water and sewer systems is calculated based on the cost of connection to the System and is evaluated annually as part of the Rate Study and shall be administered the same across the retail system.

The integrated connection fees effective January 1, 2025, shall be as follows:

Residential Users (three residential units or less)

Plan Review and Connection Fee (PRC Fee)			
Meter Size	2024	2025	% Change
3/4 inch	\$390	\$395	1.28%
1 inch	\$410	\$415	1.22%
1-1/2 inch	\$410	\$415	1.22%

All other Users (including residential of more than 3 units, commercial, industrial, governmental and religious)

Plan Review and Connection Fee (PRC Fee)			
Meter Size	2024	2025	% Change
3/4 inch	\$755	\$765	1.32%
1 inch	\$1,010	\$1,030	1.98%
1-1/2 inch	\$1,340	\$1,370	2.24%
2 inch	\$1,850	\$1,890	2.16%
3 inch	\$2,305	\$2,355	2.17%
4 inch	\$3,320	\$3,390	2.11%
6 inch	\$4,675	\$4,780	2.25%

Plus a Meter Capacity Fee based on the meter size (when water and sanitary sewer connections are made at the same time only one Meter Capacity Fee shall be charged) as follows:

<b>Meter Capacity Charge</b>			
<b>Meter Size</b>	<b>2024</b>	<b>2025</b>	<b>% Change</b>
¾ inch	\$210	\$210	0.00%
1 inch	\$300	\$295	-1.67%
1 ½ inch	\$750	\$985	31.33%
2 inch	\$880	\$1,155	31.25%
3 inch	\$2,162	\$2,355	8.93%
4 inch	At Cost	\$3,146	NA
6 inch	At Cost	\$5,201	NA
8 inch	At Cost	\$10,480	NA
10 inch	At Cost	\$13,675	NA

Commercial Plan Assessment Fee – For instances where there is an established connection or property has been previously reviewed to allow for connection to the System which require less System resources to verify system connection requirements.

<b>Commercial Plan Assessment Fee</b>			
	<b>2024</b>	<b>2025</b>	<b>% Change</b>
All Sizes	\$125	\$125	0.00%

Further information on the new integrated connection fee methodology can be provided through the Utility Business Office.

LMS

Cc: James Ouzts  
Brian Bradley

Wayne Jernberg



**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 2025 - ACCRUAL BASIS**

DATE	SRF/REVENUE REFERENCE		REVENUE BONDS			TOTAL		TOTAL PRINCIPAL & INTEREST	
	5073-	SERIES	PRINCIPAL	INTEREST	EST. FEES	PRINCIPAL	INTEREST		
07/01/25	N/A	2010A	(1)		\$ 316,270.00	\$ 800.00	\$ -	\$ 317,070.00	\$ 317,070.00
01/01/26	N/A	2010A	(1)		316,270.00	800.00	0.00	317,070.00	317,070.00
07/01/25	N/A	2016	(2)			301,042.50	625.00	0.00	301,667.50
01/01/26	N/A	2016	(2)	678,150.00	301,042.50	625.00	678,150.00	301,667.50	979,817.50
07/01/25	N/A	2021	(3)		453,838.74	625.00	0.00	454,463.74	454,463.74
01/01/26	N/A	2021	(3)	3,220,704.71	453,838.74	625.00	3,220,704.71	454,463.74	3,675,168.45
							<u>\$ 3,898,854.71</u>	<u>\$ 2,146,402.46</u>	<u>\$ 6,045,257.17</u>

(1) DS ON ES CSO PORTION OF 2010A ISSUE. (\$14.05M)

(2) DS ON ES CSO PORTION OF REFUNDED 2008 ISSUE

(3) PRORATED AMOUNT OF REFUNDED 2013 AND 2014 (2005 CSO REFUNDING) ISSUES RELATED TO CSO DEBT

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

INCLUDE MAJOR PROJECT COST FOR UPCOMING SYSTEM IMPROVEMENTS (NON-INTEGRATED)  
THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED SEWAGE SYSTEM IMPROVEMENTS ARE  
SUMMARIZED IN THE FOLLOWING TABLE.

ITEM NO.	DESCRIPTION	ESTIMATED COST	BUDGET YEAR
1	GODFREY AVE - OXFORD ST TO MARKET AVE	4,200,000	2026
2	LIFT STATION UPGRADES	350,000	2026
3	VAR LOC CIPP REHAB OF S/S	850,000	2026
4	VALENTINE LIFT STATION UPGRADES	100,000	2026
5	WOODLAWN CEMETARY SANITARY SEWER CIPP	400,000	2026
6	B STREET - GODFREY AVE TO UNDERHILL AVE	120,000	2026
7	FORCEMAIN AIR RELIEF VALVE REPLACEMENT	60,000	2026
8	PLASTER CREEK IMPROVEMENTS	137,500	2026
9	BERKSHIRE ST - GIDDINGS AV TO KALAMAZOO AV	225,000	2027
10	WHISKEY CREEK SANITARY TRUNK	3,700,000	2027
11	GODFREY AVE - GRAND RIVER TO SOUTH OF MARKET AVE	5,500,000	2027
12	LIFT STATION UPGRADES	350,000	2027
13	VAR LOC CIPP REHAB OF S/S	900,000	2027
14	6862-A.C. FORCEMAIN REPLACEMENT - EASTERN AVENUE LIFT STATIC	1,000,000	2027
15	PLASTER CREEK IMPROVEMENTS	2,000,000	2027
16	FORCEMAIN AIR RELIEF VALVE REPLACEMENT	60,000	2027
17	KENT COUNTRY CLUB SANITARY TRUNK SEWER	1,600,000	2028
18	BUTTERWORTH - HOGADONE TO SEWARD AVE	100,000	2028
19	LIFT STATION UPGRADES	350,000	2028
20	VAR LOC CIPP REHAB OF S/S	950,000	2028
21	FORCEMAIN AIR RELIEF VALVE REPLACEMENT	60,000	2028
22	BURTON/BRETON SANITARY TRUNK SEWER	3,000,000	2028
23	CASCADE/KENTWOOD SANITARY TRUNK SEWER	2,500,000	2028
24	VAR LOC CIPP REHAB OF S/S	1,000,000	2029
25	LAFAYETTE AVENUE - FOUNTAIN TO MICHIGAN	270,000	2030
26	BOSTON/BLAINE SE COLLECTION AREA CONSTRUCTION	2,000,000	2030
27	BURTON/BRETON SE COLLECTION AREA CONSTRUCTION	500,000	2030
28	TULIP ST-W END TO GRANDVILLE AV	27,000	2030
29	VAR LOC CIPP REHAB OF S/S	1,050,000	2030
30	2537 - LAFAYETTE AVENUE - FULTON TO FOUNTAIN	270,000	2030
31	B ST - GRANDVILLE TO CAULFIELD ALLEY	305,000	2030
32	BEACON ST - GRANDVILLE TO CAULFIELD	500,000	2030
33	NELAND - BATES TO SHERMAN	1,000,000	2030
		<b>\$ 35,434,500</b>	

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2024. COSTS SHOWN ARE IN 2024 DOLLARS.

SOURCE: BRIAN BRADLEY, HYDRAULIC ENGINEER, OCTOBER 2024

**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,	PRINCIPAL	INTEREST	PRIN & INT
2025	\$ 14,025,000	\$ 9,155,225	23,180,225
2026	14,540,000	8,702,589	23,242,589
2027	15,060,000	8,219,392	23,279,392
2028	15,570,000	7,700,535	23,270,535
2029	11,385,000	7,149,652	18,534,652
2030	12,650,000	6,835,012	19,485,012
2031	13,030,000	6,453,850	19,483,850
2032	13,425,000	6,050,316	19,475,316
2033	13,865,000	5,619,582	19,484,582
2034	15,925,000	5,159,803	21,084,803
2035	14,210,000	4,637,596	18,847,596
2036	9,585,000	4,138,313	13,723,313
2037	10,010,000	3,703,861	13,713,861
2038	10,460,000	3,263,135	13,723,135
2039	8,650,000	2,802,114	11,452,114
2040	9,010,000	2,441,647	11,451,647
2041	9,380,000	2,065,700	11,445,700
2042	5,560,000	1,657,797	7,217,797
2043	3,825,000	1,421,850	5,246,850
2044	4,020,000	1,230,600	5,250,600
2045	4,220,000	1,029,600	5,249,600
2046	4,430,000	818,600	5,248,600
2047	4,630,000	617,550	5,247,550
2048	4,840,000	407,300	5,247,300
2049	2,295,000	187,400	2,482,400
2050	2,390,000	95,600	2,485,600
	<b>\$ 246,990,000</b>	<b>\$ 101,564,617</b>	<b>\$ 348,554,617</b>

**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 DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

CONSTRUCTION COST RATE BASE - TASK NO. 15	\$ 205,994,487
LESS: BONDED INDEBTEDNESS IN CCRB (CASH BASIS) - TASK NO. 20	(185,696,766)
NET SEWER SYSTEM EQUITY	<u><u>\$ 20,297,721</u></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>
14-Sep-23	3.870%	14-Mar-24	3.520%
21-Sep-23	3.900%	21-Mar-24	3.550%
28-Sep-23	4.090%	28-Mar-24	3.580%
05-Oct-23	4.120%	04-Apr-24	3.680%
12-Oct-23	3.970%	11-Apr-24	3.760%
19-Oct-23	4.190%	18-Apr-24	3.790%
26-Oct-23	4.190%	25-Apr-24	4.070%
02-Nov-23	4.170%	02-May-24	4.070%
09-Nov-23	3.930%	09-May-24	3.930%
16-Nov-23	3.830%	16-May-24	3.930%
22-Nov-23	3.740%	23-May-24	4.000%
30-Nov-23	3.490%	30-May-24	4.130%
07-Dec-23	3.410%	06-Jun-24	3.970%
14-Dec-23	3.460%	13-Jun-24	3.940%
21-Dec-23	3.370%	20-Jun-24	3.900%
28-Dec-23	3.260%	27-Jun-24	3.930%
04-Jan-24	3.310%	03-Jul-24	3.960%
11-Jan-24	3.310%	11-Jul-24	3.940%
18-Jan-24	3.390%	18-Jul-24	3.920%
25-Jan-24	3.430%	25-Jul-24	3.940%
01-Feb-24	3.340%	01-Aug-24	3.940%
08-Feb-24	3.490%	08-Aug-24	3.850%
15-Feb-24	3.540%	15-Aug-24	3.880%
22-Feb-24	3.540%	22-Aug-24	3.880%
29-Feb-24	3.540%	29-Aug-24	3.870%
07-Mar-24	3.520%	05-Sep-24	3.860%
		<u>52 WEEKS</u>	<u>3.773%</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 BASE (CCRB)	\$ 20,297,721	@	4.773%	=	\$ 968,787
SEWER SYSTEM INDEBTEDNESS IN THE CCRB					
2010 BONDS	20,695,000	@	5.00%	=	1,034,750
2010A BONDS	7,595,000	@	4.37%	=	331,902
2011 SRF BONDS	2,969,675	@	2.50%	=	74,242
2013 SRF BONDS	609,125	@	2.00%	=	12,183
2016 BONDS (partially refunded 2008 Bonds)	22,480,800	@	5.00%	=	1,124,040
2018 BONDS	38,120,000	@	5.00%	=	1,906,000
2020 BONDS	34,020,000	@	4.64%	=	1,578,528
2021 BONDS (refunded 2012, 2013, 2014 Bonds)	51,707,166	@	2.21%	=	1,140,660
2023 CWRFB BONDS	7,500,000	@	1.88%	=	140,625
LESS INTEREST ON BOND RESERVE ACCOUNTS					(228,946)
	\$ 205,994,487				\$ 8,082,771
COMPOSITE RATE OF RETURN ON INVESTMENT			\$ 8,082,771	=	3.924%
			\$205,994,487		

**Noted Disclosure:**

TOTAL BONDED INDEBTEDNESS IN CCRB (from above) \$ 185,696,766 TASK NO. 18

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
CONSTRUCTION COST RATE BASE & RETURN ON SYSTEM INVESTMENT- TASK NO. 21- PART 1  
FISCAL YEAR ENDED JUNE 30, 2024**

**PHYSICAL LOCATION**

DESCRIPTION	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL	
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP		
COST	\$ 227,750,356	\$ 260,978,356	\$ 46,731,895	\$ 32,072,867	\$ 21,521,754	\$ 23,607,955	\$ 5,735,670	\$ 118,230	\$ -	\$ -	\$ -	\$ -	\$ 618,517,083	
LESS: ACCUMULATED DEPRECIATION	109,013,313	95,025,834	22,938,022	17,681,018	11,495,161	10,785,761	2,308,444	77,255	-	-	-	-	269,324,808	
NET BOOK VALUE	\$ 118,737,043	\$ 165,952,522	\$ 23,793,873	\$ 14,391,849	\$ 10,026,593	\$ 12,822,194	\$ 3,427,226	\$ 40,975	\$ -	\$ -	\$ -	\$ -	\$ 349,192,275	
WORKING CAPITAL REQUIREMENT	7,997,440	2,102,162	436,153	310,868	206,978	297,481	39,130	27,231	4,005	1,144	14,416	4,577	11,441,585	
	<u>\$ 126,734,483</u>	<u>\$ 168,054,684</u>	<u>\$ 24,230,026</u>	<u>\$ 14,702,717</u>	<u>\$ 10,233,571</u>	<u>\$ 13,119,675</u>	<u>\$ 3,466,356</u>	<u>\$ 68,206</u>	<u>\$ 4,005</u>	<u>\$ 1,144</u>	<u>\$ 14,416</u>	<u>\$ 4,577</u>	<u>\$ 360,633,860</u>	
CONTRIBUTIONS	50,267,759	69,763,238	27,841,704	27,058,395	19,140,078	17,444,116	5,335,207	-	-	-	-	-	216,850,497	
LESS AMORTIZATION	(52,436,649)	(55,504,395)	(15,186,038)	(16,234,574)	(10,947,953)	(9,018,857)	(2,081,492)	-	-	-	-	-	(161,409,958)	
	<u>\$ 2,168,890</u>	<u>\$ (14,258,843)</u>	<u>\$ (12,655,666)</u>	<u>\$ (10,823,821)</u>	<u>\$ (8,192,125)</u>	<u>\$ (8,425,259)</u>	<u>\$ (3,253,715)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (55,440,539)</u>	
CONSTRUCTION COST RATE BASE	<u>\$ 128,903,373</u>	<u>\$ 153,795,841</u>	<u>\$ 11,574,360</u>	<u>\$ 3,878,896</u>	<u>\$ 2,041,446</u>	<u>\$ 4,694,416</u>	<u>\$ 212,641</u>	<u>\$ 68,206</u>	<u>\$ 4,005</u>	<u>\$ 1,144</u>	<u>\$ 14,416</u>	<u>\$ 4,577</u>	<u>\$ 305,193,321</u>	
RETURN ON INVESTMENT- TASK 20	3.924%	<u>\$ 5,058,168</u>	<u>\$ 6,034,949</u>	<u>\$ 454,178</u>	<u>\$ 152,208</u>	<u>\$ 80,106</u>	<u>\$ 184,209</u>	<u>\$ 8,344</u>	<u>\$ 2,676</u>	<u>\$ 157</u>	<u>\$ 45</u>	<u>\$ 566</u>	<u>\$ 180</u>	<u>\$ 11,975,786</u>
<b>ZONEGATED</b>														
COST	\$ -	\$ (361,130)	\$ 6,411,607	\$ 1,988,795	\$ 3,896,746	\$ 7,835,223	\$ 1,927,471	\$ 1,429,536	\$ 357,069	\$ 245,804	\$ 6,233,073	\$ 1,001,899	\$ 30,966,093	
LESS: ACCUMULATED DEPRECIATION	-	(878,367)	3,082,157	1,488,524	1,555,518	3,567,885	693,865	670,076	259,179	178,148	2,199,252	726,124	13,542,361	
NET BOOK VALUE	\$ -	\$ 517,237	\$ 3,329,450	\$ 500,271	\$ 2,341,228	\$ 4,267,338	\$ 1,233,606	\$ 759,460	\$ 97,890	\$ 67,656	\$ 4,033,821	\$ 275,775	\$ 17,423,732	
WORKING CAPITAL REQUIREMENT	-	517,237	3,329,450	500,271	2,341,228	4,267,338	1,233,606	759,460	97,890	67,656	4,033,821	275,775	17,423,732	
	<u>\$ -</u>	<u>\$ 517,237</u>	<u>\$ 3,329,450</u>	<u>\$ 500,271</u>	<u>\$ 2,341,228</u>	<u>\$ 4,267,338</u>	<u>\$ 1,233,606</u>	<u>\$ 759,460</u>	<u>\$ 97,890</u>	<u>\$ 67,656</u>	<u>\$ 4,033,821</u>	<u>\$ 275,775</u>	<u>\$ 17,423,732</u>	
CONTRIBUTIONS	-	-	7,390	950,911	297,031	231,915	209	149	1,796	204,125	270,701	832,056	2,796,283	
LESS AMORTIZATION	-	-	(7,390)	(741,711)	(231,684)	(181,288)	(209)	(149)	(1,401)	(141,519)	(211,147)	(576,860)	(2,093,358)	
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (209,200)</u>	<u>\$ (65,347)</u>	<u>\$ (50,627)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (395)</u>	<u>\$ (62,606)</u>	<u>\$ (59,554)</u>	<u>\$ (255,196)</u>	<u>\$ (702,925)</u>	
CONSTRUCTION COST RATE BASE	<u>\$ -</u>	<u>\$ 517,237</u>	<u>\$ 3,329,450</u>	<u>\$ 291,071</u>	<u>\$ 2,275,881</u>	<u>\$ 4,216,711</u>	<u>\$ 1,233,606</u>	<u>\$ 759,460</u>	<u>\$ 97,495</u>	<u>\$ 5,050</u>	<u>\$ 3,974,267</u>	<u>\$ 20,579</u>	<u>\$ 16,720,807</u>	
RETURN ON INVESTMENT- TASK 19/21	\$ -	\$ 42,790	\$ 275,442	\$ 24,080	\$ 188,281	\$ 348,844	\$ 102,055	\$ 62,829	\$ 8,066	\$ 418	\$ 328,787	\$ 808	\$ 1,382,400	
RETURN ON INVESTMENT- TASK 19/21	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	8.273%	3.924%		
TOTAL RETURN ON INVESTMENT	<u>\$ 5,058,168</u>	<u>\$ 6,077,739</u>	<u>\$ 729,620</u>	<u>\$ 176,288</u>	<u>\$ 268,387</u>	<u>\$ 533,053</u>	<u>\$ 110,399</u>	<u>\$ 65,505</u>	<u>\$ 8,223</u>	<u>\$ 463</u>	<u>\$ 329,353</u>	<u>\$ 988</u>	<u>\$ 13,358,186</u>	

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART 2  
FISCAL YEAR ENDED JUNE 30, 2024**

**CONSTRUCTION COST**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 227,729,237	\$ 459,470,964	\$ 46,986,728	\$ 44,510,953	\$ 23,364,289	\$ 23,518,803	\$ 6,765,623	\$ 196,346	\$ -	\$ -	\$ -	\$ -	\$ 832,542,943
ADD: IN SERVICE- TASK 10/8		21,119	1,595,314	3,222,197	-	-	207,200	-	-	-	-	-	-	5,045,830
MARNE CONNECTOR AGREEMENT			(211,573)					(515,311)	(78,116)					(805,000)
SADDLEBACK SEWER			(1,187,160)		1,115,707	71,453								-
TASK 11/16/21- CSO FA AMT			(187,300,597)											(187,300,597)
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW	\$ 1,252,893		(966,294)	-	-	-	966,294	-	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,983		(37,983)	-	-	-	37,983	-	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	458,953		(136,879)	128,209	-	-	-	8,670	-	-	-	-	-	-
WEALTHY	20,444		(6,889)	6,630	-	-	-	60	199	-	-	-	-	-
MARKET	12,965,095		(1,748,862)	1,354,204	-	-	329,054	38,377	27,227	-	-	-	-	-
VANPORTFLIET / LEONARD HTS	1,239,326		409,523	(409,523)	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	1,213,244		-	(201,180)	-	-	-	46,552	154,628	-	-	-	-	-
16th AVENUE	71,058		-	-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST	141,105		-	-	-	-	-	(141,105)	141,105	-	-	-	-	-
HAYES- EAST	215,841		-	-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	546,532		19,664	(70,114)	-	-	-	50,450	-	-	-	-	-	-
SERVICEMAINS			(9,282,002)	2,126,351	(11,564,998)	1,982,758	6,383,844	1,409,825	1,106,377	357,069	245,804	6,233,073	1,001,899	-
ADJUSTED BY ZONEGATING		\$ 227,750,356	\$ 260,617,226	\$ 53,143,502	\$ 34,061,662	\$ 25,418,500	\$ 31,443,178	\$ 7,663,141	\$ 1,547,766	\$ 357,069	\$ 245,804	\$ 6,233,073	\$ 1,001,899	\$ 649,483,176
ZONEGATING ADJUSTMENT		\$ -	\$ (361,130)	\$ 6,411,607	\$ 1,988,795	\$ 3,896,746	\$ 7,835,223	\$ 1,927,471	\$ 1,429,536	\$ 357,069	\$ 245,804	\$ 6,233,073	\$ 1,001,899	\$ 30,966,093
PHYSICAL LOCATION		\$ 227,750,356	\$ 260,978,356	\$ 46,731,895	\$ 32,072,867	\$ 21,521,754	\$ 23,607,955	\$ 5,735,670	\$ 118,230	\$ -	\$ -	\$ -	\$ -	\$ 618,517,083

**ACCUMULATED DEPRECIATION**

BY PHYSICAL LOCATION- TASK 11		\$ 109,013,313	\$ 190,264,726	\$ 24,271,824	\$ 22,153,610	\$ 12,095,841	\$ 10,903,809	\$ 2,697,553	\$ 104,756	\$ -	\$ -	\$ -	\$ -	\$ 371,505,432
ADD: IN SERVICE- TASK 10		-	-	-	-	-	-	-	-	-	-	-	-	-
MARNE CONNECTOR AGREEMENT			(170,439)					(172,960)	(27,501)					(370,900)
SADDLEBACK SEWER					322,627	20,007								342,634
TASK 11/16/21- CSO ACC DEP			(88,609,997)											(88,609,997)
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW	\$ 905,310		(698,220)	-	-	-	698,220	-	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,983		(37,983)	-	-	-	37,983	-	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	227,641		(67,892)	63,592	-	-	-	4,300	-	-	-	-	-	-
WEALTHY	20,444		(6,889)	6,630	-	-	-	60	199	-	-	-	-	-
MARKET	9,288,148		(1,252,878)	970,147	-	-	235,733	27,493	19,505	-	-	-	-	-
VANPORTFLIET / LEONARD HTS	516,087		170,536	(170,536)	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	958,281		-	(158,902)	-	-	-	36,769	122,133	-	-	-	-	-
16th AVENUE	58,399		-	-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST	99,319		-	-	-	-	-	(99,319)	99,319	-	-	-	-	-
HAYES- EAST	133,845		-	-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	367,270		13,214	(47,117)	-	-	-	33,903	-	-	-	-	-	-
SERVICEMAINS			(5,456,711)	1,084,541	(3,306,695)	934,831	2,477,901	474,510	428,920	259,179	178,148	2,199,252	726,124	-
ADJUSTED BY ZONEGATING		\$ 109,013,313	\$ 94,147,467	\$ 26,020,179	\$ 19,169,542	\$ 13,050,679	\$ 14,353,646	\$ 3,002,309	\$ 747,331	\$ 259,179	\$ 178,148	\$ 2,199,252	\$ 726,124	\$ 282,867,169
ZONEGATING ADJUSTMENT		\$ -	\$ (878,367)	\$ 3,082,157	\$ 1,488,524	\$ 1,555,518	\$ 3,567,885	\$ 693,865	\$ 670,076	\$ 259,179	\$ 178,148	\$ 2,199,252	\$ 726,124	\$ 13,542,361
PHYSICAL LOCATION		\$ 109,013,313	\$ 95,025,834	\$ 22,938,022	\$ 17,681,018	\$ 11,495,161	\$ 10,785,761	\$ 2,308,444	\$ 77,255	\$ -	\$ -	\$ -	\$ -	\$ 269,324,808



**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART 3  
FISCAL YEAR ENDED JUNE 30, 2024**

**CONTRIBUTIONS BY OTHERS**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	
2023 RATE STUDY (LOCATION)		\$ 50,267,759	\$ 58,983,988	\$ 27,039,087	\$ 26,577,932	\$ 18,809,078	\$ 16,791,536	\$ 5,307,732	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 203,777,112
ADDITIONS:														
CONNECTION & FRONT FOOT FEES			170,575	36,800	-	-	37,150	27,475	-	-	-	-	-	272,000
FIXED ASSET CONTRIBUTIONS		-	10,608,675	765,817	480,463	331,000	615,430	-	-	-	-	-	-	12,801,385
		\$ 50,267,759	\$ 69,763,238	\$ 27,841,704	\$ 27,058,395	\$ 19,140,078	\$ 17,444,116	\$ 5,335,207	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 216,850,497
PLASTER CREEK INTERCEPTOR GRANT	\$ 2,244,621	-	-	-	950,911	297,031	230,119	-	-	1,796	27,137	270,701	110,615	
INTERCEPTOR	1,314,819	-	-	-	-	-	-	-	-	-	176,988	-	721,441	
LIFT STATION	70,753	-	-	7,390	-	-	1,796	209	149	-	-	-	-	
ADJUSTED BY ZONEGATING		\$ 50,267,759	\$ 69,763,238	\$ 27,849,094	\$ 28,009,306	\$ 19,437,109	\$ 17,676,031	\$ 5,335,416	\$ 149	\$ 1,796	\$ 204,125	\$ 270,701	\$ 832,056	\$ 216,850,497
LESS: ZONEGATING ADJUSTMENT		\$ -	\$ -	\$ 7,390	\$ 950,911	\$ 297,031	\$ 231,915	\$ 209	\$ 149	\$ 1,796	\$ 204,125	\$ 270,701	\$ 832,056	\$ -
PHYSICAL LOCATION		50,267,759	69,763,238	27,841,704	27,058,395	19,140,078	17,444,116	5,335,207	-	-	-	-	-	216,850,497

**AMORTIZED CONTRIBUTIONS**

2023 RATE STUDY (LOCATION)		\$ 51,431,294	\$ 54,146,716	\$ 14,662,236	\$ 15,695,502	\$ 10,565,151	\$ 8,673,440	\$ 1,974,743	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 157,149,082
CURRENT YEAR ADJUSTMENT		1,005,355.18	1,357,679.00	523,802.00	539,072.00	382,802.00	345,417.00	106,749.00						4,260,876.18
		\$ 52,436,649	\$ 55,504,395	\$ 15,186,038	\$ 16,234,574	\$ 10,947,953	\$ 9,018,857	\$ 2,081,492	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 161,409,958
PLASTER CREEK INTERCEPTOR GRANT	\$ 1,750,804	-	-	-	741,711	231,684	179,492	-	-	1,401	21,167	211,147	86,280	
INTERCEPTOR	894,077	-	-	-	-	-	-	-	-	-	120,352	-	490,580	
LIFT STATION	70,753	-	-	7,390	-	-	1,796	209	149	-	-	-	-	
ADJUSTED BY ZONEGATING		\$ 52,436,649	\$ 55,504,395	\$ 15,193,428	\$ 16,976,285	\$ 11,179,637	\$ 9,200,145	\$ 2,081,701	\$ 149	\$ 1,401	\$ 141,519	\$ 211,147	\$ 576,860	\$ 161,409,958
LESS: ZONEGATING ADJUSTMENT		\$ -	\$ -	\$ 7,390	\$ 741,711	\$ 231,684	\$ 181,288	\$ 209	\$ 149	\$ 1,401	\$ 141,519	\$ 211,147	\$ 576,860	\$ -
PHYSICAL LOCATION		52,436,649	55,504,395	15,186,038	16,234,574	10,947,953	9,018,857	2,081,492	-	-	-	-	-	161,409,958

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING  
FISCAL YEAR ENDED JUNE 30, 2024**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	
<b>CONSTRUCTION COST- BY PHYSICAL LOCATION:</b>														
BY PHYSICAL LOCATION- TASK 11		\$ 227,729,237	\$ 466,743,267	\$ 43,597,632	\$ 44,510,953	\$ 22,665,632	\$ 20,762,257	\$ 6,408,677	\$ 125,288	\$ -	\$ -	\$ -	\$ -	\$ 832,542,943
IN SERVICE- TASK 10/8		21,119	1,595,314	3,222,197	-	-	207,200	-	-	-	-	-	-	5,045,830
MARNE CONNECTOR AGREEMENT		-	(211,573)	-	-	-	-	(515,311)	(78,116)	-	-	-	-	(805,000)
SADDLEBACK SEWER		-	(1,187,160)	-	1,115,707	71,453	-	-	-	-	-	-	-	-
TASK 11/16/21- CSO COST		-	(187,300,597)	-	-	-	-	-	-	-	-	-	-	(187,300,597)
O'BRIEN		-	(546,532)	546,532	-	-	-	-	-	-	-	-	-	-
VANPORTFLIET / LEONARD HTS		-	(1,239,326)	1,239,326	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE		-	(1,213,244)	1,213,244	-	-	-	-	-	-	-	-	-	-
16th AVENUE		-	(71,058)	-	-	-	-	-	71,058	-	-	-	-	-
HAYES- WEST		-	(141,105)	-	-	-	-	141,105	-	-	-	-	-	-
HAYES- EAST		-	(215,841)	-	-	-	-	215,841	-	-	-	-	-	-
KINGSBURY	\$ 323,154		(323,154)	323,154	-	-	-	-	-	-	-	-	-	-
MEADOWOOD TRAILS	66,841		(66,841)	-	-	66,841	-	-	-	-	-	-	-	-
OAK HOLLOW	66,840		(66,840)	-	-	-	66,840	-	-	-	-	-	-	-
COLLINDALE	66,840		(66,840)	66,840	-	-	-	-	-	-	-	-	-	-
THORNAPPLE	224,216		(224,216)	-	-	224,216	-	-	-	-	-	-	-	-
6000 28TH ST	111,401		(111,401)	-	-	111,401	-	-	-	-	-	-	-	-
THORNHILLS	118,407		(118,407)	-	-	118,407	-	-	-	-	-	-	-	-
ROBINHOOD	178,399		(178,399)	-	-	-	178,399	-	-	-	-	-	-	-
CASCADE SPRINGS	65,478		(65,478)	-	-	65,478	-	-	-	-	-	-	-	-
SHOREHAVEN	72,602		(72,602)	-	-	-	72,602	-	-	-	-	-	-	-
EAGLECREST	345,633		(345,633)	-	-	-	345,633	-	-	-	-	-	-	-
GREENBRIER	48,486		(48,486)	-	-	-	48,486	-	-	-	-	-	-	-
LINCOLN SCHOOL	153,651		(153,651)	-	-	-	153,651	-	-	-	-	-	-	-
REEDS LAKE	962,898		(962,898)	-	-	-	962,898	-	-	-	-	-	-	-
KRAFT	72,602		(72,602)	-	-	72,602	-	-	-	-	-	-	-	-
ORCHARD VISTA	39,712		(39,712)	-	-	39,712	-	-	-	-	-	-	-	-
BIRD AVE-ALPINE ESTATES	797,860		(797,860)	-	-	-	797,860	-	-	-	-	-	-	-
EAST PARIS	323,478		(323,478)	-	-	-	323,478	-	-	-	-	-	-	-
SERVICE MAINS														
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.			(38,878,203)	(13,840,328)	(19,707,869)	(2,312,401)	(140,457)	(590,665)	-	-	-	-	-	(75,469,923)
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.			12,213,480	10,363,298	6,154,076	398,413	22,409	76,023	-	-	-	-	-	29,227,699
TOTAL- PHYSICAL LOCATION COST		\$ 227,750,356	\$ 245,508,924	\$ 46,731,895	\$ 32,072,867	\$ 21,521,754	\$ 23,801,256	\$ 5,735,670	\$ 118,230	\$ -	\$ -	\$ -	\$ -	\$ 603,240,952
<b>CONSTRUCTION COST- ZONEGATING:</b>														
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW	\$ 1,252,893		(966,294)	-	-	-	966,294	-	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,983		(37,983)	-	-	-	37,983	-	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	458,953		(136,879)	128,209	-	-	-	8,670	-	-	-	-	-	-
WEALTHY	20,444		(6,889)	6,630	-	-	-	60	199	-	-	-	-	-
MARKET	12,965,095		(1,748,862)	1,354,204	-	-	329,054	38,377	27,227	-	-	-	-	-
VANPORTFLIET / LEONARD HTS	1,239,326		409,523	(409,523)	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	1,213,244		-	(201,180)	-	-	-	46,552	154,628	-	-	-	-	-
16th AVENUE	71,058		-	-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST	141,105		-	-	-	-	-	(141,105)	141,105	-	-	-	-	-
HAYES- EAST	215,841		-	-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	546,532		19,664	(70,114)	-	-	-	50,450	-	-	-	-	-	-
SERVICEMAINS- ZONEGATED COST			2,106,590	5,603,381	1,988,795	3,896,746	6,501,892	1,924,467	1,106,377	357,069	245,804	6,233,073	1,001,899	30,966,093
TOTAL- ZONEGATED COST	\$ -	\$ (361,130)	\$ 6,411,607	\$ 1,988,795	\$ 3,896,746	\$ 7,835,223	\$ 1,927,471	\$ 1,429,536	\$ 357,069	\$ 245,804	\$ 6,233,073	\$ 1,001,899	\$ 30,966,093	\$ -
GRAND TOTAL- COST	\$ 227,750,356	\$ 245,147,794	\$ 53,143,502	\$ 34,061,662	\$ 25,418,500	\$ 31,636,479	\$ 7,663,141	\$ 1,547,766	\$ 357,069	\$ 245,804	\$ 6,233,073	\$ 1,001,899	\$ 634,207,045	\$ -

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING  
FISCAL YEAR ENDED JUNE 30, 2024**

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	
<b>ACCUMULATED DEPRECIATION- BY PHYSICAL LOCATION:</b>														
BY PHYSICAL LOCATION- TASK 11		\$ 109,013,313	\$ 191,746,113	\$ 22,638,984	\$ 22,153,610	\$ 12,533,627	\$ 10,703,874	\$ 2,562,515	\$ 153,396	\$ -	\$ -	\$ -	\$ -	\$ 371,505,432
IN SERVICE- TASK 10		-	-	-	-	-	-	-	-	-	-	-	-	-
MARNE CONNECTOR AGREEMENT		-	(170,439)	-	-	-	-	(172,960)	(27,501)	-	-	-	-	(370,900)
SADDLEBACK SEWER					322,627	20,007								342,634
TASK 11/16/21- CSO ACC. DEPRECIATION			(88,609,997)											(88,609,997)
O'BRIEN			(367,270)	367,270										-
VANPORTFLIET			(516,087)	516,087										-
REMEMBRANCE / 3 MILE			(958,281)	958,281										-
16th AVENUE			(58,399)						58,399					-
HAYES- WEST			(99,319)					99,319						-
HAYES- EAST			(133,845)					133,845						-
KINGSBURY	\$ 182,609		(182,609)	182,609										-
MEADOWOOD TRAILS	31,192		(31,192)			31,192								-
OAK HOLLOW	31,192		(31,192)				31,192							-
COLLINDALE	31,192		(31,192)	31,192										-
THORNAPPLE	158,527		(158,527)			158,527								-
6000 28TH ST	55,701		(55,701)			55,701								-
THORNHILLS	67,097		(67,097)			67,097								-
ROBINHOOD	107,039		(107,039)				107,039							-
CASCADE SPRINGS	54,565		(54,565)			54,565								-
SHOREHAVEN	43,561		(43,561)				43,561							-
EAGLECREST	113,383		(113,383)				113,383							-
GREENBRIER	25,859		(25,859)				25,859							-
LINCOLN SCHOOL	78,234		(78,234)				78,234							-
REEDS LAKE	399,659		(399,659)				399,659							-
KRAFT	43,561		(43,561)			43,561								-
ORCHARD VISTA	21,180		(21,180)			21,180								-
BIRD AVE-ALPINE ESTATES	344,946		(344,946)				344,946							-
EAST PARIS	215,652		(215,652)				215,652							-
SERVICE MAINS														-
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.			(14,506,904)	(5,438,365)	(7,444,572)	(739,309)	(140,457)	(248,079)	-	-	-	-	-	(28,517,686)
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.			7,131,879	4,104,563	2,649,353	118,622	22,409	31,930	-	-	-	-	-	14,058,756
		<u>\$ 109,013,313</u>	<u>\$ 91,452,302</u>	<u>\$ 23,360,621</u>	<u>\$ 17,681,018</u>	<u>\$ 12,364,770</u>	<u>\$ 11,945,351</u>	<u>\$ 2,406,570</u>	<u>\$ 184,294</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 268,408,239</u>
<b>ACCUMULATED DEPRECIATION- ZONEGATED</b>														
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW	\$ 905,310		(698,220)	-	-	-	698,220	-	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,983		(37,983)	-	-	-	37,983	-	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	227,641		(67,892)	63,592	-	-	-	4,300	-	-	-	-	-	-
WEALTHY	20,444		(6,889)	6,630	-	-	-	60	199	-	-	-	-	-
MARKET	9,288,148		(1,252,878)	970,147	-	-	235,733	27,493	19,505	-	-	-	-	-
VANPORTFLIET	516,087		170,536	(170,536)	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	958,281		-	(158,902)	-	-	-	36,769	122,133	-	-	-	-	-
16th AVENUE	58,399		-	-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST	99,319		-	-	-	-	-	(99,319)	99,319	-	-	-	-	-
HAYES- EAST	133,845		-	-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	367,270		13,214	(47,117)	-	-	-	33,903	-	-	-	-	-	-
SERVICEMAINS-ZONEGATED ACC. DEPRECIATION			1,001,745	2,418,343	1,488,524	1,555,518	2,595,949	690,659	428,920	259,179	178,148	2,199,252	726,124	13,542,361
TOTAL- ZONEGATED ACC. DEPRECIATION		<u>\$ -</u>	<u>\$ (878,367)</u>	<u>\$ 3,082,157</u>	<u>\$ 1,488,524</u>	<u>\$ 1,555,518</u>	<u>\$ 3,567,885</u>	<u>\$ 693,865</u>	<u>\$ 670,076</u>	<u>\$ 259,179</u>	<u>\$ 178,148</u>	<u>\$ 2,199,252</u>	<u>\$ 726,124</u>	<u>\$ 13,542,361</u>
GRAND TOTAL- ACC. DEPRECIATION		<u>\$ 109,013,313</u>	<u>\$ 90,573,935</u>	<u>\$ 26,442,778</u>	<u>\$ 19,169,542</u>	<u>\$ 13,920,288</u>	<u>\$ 15,513,236</u>	<u>\$ 3,100,435</u>	<u>\$ 854,370</u>	<u>\$ 259,179</u>	<u>\$ 178,148</u>	<u>\$ 2,199,252</u>	<u>\$ 726,124</u>	<u>\$ 281,950,600</u>

**CITY OF GRAND RAPIDS, MICHIGAN**  
**SEWAGE DISPOSAL SYSTEM FUND**  
**ADJUSTED OPERATING EXPENSE ZONEGATING ALLOCATION BY GOVERNMENTAL UNIT - TASK #22**  
**FISCAL YEAR ENDED JUNE 30, 2024**

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	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP
WASTEWATER TREATMENT	\$ 23,873,439	\$ 23,873,439											
LIFT STATIONS:													
A. INTERCEPTOR	319,141		276,092	33,334	-	-	8,100	945	670	-	-	-	-
B. TRUNK	198,844		38,410	94,156	-	34,964	25,924	5,390	-	-	-	-	-
C. LOCAL COLLECTOR	520,644		110,098	46,784	-	98,276	197,770	28,488	23,231	-	-	15,997	-
SEWER LINES:													
A. INTERCEPTOR	330,240		188,709	47,799	84,462	9,270	-	-	-	-	-	-	-
B. TRUNK	777,525		277,639	193,052	173,823	68,889	43,712	19,578	832	-	-	-	-
C. LOCAL COLLECTOR	5,401,987		3,351,609	681,353	531,880	323,795	422,273	59,962	31,115	-	-	-	-
D. ZONEGATING			(136,608)	15,840	(36,798)	24,624	60,730	(6,502)	19,851	11,759	3,528	29,258	14,318
BULK METERING STATIONS	3,446		-	-	2,539	-	-	-	-	737	-	59	111
CUSTOMER ACCOUNTING *	3,245,802		2,484,304	255,088	218,767	88,935	174,040	14,866	9,802				
INDUSTRIAL PRETREATMENT	1,197,632	1,197,632											
SUBTOTAL OPERATING EXPENSE	35,868,699	25,071,071	6,590,253	1,367,406	974,673	648,753	932,549	122,727	85,501	12,496	3,528	45,314	14,429
ADMINISTRATIVE EXPENSE	5,187,162	3,584,998	1,000,537	195,530	139,372	92,767	133,349	17,549	12,226	1,787	505	6,479	2,063
TOTAL	\$ 41,055,861	\$ 28,656,068	\$ 7,590,790	\$ 1,562,936	\$ 1,114,045	\$ 741,520	\$ 1,065,898	\$ 140,276	\$ 97,727	\$ 14,283	\$ 4,033	\$ 51,793	\$ 16,492

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

**METHOD OF DISTRIBUTION**

WASTEWATER TREATMENT	100.000%	100.00%												
LIFT STATIONS:	(54)													
A. INTERCEPTORS	(1)	100.000%	(1)	-	-	-	-	-	-	-	-	-	-	
B. TRUNK	(8)	100.000%	(3)	(3)	-	(1)	(1)	-	-	-	-	-	-	
C. LOCAL	(45)	100.000%	(9)	(3)	-	(9)	(17)	(5)	(1)	-	-	(1)	-	
SEWER LINES:														
TOTAL MILES:	941.14													
A. INTERCEPTOR MILES	47.74	100.000%	57.143%	14.474%	25.576%	2.807%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	
B. TRUNK LINES MILES	112.41	100.000%	35.708%	24.829%	22.356%	8.860%	5.622%	2.518%	0.107%	0.000%	0.000%	0.000%	0.000%	
C. LOCAL COLLECTOR MILES	780.99	100.000%	62.044%	12.613%	9.846%	5.994%	7.817%	1.110%	0.576%	0.000%	0.000%	0.000%	0.000%	
D. ZONEGATING MILES	(5)		(19.75)	2.29	(5.32)	3.56	8.78	(0.94)	2.87	1.70	0.51	4.23	2.07	
BULK METERING STATIONS	(5)		-	-	(2)	-	-	-	-	(1)	-	(1)	(1)	
CUSTOMER ACCTG (1) NO. OF METERS	76,608.00	100.000%	76.539%	7.859%	6.740%	2.740%	5.362%	0.458%	0.302%					
INDUSTRIAL PRETREATMENT		100.000%	58,635.00	6,021.00	5,163.00	2,099.00	4,108.00	351.00	231.00					
ADMINISTRATIVE EXPENSE (2)		100.000%	69.113%	19.289%	3.769%	2.687%	1.788%	2.571%	0.338%	0.236%	0.034%	0.010%	0.125%	0.040%

**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	\$ 42,406,017	70.3857%	\$ 235,388
CITY OF WALKER	5,520,726	9.1633%	30,644
CITY OF KENTWOOD	5,295,110	8.7888%	29,392
CASCADE TOWNSHIP	3,201,734	5.3143%	17,772
GRAND RAPIDS TOWNSHIP	2,968,368	4.9269%	16,477
TALLMADGE TOWNSHIP	593,606	0.9853%	3,295
WRIGHT TOWNSHIP	262,504	0.4357%	1,457
	<u>\$ 60,248,065</u>	<u>100.0000%</u>	<u>\$ 334,425</u>

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

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24  
FISCAL YEAR ENDED JUNE 30, 2024**

COST CENTER	DEPRECIATION EXPENSE	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 7,606,852	\$ 8,990,369	\$ 867,655	\$ 800,129	\$ 437,228	\$ 429,202	\$ 128,331	\$ 2,509	\$ -	\$ -	\$ -	\$ -	\$ 19,262,275
ADD: IN SERVICE- TASK 10/8		1,408	85,543	156,678	-	-	4,379	-	-	-	-	-	-	248,008
MARNE CONNECTOR AGREEMENT			(2,525)					(10,307)	(1,563)					(14,395)
SADDLEBACK SEWER					22,313	1,429								23,742
LESS: TASK 11/16/21- CSO DEP. EXP.			(3,780,966)											(3,780,966)
LIFT STATIONS / CHAMBERS:														
FULLER-BROOKVIEW (GR)	\$ 18,488		(14,259)	-	-	-	14,259	-	-	-	-	-	-	-
FULTON- MIDDLEBORO (GR)	-		-	-	-	-	-	-	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	8,261		(2,464)	2,308	-	-	-	156	-	-	-	-	-	-
WEALTHY	-		-	-	-	-	-	-	-	-	-	-	-	-
MARKET	360,046		(48,567)	37,607	-	-	9,138	1,066	756	-	-	-	-	-
VANPORTFLIET	34,991		11,562	(11,562)	-	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	9,679		-	(1,605)	-	-	-	371	1,234	-	-	-	-	-
O'BRIEN	12,023		433	(1,543)	-	-	-	1,110	-	-	-	-	-	-
KINGSBURY	10,772													
MEADOWWOOD TRAILS	2,228													
OAK HOLLOW	2,228													
COLLINDALE	2,228													
THORNAPPLE	7,474													
6000 28TH ST	3,713													
THORNHILLS	3,947													
ROBINHOOD	5,947													
CASCADE SPRINGS	2,183													
SHOREHAVEN	2,420													
EAGLECREST	8,944													
GREENBRIER	1,616													
LINCOLN SCHOOL	5,121													
REEDS LAKE	24,979													
KRAFT	2,420													
ORCHARD VISTA	1,324													
16TH AVE	775		(775)	-	-	-	-	-	775	-	-	-	-	-
HAYES- WEST	2,057		(2,057)	-	-	-	-	-	2,057	-	-	-	-	-
HAYES- EAST	3,205		(3,205)	-	-	-	-	3,205	-	-	-	-	-	-
BIRD AVE-ALPINE ESTATES	23,258		(23,258)				23,258							
EAST PARIS	10,783		(10,783)				10,783							
SERVICEMAINS			(142,062)	29,288	(234,361)	36,637	117,327	27,665	21,988	2,704	4,430	118,328	18,056	-
ADJUSTED BY ZONEGATING		7,608,260	5,056,986	1,078,826	588,081	475,294	608,346	151,597	27,756	2,704	4,430	118,328	18,056	15,738,664
LESS CONTRIBUTIONS AMORTIZED														
TASK NO. 21		(1,005,355)	(1,357,679)	(523,802)	(524,643)	(382,802)	(345,417)	(106,749)	-	-	-	-	(14,429)	(4,260,876)
TOTAL		\$ 6,602,905	\$ 3,699,307	\$ 555,024	\$ 63,438	\$ 92,492	\$ 262,929	\$ 44,848	\$ 27,756	\$ 2,704	\$ 4,430	\$ 118,328	\$ 3,627	\$ 11,477,788

**CITY OF GRAND RAPIDS, MICHIGAN  
SEWAGE DISPOSAL SYSTEM FUND  
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25  
FISCAL YEAR ENDED JUNE 30, 2024**

COST CENTER	INTEGRATED SYSTEM	RETAIL							WHOLESALE				TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	
OPERATION & MAINTENANCE EXPENSE- TASK NO. 22	\$ 28,656,068	\$ 7,590,790	\$ 1,562,936	\$ 1,114,045	\$ 741,520	\$ 1,065,898	\$ 140,276	\$ 97,727	\$ 14,283	\$ 4,033	\$ 51,793	\$ 16,492	\$ 41,055,861
DEPRECIATION EXPENSE TASK NO. 24	6,602,905	3,699,307	555,024	63,438	92,492	262,929	44,848	27,756	2,704	4,430	118,328	3,627	11,477,788
RETURN ON SYSTEM INVESTMENT TASK NO. 21	5,058,168	6,077,739	729,620	176,288	268,387	533,053	110,399	65,505	8,223	463	329,353	988	13,358,186
REVENUE CREDITS- TASK NO. 23		(235,388)	(30,644)	(29,392)	(17,772)	(16,477)	(3,295)	(1,457)					(334,425)
CSO DEBT SERVICE REQUIREMENTS		6,045,257											6,045,257
ALLOCATE:													
INTEGRATED SYSTEM CREDITS		(2,493,583)	(416,919)	(542,501)	(278,976)	(192,274)	(34,079)	(13,160)	(156,376)	(27,354)	(138,143)	-	(4,293,365)
INTEGRATED SYSTEM (A)	(40,317,141)	23,297,369	3,895,240	5,068,550	2,606,454	1,796,404	318,398	122,953	1,461,014	255,566	1,290,664	204,529	-
LESS: CIRCUIT BREAKER (B)		-	(245,914)	(203,629)	(17,534)	(140,121)	-	-					(607,198)
	\$ -	\$ 43,981,491	\$ 6,049,343	\$ 5,646,799	\$ 3,394,571	\$ 3,309,412	\$ 576,547	\$ 299,324	\$ 1,329,848	\$ 237,138	\$ 1,651,995	\$ 225,636	\$ 66,702,104

(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 BELOW

	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	CALEDONIA TOWNSHIP	ADA TOWNSHIP	GAINES TOWNSHIP	TOTAL
OLD METHOD- PLANT FLOW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 204,529	\$ 204,529
NEW METHOD- PLANT FLOW / LAND	23,297,369	3,895,240	5,068,550	2,606,454	1,796,404	318,398	122,953	1,461,014	255,566	1,290,664	-	40,112,612
	\$ 23,297,369	\$ 3,895,240	\$ 5,068,550	\$ 2,606,454	\$ 1,796,404	\$ 318,398	\$ 122,953	\$ 1,461,014	\$ 255,566	\$ 1,290,664	\$ 204,529	\$ 40,317,141

(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  
SEWER RATE STUDY  
SEWAGE DISPOSAL SYSTEM FUND  
TASK NO. 25A**

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

	<u>YEAR ENDED 6/30/24</u>	<u>PRO FORMA * 6/30/25</u>
<b>REVENUES:</b>		
RETAIL/WHOLESALE SEWAGE SERVICE	\$ 63,353,053	\$ 67,623,440
CONNECTION FEES/FRONT FOOT FEES	536,708	450,000
SEWAGE SURCHARGES	2,455,953	2,500,800
RENEWABLE NATURAL GAS SALES	3,045,510	3,000,000
OTHER OPERATING REVENUES	1,043,159	854,500
INTEREST ON INVESTMENTS	1,979,106	1,614,494
MISCELLANEOUS	29,992	25,000
TOTAL REVENUES	<u>\$ 72,443,481</u>	<u>\$ 76,068,234</u>
<b>OPERATING EXPENSES:</b>		
OPERATIONS & MAINTENANCE	\$ 36,348,547	\$ 41,800,718
DEPRECIATION	19,260,704	19,260,704
TOTAL EXPENSES	<u>\$ 55,609,251</u>	<u>\$ 61,061,422</u>
ADDITIONS: DEPRECIATION	<u>19,260,704</u>	<u>19,260,704</u>
NET EARNINGS OF THE SYSTEM	<u>\$ 36,094,934</u>	<u>\$ 34,267,516</u>
<b>DEBT SERVICE</b>		
SERIES 2021 BONDS	\$ 5,676,932	\$ 7,927,138
SERIES 2020 BONDS	1,815,700	1,817,200
SERIES 2018 BONDS	2,761,750	2,761,000
SERIES 2016 BONDS	3,880,750	3,882,500
SERIES 2014 BONDS	2,294,250	-
SERIES 2010A BONDS (after BAB subsidy)	957,637	957,637
SERIES 2010 BONDS	5,838,500	5,834,750
SENIOR LIEN	<u>23,225,519</u>	<u>23,180,225</u>
JUNIOR LIEN **	545,134	612,049
TOTAL	<u>\$ 23,770,653</u>	<u>\$ 23,792,274</u>
COVERAGE RATIO - SENIOR DEBT	<u>1.55</u>	<u>1.48</u>
COVERAGE RATIO - ALL DEBT	<u>1.52</u>	<u>1.44</u>

\* SEWAGE SERVICE ADJUSTED FOR RATE REVISIONS OF 1.33% AND 2.91% EFFECTIVE 1/1/24 AND 1/1/25, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2024 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS & KNOWN COST ADJUSTMENTS.

\*\* AMOUNTS IN PRO FORMA ARE BASED ON MAXIMUM PRINCIPAL AND DO NOT INCLUDE PRINCIPAL FORGIVENESS IF NOT YET FINALIZED.



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

INITIAL SYSTEM REVENUE REQUIREMENTS		\$ 67,309,302
REVENUES FROM CURRENT RATES		
REU CHARGE	\$ 289,396	
MONTHLY METER CHARGE	19,367,181	
MONTHLY BILLING CHARGE	3,799,841	
COMMODITY CHARGE	<u>41,357,891</u>	<u>(64,814,309)</u>
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		<u>\$ 2,494,993</u>
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>3.85%</u>
INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE		\$ 67,309,302
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL		(607,197)
SYSTEM REVENUE REQUIREMENTS		<u>\$ 66,702,105</u>
ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)		<u>\$ 1,887,796</u>
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>2.91%</u>

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

METER SIZE	EQUIV. FACTOR	CITY OF GR		CITY OF WALKER		CITY OF KENTWOOD		CASCADE TWP		GR TWP		TALLMADGE TWP		WRIGHT TWP	
		METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	USERS*	REU
A 3/4" or less	1.0000	54,373	54,373	5,319	5,319	4,059	4,059	1,584	1,584	3,666	3,666	307	307		-
B 1"	1.7778	2,334	4,149	403	716	524	932	260	462	281	500	28	50	-	-
C 1 1/4"	2.7778	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D 1 1/2"	4.0000	1,043	4,172	190	760	351	1,404	178	712	120	480	10	40	-	-
E 2"	7.1111	658	4,679	88	626	190	1,351	65	462	26	185	3	21	-	-
F 3"	16.0000	121	1,936	8	128	23	368	9	144	8	128	2	32	-	-
G 4"	28.4444	73	2,076	7	199	13	370	3	85	2	57	-	-	-	-
H 6" and over	64.0000	33	2,112	6	384	3	192	-	-	5	320	1	64	-	-
<i>Other- Wright Twp</i>		<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	231	422.500
<b>TOTAL</b>		<b>58,635</b>	<b>73,497</b>	<b>6,021</b>	<b>8,132</b>	<b>5,163</b>	<b>8,676</b>	<b>2,099</b>	<b>3,449</b>	<b>4,108</b>	<b>5,336</b>	<b>351</b>	<b>514</b>		<b>76,608</b>

Source: City of Grand Rapids, Michigan, Water/Sewer Customer Accounts/Meters Report, dated November 1, 2024

**CITY OF GRAND RAPIDS, MICHIGAN**

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

SYSTEM REVENUE REQUIREMENTS						\$	43,981,491
REVENUES FROM CURRENT RATES							
MONTHLY METER CHARGE							
73,497 meter equivalents	x	\$ 13.82	x	12 =	\$ 12,188,742		
MONTHLY BILLING CHARGE							
58,635 meters	x	\$ 3.55	x	12 =	2,497,851		
COMMODITY CHARGE							
6,476,899 units (100 CF)	x	\$ 4.38	=		<u>28,368,818</u>		<u>(43,055,411)</u>
REQUIRED REVENUE INCREASE (DECREASE)						\$	<u>926,080</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES							<u>2.15%</u>

**CITY OF GRAND RAPIDS, MICHIGAN**

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

COMMODITY CHARGE:

$$\frac{\text{INTEGRATED SYSTEM COST}}{\text{BILLED UNITS}} = \frac{\$29,342,626}{6,476,899} = \underline{\underline{\$ 4.53 /100 CF *}}$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 43,981,491
NEW COMMODITY CHARGE 6,476,899 x \$ 4.53	\$ 29,340,352
NEW MONTHLY BILLING CHARGE 58,635 x \$ 3.53 x 12	<u>2,483,779</u>
	<u><u>(31,824,131)</u></u>
	<u><u>\$ 12,157,360</u></u>

$$\text{MONTHLY METER CHARGE} = \frac{\$12,157,360}{73,497 \times 12} = \underline{\underline{\$ 13.78 \text{ MONTHLY}}}$$

<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	\$ 13.78	\$ 3.53	\$ 17.31	\$ 17.37
1"	1.7778	24.50	3.53	28.03	28.12
1 1/4"	2.7778	38.28	3.53	41.81	41.94
1 1/2"	4.0000	55.12	3.53	58.65	58.83
2"	7.1111	97.99	3.53	101.52	101.83
3"	16.0000	220.48	3.53	224.01	224.67
4"	28.4444	391.96	3.53	395.49	396.65
6" and over	64.0000	881.92	3.53	885.45	888.03

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

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

SYSTEM REVENUE REQUIREMENTS \* \$ 6,049,343

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,132 meter equivalents x \$ 30.29 x 12 = \$ 2,955,819

MONTHLY BILLING CHARGE

6,021 meters x \$ 3.55 x 12 = 256,495

COMMODITY CHARGE

836,031 units (100 CF) x \$ 3.05 = 2,549,895 (5,762,209)

REQUIRED REVENUE INCREASE (DECREASE) \$ 287,134

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 4.98%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 245,914

**CITY OF WALKER, MICHIGAN**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 3.20 /100 CF \*  
 \$ 3.05 x 104.98%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \*\* \$ 6,049,343

NEW COMMODITY CHARGE  
 836,031 x \$ 3.20 \$ 2,675,299

NEW MONTHLY BILLING CHARGE  
 6,021 x \$ 3.53 x 12 255,050 (2,930,349)  
\$ 3,118,994

MONTHLY METER CHARGE =  $\frac{\$3,118,994}{8,132 \times 12}$  = \$ 31.96 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 31.96	\$ 3.53	\$ 35.49	\$ 33.84
1"	1.7778	56.82	3.53	60.35	57.40
1 1/4"	2.7778	88.78	3.53	92.31	87.69
1 1/2"	4.0000	127.84	3.53	131.37	124.71
2"	7.1111	227.27	3.53	230.80	218.95
3"	16.0000	511.36	3.53	514.89	488.19
4"	28.4444	909.08	3.53	912.61	865.13
6" and over	64.0000	2,045.44	3.53	2,048.97	1,942.11

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

\*\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 245,914

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

SYSTEM REVENUE REQUIREMENTS \* \$ 5,646,799

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,676 meter equivalents x \$ 6.11 x 12 = \$ 636,124

MONTHLY BILLING CHARGE

5,163 meters x \$ 3.55 x 12 = 219,944

COMMODITY CHARGE

1,316,666 units (100 CF) x \$ 3.44 = 4,529,331 (5,385,399)

REQUIRED REVENUE INCREASE (DECREASE) \$ 261,400

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 4.85%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 203,629

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 3.61 /100 CF \*  
 \$ 3.44 x 104.85%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 5,646,799
NEW COMMODITY CHARGE 1,316,666 x \$ 3.61	\$ 4,753,164
NEW MONTHLY BILLING CHARGE 5,163 x \$ 3.53 x 12	218,705
	<u>(4,971,869)</u>
	<u>\$ 674,930</u>

MONTHLY METER CHARGE =  $\frac{\$674,930}{8,676 \times 12} = \underline{\underline{\$ 6.48 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 6.48	\$ 3.53	\$ 10.01	\$ 9.66
1"	1.7778	11.52	3.53	15.05	14.41
1 1/4"	2.7778	18.00	3.53	21.53	20.52
1 1/2"	4.0000	25.92	3.53	29.45	27.99
2"	7.1111	46.08	3.53	49.61	47.00
3"	16.0000	103.68	3.53	107.21	101.31
4"	28.4444	184.32	3.53	187.85	177.35
6" and over	64.0000	414.72	3.53	418.25	394.59

\*NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1 2025

\*\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 203,629



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

SYSTEM REVENUE REQUIREMENTS \* \$ 3,394,571

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE			
3,449 meter equivalents	x	\$ 37.51	x 12 = \$ 1,552,464
MONTHLY BILLING CHARGE			
2,099 meters	x	\$ 3.55	x 12 = 89,417
COMMODITY CHARGE			
475,766 units (100 CF)	x	\$ 3.41	= <u>1,622,362</u>
			<u>(3,264,243)</u>
REQUIRED REVENUE INCREASE (DECREASE)			<u>\$ 130,328</u>

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 3.99%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 17,534

**CASCADE TOWNSHIP**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 3.55 /100 CF \*  
 \$ 3.41 x 103.99%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 3,394,571
NEW COMMODITY CHARGE 475,766 x \$ 3.55	\$ 1,688,969
NEW MONTHLY BILLING CHARGE 2,099 x \$ 3.53 x 12	<u>88,914</u> <u>(1,777,883)</u>
	<u>\$ 1,616,688</u>

MONTHLY METER CHARGE =  $\frac{\$1,616,688}{3,449 \times 12} = \underline{\underline{\$ 39.06 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 39.06	\$ 3.53	\$ 42.59	\$ 41.06
1"	1.7778	69.44	3.53	72.97	70.24
1 1/4"	2.7778	108.50	3.53	112.03	107.75
1 1/2"	4.0000	156.24	3.53	159.77	153.59
2"	7.1111	277.76	3.53	281.29	270.29
3"	16.0000	624.96	3.53	628.49	603.71
4"	28.4444	1,111.04	3.53	1,114.57	1,070.50
6" and over	64.0000	2,499.84	3.53	2,503.37	2,404.19

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

\*\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 17,534

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

SYSTEM REVENUE REQUIREMENTS \* \$ 3,309,412

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

5,336 meter equivalents x \$ 29.35 x 12 = \$ 1,879,339

MONTHLY BILLING CHARGE

4,108 meters x \$ 3.55 x 12 = 175,001

COMMODITY CHARGE

391,629 units (100 CF) x \$ 2.80 = 1,096,561 (3,150,901)

REQUIRED REVENUE INCREASE (DECREASE) \$ 158,511

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 5.03%

\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 140,121

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.94 /100 CF \*

\$ 2.80 x 105.03%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **		\$ 3,309,412
NEW COMMODITY CHARGE		
391,629 x \$ 2.94		\$ 1,151,389
NEW MONTHLY BILLING CHARGE		
4,108 x \$ 3.53 x 12	174,015	(1,325,404)
		\$ 1,984,008

MONTHLY METER CHARGE =  $\frac{\$1,984,008}{5,336 \times 12} = \underline{\underline{\$ 30.98 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 30.98	\$ 3.53	\$ 34.51	\$ 32.90
1"	1.7778	55.08	3.53	58.61	55.73
1 1/4"	2.7778	86.06	3.53	89.59	85.08
1 1/2"	4.0000	123.92	3.53	127.45	120.95
2"	7.1111	220.30	3.53	223.83	212.26
3"	16.0000	495.68	3.53	499.21	473.15
4"	28.4444	881.21	3.53	884.74	838.39
6" and over	64.0000	1,982.72	3.53	1,986.25	1,881.95

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

\*\* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 140,121

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

SYSTEM REVENUE REQUIREMENTS		\$	576,547
REVENUES FROM CURRENT RATES			
MONTHLY METER CHARGE			
514 meter equivalents	x	\$ 25.08	x 12 = \$ 154,693
MONTHLY BILLING CHARGE			
351 meters	x	\$ 3.55	x 12 = 14,953
COMMODITY CHARGE			
46,175 units (100 CF)	x	\$ 8.91	= <u>411,419</u>
			<u>(581,065)</u>
REQUIRED REVENUE INCREASE (DECREASE)		\$	<u>(4,518)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES			<u>-0.78%</u>

**TALLMADGE TOWNSHIP**

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

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 8.84 /100 CF \*  
 \$ 8.91 x 99.22%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 576,547

NEW COMMODITY CHARGE  
 46,175 x \$ 8.84 \$ 408,187

NEW MONTHLY BILLING CHARGE  
 351 x \$ 3.53 x 12 14,868 (423,055)  
\$ 153,492

MONTHLY METER CHARGE =  $\frac{\$153,492}{514 \times 12} = \underline{\underline{\$ 24.89 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 24.89	\$ 3.53	\$ 28.42	\$ 28.63
1"	1.7778	44.25	3.53	47.78	48.14
1 1/4"	2.7778	69.14	3.53	72.67	73.22
1 1/2"	4.0000	99.56	3.53	103.09	103.87
2"	7.1111	177.00	3.53	180.53	181.90
3"	16.0000	398.24	3.53	401.77	404.83
4"	28.4444	707.98	3.53	711.51	716.94
6" and over	64.0000	1,592.96	3.53	1,596.49	1,608.67

\* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2025

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

SYSTEM REVENUE REQUIREMENTS \$ 299,324

REVENUES FROM CURRENT RATES

REU CHARGE			
422.500	meter equivalents	x \$ 57.08	x 12 = \$ 289,396
MONTHLY METER CHARGE			
422.500	meter equivalents	x \$ -	x 12 = -
MONTHLY BILLING CHARGE			
231	meters	x \$ -	x 12 = -
COMMODITY CHARGE			
20,225	units (100 CF)	x \$ -	= <u>          -</u> <u>          (289,396)</u>

REQUIRED REVENUE INCREASE (DECREASE) \$ 9,928

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 3.43%

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

**MONTHLY REU CHARGE:**

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$299,324}{422.500 \times 12} = \$ \underline{\underline{59.04}} \text{ MONTHLY REU CHARGE *}$$

**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	\$ 59.04	7.5000	\$ 442.80	19.0000	\$ 1,121.76
1.5000	88.56	8.0000	472.32	20.0000	1,180.80
2.0000	118.08	8.5000	501.84	25.0000	1,476.00
2.5000	147.60	9.0000	531.36	30.0000	1,771.20
3.0000	177.12	9.5000	560.88	35.0000	2,066.40
3.5000	206.64	10.0000	590.40	40.0000	2,361.60
4.0000	236.16	11.0000	649.44	50.0000	2,952.00
4.4000	259.78	12.0000	708.48	60.0000	3,542.40
4.5000	265.68	13.0000	767.52	70.0000	4,132.80
5.0000	295.20	14.0000	826.56	80.0000	4,723.20
5.5000	324.72	15.0000	885.60	90.0000	5,313.60
6.0000	354.24	16.0000	944.64	100.0000	5,904.00
6.5000	383.76	17.0000	1,003.68	150.0000	8,856.00
7.0000	413.28	18.0000	1,062.72	200.0000	11,808.00

\*NEW RATES EFFECTIVE ON JANUARY 1, 2025



**CITY OF EAST GRAND RAPIDS, MICHIGAN**

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 1,304,638
COMMODITY CHARGE		
421.929 units (MG) x	\$ 2,959.00	1,248,488
		<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		<u>\$ 56,150</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 25,210
MONTHLY SERVICE CHARGE		
\$2,184	x 12 MONTHS	26,208
		<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		<u>\$ (998)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>4.33%</u>

**CITY OF EAST GRAND RAPIDS, MICHIGAN**

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,329,848
NEW COMMODITY CHARGE *	
421.929 x \$ 3,092.00 =	(1,304,604)
	<hr/>
	<u>\$ 25,244</u>

MONTHLY SERVICE CHARGE \* = \$ 25,244 / 12 = \$2,104

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 228,212
COMMODITY CHARGE		
30.572 units (MG) x	\$ 7,618.00	232,897
		232,897
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$ (4,685)
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 8,926
MONTHLY SERVICE CHARGE		
\$728	x 12 MONTHS	8,736
		8,736
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$ 190
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-1.86%

**CALEDONIA TOWNSHIP**

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

SYSTEM REVENUE REQUIREMENTS	\$ 237,138
NEW COMMODITY CHARGE *	
30.572 x \$ 7,465.00 =	(228,220)
	<hr/>
	<u>\$ 8,918</u>

MONTHLY SERVICE CHARGE \* = \$ 8,918 / 12 = \$743

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 1,152,521
COMMODITY CHARGE		
275.826 units (MG) x	\$ 4,012.00	1,106,614
		1,106,614
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$ 45,907
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 499,474
MONTHLY SERVICE CHARGE		
\$40,984	x 12 MONTHS	491,808
		491,808
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$ 7,666
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		3.35%

**ADA TOWNSHIP**

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

SYSTEM REVENUE REQUIREMENTS	\$ 1,651,995
NEW COMMODITY CHARGE *	
275.826 x \$ 4,178.00 =	(1,152,401)
	<hr/>
	<u>\$ 499,594</u>

MONTHLY SERVICE CHARGE \* = \$499,594 / 12 = \$41,633

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025

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

INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 204,529
COMMODITY CHARGE		
74.400 units (MG) x	\$ 2,574.00	191,506
		191,506
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)		\$ 13,023
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS		\$ 21,107
MONTHLY SERVICE CHARGE		
\$1,619	x 12 MONTHS	19,428
		19,428
REQUIRED SERVICE REVENUE INCREASE (DECREASE)		\$ 1,679
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		6.97%

**GAINES TOWNSHIP**

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

SYSTEM REVENUE REQUIREMENTS \$ 225,636

NEW COMMODITY CHARGE \*

74.400 x \$ 2,749.00 =

(204,526)

---

\$ 21,110

MONTHLY SERVICE CHARGE \* = \$ 21,110 / 12 = \$1,759

\* NEW RATES EFFECTIVE ON JANUARY 1, 2025



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

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

Sewer User Type	Definition	2024 Rate	2025 Rate	% Change
Domestic	Property is domicile for single or multiple family use, such as homes, apartments, duplexes, condominium, etc.	\$ 117.00	\$ 122.00	4.27%
Commercial - Industrial	Property used to offer services and / or products, such as retail/wholesale stores, gas stations, restaurants, hotels, schools, churches, etc., and manufacturing or processing facilities (industrial).	\$ 200.00	\$ 180.00	-10.00%

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

The City Engineer’s Office has evaluated the recent costs for a six inch (6”) sanitary sewer lateral and recommends the following sanitary sewer lateral charges:

R.O.W. Width	Year	Lateral Charge	% Change
50 feet	2024	\$3,500	2.86%
	2025	\$3,600	
60 feet	2024	\$4,100	2.44%
	2025	\$4,200	
66 feet	2024	\$4,400	4.55%
	2025	\$4,600	
80 feet	2024	\$5,300	3.77%
	2025	\$5,500	
100 feet	2024	\$6,500	3.08%
	2025	\$6,700	

# MEMORANDUM

CITY OF GRAND RAPIDS

**Date:** October 24, 2024

**To:** Tai Verbrugge  
Utility Financial Officer

**From:** Tiffany L. Berry  
Assistant Environmental Service Manager

**Subject:** **Sewer Rate Study – Task #30 - Surcharges**

The Water Resource Recovery Facility (WRRF) 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), and
- 4) Ammonia Nitrogen (NH<sub>3</sub>).

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 Water Resource Recovery Facility 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.

**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 2024	Volume	Wastewater Surcharges				Industrial	Other
			BOD	TSS	Phos	NH3		
Operation & Maintenance (See Part 2)	\$ 40,901,460	\$ 6,952,595	\$ 6,500,714	\$ 7,804,137	\$ 1,637,086	\$ 824,505	\$ 1,197,632	\$ 15,984,791
Depreciation (See Part 3)	11,477,788	1,935,510	1,809,658	2,172,488	455,732	229,517	-	4,874,883
Return on System Investment (See Part 3)	13,358,186	1,482,701	1,386,292	1,664,238	349,115	175,822	-	8,300,018
<b>Total</b>	<b>\$ 65,737,434</b>	<b>\$ 10,370,806</b>	<b>\$ 9,696,664</b>	<b>\$ 11,640,863</b>	<b>\$ 2,441,933</b>	<b>\$ 1,229,844</b>	<b>\$ 1,197,632</b>	<b>\$ 29,159,692</b>

**Recommended Surcharge Rate - 2025**

**\$ 0.482      \$ 0.647      \$ 5.032      \$ 0.575**

**Actual Surcharge Rate - 2024**

**\$ 0.474      \$ 0.661      \$ 5.097      \$ 0.560**

**Change in Surcharge Rate - Amount- 2024 to 2025**

**\$ 0.008      \$ (0.014)      \$ (0.065)      \$ 0.015**

**Change in Surcharge Rate - Percent- 2024 to 2025**

**1.69%      -2.12%      -1.28%      2.68%**

Loadings - lb/day (Per K.Anderson) \*

**55,120      49,263      1,330      5,864**

Loadings - lb/year

20,118,922      17,980,873      485,328      2,140,482

\* Loadings are the average of the last three years.

**Task No. 30 - Part 2**

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

	Primary Allocation		See Task 30 - Part 4		Component Allocation (3)						
	Base Year-	Calendar Year-	Allocation	Line	Volume	Wastewater Surcharges				Industrial	Other
	2024	2025	Basis	No. Ref.		BOD	TSS	Phos	NH3		
<b>Wastewater Treatment Plant</b>	<b>Allocation (1)</b>	<b>Allocation (2)</b>									
Pre-Treatment	\$ 2,091,169	\$ 2,294,314	WWTP	(1)	\$ 2,294,314	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Primary Treatment	3,412,195	3,743,671	WWTP	(2)	-	1,123,101	2,246,203	-	374,367	-	-
Secondary Treatment	4,796,765	5,262,744	WWTP	(3)	1,315,685	2,105,098	789,412	789,412	263,137	-	-
Disinfection/Dechlorination	1,592,242	1,746,919	WWTP	(4)	1,746,919	-	-	-	-	-	-
Phosphorus Removal	1,204,350	1,321,346	WWTP	(5)	660,673	-	-	660,673	-	-	-
Residue Handling/Disposal	8,522,162	9,350,043	WWTP	(6)	935,004	3,272,515	4,768,522	187,001	187,001	-	-
	<u>\$ 21,618,883</u>	<u>\$ 23,719,037</u>			<u>\$ 6,952,595</u>	<u>\$ 6,500,714</u>	<u>\$ 7,804,137</u>	<u>\$ 1,637,086</u>	<u>\$ 824,505</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Lift Stations</b>											
Interceptor		319,141	Collection	(11)	-	-	-	-	-	-	319,141
Trunk		198,844	Collection	(11)	-	-	-	-	-	-	198,844
Local Collector		520,644	Collection	(11)	-	-	-	-	-	-	520,644
<b>Sewer Lines</b>											
Interceptor		330,240	Collection	(11)	-	-	-	-	-	-	330,240
Trunk		777,525	Collection	(11)	-	-	-	-	-	-	777,525
Local Collector		5,401,987	Collection	(11)	(0)	-	-	-	-	-	5,401,987
<b>Bulk Meter Stations</b>		3,446	Collection	(7)	-	-	-	-	-	-	3,446
<b>Customer Accounting</b>		3,245,802	Admin	(8)	0	-	-	-	-	-	3,245,802
<b>Industrial Pretreatment</b>		1,197,632	Industry	(9)	-	-	-	-	-	1,197,632	-
Subtotal		<u>\$ 35,714,298</u>			<u>\$ 6,952,595</u>	<u>\$ 6,500,714</u>	<u>\$ 7,804,137</u>	<u>\$ 1,637,086</u>	<u>\$ 824,505</u>	<u>\$ 1,197,632</u>	<u>\$ 10,797,629</u>
Admin		5,187,162	Admin	(10)	(0)	-	-	-	-	-	5,187,162
<b>Total</b>		<u>\$ 40,901,460</u>			<u>\$ 6,952,595</u>	<u>\$ 6,500,714</u>	<u>\$ 7,804,137</u>	<u>\$ 1,637,086</u>	<u>\$ 824,505</u>	<u>\$ 1,197,632</u>	<u>\$ 15,984,791</u>
<b>WWTP Allocation Factors</b>		<b>100.000%</b>			<b>29.313%</b>	<b>27.407%</b>	<b>32.902%</b>	<b>6.902%</b>	<b>3.476%</b>	<b>0.000%</b>	<b>0.000%</b>

(1) Per K.Anderson 10/30/2024

(2) Primary Allocation of Current Year for Calendar 2025, based on 2024 Base Year.

(3) - (11) 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*

<i>Description</i>	<i>Amount</i>	<i>Volume</i>	<b>Wastewater Surcharges</b>				<i>Industrial</i>	<i>Other</i>
			<b>BOD</b>	<b>TSS</b>	<b>Phos</b>	<b>NH3</b>		
<i>Integrated System (1)</i>	\$ 6,602,905	\$ 1,935,510	\$ 1,809,658	\$ 2,172,488	\$ 455,732	\$ 229,517	\$ -	\$ -
<i>Other</i>	4,874,883	-	-	-	-	-	-	4,874,883
<i>Total</i>	<u>\$ 11,477,788</u>	<u>\$ 1,935,510</u>	<u>\$ 1,809,658</u>	<u>\$ 2,172,488</u>	<u>\$ 455,732</u>	<u>\$ 229,517</u>	<u>\$ -</u>	<u>\$ 4,874,883</u>

*Return on System Investment- Task 21*

<i>Description</i>	<i>Amount</i>	<i>Volume</i>	<b>Wastewater Surcharges</b>				<i>Industrial</i>	<i>Other</i>
			<b>BOD</b>	<b>TSS</b>	<b>Phos</b>	<b>NH3</b>		
<i>Integrated System (1)</i>	\$ 5,058,168	\$ 1,482,701	\$ 1,386,292	\$ 1,664,238	\$ 349,115	\$ 175,822	\$ -	\$ -
<i>Other</i>	8,300,018	-	-	-	-	-	-	8,300,018
<i>Total</i>	<u>\$ 13,358,186</u>	<u>\$ 1,482,701</u>	<u>\$ 1,386,292</u>	<u>\$ 1,664,238</u>	<u>\$ 349,115</u>	<u>\$ 175,822</u>	<u>\$ -</u>	<u>\$ 8,300,018</u>

*(1) Allocated on WWTP Allocation Factors \**                      **29.3130%**      **27.4070%**      **32.9020%**      **6.9020%**      **3.4760%**

*\* 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 (a)	100.000%	WWTP	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(2)	Primary Treatment (a)	100.000%	WWTP	0.000%	30.000%	60.000%	0.000%	10.000%	0.000%	0.000%
(3)	Secondary Treatment (a)	100.000%	WWTP	25.000%	40.000%	15.000%	15.000%	5.000%	0.000%	0.000%
(4)	Disinfection/Dechlorination (a)	100.000%	WWTP	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(5)	Phosphorus Removal (a)	100.000%	WWTP	50.000%	0.000%	0.000%	50.000%	0.000%	0.000%	0.000%
(6)	Residue Handling/Disposal (a)	100.000%	WWTP	10.000%	35.000%	51.000%	2.000%	2.000%	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%
(8)	Customer Accounting	100.000%	Admin	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(9)	Industrial Pretreatment	100.000%	Industry	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%
(10)	Admin	100.000%	Admin	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(11)	Collection System	100.000%	Collection	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%

(a) With the exception of phosphorus removal, foregoing based on "Final Allocation Table" in August 1, 2003 memo from Randall Fisher & Mike Lunn to Eric DeLong regarding 2001 Surcharge Rate Evaluation. Evaluation by WWTP staff for 2013 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 2024 RS adjustments

# MEMORANDUM

CITY OF GRAND RAPIDS

**Date:** October 28, 2024

**To:** Molly J. Clarin  
Chief Financial Officer

**From:** Tai Verbrugge  
Utility Financial Officer

**Subject:** **Sewer Rate Study – Task #30A – Concentrated Waste Surcharge Adjustments**

Beginning with the 2016 Water/Sewer Rate Study, the City of Grand Rapids has prepared Task 30A as a means of adjusting the industrial surcharges laid out in Task 30. These adjustments were intended for industrial customers whose waste was not combined with the normal influent entering the Water Resource Recovery Facility. Those wastes were segregated into a separate holding tank and used to feed the plant during off-peak hours. Doing so resulted in electrical cost savings, which necessitated the Task 30A adjustment to reduce the surcharges as a reflection of those savings.

This process has changed, however. Industrial waste is no longer temporarily held in a storage tank and fed into the plant during off-peak hours. Instead, it is fed directly into a dedicated Concentrated Waste biodigester.

Because the premise underlying the Task 30A adjustment is no longer true, there is no longer any need to prepare this task. For the foreseeable future, there will be no Task 30A in the Water/Sewer Rate Study.



# MEMORANDUM

CITY OF GRAND RAPIDS

**Date:** October 24, 2024

**To:** Tai Verbrugge  
Utility Financial Officer

**From:** Tiffany L. Berry  
Assistant Environmental Service Manager

**Subject:** **Sewer Rate Study – Task #31 – IPP Permit Fee & Discharge Authorization Fee Structure**

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 clerical work, data, software, permitting, and inspection requirements. 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.

A discharge authorization fee is added this year to differentiate between the costs associated with a Significant Industrial User (SIU) permit and a discharge authorization. A discharge authorization is written authorization specifying the conditions for discharge of a one-time or short-term duration discharge, or other discharges not meeting the definition of a Significant Industrial User such as construction groundwater dewatering activities.

**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 software maintenance costs.

**Discharge Authorization fee:** This fee is based on actual costs associated with the administration and implementation of one-time or short-term discharges. These include all costs associated with clerical work, data, software, permitting, and inspections. Implementation costs include all costs associated with sampling and associated laboratory analysis as required in discharge authorizations.

**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

Five examples of analytical fees are attached herewith.

**City of Grand Rapids**  
**Cost of Services Provided by IPP**

FY FY25

IPP Costs:	Permit Fee:	\$ 1,000.00	
	Discharge Authorization Fee	\$ 665.00	
	Labor:	\$ 82.74	per hour
	Vehicle:	\$ 4.88	per hour
	Sampler:	\$ 75.00	per day

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

Laboratory Costs:

	<b>metals</b>		
	1 metal	\$ 12.00	ea.
	2 metals	\$ 16.50	total
	3 metals	\$ 21.00	total
	4 metals	\$ 25.50	total
	5 metals	\$ 30.00	total
	6 metals	\$ 34.50	total
	7 metals	\$ 39.00	total
	8 metals	\$ 43.50	total
	9 metals	\$ 48.00	total
	10 metals	\$ 52.50	total
	11 metals	\$ 57.00	total
	12 metals	\$ 61.50	total
	13 metals	\$ 66.00	total
	14 metals	\$ 70.50	total
	<b>TSS</b>	\$ 11.50	ea.
	<b>BOD</b>	\$ 23.00	ea.
	<b>BOD 7</b>	\$ 23.00	ea.
	<b>COD</b>	\$ 16.50	ea.
	<b>Total Phosphorus</b>	\$ 11.50	ea.
	<b>pH</b>	\$ 6.00	ea.
	<b>EPA 624.1</b>	\$ 48.00	ea.
	<b>EPA 625.1</b>	\$ 106.00	ea.
	<b>BTEX/MTBE</b>	\$ 48.00	ea.
	<b>Sulfide</b>	\$ 23.00	ea.
	<b>Oil &amp; Grease</b>	\$ 23.00	ea.
	<b>Total cyanide</b>	\$ 23.00	ea.
	<b>Hexavalent chromium</b>	\$ 28.00	ea.
	<b>Fecal coliform</b>	\$ 19.00	ea.
	<b>Ammonia nitrogen</b>	\$ 16.50	ea.
	<b>Mercury (EPA 245.1 or 245.2)</b>	\$ 20.00	ea.

	<b>Pesticides</b>	<b>\$ 64.00</b>	ea.
	<b>PCBs</b>	<b>\$ 64.00</b>	ea.
	<b>Phenols, Total</b>	<b>\$ 25.00</b>	ea.
	<b>PFAS EPA 537 Modified</b>	<b>\$ 325.00</b>	ea.
(sample, duplicate and blank are separate samples)			
	<b>PFAS by LCMSMS</b>	<b>\$ 350.00</b>	ea.
(sample, duplicate and blank are separate samples)			
	<b>PFAS by EPA Draft method 1633</b>	<b>\$ 525.00</b>	ea.
(sample, duplicate and blank are separate samples)			
	<b>EPA 1666 Volatile organics in pharmaceuticals</b>	<b>\$ 48.00</b>	ea.
	<b>EPA 524.2 Purgeable Organics</b>	<b>\$ 48.00</b>	ea.
	<b>Methyl Blue Active substances (MBAS)</b>	<b>\$ 66.00</b>	ea.
	<b>Color</b>	<b>\$ 16.50</b>	ea.
	<b>GC-MS Fingerprint</b>	<b>\$ 130.00</b>	ea.

Explanation of Costs:

**Labor:** Labor is the hourly pay rate of an Industrial Pretreatment Program Inspector (classification 23A @ "F" step = \$41.372 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 based on the most recently approved competitive bid obtained for contract work provided to the Grand Rapids Water Resource Recovery Facility

**Analysis:** Laboratory costs are based on the most recently approved competitive bid obtained for contract work provided to the Grand Rapids Water Resource Recovery Facility

Permit No: Example 1

Company: Typical Metal Finisher 4 day sampling

Facility Address:  
City, State, Zip

Permit Fee: \$ 1,000.00  
Analytical Fee: \$ 1,335.74  
Amount Due: \$ 2,335.74

<b>Composite Samples:</b>	<b>4</b>					
<b>IPP Requirements:</b>	man hours =	<b>6.0</b>	x	\$ 82.74	= \$ <b>496.46</b>	
	sampler days =	<b>4.0</b>	x	\$ 75.00	= \$ <b>300.00</b>	
	vehicle hours =	<b>6.0</b>	x	\$ 4.88	= \$ <b>29.28</b>	
<b>Total IPP Composite Costs:</b>					<b>\$ 825.74</b>	
<b>Laboratory Analysis:</b>	Metals	<b>6</b>		\$ 34.50	= \$ <b>34.50</b>	
<i>(each composite)</i>	TSS	<b>1</b>	x	\$ 11.50	= \$ <b>12.00</b>	
	BOD		x	\$ 23.00	= \$ -	
	Total phosphorus		x	\$ 11.50	= \$ -	
	Ammonia nitrogen		x	\$ 16.50	= \$ -	
	EPA 625.1		x	\$ 106.00	= \$ -	
	Sulfide		x	\$ 23.00	= \$ -	
	other		x		= \$ -	
<b>total per composite:</b>					<b>\$ 46.50</b>	
<b>Total Laboratory Composite Costs:</b>					<b>\$ 186.00</b>	
<b>Total Composite Sample Costs:</b>					<b>\$ 1,011.74</b>	
<b>Grab Samples:</b>	<b>4</b>					
<b>IPP Requirements:</b>	man hours =	<b>0.0</b>	x	\$ 82.74	= \$ -	
	vehicle hours =	<b>0.0</b>	x	\$ 4.88	= \$ -	
<b>Total IPP Grab Costs:</b>					<b>\$ -</b>	
<b>Laboratory Analysis:</b>	Metals			\$ -	= \$ -	
	pH	<b>1</b>	x	\$ 11.50	= \$ <b>12.00</b>	
	EPA 624.1		x	\$ 6.00	= \$ -	
	EPA 625.1		x	\$ 48.00	= \$ -	
	BTEX/MTBE		x	\$ 106.00	= \$ -	
	Sulfide		x	\$ 48.00	= \$ -	
	Oil & grease	<b>1</b>	x	\$ 23.00	= \$ <b>23.00</b>	
	Total cyanide	<b>1</b>	x	\$ 23.00	= \$ <b>23.00</b>	
	Hexavalent Chromium	<b>1</b>	x	\$ 23.00	= \$ <b>23.00</b>	
	other		x		= \$ -	
<b>total per grab:</b>					<b>\$ 81.00</b>	
<b>Total Laboratory Grab Costs:</b>					<b>\$ 324.00</b>	
<b>Total Grab Sample Costs:</b>					<b>\$ 324.00</b>	
<b>Total Analytical Permit Costs:</b>					<b>\$ 1,335.74</b>	

Permit No: Example 2

Company: Typical Metal Finisher 1 day sampling

Facility Address:  
City, State, Zip

Permit Fee: \$ 1,000.00  
Analytical Fee: \$ 333.94  
Amount Due: \$ 1,333.94

<b>Composite Samples:</b>	<u>1</u>				
<b>IPP Requirements:</b>	man hours =	1.5	x \$ 82.74	= \$ 124.12	
	sampler days =	1.0	x \$ 75.00	= \$ 75.00	
	vehicle hours =	1.5	x \$ 4.88	= \$ 7.32	
			<b>Total IPP Composite Costs:</b>		<b>\$ 206.44</b>
<b>Laboratory Analysis:</b>	Metals	6	\$ 34.50	= \$ 34.50	
(each composite)	TSS	1	x \$ 11.50	= \$ 12.00	
	BOD		x \$ 23.00	= \$ -	
	Total phosphorus		x \$ 11.50	= \$ -	
	Ammonia nitrogen		x \$ 16.50	= \$ -	
	EPA 625.1		x \$ 106.00	= \$ -	
	Sulfide		x \$ 23.00	= \$ -	
	other		x	= \$ -	
			<b>total per composite:</b>	<b>\$ 46.50</b>	
			<b>Total Laboratory Composite Costs:</b>		<b>\$ 46.50</b>
			<b>Total Composite Sample Costs:</b>		<b>\$ 252.94</b>
<b>Grab Samples:</b>	<u>1</u>				
<b>IPP Requirements:</b>	man hours =	0.0	x \$ 82.74	= \$ -	
	vehicle hours =	0.0	x \$ 4.88	= \$ -	
			<b>Total IPP Grab Costs:</b>		<b>\$ -</b>
<b>Laboratory Analysis:</b>	Metals		\$ -	= \$ -	
(each grab)	pH	1	x \$ 11.50	= \$ 12.00	
	EPA 624.1		x \$ 6.00	= \$ -	
	EPA 625.1		x \$ 48.00	= \$ -	
	BTEX/MTBE		x \$ 106.00	= \$ -	
	Sulfide		x \$ 48.00	= \$ -	
	Oil & grease	1	x \$ 23.00	= \$ 23.00	
	Total cyanide	1	x \$ 23.00	= \$ 23.00	
	Hexavalent Chromium	1	x \$ 23.00	= \$ 23.00	
	other		x	= \$ -	
			<b>total per grab:</b>	<b>\$ 81.00</b>	
			<b>Total Laboratory Grab Costs:</b>		<b>\$ 81.00</b>
			<b>Total Grab Sample Costs:</b>		<b>\$ 81.00</b>
			<b>Total Analytical Permit Costs:</b>		<b>\$ 333.94</b>

Permit No: Example 3

Company: Litho Process

Facility Address:  
City, State, Zip

Permit Fee: \$ 1,000.00  
Analytical Fee: \$ 278.94  
Amount Due: \$ 1,278.94

Composite Samples: 1

**IPP Requirements:**  
man hours = 1.5 x \$ 82.74 = \$ 124.12  
sampler days = 1.0 x \$ 75.00 = \$ 75.00  
vehicle hours = 1.5 x \$ 4.88 = \$ 7.32

**Total IPP Composite Costs: \$ 206.44**

**Laboratory Analysis:**  
(each composite)  
Metals 4 \$ 25.50 = \$ 25.50  
TSS 1 x \$ 11.50 = \$ 12.00  
BOD x \$ 23.00 = \$ -  
Total phosphorus x \$ 11.50 = \$ -  
Ammonia nitrogen x \$ 16.50 = \$ -  
EPA 625.1 x \$ 106.00 = \$ -  
Sulfide x \$ 23.00 = \$ -  
other x = \$ -

**total per composite: \$ 37.50**

**Total Laboratory Composite Costs: \$ 37.50**

**Total Composite Sample Costs: \$ 243.94**

Grab Samples: 1

**IPP Requirements:**  
man hours = 0.0 x \$ 82.74 = \$ -  
vehicle hours = 0.0 x \$ 4.88 = \$ -

**Total IPP Grab Costs: \$ -**

**Laboratory Analysis:**  
Metals \$ - = \$ -  
pH 1 x \$ 11.50 = \$ 12.00  
EPA 624.1 x \$ 6.00 = \$ -  
EPA 625.1 x \$ 48.00 = \$ -  
BTEX/MTBE x \$ 106.00 = \$ -  
Sulfide x \$ 48.00 = \$ -  
Oil & grease 1 x \$ 23.00 = \$ 23.00  
Total cyanide x \$ 23.00 = \$ -  
Hexavalent Chromium x \$ 23.00 = \$ -  
other x = \$ -

**total per grab: \$ 35.00**

**Total Laboratory Grab Costs: \$ 35.00**

**Total Grab Sample Costs: \$ 35.00**

**Total Analytical Permit Costs: \$ 278.94**

Permit No: Example 4

Company: Stripping Process

Facility Address:  
City, State, Zip

Permit Fee: \$ 1,000.00  
Analytical Fee: \$ 283.44  
Amount Due: \$ 1,283.44

<b>Composite Samples:</b>	<b>1</b>								
<b>IPP Requirements:</b>	man hours =	1.5	x	\$ 82.74	=	\$ 124.12			
	sampler days =	1.0	x	\$ 75.00	=	\$ 75.00			
	vehicle hours =	1.5	x	\$ 4.88	=	\$ 7.32			
<b>Total IPP Composite Costs:</b>						<b>\$ 206.44</b>			
<b>Laboratory Analysis:</b>	Metals	5		\$ 30.00	=	\$ 30.00			
<i>(each composite)</i>	TSS	1	x	\$ 11.50	=	\$ 12.00			
	BOD		x	\$ 23.00	=	\$ -			
	Total phosphorus		x	\$ 11.50	=	\$ -			
	Ammonia nitrogen		x	\$ 16.50	=	\$ -			
	EPA 625.1		x	\$ 106.00	=	\$ -			
	Sulfide		x	\$ 23.00	=	\$ -			
	other		x		=	\$ -			
<b>total per composite:</b>						<b>\$ 42.00</b>			
<b>Total Laboratory Composite Costs:</b>						<b>\$ 42.00</b>			
<b>Total Composite Sample Costs:</b>							<b>\$ 248.44</b>		
<b>Grab Samples:</b>	<b>1</b>								
<b>IPP Requirements:</b>	man hours =	0.0	x	\$ 82.74	=	\$ -			
	vehicle hours =	0.0	x	\$ 4.88	=	\$ -			
<b>Total IPP Grab Costs:</b>						<b>\$ -</b>			
<b>Laboratory Analysis:</b>	Metals			\$ -	=	\$ -			
<i>(each grab)</i>	pH	1	x	\$ 11.50	=	\$ 12.00			
	EPA 624.1		x	\$ 6.00	=	\$ -			
	EPA 625.1		x	\$ 48.00	=	\$ -			
	BTEX/MTBE		x	\$ 106.00	=	\$ -			
	Sulfide		x	\$ 48.00	=	\$ -			
	Oil & grease	1	x	\$ 23.00	=	\$ 23.00			
	Total cyanide		x	\$ 23.00	=	\$ -			
	Hexavalent Chromium		x	\$ 23.00	=	\$ -			
	other		x		=	\$ -			
<b>total per grab:</b>						<b>\$ 35.00</b>			
<b>Total Laboratory Grab Costs:</b>						<b>\$ 35.00</b>			
<b>Total Grab Sample Costs:</b>							<b>\$ 35.00</b>		
<b>Total Analytical Permit Costs:</b>							<b>\$ 283.44</b>		



Permit No: Example 5

Company: Surcharge

Facility Address:  
City, State, Zip

Permit Fee: \$ 1,000.00  
Analytical Fee: \$ 1,359.74  
Amount Due: \$ 2,359.74

<b>Composite Samples:</b>	<b>4</b>							
<b>IPP Requirements:</b>	man hours =	6.0	x	\$ 82.74	=	\$ 496.46		
	sampler days =	4.0	x	\$ 75.00	=	\$ 300.00		
	vehicle hours =	6.0	x	\$ 4.88	=	\$ 29.28		
	<b>Total IPP Composite Costs:</b>					<b>\$ 825.74</b>		
<b>Laboratory Analysis:</b> (each composite)	Metals			\$ 34.50	=	\$ 34.50		
	TSS	1	x	\$ 11.50	=	\$ 12.00		
	BOD	1	x	\$ 23.00	=	\$ 23.00		
	Total phosphorus	1	x	\$ 11.50	=	\$ 12.00		
	Ammonia nitrogen	1	x	\$ 16.50	=	\$ 17.00		
	EPA 625.1		x	\$ 106.00	=	\$ -		
	Sulfide		x	\$ 23.00	=	\$ -		
	other		x		=	\$ -		
	<b>total per composite:</b>					<b>\$ 98.50</b>		
	<b>Total Laboratory Composite Costs:</b>					<b>\$ 394.00</b>		
	<b>Total Composite Sample Costs:</b>						<b>\$ 1,219.74</b>	
<b>Grab Samples:</b>	<b>4</b>							
<b>IPP Requirements:</b>	man hours =	0.0	x	\$ 82.74	=	\$ -		
	vehicle hours =	0.0	x	\$ 4.88	=	\$ -		
	<b>Total IPP Grab Costs:</b>					<b>\$ -</b>		
<b>Laboratory Analysis:</b> (each grab)	Metals			\$ -	=	\$ -		
	pH	1	x	\$ 11.50	=	\$ 12.00		
	EPA 624.1		x	\$ 6.00	=	\$ -		
	EPA 625.1		x	\$ 48.00	=	\$ -		
	BTEX/MTBE		x	\$ 106.00	=	\$ -		
	Sulfide		x	\$ 48.00	=	\$ -		
	Oil & grease	1	x	\$ 23.00	=	\$ 23.00		
	Total cyanide		x	\$ 23.00	=	\$ -		
	Hexavalent Chromium		x	\$ 23.00	=	\$ -		
	other		x		=	\$ -		
	<b>total per grab:</b>					<b>\$ 35.00</b>		
	<b>Total Laboratory Grab Costs:</b>					<b>\$ 140.00</b>		
	<b>Total Grab Sample Costs:</b>						<b>\$ 140.00</b>	
	<b>Total Analytical Permit Costs:</b>						<b>\$ 1,359.74</b>	

# MEMORANDUM

CITY OF GRAND RAPIDS

**DATE:** August 30, 2024

**TO:** Tai Verbrugge  
Utility Financial Officer

**FROM:** Lindsay Sagorski Munsell  
Acting Assistant Water System Manager

**SUBJECT: 2024 SEWER RATE STUDY- TASK #32 - SANITARY SEWER  
OVERSIZING RATES**

Sanitary Sewer oversizing rates are established for this year as noted below:

<u>Pipe Size</u>	<u>2023 Rate</u>	<u>2024 Rate</u>	<u>2025 Rate</u>	<u>2024 to 2025 % Change</u>
8"-10"	\$8.72/ft	\$8.72/ft	\$11.07/ft	26.95%
8"-12"	\$15.57/ft	\$18.18/ft	\$20.45/ft	12.48%
8"-15"	\$34.88/ft	\$34.88/ft	\$38.46/ft	10.26%
10"-12"	\$6.85/ft	\$9.46/ft	\$9.38/ft	-0.85%
10"-15"	\$26.16/ft	\$26.16/ft	\$27.39/ft	4.70%
12"-15"	\$19.31/ft	\$16.70/ft	\$18.01/ft	7.84%

These rates have been determined in accordance with the Sewer Disposal System Rules and Regulations, and are approved for use from January 1, 2025, through December 31, 2025.

Due to the ongoing volatility in the economic marketplace, some material prices have been impacted again this year. The information we gathered from vendors showed an increase in some pipe products over last year. As a result of the price fluctuation, we are seeing parallel changes in the Oversizing Rates.

Background information and calculations to establish these rates are on file in the Utility Engineering, Distribution and Collection Office located at 1900 Oak Industrial Drive NE. If you have any questions regarding this matter, please call me at 616-456-4000.

LS/AO

Cc: James Ouzts  
Cindy Irving  
Jeff McCaul

Tim Burkman  
Wayne Jernberg  
Brian Bradley

**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 June 30, 2024:

<u>UAB Partners</u>	<u>Sq. Miles of USD by CC</u>	<u>Percent</u>
Grand Rapids	45.346	37.526%
Walker	19.230	15.913%
Kentwood	14.227	11.773%
Cascade	16.814	13.914%
Grand Rapids Township	8.582	7.102%
Tallmadge Township	2.617	2.166%
Wright Township	0.898	0.743%
East Grand Rapids	3.370	2.789%
Ada	7.258	6.006%
Caledonia Township	2.499	2.068%
Total	<u>120.841</u>	<u>100.000%</u>

**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 (ICB)	\$ 86,743	12.50%
City & Customer Community Circuit Breaker (CCCCB)	607,197	87.50%
Total	<u>\$ 693,940</u>	<u>100.00%</u>

The following tables summarize the amount, if any, of the 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	\$ 607,197	100.00%
Less: Amount Applied in Current Rate Study	(607,197)	-100.00%
Total CCCCCB Revenue Credit- Next Year's Rate Study	<u>\$ -</u>	<u>0.00%</u>

# MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 1, 2024

TO: Tai Verbrugge  
Utility Financial Officer

FROM: Jared Grabinski  
Assistant Environmental Services Manager

**SUBJECT: 2024 SEWER RATE STUDY - TASK #35 - FDD Opt Out Charge**

The Footing Drain Disconnection Ordinance (FDD) authorizes the City Manager or his designee to identify FDD Project Areas within the City of Grand Rapids based on the severity of System groundwater and stormwater inflow surcharge problems. Once designated, the ordinance requires homeowners within the FDD Project Areas to disconnect their footing drains from the City's sanitary sewer system at City expense.

The additional charge for non-compliance with the footing drain disconnection ordinance has been calculated based on current information and is recommended to be \$76.91 / month which is the actual cost to the system for the additional flow.

JMG

**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	\$150,000 /year <sup>1</sup>	Estimated annual claims cost
System Retail Customers	76,594	Total retail customers <sup>2</sup>
Grand Rapids Retail Customers	<u>58,628</u>	Total retail customers in Grand Rapids <sup>2</sup>
Annual Cost	<b>\$1.96 /yr/cust.</b>	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>21,800</u> gal/year	Average generation rate
Total	65,600 gal/year	Average per house

Unit Conveyance & Treatment Costs

Annual average FD flows	0.065600 MG/yr	Average per house
Conveyance	\$509 /MG	Unit conveyance cost <sup>3</sup>
Treatment	<u>\$1,526</u> /MG	Unit treatment cost <sup>3</sup>
Conveyance & Treatment	\$2,035 /MG	
Annual Cost	<b>\$133.50 /yr/cust.</b>	Annual cost for a connected FD

**3. Actual MDNRE penalties for SSO's**

Penalties for SSO

Grand Rapids Customers	58,628	
Penalties	\$25,000	Per occurrence
Potential SSOs	0 /year	Occurrences
Annual cost	<u>0</u> \$/year	
	<b>\$0.00 /yr/cust.</b>	Annual cost for penalties

**4. Avoided Transport & Future Projects**

Cost Per FDD

Pilot Project Costs	1,788 \$/yr/FDD cust.	Annual cost of FDD work <sup>5</sup>
FDD Equivalents	<u>25,598</u> FDD	FDDs needed to correct backup problems
Total Cost	\$45,769,224	Annualized Conveyance and Storage Costs
Grand Rapids Customers	<u>58,628</u>	Customers in Grand Rapids
Cost Per single Family Home	<b>\$780.67</b> \$/home/not removed	Annualized cost for Grand Rapids Customers

**5. Avoided Administrative (Engineering & Legal) Costs**

Associated with Administration of claims, construction

Legal	0.5	Citywide claims administration
Engineering	<u>1.5</u>	Citywide engineering investigation
Staffing	2.0	Total staffing
Rate	\$200,000 /year	Average loaded staffing rate <sup>4</sup>
Total	\$400,000 /year	
Customers	<u>58,628</u>	In Grand Rapids
	<b>\$6.82 \$/yr/cust.</b>	

**Annual Cost Summary**

1. Avoided Claims	\$1.96	
2. Avoided Treatment	\$133.50	
3. Actual MDNRE Penalties for SSOs	\$0.00	
4. Avoided Future Projects	\$780.67	
5. Administration	<u>\$6.82</u>	
<b>TOTAL</b>	<b>\$922.95 \$/yr/cust.</b>	
	<b>\$76.91 /month/cust.</b>	Monthly fee for not disconnecting

**Notes:**

- <sup>1</sup> Sinking fund annual budget
- <sup>2</sup> Customer numbers per 2024 Rate Study
- <sup>3</sup> Value for sewer maintenance and WRRF costs from 2024 rate study.
- <sup>4</sup> Estimated staff rate with benefits
- <sup>5</sup> Total cost per FDD amortized over 20 years with 2.5% interest rate

**CITY OF GRAND RAPIDS, MICHIGAN  
APPENDICES  
ANNUAL WATER/SEWER RATE REVIEW**

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# CITY OF GRAND RAPIDS AGENDA ACTION REQUEST

**DATE:** November 12, 2024

**TO:** Mark Washington, City Manager

**COMMITTEE:** Committee of the Whole  
**LIAISON:** Mark Washington, City Manager

**FROM:** Tai Verbrugge  
Utility Financial Officer

**SUBJECT:** **2024 Water/Sewer Rate Study – Introduction and Initiation of the 20 Day Comment Period**

A comprehensive review of operating and capital costs by community, in conjunction with customer base variation and usage, is performed annually for the purpose of recommending water and sewer rate adjustments for the City of Grand Rapids and its partner communities. The City of Grand Rapids continues to adhere to its water and sewer rate-setting methodology first established in 1976-77. The methodology yields consistent performance in providing for the long-term financing needs of the Water Supply and Sewage Disposal Systems and assuring adequate debt service coverage pursuant to the Systems' master bond ordinance covenants. This year's review marks the 48<sup>th</sup> annual water/sewer rate study report.

The City's review of the Water Supply and Sewage Disposal Systems' performance has identified the revenue requirements for water and sewer operations and service for calendar year 2025. Water Supply System revenue requirements increased by \$1,517,161 or 2.80% more than revenues generated by existing rates and charges. Sewage Disposal System revenue requirements increased by \$1,887,795 or 2.91% more than revenues generated by existing rates and charges. Annual inflation for the 12-month period ending with September 2024 was 3.02%, according to the Consumer Price Index for All Urban Consumers (CPI-U). As such, both recommended utility increases for this year are lower than the rate of inflation.

Billed volume is used in the rate study to forecast the next calendar year's expected revenue. In 2010, the rate study began using a three-year average of billed volume to smooth significant volume variances and prevent reactionary rate fluctuations. Therefore, although the Water System experienced a 2.81% decrease in billed volume year-over-year, the three-year average only decreased by 0.69%. This produces upward pressure water rates, but the drop in water consumption was partially offset by the addition of new customers. The number of billed water meters increased by 0.68% in the past year, and the additional revenue from those meters neutralized most of the impact of declining



consumption. The Sewer System likewise experienced a 0.06% decrease in the three-year average of billed volume, but a 0.51% increase in the number of meters. Netted against each other, these sales revenues exerted a moderate downward pressure on rates.

Growth in other revenue streams likewise helped to alleviate rate increases. As would be expected given the new meters added this year, both systems saw a healthy rise in integrated connection fees, which are collected when new developments link up to our existing distribution & collection systems. In addition to continuing sales of Renewable Natural Gas (RNG) produced by the biodigester, the Sewage Disposal System also benefitted from its first full year of selling the related energy credits. However, due to regulatory changes dictated by the EPA, we anticipate a temporary reduction in these sales figures during FY2025 as we determine the best path forward.

Increases in operational expenses were the single largest factors impacting the rates this year. Staff turnover in the Water System has required a heavier reliance on temporary personnel, although this is expected to normalize over time. Additionally, union contracts are scheduled for renewal in the summer of 2025, and we anticipate that new contracts will include inflation-based wage increases for almost all personnel. The Water System also continues to invest heavily in replacing private-side lead service lines for residents of the City of Grand Rapids, in accordance with Environmental Protection Agency (EPA) and The State of Michigan Environment, Great Lakes & Energy Division (EGLE) regulatory requirements. For the Sewage Disposal System, operational costs did not change much year-over-year. However, significant increases are expected over the next few years as we work to overhaul the entirety of our Operational Technology (OT) infrastructure, and as we conduct engineering studies to continue optimizing our existing systems. These costs are factored into the 2024 Rate Study to help spread out their impact and mitigate steep rate increases in the future.

Asset additions were also responsible for a portion of the Water System rate increase, particularly for the City of Grand Rapids. Of the \$21.8M worth of Water assets put into service this year, \$16.4M was for watermains within the City of Grand Rapids, \$1.2M was for mains in Walker, and \$1.7M were for process equipment at the Lake Michigan Filtration Plant (LMFP). Grand Rapids accounted for such a large portion of these investments because of our focus on replacing our lead watermains, and we expect our asset base to continue growing over the next decade as the distribution system is revamped. Financial assistance offered by the State of Michigan via the Drinking Water State Revolving Fund (DWSRF) helped to temper the rate impact of these improvements by providing us with low-interest loans and significant principal forgiveness.

The Sewage Disposal System put \$6.8M worth of assets into service, primarily in the form of servicemains and improvements at Lift Stations, but we also made an effort to clean up our books and remove any assets that were worn out, obsolete, or no longer in use. As a result of that process and the natural rolling-off of assets, overall depreciation actually decreased year-over-year, helping to lower the rate increase. The required return on system investment also dropped from 4.16% to 3.92% this year, as we

recognized a \$10M contribution to our asset base from private entities related to the Market Ave trunk main. This contribution had a significant downward impact on the Sewage Disposal System's revenue requirement, cutting it by more than \$1.2M.

Recommended rate adjustments incorporate provisions of the third amendment to the uniform service agreements with customer communities, which eliminates penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker (CCCCB). This amendment generated \$153,690 to support the ICB, the program aimed at assisting retail customers requiring assistance in payment of their water/sewer bills. This amount will again be supplemented with an additional appropriation of non-operating revenue. The third amendment also provides for a City and Customer Community Circuit Breaker, 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. Total City and Customer Community Circuit Breaker funds used in the 2024 rate study was \$1,075,828 in relief, which accounted for the entirety of the available CCCCCB funds.

Attached are detailed schedules that show, by customer community, revenue requirement changes and rate adjustment impacts to a typical domestic and commercial customer with the system average quarterly consumption.

The Preliminary 2024 Water and Sewer Rate Study has been made available to the Utility Advisory Board partners and other customer communities on November 6, 2024. All partner and customer communities have a thirty-day comment period following notification of the rates as provided in the water/sewer service agreements. Approval of the resolution for the 2025 Water and Sewer rates by the City Commission is scheduled for Tuesday, December 17, 2024.

The annual rate study, along with explanatory materials, will be filed with the City Clerk's Office no later than the close of business on November 12, 2024, and are available for public review and comment. This is at least twenty (20) days prior to the City Commission's consideration of an approval resolution. Those wishing to provide feedback may submit comments to the City Clerk's Office or by sending an email to [info@grcity.us](mailto:info@grcity.us). Public notice will also be published in the newspaper, and the rate study and supplemental materials have been posted on the City's website at:

<https://www.grandrapidsmi.gov/Government/Departments/Water-System/Water-and-Sewer-Rate-Studies>.

The Utility Finance team will also be hosting open office hours in public locations throughout the City, to provide citizens with the opportunity to ask questions and voice their thoughts in person. The exact dates and locations for these office hours are still being finalized but will be announced when details are available.

Comments will be reported and considered as part of the FY2026 budget planning process.

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 PRELIMINARY WATER/SEWER RATE STUDY  
SUMMARY OF REVENUE REQUIREMENT CHANGES  
FOR RATES EFFECTIVE JANUARY 1, 2025**

	<u>WATER (1)</u>		<u>SEWER (1)</u>		
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>	
RETAIL COMMUNITIES	GRAND RAPIDS	\$ 1,387,267	4.34%	\$ 926,080	2.15%
	WALKER	220,558	5.34%	287,134	4.98%
	KENTWOOD	203,096	3.98%	261,400	4.85%
	CASCADE TWP	(377,079)	-8.61%	130,328	3.99%
	GRAND RAPIDS TWP	39,906	1.35%	158,511	5.03%
	TALLMADGE TWP	(10,548)	-3.70%	(4,518)	-0.78%
	WRIGHT TWP	N/A	N/A	9,928	3.43%
WHOLESALE COMMUNITIES	EAST GRAND RAPIDS	33,505	3.44%	55,152	4.33%
	ADA TWP	6,088	0.37%	53,573	3.35%
	OTTAWA COUNTY	14,368	0.51%	NA	NA
	GAINES TWP	N/A	N/A	14,702	6.97%
	CALEDONIA TWP	N/A	N/A	(4,495)	-1.86%
<hr/>					
SYSTEM	\$ 1,517,161	2.80%	\$ 1,887,796	2.91%	
<hr/>					

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

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

	<u>WATER</u>		<u>SEWER</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
SYSTEM REVENUE REQUIREMENT	\$ 55,750,731	2.80%	\$ 66,702,105	2.91%
ADD: CCCC B RELIEF	468,631	0.86%	607,197	0.94%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ 56,219,362</u>	<u>3.66%</u>	<u>\$ 67,309,302</u>	<u>3.85%</u>

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 PRELIMINARY WATER/SEWER RATE STUDY  
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS  
BY CUSTOMER COMMUNITY \*  
FOR RATES EFFECTIVE JANUARY 1, 2025**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2024</u>	<u>2025</u>	<u>DOLLARS</u>	<u>PERCENT</u>
<b>GRAND RAPIDS</b>				
WATER	\$ 118.42	\$ 123.58	\$ 5.16	4.36%
SEWER	144.09	147.06	2.97	2.06%
	<u>\$ 262.51</u>	<u>\$ 270.64</u>	<u>\$ 8.13</u>	3.10%
BASE RATIO	1.00	1.00		
<b>WALKER</b>				
WATER	\$ 108.76	\$ 114.59	\$ 5.83	5.36%
SEWER	165.57	173.67	8.10	4.89%
	<u>\$ 274.33</u>	<u>\$ 288.26</u>	<u>\$ 13.93</u>	5.08%
RATIO TO GR	1.05	1.07		
<b>KENTWOOD</b>				
WATER	\$ 111.89	\$ 116.41	\$ 4.52	4.04%
SEWER	101.22	105.84	4.62	4.56%
	<u>\$ 213.11</u>	<u>\$ 222.25</u>	<u>\$ 9.14</u>	4.29%
RATIO TO GR	0.81	0.82		
<b>CASCADE TWP</b>				
WATER	\$ 160.89	\$ 146.87	\$ (14.02)	-8.71%
SEWER	194.79	202.32	7.53	3.87%
	<u>\$ 355.68</u>	<u>\$ 349.19</u>	<u>\$ (6.49)</u>	-1.82%
RATIO TO GR	1.35	1.29		
<b>GRAND RAPIDS TWP</b>				
WATER	\$ 128.34	\$ 130.05	\$ 1.71	1.33%
SEWER	157.50	165.27	7.77	4.93%
	<u>\$ 285.84</u>	<u>\$ 295.32</u>	<u>\$ 9.48</u>	3.32%
RATIO TO GR	1.09	1.09		
<b>TALLMADGE TWP</b>				
WATER	\$ 99.77	\$ 94.95	\$ (4.82)	-4.83%
SEWER	273.00	270.90	(2.10)	-0.77%
	<u>\$ 372.77</u>	<u>\$ 365.85</u>	<u>\$ (6.92)</u>	-1.86%
RATIO TO GR	1.42	1.35		

\* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER  
 QUARTERLY CONSUMPTION OF: WATER- 32.00 UNITS OR 23,936 GALLONS  
 SEWER - 21.00 UNITS OR 15,708 GALLONS  
 NO. OF MONTHS: 3

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

<b>WRIGHT TWP-</b>				
SEWER (No. of REU 1.00)	<u>\$ 171.24</u>	<u>\$ 177.12</u>	<u>\$ 5.88</u>	3.43%

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 PRELIMINARY WATER/SEWER RATE STUDY  
IMPACT OF RATE ADJUSTMENTS ON COMMERCIAL USERS  
BY CUSTOMER COMMUNITY  
FOR RATES EFFECTIVE JANUARY 1, 2025**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2024</u>	<u>2025</u>	<u>DOLLARS</u>	<u>PERCENT</u>
<b>GRAND RAPIDS</b>				
WATER	\$ 586.79	\$ 614.87	\$ 28.08	4.79%
SEWER	977.88	1,008.21	30.33	3.10%
	<u>\$ 1,564.67</u>	<u>\$ 1,623.08</u>	<u>\$ 58.41</u>	3.73%
BASE RATIO	1.00	1.00		
<b>WALKER</b>				
WATER	\$ 494.21	\$ 521.89	\$ 27.68	5.60%
SEWER	794.40	833.85	39.45	4.97%
	<u>\$ 1,288.61</u>	<u>\$ 1,355.74</u>	<u>\$ 67.13</u>	5.21%
RATIO TO GR	0.82	0.84		
<b>KENTWOOD</b>				
WATER	\$ 479.35	\$ 498.41	\$ 19.06	3.98%
SEWER	744.99	781.59	36.60	4.91%
	<u>\$ 1,224.34</u>	<u>\$ 1,280.00</u>	<u>\$ 55.66</u>	4.55%
RATIO TO GR	0.78	0.79		
<b>CASCADE TWP</b>				
WATER	\$ 692.13	\$ 631.12	\$ (61.01)	-8.81%
SEWER	906.36	943.11	36.75	4.05%
	<u>\$ 1,598.49</u>	<u>\$ 1,574.23</u>	<u>\$ (24.26)</u>	-1.52%
RATIO TO GR	1.02	0.97		
<b>GRAND RAPIDS TWP</b>				
WATER	\$ 568.29	\$ 576.09	\$ 7.80	1.37%
SEWER	738.39	775.59	37.20	5.04%
	<u>\$ 1,306.68</u>	<u>\$ 1,351.68</u>	<u>\$ 45.00</u>	3.44%
RATIO TO GR	0.84	0.83		
<b>TALLMADGE TWP</b>				
WATER	\$ 594.49	\$ 570.24	\$ (24.25)	-4.08%
SEWER	1,962.06	1,946.70	(15.36)	-0.78%
	<u>\$ 2,556.55</u>	<u>\$ 2,516.94</u>	<u>\$ (39.61)</u>	-1.55%
RATIO TO GR	1.63	1.55		

\* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE COMMERCIAL CUSTOMER  
 QUARTERLY CONSUMPTION OF : WATER- 214.00 UNITS OR 160,072 GALLONS  
 SEWER - 204.00 UNITS OR 152,592 GALLONS  
 NO. OF MONTHS: 3

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

<b>WRIGHT TWP</b>				
SEWER (No. of REU 1.00)	<u>\$ 171.24</u>	<u>\$ 177.12</u>	<u>\$ 5.88</u>	3.43%

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 PRELIMINARY WATER/SEWER RATE STUDY  
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES  
EFFECTIVE JANUARY 1, 2025**

**WATER RATES**

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 2.57	\$ 2.08	\$ 1.91	\$ 2.41	\$ 2.25	\$ 2.61	NA
<b>MONTHLY SERVICE CHARGE BY METER SIZE</b>								
3/4" & Less	A	\$ 13.78	\$ 16.01	\$ 18.43	\$ 23.25	\$ 19.35	\$ 3.81	NA
1"	B	\$ 21.63	\$ 25.59	\$ 29.89	\$ 38.46	\$ 31.53	\$ 3.90	NA
1-1/4"	C	\$ 31.72	\$ 37.91	\$ 44.63	\$ 58.02	\$ 47.19	\$ 4.02	NA
1-1/2"	D	\$ 44.05	\$ 52.97	\$ 62.65	\$ 81.93	\$ 66.33	\$ 4.17	NA
2"	E	\$ 75.44	\$ 91.30	\$ 108.51	\$ 142.78	\$ 115.05	\$ 4.54	NA
3"	F	\$ 165.13	\$ 200.81	\$ 239.53	\$ 316.65	\$ 254.25	\$ 5.61	NA
4"	G	\$ 290.69	\$ 354.13	\$ 422.96	\$ 560.06	\$ 449.13	\$ 7.10	NA
6" & Over	H	\$ 649.45	\$ 792.17	\$ 947.05	\$ 1,255.53	\$ 1,005.93	\$ 11.37	NA

**SEWER RATES**

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 4.53	\$ 3.20	\$ 3.61	\$ 3.55	\$ 2.94	\$ 8.84	NA
REU Charge (Monthly) *		NA	NA	NA	NA	NA	NA	\$ 59.04
<b>MONTHLY SERVICE CHARGE BY METER SIZE</b>								
3/4" & Less	A	\$ 17.31	\$ 35.49	\$ 10.01	\$ 42.59	\$ 34.51	\$ 28.42	NA
1"	B	\$ 28.03	\$ 60.35	\$ 15.05	\$ 72.97	\$ 58.61	\$ 47.78	NA
1-1/4"	C	\$ 41.81	\$ 92.31	\$ 21.53	\$ 112.03	\$ 89.59	\$ 72.67	NA
1-1/2"	D	\$ 58.65	\$ 131.37	\$ 29.45	\$ 159.77	\$ 127.45	\$ 103.09	NA
2"	E	\$ 101.52	\$ 230.80	\$ 49.61	\$ 281.29	\$ 223.83	\$ 180.53	NA
3"	F	\$ 224.01	\$ 514.89	\$ 107.21	\$ 628.49	\$ 499.21	\$ 401.77	NA
4"	G	\$ 395.49	\$ 912.61	\$ 187.85	\$ 1,114.57	\$ 884.74	\$ 711.51	NA
6" & Over	H	\$ 885.45	\$ 2,048.97	\$ 418.25	\$ 2,503.37	\$ 1,986.25	\$ 1,596.49	NA

\* REU - Residential Equivalent Unit (Wright Township Only)

**FIRE PROTECTION RATES- ALL GOVERNMENTAL UNITS**

6"	H	\$ 22.98	10"	J	\$ 63.87
8"	I	\$ 40.76	12"	K	\$ 91.91

**NOTE:** Monthly defined as 1/12th of 365 days.

**CITY OF GRAND RAPIDS, MICHIGAN  
2024 PRELIMINARY WATER/SEWER RATE STUDY  
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE CUSTOMER COMMUNITIES  
EFFECTIVE JANUARY 1, 2025**

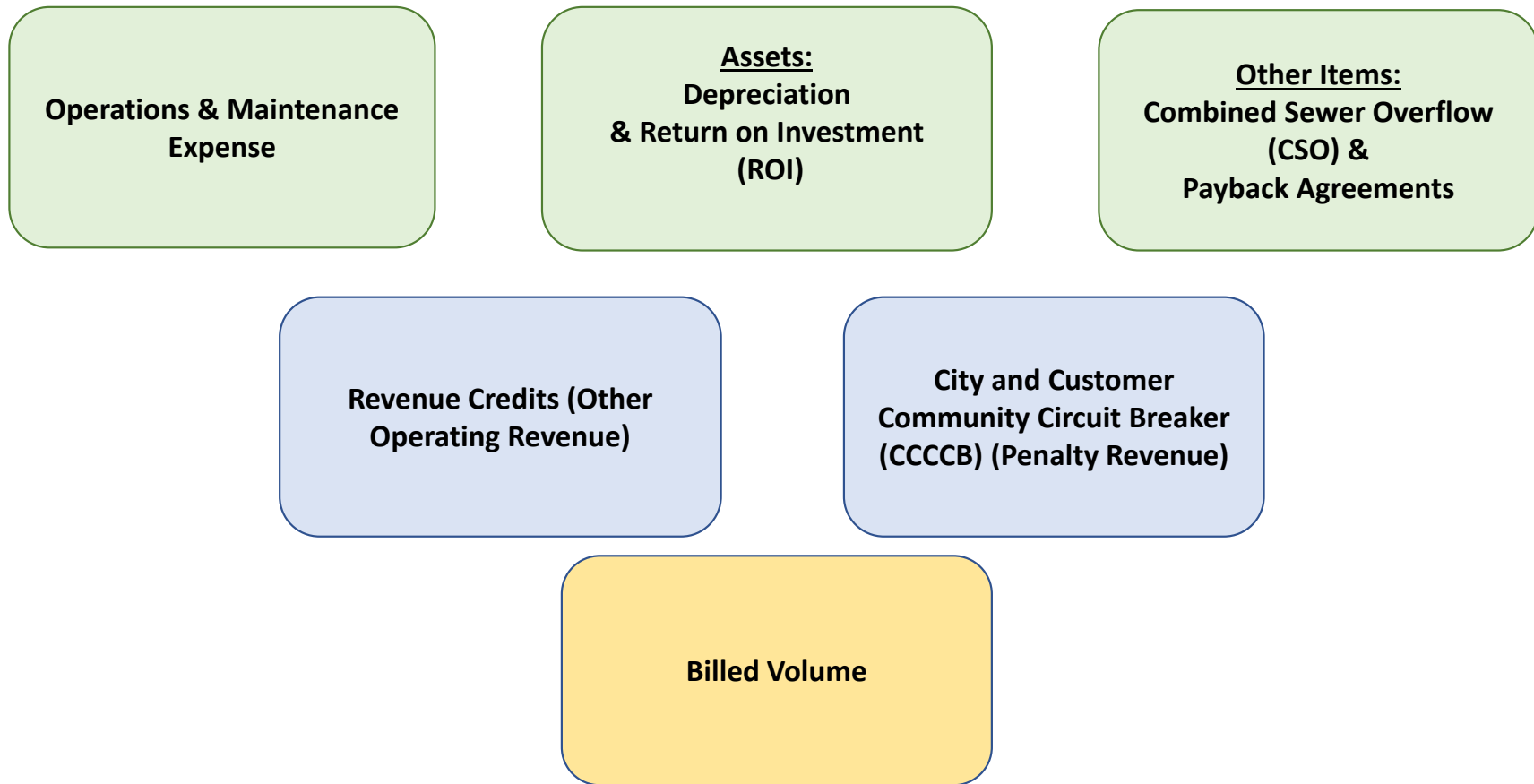
	<u>2024</u>	<u>2025</u>	<u>PERCENTAGE CHANGE</u>
<b>EAST GRAND RAPIDS</b>			
WATER - SERVICE (MONTHLY)	\$17,047.00	\$19,839.00	16.38%
- COMMODITY (100 CF)	\$1.31	\$1.31	0.00%
SEWER - SERVICE (MONTHLY)	\$2,184.00	\$2,104.00	-3.66%
- COMMODITY (MG)	\$2,959.00	\$3,092.00	4.49%
<b>ADA TWP</b>			
WATER - SERVICE	\$60,124.00	\$61,151.00	1.71%
- COMMODITY	\$1.50	\$1.49	-0.67%
SEWER - SERVICE	\$40,984.00	\$41,633.00	1.58%
- COMMODITY	\$4,012.00	\$4,178.00	4.14%
<b>OTTAWA COUNTY</b>			
WATER - SERVICE	\$0.00	\$0.00	N/A
- COMMODITY	\$1.43	\$1.44	0.70%
<b>GAINES TWP</b>			
SEWER - SERVICE	\$1,619.00	\$1,759.00	8.65%
- COMMODITY	\$2,574.00	\$2,749.00	6.80%
<b>CALEDONIA TWP</b>			
SEWER - SERVICE	\$728.00	\$743.00	2.06%
- COMMODITY	\$7,618.00	\$7,465.00	-2.01%

**NOTE: Monthly defined as 1/12th of 365 days.**





## Building Blocks of the Revenue Requirement



## 2025 Rate Impact by Community

**Retail Communities:** charges assessed directly to User based on water consumption (except for Wright Twp – REUs). Readiness to Serve (RTS) based on meter size and Commodity based on volume. City of GR maintains assets and bills users directly.

**Wholesale Communities:** charges assessed directly to Wholesale Community based on water consumption measured through a master meter at the point of service in the customer community. Readiness to Serve (RTS) based on non-integrated system requirements and Commodity based on volume. Customer community maintains assets and bills users directly.

	WATER (1)		SEWER (1)		
	AMOUNT	PERCENT	AMOUNT	PERCENT	
RETAIL COMMUNITIES	GRAND RAPIDS	\$ 1,387,267	4.34%	\$ 926,080	2.15%
	WALKER	220,558	5.34%	287,134	4.98%
	KENTWOOD	203,096	3.98%	261,400	4.85%
	CASCADE TWP	(377,079)	-8.61%	130,328	3.99%
	GRAND RAPIDS TWP	39,906	1.35%	158,511	5.03%
	TALLMADGE TWP	(10,548)	-3.70%	(4,518)	-0.78%
	WRIGHT TWP	N/A	N/A	9,928	3.43%
WHOLESALE COMMUNITIES	EAST GRAND RAPIDS	33,505	3.44%	55,152	4.33%
	ADA TWP	6,088	0.37%	53,573	3.35%
	OTTAWA COUNTY	14,368	0.51%	NA	NA
	GAINES TWP	N/A	N/A	14,702	6.97%
	CALEDONIA TWP	N/A	N/A	(4,495)	-1.86%
<b>SYSTEM</b>	<b>\$ 1,517,161</b>	<b>2.80%</b>	<b>\$ 1,887,796</b>	<b>2.91%</b>	

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



## 15-Year Historical Rate Changes

Rate Study Year	Water Supply System			Sewage Disposal System		
	Revenue Requirements	% change in RR over prev year	% gross rate incr (decr) **	Revenue Requirements	% change in RR over prev year	% gross rate incr (decr) **
2010	41,200,107	-4.05%	-6.27%	49,673,390	-3.32%	-3.30%
2011	41,802,404	1.46%	5.15%	50,082,541	0.82%	2.89%
2012	39,247,442	-6.11%	-4.41%	48,183,681	-3.79%	-2.46%
2013	38,646,748	-1.53%	-4.30%	48,946,212	1.58%	2.46%
2014	40,055,985	3.65%	2.50%	49,962,043	2.08%	2.81%
2015	40,178,439	0.31%	1.00%	49,868,027	-0.19%	0.30%
2016	41,187,517	2.51%	3.63%	50,400,344	1.07%	0.36%
2017	42,828,972	3.99%	2.45%	52,319,981	3.81%	3.08%
2018	43,868,464	2.43%	2.71%	54,611,300	4.38%	3.28%
2019	45,752,997	4.30%	2.47%	56,969,417	4.32%	3.49%
2020	45,501,943	-0.55%	0.62%	61,242,290	7.50%	7.92%
2021	47,692,896	4.82%	4.08%	62,943,059	2.78%	4.00%
2022	50,122,073	5.09%	5.68%	63,232,742	0.46%	1.07%
2023	54,408,787	8.55%	6.50%	64,540,737	2.07%	1.33%
2024*	55,750,731	2.47%	2.80%	66,702,105	3.35%	2.91%
<b>AVG</b>	<b>44,549,700</b>	<b>1.82%</b>	<b>1.64%</b>	<b>55,311,858</b>	<b>1.79%</b>	<b>2.01%</b>

\* Revenue Requirements per the 2024 Preliminary Rate Study.  
 \*\* The percentage gross rate increase (decrease) differs from the annual percentage change in Revenue Requirements due to differences in usage volumes/customers/application of Circuit Breaker  
 - Annual inflation for the 12 months ending September 2024 was 3.02%



## Rate Impact Factors - Water

2024 Water Rate Study Rate Drivers	% Impact
<b>Increases:</b>	
O&M – Personnel services Private lead line replacements Supply costs stabilizing	2.03%
Assets – Return on System Investment & Depreciation \$21.8M of new assets in service Most (\$18.8M) for watermains & lead line replacements	1.26%
Revenue Expectation (3-yr avg water billed volume down, meters up)	0.32%
<b>Decreases:</b>	
Integrated Connection Fee Credit / Penalty Offset	(0.81%)
<b>Proposed System Average Rate Increase</b>	<b>2.80%</b>



## Rate Impact Factors - Sewer

2024 Sewer Rate Study Rate Drivers	% Impact
<b>Increases:</b>	
O&M – Personnel services Overhaul of SCADA infrastructure Maximizing use of existing systems	6.20%
<b>Decreases:</b>	
Assets – Return on System Investment & Depreciation \$6.8M of new assets in service Required return decreased by Market Ave contribution	(2.13%)
Natural gas revenues / Penalty Offset	(0.74%)
Revenue Expectation (3-yr avg sewer billed volume down, meters up)	(0.42%)
<b>Proposed System Average Rate Increase</b>	<b>2.91%</b>

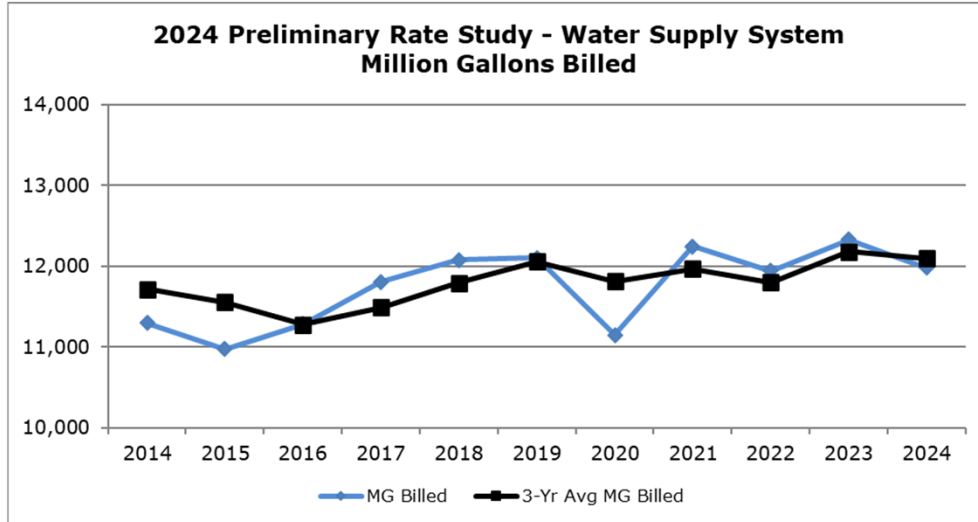


## Billed Volume

### Water Supply System

2024 water volume down (2.81%) over 2023

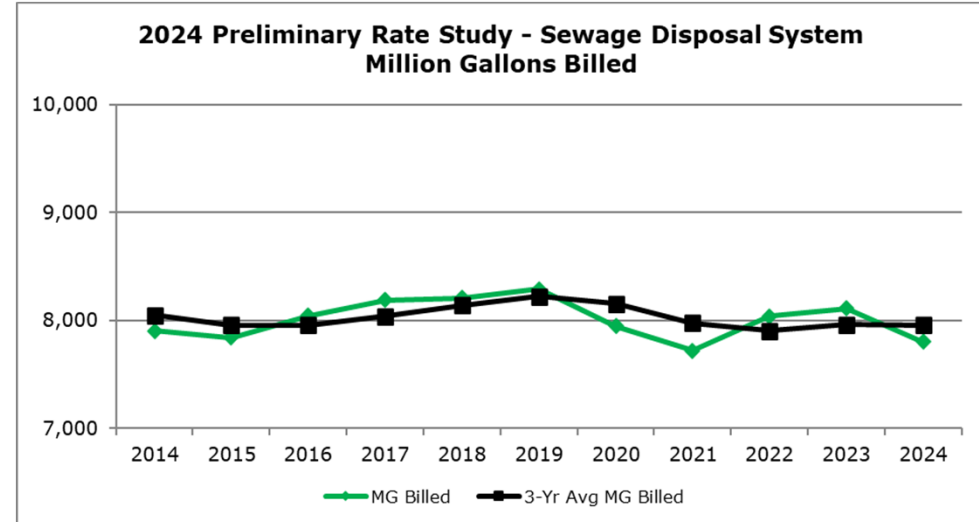
3-Yr Avg water volume **down** (0.69%)



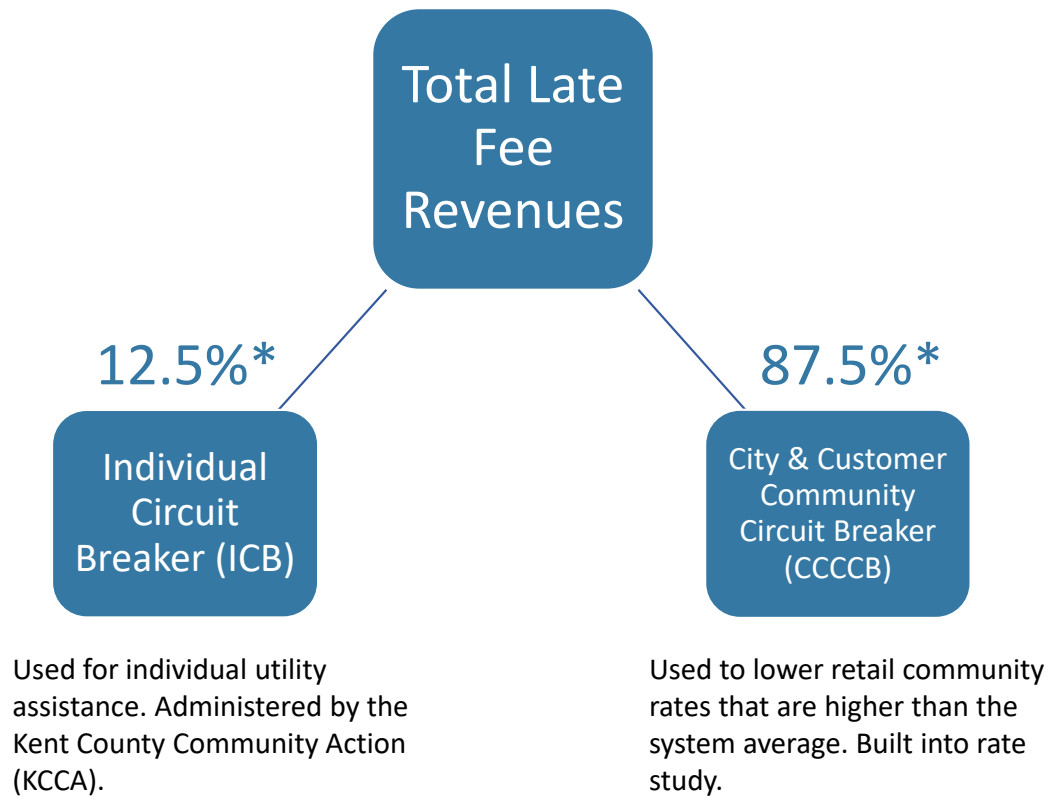
### Sewer Disposal System

2024 sewer volume down (3.77%) over 2023

3-Yr Avg sewer volume **down** (0.06%)



## Assistance/Affordability Programs - Overview



*\*Methodology, including % split, dictated by 3<sup>rd</sup> Amendment to Service Agreement w/ Retail Communities. Effective 2007.*



## Individual Assistance Program (ICB)

	<b>Water/Sewer</b>
<b>Total Penalty Revenue (FY24)</b>	<b>\$1,229,518</b>
Individual Circuit Breaker (ICB):	
Penalty Revenue (12.5%)	153,690
Other Non-op Revenue	80,000
<b>Total ICB for CY25</b>	<b>\$233,690</b>

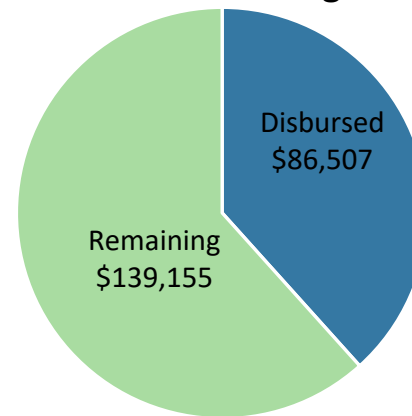
Previous Rate Study set aside **\$225,662** for CY24

Current figures reflect draws thru Sep'24

Unused funds lower rates in the next study



**CY24 Funding**





## Community Affordability Program (CCCCB)

	<b>Water/Sewer</b>
<b>Total Penalty Revenue (FY24)</b>	<b>\$1,229,518</b>

City & Customer Community Circuit Breaker (CCCCB):

<b>Penalty Revenue (87.5%) – Total Available CCCCCB</b>	<b>1,075,828</b>
CCCCB Funds Applied in 2024 Rate Study*	1,075,828
Remaining CCCCCB Funds (rolled to next year)	Zero

\*CCCCB Funds are only applied to reduce rates when a retail community projects a rate increase greater than the system-wide average. Remaining funds reduce system-wide rates the next year.



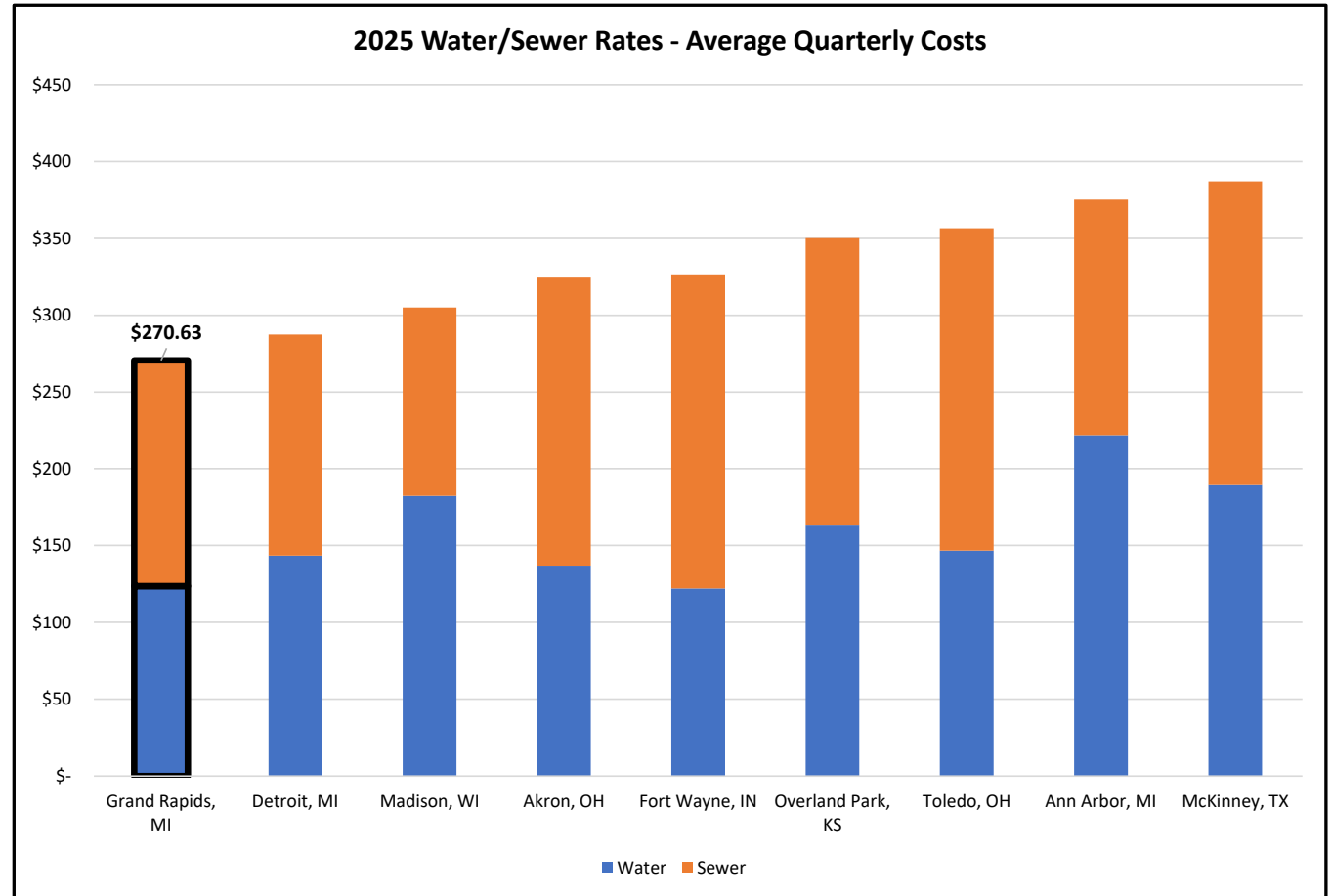
## Preliminary 2025 Quarterly Bill

	<b>APPROXIMATE QUARTERLY BILL</b>		<b>CHANGE</b>	
	<u>2024</u>	<u>2025</u>	<u>DOLLARS</u>	<u>PERCENT</u>
<b>GRAND RAPIDS</b>				
WATER	\$ 118.42	\$ 123.58	\$ 5.16	4.36%
SEWER	144.09	147.06	2.97	2.06%
	<u>\$ 262.51</u>	<u>\$ 270.64</u>	<u>\$ 8.13</u>	3.10%
BASE RATIO	1.00	1.00		
<b>WALKER</b>				
WATER	\$ 108.76	\$ 114.59	\$ 5.83	5.36%
SEWER	165.57	173.67	8.10	4.89%
	<u>\$ 274.33</u>	<u>\$ 288.26</u>	<u>\$ 13.93</u>	5.08%
RATIO TO GR	1.05	1.07		
<b>KENTWOOD</b>				
WATER	\$ 111.89	\$ 116.41	\$ 4.52	4.04%
SEWER	101.22	105.84	4.62	4.56%
	<u>\$ 213.11</u>	<u>\$ 222.25</u>	<u>\$ 9.14</u>	4.29%
RATIO TO GR	0.81	0.82		
<b>CASCADE TWP</b>				
WATER	\$ 160.89	\$ 146.87	\$ (14.02)	-8.71%
SEWER	194.79	202.32	7.53	3.87%
	<u>\$ 355.68</u>	<u>\$ 349.19</u>	<u>\$ (6.49)</u>	-1.82%
RATIO TO GR	1.35	1.29		
<b>GRAND RAPIDS TWP</b>				
WATER	\$ 128.34	\$ 130.05	\$ 1.71	1.33%
SEWER	157.50	165.27	7.77	4.93%
	<u>\$ 285.84</u>	<u>\$ 295.32</u>	<u>\$ 9.48</u>	3.32%
RATIO TO GR	1.09	1.09		
<b>TALLMADGE TWP</b>				
WATER	\$ 99.77	\$ 94.95	\$ (4.82)	-4.83%
SEWER	273.00	270.90	(2.10)	-0.77%
	<u>\$ 372.77</u>	<u>\$ 365.85</u>	<u>\$ (6.92)</u>	-1.86%
RATIO TO GR	1.42	1.35		
<p><i>* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER</i></p> <p>QUARTERLY CONSUMPTION OF: WATER- 32.00 UNITS OR 23,936 GALLONS</p> <p>SEWER - 21.00 UNITS OR 15,708 GALLONS</p> <p>NO. OF MONTHS: 3</p>				

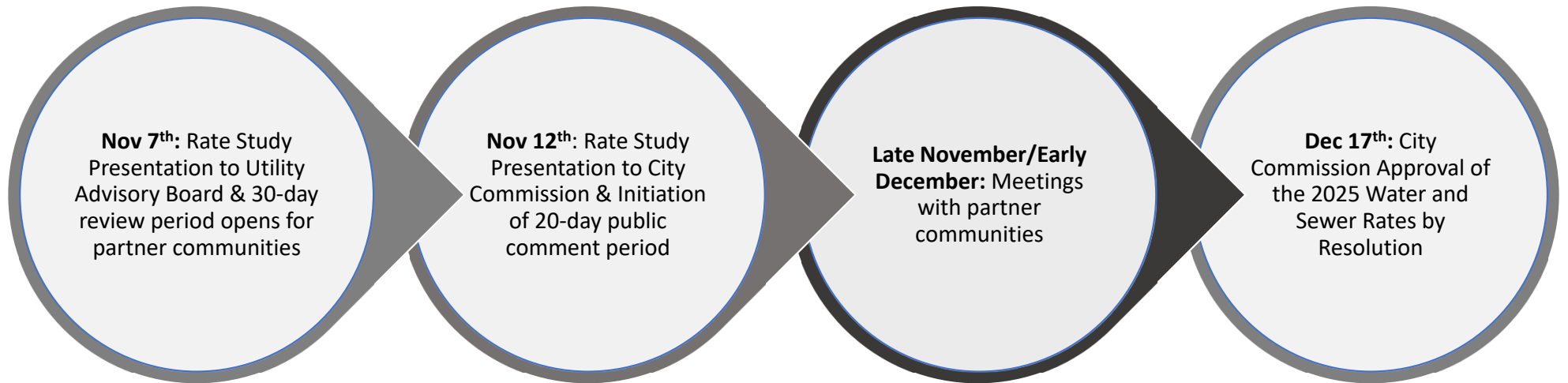


## Comparison to Similarly Sized Cities

Comparables	Population (2020 Census)
Detroit, MI	639,111
Toledo, OH	270,871
Madison, WI	269,840
Fort Wayne, IN	263,886
<b>Grand Rapids, MI</b>	<b>198,917</b>
Overland Park, KS	197,238
McKinney, TX	195,308
Akron, OH	190,469
Ann Arbor, MI	119,381



## 2024 Water & Sewer Rate Study Schedule



## Office Hours for Public Comment

<b>Ward 1</b>	<ul style="list-style-type: none"><li>• Friday, November 15<sup>th</sup></li><li>• GRPL West Side Branch</li><li>• 10:00am – 6:00pm</li></ul>
<b>Ward 2</b>	<ul style="list-style-type: none"><li>• Friday, November 22<sup>nd</sup></li><li>• GRPL Van Belkum Branch</li><li>• 10:00am – 6:00pm</li></ul>
<b>Ward 3</b>	<ul style="list-style-type: none"><li>• Friday, November 29<sup>th</sup></li><li>• GRPL Madison Square Branch</li><li>• 10:00am – 6:00pm</li></ul>
<b>Downtown</b>	<ul style="list-style-type: none"><li>• Saturday, November 23<sup>rd</sup></li><li>• GRPL Main Library</li><li>• 10:00am – 2:00pm</li></ul>





Thank you





Grand Rapids Press

LEGAL AFFIDAVIT

AD#: 0010926346

Total

\$125.00

State of Michigan,) ss  
County of Kent and County of Ottawa)

Nancy Block being duly sworn, deposes that he/she is principal clerk of MLive Media Group; that Grand Rapids Press is a public newspaper published in the city of Grand Rapids, with general circulation in Kent and Ottawa county, and this notice is an accurate and true copy of this notice as printed in said newspaper, was printed and published in the regular edition and issue of said newspaper on the following date(s):

Grand Rapids Press 11/12/2024

Principal Clerk of the Publisher

Sworn to and subscribed before me this 12th day of November 2024

Notary Public

TEASHA R. PAYNE  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF MECOSTA  
COMMISSION EXP FEB 24 2026  
ACTING IN COUNTY OF Kent



### CITY OF GRAND RAPIDS

#### WATER/SEWER RATES AND CHARGES FOR 2025 NOW AVAILABLE FOR PUBLIC COMMENT

The City of Grand Rapids has completed the "Preliminary Water/Sewer 2024 Rate Study" report, which is the basis for recommending water and sewer rates to become effective January 1, 2025, for all residential, commercial, and industrial users. That report, which also includes information on the Individual Circuit Breaker Program, the program that helps 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, 300 Monroe NW, Grand Rapids, MI 49503 between 8:00 a.m. and 5:00 p.m. weekdays and can also be reviewed at:

<https://www.grandrapidsmi.gov/Government/Departments/Water-System/Water-and-Sewer-Rate-Study>

Opportunity for public commentary runs through December 2nd. You may submit comments to the City Clerk's Office or by sending an email to [info@grcity.us](mailto:info@grcity.us).

The Grand Rapids City Commission is scheduled to consider approval on the rates on Tuesday, December 17, 2024.

17-24-96-1

**94201 Result: Approved**

**Mover: O'Connor. Supporter: Goei.**

WHEREAS:

1. The Water/Sewer rate studies have been undertaken and completed for the years 1976 through 2023; and
2. The 2024 Water/Sewer rate study has been completed using the same general methodology as the 1976 through 2023 Water/Sewer rate studies, as adjusted where appropriate for the uniform water and sanitary sewer service agreements; therefore

RESOLVED:

1. That pursuant to Section 2.33 of Chapter 26 of the City Code, the following water rates, charges, and fees will be as follows:

a. Front foot rate

Domestic  
\$150  
Commercial  
\$230

b. Integrated water connection fees

i. Plan Review and Connection Fee (PRC)

1. Residential Users (three residential units or less)

Meter Size  
PRC Fee  
¾ inch or less  
\$395  
1 inch  
\$415  
1½ inch  
\$415

2. All other Users (including residential of more than 3 units, commercial, industrial, governmental and religious)

Meter Size  
PRC Fee  
¾ inch or less  
\$765  
1 inch  
\$1,030  
1½ inch  
\$1,370  
2 inch  
\$1,890  
3 inch  
\$2,355  
4 inch  
\$3,390  
6 inch  
\$4,780

ii. Meter Capacity Fee (MCC) (when water and sanitary sewer connections are made at the same time only one Meter Capacity Fee shall be charged)

Meter Size  
MCC Fee  
¾ inch or less  
\$210  
1 inch  
\$295



1½ inch  
\$985  
2 inch  
\$1,155  
3 inch  
\$2,355  
4 inch  
\$3,146  
6 inch  
\$5,201

Ultrasonic Meters  
1-1/2" – 12"  
At Cost

iii. Fire Protection Review Fee

All Fire Service Sizes  
\$800

iv. Commercial Plan Assessment Fee (for instances where there is an established connection or property has been previously reviewed)

All Sizes  
\$125

c. Commodity rates within the City of Grand Rapids

Domestic  
\$2.57 per 100 cubic feet  
Commercial  
\$2.57 per 100 cubic feet  
Industrial  
\$2.57 per 100 cubic feet

d. Monthly service charge within the City of Grand Rapids

Size of Meter  
Charge  
¾ inch or less  
\$13.78  
1 inch  
\$21.63  
1¼ inch  
\$31.72  
1½ inch  
\$44.05  
2 inches  
\$75.44  
3 inches  
\$165.13  
4 inches  
\$290.69  
6 inches or larger  
\$649.45

e. Fire protection charge

Size of Pipe  
Monthly  
Quarterly  
6 inches  
\$22.98  
\$68.94  
8 inches  
\$40.76  
\$122.28  
10 inches  
\$63.87  
\$191.61  
12 inches  
\$91.91  
\$275.73

f. Water service pipe costs

50 ft.  
60 ft.  
66 ft.  
80 ft.  
100 ft.  
R.O.W.  
Cost for 1 inch Water Service

\$3,900
\$4,300
\$4,600
\$5,200
\$6,200
Cost for 1½ inch Water Service
\$5,700
\$6,300
\$6,700
\$6,700
\$8,800
Cost for 2 inches Water Service
\$6,500
\$7,100
\$7,500
\$8,500
\$9,800

- g. Non-metered hydrant connection use fee (pool filling per connection) - \$100 refundable deposit + \$75/week
- h. Hydrant use permit (non-metered connection – residential customers) - \$50
- i. Hydrant use permit fee (metered connection) - \$300
- j. Metered hydrant connection use fee (per connection) - City of Grand Rapids account holder and Non-account holder - \$500 refundable deposit + \$25/week + metered volume (commodity charges at City of Grand Rapids rate)
- k. Hydrant connection assistance requests - \$100 service fee
- l. Hydrant flow test - \$200
- m. Tapping permits (all sizes) - \$375
- n. Meter service on/off requests (normal service hours 8am-7pm M-F)

Meter Size
Fee
All Sizes
\$75

Inspections/repair scheduled on & off request (may also need meter install)  
\$75

- o. Meter replacement (non-system planned/scheduled replacement) (In addition to meter installation fee)

Meter Size
Fee
¾ inch or less
\$210
1 inch
\$300
1½ inch
\$985
2 inches
\$1,155
3 inches
\$2,356
4 inches or larger
At cost
Ultrasonic Meters
At cost

- p. Final or actual meter reading - \$65
- q. Meter testing fee – paid by customer if meter is accurate, no charge if meter is faulty (In addition to Service On/Off Requests Fee)

Meter Size
Fee

¾ inch or less  
\$150  
1 inch  
\$150  
1½ inch  
\$200  
2 inches  
\$350  
3 inches  
\$500  
4 inches or larger  
At cost  
Ultrasonic Meters  
At cost

- r. Meter interface unit replacement - \$200
- s. Security deposit - \$500
- t. Street opening permit - \$300
- u. Water inspection permit (within City) - \$95
- v. Water inspection permit (outside City) - \$110
- w. Sanitary Service line inspection permit (within City) - \$95
- x. Sanitary Service line inspection permit (outside City) - \$110
- y. Storm Service line inspection permit (within City) - \$95
- z. Storm Service line inspection permit (outside City) - \$110
- aa. Footing drain lateral inspection permit (within City) - \$95
- bb. Footing drain lateral inspection permit (outside City) - \$110
- cc. Sewer lateral service demolition/cap off inspection fee (within City) - \$95
- dd. Sewer lateral service demolition/cap off inspection fee (outside City) - \$110
- ee. Plumbing service re-inspection fee - \$95
- ff. Cross connection re-inspection fee - \$75
- gg. Irrigation Service Cut/Cap Administration fee - \$70
- hh. Delinquent Commercial Backflow Test fee (per device) - \$35
- ii. Customer requested onsite service - \$100
- jj. Administrative/Research fee (review or processing of account for non-payment, returned payment, shut-off, posting of property, and/or backflow non-compliance. Documentation creation for account of location information, FOIA request may still be required) – \$70
- kk. Late payment penalty – 10% of net
- ll. Missed appointment fee - \$50
- mm. Unauthorized operation, tampering, or removal of any Water or Sanitary Sewer System owned or maintained valve, asset, infrastructure, or equipment (for example, but not limited to, valves, meters, meter reading equipment, hydrants, and curb stops and box) - \$500 plus double commodity rate for estimated volume and unbilled

readiness to serve charges that may apply plus doubling of penalties for each subsequent infraction

- nn. Unauthorized use or illegal connection to any Water or Sanitary Sewer System owned pipe, property and/or private plumbing system served by the Water and/or Sanitary Sewer System - \$500 plus double commodity rate for estimated volume and any unbilled readiness to serve charges that may apply plus doubling of penalties for each subsequent infraction
- oo. Failure to return or return of damaged beyond repair / repairable hydrant connection equipment – Cost + 10%
- pp. Repair/replace damage to fire hydrant – Cost + 10%
- qq. Permit infractions/violations – \$100 plus double commodity rate for estimated volume and any unbilled readiness to serve charges that may apply plus doubling of penalties for each subsequent infraction
- rr. Returned check charge - \$30
- ss. Unauthorized service tap of Water or Sewer main - \$500 plus double commodity rate for estimated volume and any unbilled readiness to serve charges that may apply plus doubling of penalties for each subsequent infraction
- tt. Any cost recovery due to damaged caused or undue oversight of any location, account, or infrastructure of the Water and/or Sanitary Sewer System will be charged in accordance with cost recovery methodology for time and materials, including a 10% administrative charge for processing – Cost + 10%
- uu. Watermain oversizing rates
  - 8 – 12 inches
  - \$40.97 per lineal foot
  - 12 – 16 inches
  - \$27.75 per lineal foot
  - 8 – 16 inches
  - \$68.22 per lineal foot
- vv. Circuit breaker allocation
  - Individual Circuit Breaker (ICB)
  - \$233,690
  - City and Customer Community Circuit Breaker (CCCCB)
  - \$1,075,828

2. That Pursuant to Section 2.94 of Chapter 27 of the City Code, the following City sewer rates, charges and fees will be as follows:

- a. Front foot rate
  - Domestic
  - \$122
  - Commercial
  - \$180
- b. Integrated sewer connection fees (based on water meter size)
  - i. Plan Review and Connection Fee (PRC)

1. Residential Users (three residential units or less)

Meter Size	PRC Fee
¾ inch or less	\$395
1 inch	\$415
1½ inch	\$415

2. All other Users (including residential of more than 3 units, commercial, industrial, governmental, and religious)

Meter Size	PRC Fee
¾ inch or less	\$765
1 inch	\$1,030
1½ inch	\$1,370
2 inch	\$1,890
3 inch	\$2,355
4 inch	\$3,390
6 inch	\$4,780

ii. Meter Capacity Charge (when water and sanitary sewer connections are made at the same time only one Meter Capacity Charge shall be charge)

Meter Size	MCC Fee
¾ inch or less	\$210
1 inch	\$295
1½ inch	\$985
2 inch	\$1,155
3 inch	\$2,355
4 inch	\$3,146
6 inch	\$5,201

Ultrasonic Meters  
1-1/2" - 12"  
At Cost

iii. Commercial Plan Assessment Fee (for instances where there is an established connection or property has been previously reviewed)

All Sizes  
\$125

c. Commodity rates within the City of Grand Rapids

Domestic	\$4.53 per 100 cubic feet
Commercial	\$4.53 per 100 cubic feet
Industrial	\$4.53 per 100 cubic feet

d. Monthly service charge within the City of Grand Rapids

Size of Meter	Charge
¾ inch or less	\$17.31

1 inch  
\$28.03  
1¼ inch  
\$41.81  
1½ inch  
\$58.65  
2 inches  
\$101.52  
3 inches  
\$224.01  
4 inches  
\$395.49  
6 inches or larger  
\$885.45

e. Wastewater surcharges for industrial customers

BOD  
\$0.482  
TSS  
\$0.647  
Phos  
\$5.032  
NH3  
\$0.575

f. Significant industrial user discharge permit fee - \$1,000 plus the surcharge analytical fees

g. Industrial discharge authorization fee (one-time or short-term discharge) - \$665 plus the surcharge analytical fees

h. Surcharge analytical fees

Metals  
1 Metal  
\$12.00/each  
2 Metals  
\$16.50 total  
3 Metals  
\$21.00 total  
4 Metals  
\$25.50 total  
5 Metals  
\$30.00 total  
6 Metals  
\$34.50 total  
7 Metals  
\$39.00 total  
8 Metals  
\$43.50 total  
9 Metals  
\$48.00 total  
10 Metals  
\$52.50 total  
11 Metals  
\$57.00 total  
12 Metals  
\$61.50 total  
13 Metals  
\$66.00 total  
14 Metals  
\$70.50 total  
TSS  
\$11.50/each  
BOD  
\$23.00/each  
BOD 7  
\$23.00/each  
COD  
\$16.50/each  
Total Phosphorus  
\$11.50/each  
pH  
\$6.00/each  
EPA 624.1  
\$48.00/each  
EPA 625.1

\$106.00/each  
 BTEX/MTBE  
 \$48.00/each  
 Sulfide  
 \$23.00/each  
 Oil and Grease  
 \$23.00/each  
 Total Cyanide  
 \$23.00/each  
 Hexavalent Chromium  
 \$28.00/each  
 Fecal Coliform  
 \$19.00/each  
 Ammonia Nitrogen  
 \$16.50/each  
 Mercury (EPA 245.1 or 245.2)  
 \$20.00/each  
 Pesticides  
 \$64.00/each  
 PCBs  
 \$64.00/each  
 Phenols, Total  
 \$25.00/each  
 PFAS EPA 537 Modified  
 (samples, duplicate and blank)  
 \$325.00/each  
 PFAS by LCMSMS  
 (samples, duplicate and blank)  
 \$350.00/each  
 PFAS by EPA Draft Method 1633  
 (samples, duplicate and blank)  
 \$525.00/each  
 EPA 1666 Volatile Organics in Pharmaceuticals  
 \$48.00/each  
 EPA 524.2 Purgeable Organics  
 \$48.00/each  
 Methyl Blue Active Substances (MBAS)  
 \$66.00/each  
 Color  
 \$16.50/each  
 GC-MS Fingerprint  
 \$130.00/each  
 Labor  
 \$82.74/hour  
 Sampler  
 \$75.00/day  
 Vehicle  
 \$4.88/hour  
 Composite Labor  
 1.5 hours per sample  
 Grab Sample Labor  
 1.0 hours per sample

**i. Sewer lateral charges**

50 ft.  
 60 ft.  
 66 ft.  
 80 ft.  
 100 ft.  
 R.O.W.  
 Cost for 6 inch lateral  
 \$3,600  
 \$4,200  
 \$4,600  
 \$5,500  
 \$6,700

**j. Sewer oversizing rates**

Description  
 Amount  
 (per lineal foot)  
 8 – 10 inches  
 \$11.07  
 8 – 12 inches  
 \$20.45  
 8 – 15 inches  
 \$38.46

10 – 12 inches  
\$9.38  
10 – 15 inches  
\$27.39  
12 – 15 inches  
\$18.01

- k. Footing drain disconnect opt out charge - \$76.91 per customer per month
- 3. That the above Water and Sewer rates, charges, and fees are approved and shall be effective January 1, 2025.

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 17, 2024.



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Joel H. Hondorp, City Clerk



**94202 Result: Approved**

**Mover: O'Connor. Supporter: Goei.**

WHEREAS:

1. The Water/Sewer rate studies have been undertaken and completed for the years 1976 through 2023; and
2. The 2024 Water/Sewer Rate Study has been completed using the same general methodology as the 1976 through 2023 Water/Sewer Rate Studies, as adjusted where appropriate for the uniform water and sanitary sewer service agreements; therefore

RESOLVED:

1. That the attached water and sewer rates are approved for retail and wholesale partner communities of the City's Water Supply System and Sanitary Sewer System and shall be effective January 1, 2025; and
2. That the Utility Financial Officer 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 action as may be required to evidence the new water and sewer rates.

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 17, 2024.



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Joel H. Hondorp, City Clerk

# MEMORANDUM

CITY OF GRAND RAPIDS

**DATE:** January 1, 2025

**TO:** Molly J. Clarin  
Chief Financial Officer

**FROM:** Tai Verbrugge  
Utility Financial Officer

**SUBJECT:** **2024 WATER/SEWER RATES STUDY PARTNER COMMUNITY CONTRIBUTIONS**

None of the partner communities have elected to make a separate contribution this year to reduce their water or sewer 2024 rate study revenue requirement.

TCV

# MEMORANDUM

CITY OF GRAND RAPIDS

**DATE:** December 17, 2024

**TO:** City of Grand Rapids Mayor and City Commissioners

**FROM:** Tai Verbrugge, Utility Financial Officer

**SUBJECT:** **2024 Rate Study – City of Grand Rapids 20-day Public Comment Period Comments**

During the 2024 Water and Sewer Rate Study comment period, the City of Grand Rapids did not receive any direct communications from the public. However, during tabling events held four times throughout the public comment period, feedback was collected from nine (9) individuals.

Of the nine people that I spoke with, three were opposed to any rate increases. Reasons for this disapproval included the hardships caused by general inflation across the board, and the feeling that other communities are not paying their fair share. Three respondents expressed their approval of the proposed rates once I explained the primary drivers behind the changes; all three believed that investments in replacing lead pipes are worth the additional costs. The final three residents only asked questions about the utility systems and the rate-setting process, but did not offer any opinions or comments.

As indicated at the Committee of the Whole Preliminary Rate Study Presentation on November 12, 2024, all public comments received will be reviewed by staff and considered as part of the FY2026 budget planning process.