ORDINANCE NO. 2533

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDWOOD CITY AMENDING ARTICLE III (CONNECTION FEES) OF CHAPTER 38, ARTICLE VII (CROSS CONNECTION CONTROL) OF CHAPTER 38, ARTICLE IX (FEES AND CHARGES) OF CHAPTER 27, AND ARTICLE X (SEWER FUND) OF CHAPTER 27 OF THE REDWOOD CITY MUNICIPAL CODE AND UPDATING THE CITY'S WATER CAPACITY AND CONNECTION FEES, WASTEWATER CAPACITY AND CONNECTION FEES, AND WATER AND WASTEWATER USER AND PENALTY FEES

WHEREAS, the Redwood City Municipal Code ("City Code") Chapter 38 (Water System Regulations), Article III (Connection Fees) imposes water capacity fees on all new connections to the City of Redwood City's ("City") water system; and

WHEREAS, the City Code Chapter 27 (Sanitary Sewage Facilities), Article IX (Fees and Charges) imposes wastewater capacity fees on all new connections to the City's wastewater system; and

WHEREAS, the City reviewed its water and wastewater capacity fees to determine if they are adequate to cover the costs of existing and planned public improvements that provide capacity to serve new development, and the City submitted a Sewer and Water Capacity & User Fee Study dated December 20, 2023 ("Fee Study"), which recommends water and wastewater capacity fee schedules to be implemented immediately. The Fee Study is attached hereto as **Exhibit A** and hereby incorporated by reference; and

WHEREAS, the purpose of the water and wastewater capacity fees is to fund a proportionate share of the costs of existing and future water and wastewater system facilities and assets that are reasonably necessary to provide water and wastewater capacity for new development. For the purpose of this Ordinance, "new development" means all new building construction, conversion to a new use, or additional use within an existing building that creates a need for additional water or wastewater capacity; and

WHEREAS, the water and wastewater capacity fees are "exempt charges," within the meaning of Section 1 of Article XIII C of the California Constitution and the Taxpayer Protection and Government Accountability Act (Initiative No. 21-0042) because they are fees that are imposed as a condition of property development; and

WHEREAS, the City also evaluated the City's costs of service in providing water and wastewater related services and determined the water and wastewater user fees that would be justified by those costs of service, and the analysis supporting these user fees is set forth in the Fee Study; and

WHEREAS, the water and wastewater user fees are "exempt charges," within the meaning of Section 1 of Article XIII C of the California Constitution and the Taxpayer

Protection and Government Accountability Act (Initiative No. 21-0042) because they are reasonable fees for a specific local government service or product provided directly to the payor that is not provided to those not charged and which do not exceed the City's actual costs to provide the service or product; and

WHEREAS, the City desires to adopt certain penalty fees for violations of the water and wastewater requirements in its City Code; and

WHEREAS, the penalty fees are "exempt charges," within the meaning of Section 1 of Article XIII C of the California Constitution and the Taxpayer Protection and Government Accountability Act (Initiative No. 21-0042) because they are fines imposed by a local government to punish a violation of law; and

WHEREAS, pursuant to Government Code sections 66013, 66016, and 66016.6, notice of the time and place of the meeting, including a general explanation of the matters to be considered and a statement that required data is available was mailed at least 14 days prior to the meeting to those members of the public who filed a written request with the City, and the City made available information required by sections 66013 and 66016 at least 14 days prior to the meeting; and

WHEREAS, notice of the public hearing at which the fees were considered was published in accordance with Government Code section 66018; and

WHEREAS, on January 8, 2024, the City Council considered the proposed water and wastewater capacity fees and water and wastewater user and penalty fees set forth in the Fee Study, at an open and public hearing, during which all interested persons were given an opportunity to comment.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDWOOD CITY DOES ORDAIN AS FOLLOWS:

Section 1. The above recitals are true and correct, and incorporated herein by reference and each is relied upon independently by the City Council for its adoption of the Ordinance.

Section 2. The Ordinance has been reviewed with respect to applicability of the California Environmental Quality Act ("CEQA") and the CEQA Guidelines. The Ordinance is not project under Public Resources Code Section 21065 and California Environmental Quality Act ("CEQA") Guidelines Section 15378(b)(4) because the Ordinance does not have the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, as the Ordinance creates government funding mechanisms which do not involve any commitment to any specific project. The Ordinance is also exempt from CEQA as there is no possibility for causing a significant effect on the environment, per CEQA Guideline Section 15061(b)(3). No specific water or wastewater projects are associated with this Ordinance. The Ordinance is policy-oriented and would create a funding mechanism for the development

of future water and wastewater facilities. When and if specific water or wastewater projects are developed and proposed for implementation, the environmental impacts of such facilities would be evaluated in accordance with CEQA and City practice.

Section 3. The City Council of the City of Redwood City hereby adopts the following amendments to the City Code by adding the text shown in underline (example) and deleting the text shown in strikeout (~~example~~), as shown below. Wording in brackets ([example]) is informational only and is not to be included in the published ordinance.

A. Article III of Chapter 38 of the City Code is hereby retitled and amended as set forth in **Exhibit B**.

B. Article VII of Chapter 38 of the City Code is hereby amended as set forth in **Exhibit C**.

C. Article IX of Chapter 27 of the City Code is hereby amended as set forth in **Exhibit D**.

D. Article X of Chapter 27 of the City Code is hereby amended as set forth in **Exhibit E**.

Section 4. The City Council hereby accepts and approves the Fee Study setting forth the basis for the water and wastewater capacity fees and water and wastewater user and penalty fees.

Section 5. The City Council hereby adopts the water and wastewater capacity fee schedules set forth in **Exhibit F** attached hereto and incorporated herein by this reference.

Section 6. The water and wastewater capacity fees shall automatically increase starting on July 1, 2025, and in each year thereafter, in accordance with any changes in regional construction costs. Specifically, the amount of the adjustment shall be based on May over May construction cost changes according to the "Construction Cost Index" for the San Francisco Bay Area, as reported monthly in the Engineering News Record.

Section 7. The City Council hereby adopts the water and wastewater user fee schedules set forth in **Exhibit G** attached hereto and incorporated herein by this reference.

Section 8. Commencing on July 1, 2025, and on July 1 of each fiscal year thereafter, the water and wastewater user fees shall be administratively revised and increased annually by a factor equal to the net change in average City salaries and benefits costs for that fiscal year. Such net change is measured by dividing the average budgeted City salary and benefit costs for the fiscal year in which the change is to become effective by the average budgeted City salary and benefit costs for the prior fiscal year. The average budgeted City salary and benefit costs for any fiscal year shall be determined

by dividing the total budgeted salary and benefit costs by the expected total number of full-time equivalent employees for that fiscal year. Notwithstanding the foregoing, in no event shall the annual administrative revisions described in this Section apply to any fees and charges established by other agencies or as otherwise may be prohibited by applicable law.

Section 9. The Fee Study, water and wastewater capacity fees, and water and wastewater user and penalty fees may be amended from time to time by ordinance or resolution of the City Council.

Section 10. Once effective, the water and wastewater capacity fees and water and wastewater user and penalty fees shall be incorporated into the City's Master Fee Schedule.

Section 11. If any provision, section, paragraph, sentence or word of this Ordinance, or the application thereof to any person or circumstance, is rendered or declared invalid by any court of competent jurisdiction, the remaining provisions, sections, paragraphs, sentences or words of this Ordinance, and their application to other persons or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.

Section 12. This Ordinance shall become effective 30 days after the date of its adoption. The fees and charges adopted by this Ordinance shall become effective 60 days after adoption.

Section 13. The City Clerk is directed to cause this Ordinance to be published in the manner required by law.

* * *

ORDINANCE NO. 2533

At a Joint City Council/Successor Agency Board/Public Financing Authority Meeting thereof held on the 22nd day of January 2024 by the following votes:

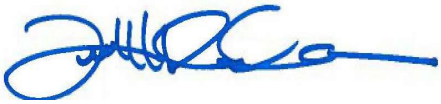
AYES, and in favor of the passage and adoption of the foregoing ordinance:

AYES:	Aguirre, Eakin, Howard, Martinez Saballos, Sturken, Vice Mayor Espinoza-Garnica, and Mayor Gee
NOES:	None
ABSENT:	None
ABSTAINED:	None
RECUSED:	None

Jeff Gee
Mayor of the City of Redwood City

Yessika Castro, CMC, CPMC
City Clerk of Redwood City

I hereby approve the foregoing Ordinance
this 23rd day of January 2024.



Jeff Gee
Mayor of the City of Redwood City

CITY OF REDWOOD CITY

Sewer and Water Capacity Fees & User Fees Study

Final Report – November 20, 2023
Revised December 20, 2023

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CITY OF REDWOOD CITY

1400 Broadway
Redwood City, CA 94063

SEWER AND WATER CAPACITY FEES AND USER FEES STUDY

Revised December 20, 2023

HF&H CONSULTANTS, LLC

590 Ygnacio Valley Rd, Suite 105
Walnut Creek, CA 94596

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December 20, 2023

Terence Kyaw
Public Works Director
City of Redwood City
1400 Broadway
Redwood City, CA 94063

Subject: Sewer and Water Capacity Fees and User Fees Study – Final Report

Dear Terence Kyaw:

HF&H is pleased to submit this report from our study of the City of Redwood City's (City's) sewer and water capacity fees and user fees. The report summarizes the analysis that was conducted to develop the recommended fees.

Thank you for the opportunity to assist the City with this study. We express our appreciation to staff for their support of our analysis.

Please note this report was revised December 20, 2023 to address the City staff comments received after the final report was originally submitted November 20, 2023. The edits made included adding a calculation for sewer and water capacity fees applicable to accessory dwelling units. The edits revised Figures 1-4, 1-5, 3-10, and 4-8 of the final report. The Glossary was updated to provide context based on the revised figures.

Sincerely,

HF&H CONSULTANTS, LLC

Rick Simonson
Senior Vice President

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APPENDIX

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GLOSSARY

ADU – Accessory Dwelling Unit

BOD – Biological Oxygen Demand. The amount of oxygen consumed by bacteria and other microorganisms during decomposition of organic matter in an aerobic environment. Measured as a concentration in milligrams per liter to define the strength of the wastewater discharged to be accounted for during the wastewater treatment process.

City – City of Redwood City and/or the City's Water Enterprise and/or City's Sewer Enterprise

CCF – Hundred cubic feet (see HCF below).

CIP - Capital Improvement Program.

DU – Dwelling Unit, in reference to the number of physical residences served by a water or sewer connection.

EDU – Equivalent Dwelling Unit in reference to the current sewer capacity fee.

EMU – Equivalent Meter Unit.

FOG – Fats, oils, and greases.

FY - Fiscal Year.

GPD - Gallons Per Day.

HCF - Hundred cubic feet of metered water; 748 gallons; a cube of water 4.6 feet on edge. One HCF per month is about 25 gallons per day.

PAYGo - Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources such as bonds or loans.

RCN – Replacement Cost New

RCNLD – Replacement Cost New Less Depreciation

SF – Square Feet

SVCW – Silicon Valley Clean Water, a Joint Powers Authority serving the communities of Belmont, Redwood City, San Carlos, and the West Bay Sanitary District.

TSS – Total Suspended Solids. Suspended particles or solids present in water or wastewater that must be removed through filtration. Measured as a concentration in milligrams per liter to define water quality or the strength of the wastewater discharged.

WT – Water Storage Tank, as in Emergency Water Storage Tank Fee, an existing development fee charged to specific water customers.

ACKNOWLEDGEMENTS

City Council

Jeff Gee, Mayor
Lissette Espinoza-Garnica, Vice Mayor
Alicia C. Aguirre, Councilmember

Kaia Eakin, Councilmember
Diane Howard, Councilmember
Elmer Martinez Saballos, Councilmember
Chris Sturken, Councilmember

City Staff

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Patti Schrotenboer, Senior Civil Engineer

Public Works Services
Terence Kyaw, Public Works Director
Sindy Mulyono-Danre, Assistant Public Works Director/Chief Sustainability and Resiliency Officer
Justin Chapel, Public Works Superintendent, Water Utilities
Robin Kim, Public Works Superintendent, Wastewater
Lily Ng, Management Analyst, Public Works Services

Legal Counsel
Megan Burke, Esq.

HF&H Consultants, LLC
Rick Simonson, Senior Vice President
Gabe Sasser, PE, Project Manager
Alex Santos, Senior Associate

LIMITATIONS

This document was prepared solely for the City of Redwood City in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the City, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.

SEWER AND WATER CAPACITY FEES AND USER FEES STUDY

I. EXECUTIVE SUMMARY

BACKGROUND

The City provides sewer and water services to residential and commercial accounts. These ongoing services are primarily funded by the City's sewer and water rates. Both the sewer and water enterprises receive supplemental revenues from capacity fees and user fees. The City requested HF&H Consultants (HF&H) to review its current schedule of sewer and water capacity fees and user fees. This report summarizes the analysis conducted to update existing fees and to establish new fees.

New development connecting to the City's sewer and water systems is charged one-time capacity fees at the time of connection. Currently, new sewer connections pay a Sewer Capital Facilities Fee[1] and new water connections pay a Capital Facilities Fee and a Capacity Charge. A capacity fee is based on the reasonable cost of existing and future public facilities that are of proportional benefit to new service connections. The reasonable cost is derived based on the value of facilities that provide capacity for growth.

Existing residents and commercial customers pay for the City's provision of water service and sewer collection service according to the City's schedule of sewer and water rates. Existing and prospective customers who require additional office and field services are charged user fees based on the City's adopted schedule found in the City's Master Fee Schedule.

In 2013, the City of Redwood City (City) updated its Sewer System Master Plan to prioritize capacity and rehabilitation improvement projects to be performed as part of its capital improvement program (CIP). The City has recently finished updating its Sanitary Sewer Capacity Master Plan, which is scheduled to be adopted by the City Council on November 27, 2023. The recommendations included in the Sewer Master Plan have been included in this analysis. The City last adopted a Water System Master Plan in 2011 and plans to prepare a Recycled Water Master Plan, estimated for adoption in 2025. Only the approved water CIP projects from the existing Water Master Plan and adopted CIP plans are considered in this analysis. Future water capacity fees will include the costs of developing infrastructure identified in the updated Water Master Plan and the new Recycled Water Master Plan.

The following discussion summarizes HF&H's findings and recommendations.

FINDINGS AND RECOMMENDATIONS

Current Capacity Fees

The City charges a Sewer Capital Facilities Fee to all new sewer connections. Residential (single family and multi family dwellings) connections pay a fixed charge per equivalent dwelling unit (EDU). Commercial customer's Capital Facilities Fee is calculated based on the number of EDUs per account. EDUs are calculated using the ratio of the gross floor area per 2,000 square feet of the building(s) supported by the sewer connection. A minimum of one EDU is charged to all Commercial customers. **Figure 1-1** summarizes the

[1] In addition to the Sewer Capacity Fee, Redwood City customers also pay a Wastewater Treatment Capacity Fee to Silicon Valley Clean Water. This fee is set by Silicon Valley Clean Water and was not analyzed as part of this study.

existing fees. The sewer capacity fees were last increased in 1996 and have not been increased to keep pace with inflationary increases.

Figure 1-1. Current Sewer Capacity Fees

Customer Class	Sewer Capital Facilities Fee
Residential (each DU)	$960
Commercial (per account)	(Gross Floor Area x $960) / 2000 sqft

The City charges all new water connections two separate capacity fees. A Capital Facilities Fee is charged based on the meter size of the new connection and reimburses the City for the costs associated with future capital infrastructure to expand capacity. Also, a Water Capacity Charge is assessed based on the estimated demand the new connection will add to the City's water system and reimburses the City for the costs associated with increasing the supply available and reducing demand for potable water. **Figures 1-2** and **1-3** summarize these existing fees. The City has not increased the Capital Facilities Fee since 1994 and the Water Capacity Charge has not been increased since 2007.

Figure 1-2. Current Water Capital Facilities Fees

Water Meter Size	Existing Capital Facilities Fee
5/8"	$1,787
3/4"	$2,681
1"	$4,468
1-1/2"	$8,935
2"	$14,296
3"	$26,805
4"	$44,675
6" or larger	$89,350

Figure 1-3. Current Water Capacity Charge

Variable	Rate
Net New Demand	$11.58/gpd
x	Attachment Q Water Use[1]
	Capacity Charge Assessed

[1]Attachment Q includes both Indoor and Outdoor water use projections.

Proposed Capacity Fees

Increases to the City's capacity fees are recommended to reflect the current value of capacity provided by the sewer and water systems to new connections. The recommended sewer collection capacity fees are shown in **Figure 1-4**. The recommended water capacity fees consolidate the City's existing practice of

assessing two separate fees. The recommended water capacity fees, graduated by meter capacity, are shown in **Figure 1-5**.

Figure 1-4. Proposed Sewer Collection Capacity Fees

Sewer Customer	Average Flow per DU (gpd)	Proposed Connection Fee	Unit
Single Family residence	128	$3,166	per DU
Multi Family dwelling unit	94	$2,333	per DU
Commercial customers		$3,166	per EDU[1]
Accessory Dwelling Units[2]		$1.78	per SF

[1]Commercial/Industrial customers calculate total EDU by the ratio of estimated volume of wastewater discharged divided by 128 gallons per day.
[2]The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet. ADUs will be charged capacity fees in accordance with Gov. Code. Section 65852.2(f)(5).

Figure 1-5. Proposed Water Capacity Fees

Meter Size	Capacity Fee per EMU	Capacity Ratio	Proposed Capacity Fee
Single Family residence[1]	$5,679	1.00	$5,679
Multi Family/Commercial customers			
5/8" Meters	$5,679	1.00	$5,679
3/4" Meters	$5,679	1.50	$8,519
1" Meters	$5,679	2.50	$14,198
1.5" Meters	$5,679	5.00	$28,396
2" Meters	$5,679	8.00	$45,433
3" Meters	$5,679	21.75	$123,521
4" Meters	$5,679	37.50	$212,966
6" Meters	$5,679	80.00	$454,328
8" Meters	$5,679	140.00	$795,075
10" Meters	$5,679	210.00	$1,192,612
Accessory Dwelling Units[2]			$3.19/square foot

[1]Charge is applicable for all Single Family Residential connections less than or equal to 1".
[2]The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet. ADUs will be charged capacity fees in accordance with Gov. Code. Section 65852.2(f)(5).

Current User Fees

Current user fees for sewer and water service are provided in the Community Development Department and Public Works sections of the City's Master Fee Schedule, effective July 1, 2022. Existing user fees analyzed in this study include all the following entries:

- Wastewater Discharge Permit Fee

- Sewer Lateral Installation Fee
- Water Service Meter Fee(s)
- Water Main Tapping Fee(s)
- After-Hours Water Re-Connection Fee
- Backflow and Well Fee for Initial Registration, Administration, and Record Filing
- Cross Connection Control Inspection Fee
- Cross Connection Control Testing Fee
- Backflow Testing Fee
- Water Service Line Installation Fee(s)

Proposed User Fees

Existing user fees require updating to reflect the City's current cost of providing existing and prospective customers with these additional office and field services. **Figure 1-6** to **Figure 1-10** include the recommended user fees for sewer and water services provided by the City. New user fees are discussed in further detail in Section V.

Figure 1-6. Proposed User Fees for Sewer Services

User Fee	Current Amount	Proposed Amount		Notes
Wastewater Discharge Permit Fee	$300.00	$986.43	Fee	Fee plus actual volume discharged times appropriate sewer commercial volumetric rates by customer class.
Sanitary Sewer Fats, Oils and Grease Fee	New	$450.00	Fee	Per occurrence
User Fee	**Current Amount**	**Proposed Minimum Amount**		**Notes**
Sewer Lateral Installation Fee	$2,500.00	Price as quoted	Fee	Actual cost of City labor, CalTrans equipment rentals, plus any direct materials.
Sewer Discharge Inspection Deposit	New	$5,000.00	Deposit	Actual fee amount will be calculated based on actual costs incurred. Any unused portion of the deposit will be refunded.

Note: City labor hours associated with the sewer lateral installation fee will be charged at a blended hourly rate of $108.11.

Figure 1-7. Comparison of Existing to Proposed User Fees for Water Services (Meters Fees)

User Fee	Current Amount	Proposed Amount	
Water Service Meter Fee			
5/8" - Displacement	$631.00	$803.45	Fee
3/4" - Displacement	$673.00	$833.97	Fee
1" - Displacement	$756.00	$885.85	Fee
1.5" - Displacement	$1,197.00	$1,275.92	Fee
2" - Displacement	$1,738.00	$1,444.10	Fee
1.5" - Turbine	$2,082.00	$1,275.92	Fee
2" - Turbine	$1,738.00	$1,444.10	Fee
3" - Turbine	$2,750.00	$1,455.24	Fee
4" - Turbine	$4,779.00	$1,866.17	Fee
6" - Turbine	$8,225.00	$3,648.32	Fee
8" - Turbine	$12,815.00	$5,189.51	Fee
10" - Turbine	$16,962.00	$6,446.82	Fee
2" - Compound	$2,602.00	$2,553.39	Fee
3" - Compound	$3,310.00	$2,602.78	Fee
4" - Compound	$5,344.00	$3,722.21	Fee
6" - Compound	$9,079.00	$5,056.37	Fee
8" - Compound	$14,945.00	$8,729.37	Fee
10" - Compound	$18,289.00	$9,614.37	Fee
4" - Fire Rated	$13,335.00	$8,235.60	Fee
6" - Fire Rated	$16,527.00	$10,781.60	Fee
8" - Fire Rated	$24,372.00	$16,992.37	Fee
10" - Fire Rated	$32,642.00	$23,551.37	Fee
Dedicated Irrigation Meter Fee	New	$80.46	Fee

Note: dedicated irrigation meter fee is in addition to any of the meter service fees for irrigation services to recover costs for mapping landscaped areas and account administration.

Figure 1-8. Comparison of Existing to Proposed User Fees for Water Services

User Fee	Current Amount	Proposed Amount		Notes
Water Main Tapping Fee				
2" or smaller	$348.00	$506.40	Fee	
4 to 12"	$1,044.00	$1,136.67	Fee	
After-Hours Water Re-connection Fee	$518.00	$251.38	Fee	
Backflow and Well Fee for Initial Registration and Annual Administration/Record Filing	$100.00	$56.80	Fee	
Recycled Water Fill Station Access Card Fee	New	$10.00	Fee	
Recycled Water Fill Station Consumption Charge	New	Equal to the commercial water use charge rate	Fee	The cost is actual volume of recycled water in gallons x (commercial/MF/irrigation water use charge rate divided by 748 gallons).
Construction Meter Deposit	New	$1,500.00	Deposit	
Backflow Tag Fee	New	$6.00	Fee	Per (3) backflow tags
Fire Flow Testing Fee	New	$716.19	Fee	Per test report or actual cost.
Construction Meter Reading Fee	New	$49.45	Fee	Per monthly billing period that customer fails to report construction meter reading.
Failure to Respond to Cross Connection Program Notice Fee	New	$28.40	Fee	
Termination of Water Service for Failure to Test/Inspect Fee	$50.00	$98.89	Fee	
Cut Lock Fee	New	$25.00	Fee	

Note: Current main tapping fees based on hourly rates for specific crew size assumed per main diameter.

Figure 1-9. Comparison of Existing to Proposed User Fees for Water Services (Penalty Fees)

User Fee	Current Amount	Proposed Amount	
Fee for Unauthorized Water Use			
1st offense	New	warning	Fee
2nd offense	New	$1,000	Fee
3rd offense	New	$2,000	Fee
Subsequent offenses	New	$3,000 per day	Fee

Figure 1-10. Comparison of Existing to Proposed User Fees (Actual Cost Services)

User Fee	Current Amount	Proposed Minimum Fee		Hourly Rate	Notes
Cross Connection Control Inspection Fee	$128.00	$49.05	Fee	$98.09	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Cross Connection Control Testing Fee	New	$49.05	Fee	$98.09	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Backflow Testing Fee	$128.00	$49.45	Fee	$98.09	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Water Service Line Installation - < 4"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 4"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 6"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 8"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 10"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Recycled Water Site Annual Inspection Fee	New	$88.11	Fee	$88.11	Minimum fee for first hour. Additional staff time billed according to hourly rate.
Plan, Permit, and Engineering Report Review Fee for Recycled Water	New	$107.28	Fee	$107.28	Actual cost

Implementation

Once the City has adopted updated capacity fees based on the findings of this study, we recommend that the water and wastewater capacity charges shall automatically increase starting on July 1, 2025, and in each year thereafter, in accordance with any changes in regional construction costs. Specifically, the amount of the adjustment shall be based on May over May construction cost changes according to the "Construction Cost Index" for the San Francisco Bay Area, as reported monthly in the Engineering News Record. The City should plan on conducting detailed capacity fee studies approximately every five years in keeping with industry practice, which will reflect other changed conditions, such as capital improvement program assumptions and retired debt service.

Similarly, we recommend the adopted user fees be increased to ensure fees keep pace with the costs the City incurs. Commencing on July 1, 2025, and on July 1 of each fiscal year thereafter, the proposed user fees shall be administratively revised and increased annually by a factor equal to the net change in average City salaries and benefits costs for that fiscal year. Such net change is measured by dividing the average budgeted City salary and benefit costs for the fiscal year in which the change is to become effective by the average budgeted City salary and benefit costs for the prior fiscal year. The average budgeted City salary and benefit costs for any fiscal year shall be determined by dividing the total budgeted salary and benefit costs by the expected total number of full-time equivalent employees for that fiscal year. Notwithstanding the foregoing, in no event shall the annual administrative revisions described apply to any fees and charges established by other agencies or as otherwise may be prohibited by applicable law.

II. INTRODUCTION

CAPACITY FEES

Capacity fees are a type of development impact fee that public agencies may impose as a condition of development under the authority of California Government Code Section 66000 et seq., the Mitigation Fee Act. The purpose of these fees is to ensure that development pays its fair share of the costs associated with providing system capacity. Capacity fees are a one-time charge paid at the time the connection is made. The Act requires that capacity fees be based on the value of facilities in existence at the time a charge is imposed and new public facilities to be acquired or constructed in the future that are of proportional benefit to new development.

The purpose of this report is to document that the conditions have been met to establish that the City's capacity fees are reasonably related to the City's costs of providing capacity in its water and sewer systems for new development.

USER FEES

Existing and prospective customers who require additional and unique office and field services, beyond the services covered by sewer and water rates, are charged user fees according to the City's Master Fee Schedule. Most commonly, user fees recoup the costs of these additional services provided, such as for the installation of a water meter. Such fees account for the costs of materials, supplies, and labor hours of City personnel required to perform the work associated with the fee. Less frequently, user fees require an initial deposit of funds that will be used to pay for actual costs of service, with the user being refunded any unspent revenues from the deposit or billed for any costs above and beyond the deposit The deposit provides the City with a level of reimbursement in the event of a default by the customer, such as a construction meter not being returned. Penalties are the third type of fee and are charged when there is a violation of state or local law to discourage the illegal behavior. The purpose of this report is to document the calculation and justification for each sewer and water user fee administered by the City and to set reasonable penalty fees to detour illegal actions.

A "user fee" is a charge for service provided by a governmental agency to a public customer or group. While user fees are not subject to the requirements of Proposition 218 or the Mitigation Fee Act, they are subject to Proposition 26, which mandates that the fees cannot exceed the City's costs of providing the service or product. Therefore, this report seeks to establish that the City's user fees for sewer and water service are reasonable.

STUDY PROCESS

In 2022, as a teriary effort to the sewer and water rates studies, the City requested HF&H to perform a capacity fees and user fees study to establish new fees for 2024. The City is currently conducting an update of its Sanitary Sewer Capacity Master Plan, which is expected to be adopted on November 27, 2023. Recommendations from the upcoming Sewer Master Plan are included in this analysis. The City plans to adopt a Recycled Water Master Plan, estimated for 2025. Therefore, the scope of recycled water user fees is limited and will be re-visited once the Recycled Water Master Plan has been adopted. However, adopted water capital improvement program (CIP) projects and the projects included in the current Water System Master Plan from 2011 are factored into this study.

The study has two goals. First, the study seeks to ensure the City's capacity fees are recovering development's fair share of the costs of existing facilities and future facilities. Second, the study seeks to update and modify the City's sewer and water user fees. The updated fees will ensure all miscellaneous fees, permits, deposits, and penalties for such utility services not funded through utility rates, will adequately recover the costs the City incures to provide these additional services.

REPORT ORGANIZATION

The report is divided into the following sections: Sewer Collection Capacity Fees, Water Capacity Fees, and User Fees.

A Glossary of technical terms and acronyms is provided following the Table of Contents.

III. SEWER COLLECTION CAPACITY FEES

EXISTING FEES

New customers connecting to the Redwood City sewer system are charged a one-time fee at the time of connection to reimburse current rate payers for costs they incurred to provide capacity in the collection system for future growth. This section updates the City's sewer capacity fees related to the collection system. New customers may be subjected to additional costs to connect that are not covered by the City's capacity fees, such as reimbursement charges and lateral construction costs.

The City's current capacity fees were last updated in 1994. **Figure 3-1** summarizes the current sewer capacity fees for Residential and Commercial customers[2]. Residential (Single Family and Multi-Family) customers pay a flat rate per dwelling unit of $960. Commercial customers pay based on a ratio of the gross floor area of the building per 2,000 feet, as one EDU is equal to 2,000 feet. The minimum capacity fee for Commercial customers is $960.

Figure 3-1. Current Sewer Capacity Fees

Customer Class	Sewer Capital Facilities Fee
Residential (each DU)	$960
Commercial (per account)	(Gross Floor Area x $960) / 2000 sqft

METHODOLOGY

Three steps are required to determine the reasonable costs that can be recovered with capacity fees: (1) facilities that benefit growth must be identified, (2) the cost of those facilities must be derived, and (3) the capacity provided by those facilities must be determined. The approach used in this report to address each of these steps is described below.

Facilities that Benefit Growth

Capacity fees are used to recover growth's fair share of the costs of existing facilities that were funded by rate payers and that provide capacity for growth. Capacity fees can also be used to recover growth's fair share of the costs of future capital improvements that are identified in a facilities master plan or similar capital improvement plan. The combination of the existing and future facilities comprises the facilities that will be needed to serve existing and future customers within the foreseeable planning horizon.

The inventory of the existing collection systems was compiled by the City as of June 30, 2022. The inventory categorizes facilities by description (i.e., sewer lift stations, sewer manholes, and sewer lines, land, and buildings). The inventory also identifies if the facilities were debt funded from bonds that are currently outstanding. Whereas the value of facilities funded on a pay-as-you-go (PAYGo) basis can include the full cost once the facilities are placed in service, debt-funded facilities should be handled differently to ensure that rate payers are reimbursed for their costs (i.e., their cumulative debt service payments) and that new

[2] In addition to the Sewer Capacity Fee, Redwood City customers also pay a Wastewater Treatment Capacity Fee to Silicon Valley Clean Water. This fee is set by Silicon Valley Clean Water and was not analyzed as part of this study.

connections do not pay for both the construction cost and then the subsequent cost of debt service through their rates.

The future capital improvements were developed by the City and constitute PAYGo capital projects that are budgeted for the next five years. These same projects are included in the City's concurrent sewer rate study for FY 2024-25, but the costs of these facilities were reduced in the rate model by the estimated capacity fee revenues that would be collected to fund these projects. Future facilities will provide capacity for growth as well as benefit existing ratepayers by improving reliability and upgrading facilities. Therefore, the value of future facilities will be shared proportionally among both the existing customer base and future development.

The combination of the existing and future facilities represents all infrastructure that will be required to meet demands within the near term. Additional facilities introduced will be included in future updates. There will also be other facilities that are currently projected for future construction that are modified or replaced by other facilities. Again, changes like this can be reflected in future updates to the facility inventory and capacity fees.

Value of Facilities

The determination of reasonable costs begins by determining the value of the facilities. The maximum value, replacement cost new (RCN), is the amount that it would cost the City to construct its facilities today. This value represents the original cost escalated from the construction date based on construction cost inflation. By escalating the value, rate payers are compensated for having constructed capacity for growth, if and when development chooses to connect.

After the RCN value is determined, deductions may be appropriate. The most common deduction is for depreciation, which leads to a replacement cost new less depreciation (RCNLD) value. Depreciation serves as a proxy for the maintenance and appreciation in value that the rate payers are entitled to recover since the facility was constructed; however, it is typically the case that substantial maintenance was deferred. To account for this, it is reasonable to exclude some or all depreciation. The amount of depreciation that should be deducted is subject to judgment. This analysis calculates the RCNLD value by fully depreciating the existing infrastructure value. As such, this analysis provides a conservative valuation of existing facilities.

Capital facilities are typically funded either directly from rate revenue on a PAYGo basis or from borrowed funds such as bonds or loans. When borrowed funds are used, it is reasonable for rate payers to be reimbursed for the debt service they have retired but not for the outstanding debt. Hence, in the case of debt-funded infrastructure, it is appropriate to reduce the value of the existing facilities, represented by RCNLD, by the outstanding debt associated with those facilities.

Contributed capital can be excluded for facilities that do not provide system-wide capacity such as in-tract facilities, which includes customer meters, services, and laterals. In-tract facilities are facilities constructed by developers specifically for the benefit of subdivisions without any additional capacity for other connections. Data is often not available to estimate exactly how much capital was contributed by developers. However, reasonable estimates can be made to minimize how much contributed capital is included in the capacity fee calculation so that double counting is avoided.

The value of projected capital improvements is added to the RCNLD calculated value for the existing facilities to include projects that are in the planning stages. A listing of capital improvement projects for the sewer enterprise is available in Appendix C.

The City has collected past capacity fees for development. The revenues from these fees reimburse the City's rate payers for the additional capacity afforded and have been excluded from the system value that future connections must reimburse through capacity fees

Capacity in Facilities

The capacity of the facilities should correspond to the facilities that are included in determining the value of capacity. The proposed capacity fee is based on two components, the current number of connections served by the City that benefit from existing capacity and the future number of projected connections served by the City that will benefit from the capacity added by the City's Sanitary Sewer Capacity Master Plan. The current volume of annual discharge conveyed by the City is converted to a standard dwelling unit, referred to as an EDU. An EDU represents the average annual wastewater discharged of a single-family residential parcel, 128 gallons per day (GPD), based on the preliminary FY 2024-25 sewer rate study. Multi-family parcels are assumed to discharge less, based on historical data showing these customers discharge 94 GPD. Commercial customers discharging a greater volume would be assigned more than one EDU.

The capacity fee represents the unit cost of capacity, made up of two components, the value of existing capacity and the value of future capacity. The value of the existing capacity unit cost is determined by dividing the value of the facilities by the current number of connections served. In this way, the capacity fee is the average cost paid by today's connections. In order to join the system, new connections need to pay the average cost so that they are at the same level of capital participation as existing connections and thereby have fully reimbursed existing connections so that all connections have borne an equivalent cost. The capacity fee should not be viewed as the cost of a share of the facilities. Paying a capacity fee does not convey an ownership share in the facilities. Paying a capacity fee only provides reimbursement to those who bore the cost of providing capacity for future connections.

The value of the future capacity is determined by dividing the value of the future facilities that will provide further capacity by the combined sum of the existing capacity and the future capacity. All customers, both existing and future, will benefit from the extensions made to the system to support greater capacity. Existing customers will fund construction of future facilities through sewer rates designed to meet capital project needs. In turn, sewer rates will be offset by capacity fee revenues collected from development to reduce the amount of ratepayer-funding needed. Therefore, both future and existing customers share the cost of these future facilities identified by the Sewer Master Plan.

CALCULATION OF PROPOSED FEES

Facilities included in Calculation

Capacity fees are used to recover growth's fair share of the costs of existing facilities that were funded by ratepayers and that provide capacity for growth. Growth can occur anywhere within the service area. Hence, the facilities required to serve the City's current customers are the same facilities that provide service for growth.

The capacity fee also includes projected capital improvements that benefit growth over the next five years. Those future facilities are included with the existing facilities because five years is the typical period for which capacity fees are set before another update should be conducted.

Figure 3-2 summarizes the current and planned facilities that are included in the capacity fee calculation.

Figure 3-2. Facility Costs Recovered by Capacity Fees

Type of Facility
Land
Buildings
Lift Stations
Pipelines
Valves & Controls
Manholes
Miscellaneous Improvements
Other Equipment

Value of Facilities

Figure 3-3 summarizes the various assets that comprise the City's wastewater system value. The City's existing wastewater system was valued by using the City's fixed asset listing and escalating the original construction costs to current year costs using the Engineering News Record Construction Cost Index as of June 2023. Depreciation for each asset group category has been provided by the City, based on the age and useful life of the type of facility, for purposes of calculating RCNLD. In addition, the City provided direction for which assets to exclude from the evaluation due to construction being in progress, previously purchased assets that have been retired, or assets that were developer contributions. The fixed asset listing is available in Appendix A. All outstanding debt for which the City's sewer fund is responsible is due to the City's share of debt issuance made by Silicon Valley Clean Water (SVCW) for purposes of wastewater treatment. Thus, there are no existing assets in the City's collection system that have been funded with existing debt that must be excluded from the analysis associated with the sewer collection system capacity fee. **Figure 3-4** provides a summary of the value of the facilities, including the existing facilities and the future facilities included in the Sewer Master Plan, with an estimated cost of $42,734,000.

Figure 3-3. Existing Sewer Collection System Value

Assets	Value
CIP	$45,533,023
Fixed Assets	$75,442,449
(Less) Developer Contributions	($438,465)
(Less) Capacity Fee Revenues in Reserve	($161,009)
(Less) Outstanding Debt	$0
Investment in SVCW	$0
Existing System Value	**$120,375,999**

Figure 3-4. Value of the Sewer Facilities

Sewer	Value
Existing System Value	$120,375,999
Master Plan Capital Projects	$42,734,000
Existing and Future System Value	**$163,109,999**

Capacity of Facilities

The capacity in the City's wastewater system is governed by its collection system capacity. The existing connections were factored into the collection system capacity to determine the total number of equivalent dwelling units (EDUs) the system currently provides services to. For our analysis, we relied on 128 GPD as the capacity required per EDU, as shown in **Figure 3-5**. Metered water readings for FY 2021-22 and FY 2022-23 were used to estimate the amount of capacity served by the existing collection system. Wastewater flows for Single Family and Multi Family customers were determined using annualized winter water use (i.e. the lowest metered volume month extrapolated to twelve months). Commercial wastewater flows were determined by applying the return-to-sewer factors applied in the sewer rates study to the average annual flow per customer. Converting the existing capacity of wastewater flow to a daily figure and dividing the existing capacity of each customer class by the unit discharge of 128 GPD yielded the total number of EDUs. **Figure 3-5** provides the calculation of capacity each customer class requires.

Figure 3-5. Existing Sewer Collection Capacity Served

Customer Class	WW Flow (hcf)	EDUs
Inside City		
Single-Family	971,797	15,559
Multi-Family	663,176	10,618
Commercial Class A	517	8
Commercial Class B	71,340	1,142
Commercial Class C	253,802	4,064
Commercial Class D	4,494	72
Commercial Class E	31,809	509
Contract Sewer Agencies		
Emerald Lake Heights		
Single-Family	95,437	1,528
Commercial Class B	1,106	18
Oak Knoll		
Single-Family	8,432	135
Commercial Class B	537	9
Kensington Square	4,622	74
Edgewood	937	15
Fair Oaks	629,664	10,081
Town of Wood Side	10,593	170
Total	2,748,260	44,001
	HCF	EDUs

Because the five-year budgeted plan of CIP projects is included in the value of the facilities, the analysis estimates the capacity served by the City over the next five years, as shown in **Figure 3-6**. Growth was estimated based on the population projections found in the City's 2020 Urban Water Management Plan. This projected level of capacity will be used to determine the unit value of existing capacity.

Figure 3-6. Estimated Sewer Collection Capacity Served after 5 Years

Sewer System Capacity	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Existing Capacity (EDU)	44,001	44,372	44,746	45,123	45,503
Annual Growth (EMU)	371	374	377	380	383
Existing and Future Capacity	**44,372**	**44,746**	**45,123**	**45,503**	**45,886**

Facilities added as a result of the Sewer Master Plan are calculated to add 4,200,000 GPD in additional capacity. Using the capacity per EDU previously specified, this equates to 32,811 EDU of additional capacity, as shown in **Figure 3-7**. The summation of the capacity from existing facilities and capacity added from future facilities is determined in **Figure 3-8**.

Figure 3-7. Estimated Sewer Collection Capacity Added by Sewer Master Plan

Master Plan EDU Projections	
Dry Weather Capacity Added (gpd)	4,200,000
Capacity per EDU (gpd)	128
Total EDUs	**32,811**

Figure 3-8. Total Future Sewer Collection Capacity

Capacity	Units
Existing & Future Capacity	45,886
Master Plan Estimated Capacity	32,811
Total	**78,697**

Capacity Fees

The value of the facilities in **Figure 3-4** serves as the basis for the capacity fee. The unit capacity fee is determined by dividing the values in **Figure 3-4** by the total EDUs shown in **Figure 3-6** and **Figure 3-8**. The resulting capacity fee is shown below. The resulting capacity fee of $3,166 comprises the unit value of capacity of the existing facilities and the unit value of capacity of the facilities added via the Sewer Master Plan. Dividing the Sewer Master Plan project costs by the total volume of future estimated capacity in **Figure 3-8**, rather than the sewer capacity from **Figure 3-7**, yields a more conservative calculation. The City sewer system will benefit from the additional capacity provided by the Master Plan projects. The capacity fees per dwelling unit for multi-family dwelling units would be reduced by 26% to reflect the cost-of-service analysis, which assumes these non-single family residential parcels discharge only 74% of the typical volume of a single-family residential parcel. **Figure 3-9** summarizes the calculation value for the proposed capacity fees. **Figure 3-10** lists the proposed capacity fees by sewer customer type.

The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet, provided by the City, based on the County Assessor's data. ADUs will be charged capacity fees in accordance with Government Code. Section 65852.2(f)(5).

Figure 3-9. Capacity Fee Calculation

Sewer System	Value
System Value	$120,375,999
Existing & future (EDU)	45,886
Value per EDU	**$2,623**
Dry Weather Capacity Added (gpd)	4,200,000
Capacity per EDU (gpd)	128
Master Plan Estimated (EDU)	32,811
Existing & Future (EDU)	45,886
Total Future EDUs	78,697
Master Plan Capital Projects	$42,734,000
Total Future EDUs	78,697
Value per EDU	**$543**
Total Value per EDU	**$3,166**

Figure 3-10. Proposed Sewer Collection Capacity Fees

Sewer Customer	Average Flow per DU (gpd)	Proposed Connection Fee	Unit
Single Family residence	128	$3,166	per DU
Multi Family dwelling unit	94	$2,333	per DU
Commercial customers		$3,166	per EDU[1]
Accessory Dwelling Units[2]		$1.78	per SF

[1]Commercial/Industrial customers calculate total EDU by the ratio of estimated volume of wastewater discharged divided by 128 gallons per day.
[2]The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet. ADUs will be charged capacity fees in accordance with Gov. Code. Section 65852.2(f)(5).

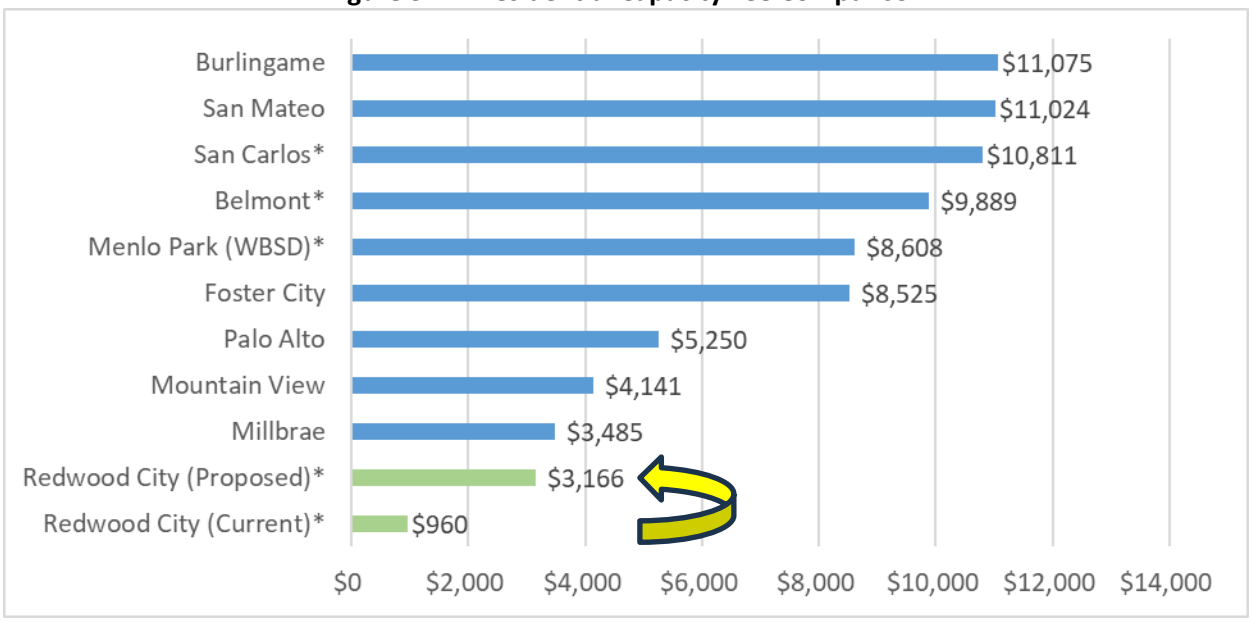
Implementation

Once the City has adopted updated capacity fees based on the findings of this study, we recommend that the sewer capacity charges shall automatically increase starting on July 1, 2025, and in each year thereafter, in accordance with any changes in regional construction costs. Specifically, the amount of the adjustment shall be based on May over May construction cost changes according to the "Construction Cost Index" for the San Francisco Bay Area, as reported monthly in the Engineering News Record. The City should plan on conducting detailed capacity fee studies approximately every five years in keeping with industry practice, which will reflect other changed conditions, such as capital improvement program assumptions and retired debt service.

CAPACITY FEE COMPARISON

Figure 3-11 compares the City's existing and proposed capacity fees with other neighboring agencies. We have compared the City's proposed single-family residential capacity fee per EDU.

Figure 3-11. Residential Capacity Fee Comparison



*SVCW members capacity fees exclude treatment capacity fees paid to SVCW.

The City's current capacity fees are lower than all neighboring agencies that were surveyed. When the treatment capacity fee of $2,135.70 is added to the existing total, the City's fees remain in the lowest half of fees charged. Thus, with the proposed increase to the existing capacity fees and treatment capacity fee, the City's fees would remain less than Foster City.

While reviewing the comparison above, consider there are multiple factors that can lead to differences in capacity fees such as the size of the agency, when the capacity fee was updated last, and whether the capacity fee includes existing facilities, future facilities, or both. Agencies also have the discretion to set their capacity fees lower than the calculated amount as a means of balancing the recovery of growth-related costs between capacity fees and rates or to encourage development. These differences should be considered as the City compares the proposed capacity fees with neighboring agencies.

Figure 3-12 provides a tabular comparison of the capacity fees per customer type and jurisdiction. This analysis allows for comparison of fees charged to agencies for larger developments and commercial customers whose capacity needs exceed what is typically provided to a single-family residential customer. While the City's current and proposed fees may be based on flow relative to one EDU, other jurisdictions fees are set according to the size of the sewer lateral served, size of the building supported by the account, or the assumed strength of the customer's effluent.

Figure 3-12. Survey of Neighboring Agency Sewer Capacity Fees

Customer Type	Redwood City Proposed	Palo Alto	Millbrae	WBSD	Belmont	San Carlos	Foster City
Single Family Connection	$5,302	$5,250	$3,485	$10,744	$12,025	$12,947	$8,525
Multi-Family Connection	$3,757	$10,500	$2,439	$10,032	$13,449	$6,424	$5,328
Non-Residential	$5,302	$10,500	$3,485	$7,650	$14,161	$9,419	$8,525

Notes: All SVCW members (Redwood City, West Bay Sanitary District, Belmont, and San Carlos) include treatment capacity fees paid to SVCW: $2,135.70 per DU for Single Family, $1,423.80 per DU for Multi-Family, and a minimum of $2,135.70 per EDU for Non-Residential customers.

1. Unless specified, fees assume 128 gpd of wastewater flow.
2. All Single Family and Multi-Family fees shown are per dwelling unit.
3. Palo Alto fees are set based on the size of the sewer lateral and water meter served. A 4" lateral is assumed for all rates shown. The Single Family connection assumes a 5/8" water meter and the Multi-Family and Commercial connections assume a 1" water meter.
4. Millbrae Non-Residential fees assume 200 gpd and wastewater strengths of 250 TSS and 125 BOD.
5. Belmont capacity fees assume 270 gpd per EDU.
6. San Carlos Non-Residential fees are calculated based on $56.90/gpd.
7. Foster City Non-Residential fees assume medium strength. One EDU is equal to 200 gpd.

IV. WATER CAPACITY FEES

EXISTING FEES

New customers connecting to the Redwood City water system are charged two one-time fees at the time of connection to reimburse current rate payers for costs they have and will incur to provide capacity for future growth. This section updates the City's water capacity fees. New customers may be subjected to additional costs to connect that are not covered by the City's capacity fees, such as reimbursement charges and water meter installations.

The City's current capacity fees were last studied in 2007. **Figure 4-1** and **Figure 4-2** summarize the current capacity fees for all customers. All customers pay a graduated rate per meter size for the Capital Facilities Fee. However, the Water Capacity Charge is subject to the net new demand required by the customer joining the system. The City relies on Attachment Q to estimate Indoor and Outdoor (i.e. landscaping) water use needs by customer type. All new demand is charged at a rate of $11.58 per gallon per day.

Figure 4-1. Current Water Capital Facilities Fees

Water Meter Size	Existing Capital Facilities Fee
5/8"	$1,787
3/4"	$2,681
1"	$4,468
1-1/2"	$8,935
2"	$14,296
3"	$26,805
4"	$44,675
6" or larger	$89,350

Figure 4-2. Current Water Capacity Charge

Variable	Rate
Net New Demand	$11.58/gpd
x	Attachment Q Water Use[1]
	Capacity Charge Assessed

[1]Attachment Q includes both Indoor and Outdoor water use projections.

METHODOLOGY

The methodology to determine water capacity fees follows the same three steps as sewer capacity fees to determine the reasonable costs that can be recovered with capacity fees: (1) facilities that benefit growth must be identified, (2) the cost of those facilities must be derived, and (3) the capacity provided

by those facilities must be determined. The approach used in this report to address each of these steps is described below.

Facilities that Benefit Growth

As stated in the previous section, capacity fees are used to recover growth's fair share of the costs of existing facilities that were funded by rate payers and that provide capacity for growth. Additionally, capacity fees can also be used to recover growth's fair share of the costs of future capital improvements that are identified in a facilities master plan or similar capital improvement plan. The combination of the existing and future facilities comprises the facilities that will be needed to serve existing and future customers within the foreseeable planning horizon.

The inventory of the existing facilities was compiled by the City as of June 30, 2022. The inventory categorizes facilities by description (i.e., reservoir, pumping plant, water treatment plant, land, equipment & vehicles, and buildings). Pipes less than 8" in diameter have been excluded as these smaller pipes are not assumed to provide capacity to the overall system. Instead, these smaller pipes provide localized benefit to a specific subset of customers for purposes of water distribution.

The capital projects included in the City's five year CIP and projects included in the 2011 Water System Master Plan were identified by the City and constitute PAYGo capital projects that are budgeted for the next five years and included in the current FY 2023-24 water rates study. A listing of capital improvement projects for the water enterprise is available in Appendix C. Note, the costs included in the rate study were decreased based on the estimated revenues the City would collect from the updated capacity fees. Future facilities will provide capacity for growth as well as benefit existing ratepayers by improving reliability and upgrading facilities. There are currently no plans for constructing facilities that shall be used exclusively by growth.

The combination of the existing and future facilities represents all infrastructure that will be required to meet demands within the near term. Additional facilities introduced will be included in future updates. There will also be other facilities that are currently projected for future construction that are modified or replaced by other facilities. Again, changes like this can be reflected in future updates to the facility inventory.

Value of Facilities

Similar to the value of the sewer capacity fees, the value of facilities relies on the RCNLD calculated value for the existing facilities, and the value of PAYGo capital projects that are budgeted for the next five years. From this sum, the City's outstanding debt service and revenues collected for past development fees are subtracted. Rather than exclude individual assets funded via debt service, the remaining debt service as of July 2023 is subtracted to account for the three refunding bonds the City issued in 2013, 2015, and 2017. The City has collected past fees for development, including the emergency water storage tank fees. The revenues from these fees reimburse the City's rate payers for the additional capacity afforded and have been excluded from the system value that future connections must reimburse through capacity fees.

Capacity in Facilities

The capacity of the facilities should correspond to the facilities that are included in determining the value of capacity. The proposed capacity fee is based on the current number of connections provided by the City. The current number of water meters serviced by the City is converted to an equivalent meter unit

(EMU). An EMU represents the capacity of the smallest meter size available, a 5/8" meter. Larger meters equal more EMUs depending on how their rated capacities compare with one EMU.

The capacity fee represents the unit cost of capacity which is determined by dividing the value of the facilities by the current number of connections served. In this way, the capacity fee is the average cost paid by today's connections. In order to join the system, new connections need to pay the average cost so that they are at the same level of capital participation as existing connections and thereby have fully reimbursed existing connections so that all connections have borne an equivalent cost. The capacity fee should not be viewed as the cost of a share of the facilities. Paying a capacity fee does not convey an ownership share in the facilities. Paying a capacity fee only provides reimbursement to those who bore the cost of providing capacity for future connections.

CALCULATION OF PROPOSED FEES

Facilities included in Calculation

Capacity fees are used to recover growth's fair share of the costs of existing and future facilities that were or will be funded by rate revenues from current customers and that provide capacity for growth. Growth can occur anywhere within the service area. Hence, the facilities required to serve the City's current customers are the same facilities that provide service for growth.

The capacity fee also includes projected capital improvements that benefit growth over the next five years. Those future facilities are included with the existing facilities because five years is the typical period for which capacity fees are set before another update should be conducted.

Figure 4-3 summarizes the current and planned facilities that are included in the capacity fee calculation.

Figure 4-3. Facility Costs Recovered by Capacity Fees

Type of Facility
Land
Buildings
Pumping Plants
Recycled Water Facilities
Valves & Controls
Reservoir
Piplelines
Telemetry System
Other Equipment

Value of Facilities

Figure 4-4 summarizes the City's water facility values. The City's existing water system was valued by using the City's fixed asset listing and escalating the original construction costs to current year costs using the Engineering News Record Construction Cost Index as of June 2023. Depreciation for each asset group category has been provided by the City for purposes of calculating RCNLD. In addition, the City provided direction for which assets to exclude from the evaluation due to construction being in progress, previously

purchased assets that have been retired, or assets that were developer contributions. The fixed asset listing is available in Appendix B. Outstanding debt service as of July 2023 has been excluded to account for any assets funded via existing debt service. Previous connection fee revenues and development fee revenues (e.g. the Emergency Water Storage Tank Fees) collected have been excluded to account for the previous reimbursement development provided to existing rate payers.

Figure 4-4. Value of Facilities

Assets	Value
CIP	$116,986,094
Fixed Assets	$177,832,845
(Less) Outstanding Debt	($41,670,519)
(Less) Connection Fee Revenues in Reserve	($468,640)
(Less) Previous Emerg WT Fees	($8,374,248)
System Value	**$244,305,532**

Capacity of Facilities

The capacity of the water system was calculated by combining the existing customers served and future growth projections. The existing connections were factored into the water system capacity to determine the total number of EMUs the system is providing service to. **Figure 4-5** shows the calculation of the current capacity served. Note, all existing Single Family Residential connections were assumed to be 5/8" meters, to align with the City's practice of assessing 1 EMU per Single Family Residential connection if the applicant's meter size is less than or equal to 1". Because the five-year budgeted plan of CIP projects is included in the value of the facilities, the analysis estimates the capacity served by the City over the next five years, as shown in **Figure 4-6**. Growth was estimated based on the population projections and demand projections found in the City's 2020 Urban Water Management Plan, which accounts for increases to both commercial and residential customer services. This projected level of total capacity for the five year planning period, 43,018 EMUs, will be used to determine the unit value of capacity.

Figure 4-5. Existing Water System Capacity Served

Applicable Service Size	Capacity Multiplier	EMUs
5/8" Meters	1.00	21,156
3/4" Meters	1.50	281
1" Meters	2.50	1,870
1.5" Meters	5.00	2,250
2" Meters	8.00	6,352
3" Meters	21.75	4,850
4" Meters	37.50	2,663
6" Meters	80.00	640
8" Meters	140.00	560
10" Meters	210.00	630
	Total EMUs	**41,251**

[1]EMUs for 5/8" meters include 19,361 Single-Family accounts.

Figure 4-6. Capacity in Water Facilities - EMUs

Water System Capacity	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Existing Capacity (EMU)	41,251	41,758	42,271	42,629	42,823
Annual Growth (EMU)	507	513	357	194	195
Total Capacity	**41,758**	**42,271**	**42,629**	**42,823**	**43,018**

Capacity Fees

The value of the facilities in **Figure 4-4** serves as the basis for the capacity fee. The unit capacity fee is determined by dividing the value in **Figure 4-4** by the total EMUs shown in **Figure 4-6**. The resulting capacity fee is shown below.

Figure 4-7. Capacity Fee Calculation

Capacity Fee	RCNLD
System Value	$244,305,532
EMUs	43,018
Value per EMU	**$5,679**

The capacity fee for each meter size, regardless of customer class (e.g., Single Family, Multi Family, Commercial), is derived by multiplying the $5,679 unit cost per EMU times the capacity ratio of each meter size. The resulting capacity fees are shown in **Figure 4-8**.

The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet, provided by the City, based on the County Assessor's data. ADUs will be charged capacity fees in accordance with Government Code. Section 65852.2(f)(5).

Figure 4-8. Proposed Water Capacity Fees

Meter Size	Capacity Fee per EMU	Capacity Ratio	Proposed Capacity Fee
Single Family residence[1]	$5,679	1.00	$5,679
Multi Family/Commercial customers			
5/8" Meters	$5,679	1.00	$5,679
3/4" Meters	$5,679	1.50	$8,519
1" Meters	$5,679	2.50	$14,198
1.5" Meters	$5,679	5.00	$28,396
2" Meters	$5,679	8.00	$45,433
3" Meters	$5,679	21.75	$123,521
4" Meters	$5,679	37.50	$212,966
6" Meters	$5,679	80.00	$454,328
8" Meters	$5,679	140.00	$795,075
10" Meters	$5,679	210.00	$1,192,612
Accessory Dwelling Units[2]			$3.19/square foot

[1]Charge is applicable for all Single Family Residential connections less than or equal to 1".
[2]The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet. ADUs will be charged capacity fees in accordance with Gov. Code. Section 65852.2(f)(5).

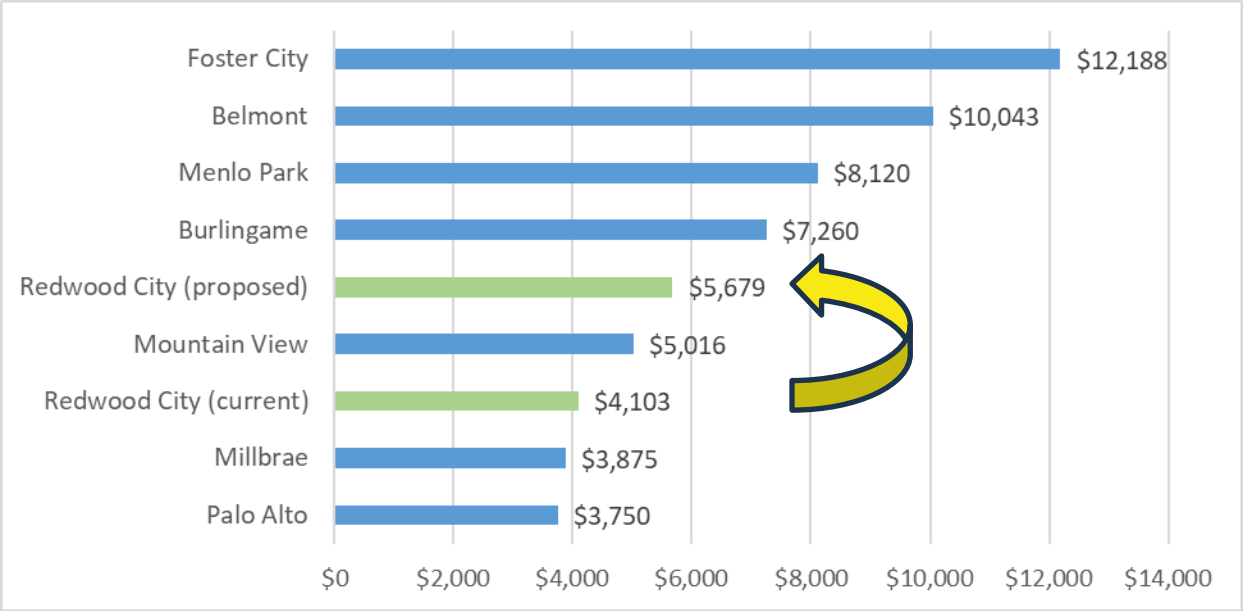
Implementation

Once the City has adopted updated capacity fees based on the findings of this study, we recommend that the water capacity charges shall automatically increase starting on July 1, 2025, and in each year thereafter, in accordance with any changes in regional construction costs. Specifically, the amount of the adjustment shall be based on May over May construction cost changes according to the "Construction Cost Index" for the San Francisco Bay Area, as reported monthly in the Engineering News Record. The City should plan on conducting detailed capacity fee studies approximately every five years in keeping with industry practice, which will reflect other changed conditions, such as capital improvement program assumptions and retired debt service.

WATER CAPACITY FEE COMPARISON

Figure 4-9 compares the City's existing and proposed capacity fees with other neighboring agencies. We have compared the City's proposed single-family residential fees for 5/8" meter connections, or the smallest available meter size available in other agencies.

Figure 4-9. Comparison of Capacity Fees (5/8" Meter)



The City's current capacity fees are lower than most of all neighboring agencies that were surveyed. Increasing the existing capacity fees to the recommended amount would place the City's fees in the middle of the fees surveyed. Further, there would still be a wide margin between the City's proposed fee and the highest capacity fees of agencies compared.

While reviewing the comparison above, consider there are multiple factors that can lead to differences in capacity fees such as the size of the agency, when the capacity fee was updated last, and whether the capacity fee includes existing facilities, future facilities, or both. Agencies also have the discretion to set their capacity fees lower than the calculated amount as a means of balancing the recovery of growth-related costs between capacity fees and rates or to encourage development. These differences should be considered as the City compares the proposed capacity fees with neighboring agencies.

Figure 4-10 provides a tabular comparison of the capacity fees per meter size and jurisdiction. This analysis allows for comparison of fees charged to agencies for larger developments and commercial customers whose capacity needs exceed what is typically provided to a single-family residential customer.

Figure 4-10. Survey of Neighboring Agency Water Capacity Fees

Meter Size	Redwood City Proposed	Palo Alto	Millbrae	Menlo Park	Belmont	Foster City
5/8" Meters	$5,679	$3,750	N/A	$8,120	$10,043	N/A
3/4" Meters	$8,519	$3,750	$3,875	$8,120	$10,043	$12,188
1" Meters	$14,198	$6,250	$6,455	$13,534	$16,738	$20,355
1.5" Meters	$28,396	$18,850	$12,291	$27,069	$33,476	$48,753
2" Meters	$45,433	$31,250	$20,671	$43,310	$53,561	$64,965
3" Meters	$123,521	varies[1]	$38,751	$86,621	$100,427	$142,240
4" Meters	$212,966	varies[1]	$64,582	$135,345	$167,379	$255,959
6" Meters	$454,328	varies[1]	$129,174	$270,690	$334,758	$568,837
8" Meters	$795,075	varies[1]	$206,677	$433,103	$535,613	$975,081
10" Meters	$1,192,612	varies[1]	N/A	$622,586	N/A	N/A

[1] Palo Alto customers with a meter greater than or equal to 3" pay based on a rate of $125 per fixture unit of the building or buildings serviced by the meter.

V. USER FEES AND PENALTY FEES

EXISTING FEES

Current user fees for sewer and water service are provided in the Community Development Department and Public Works sections of the City's Master Fee Schedule, effective July 1, 2022. Existing user fees analyzed in this study include all the following entries, including the purpose for collection of the fee:

Wastewater Discharge Permit Fee – A permit is required for any user directly discharging to the City's collection system, including temporary discharges as part of construction projects. The fee accounts for time the City will spend to process the permit, and wastewater treatment and disposal costs associated with the discharge will also be assessed as part of this fee.

Sewer Lateral Installation Fee – If no sewer lateral exists between the sewerage facilities and the property line of the adjacent premises to be served thereby, a sewer lateral shall be installed by the City or by the owner of the premises under terms and conditions specified by the City Engineer, upon approval of an application therefore by the City Engineer for the installation of such lateral. If the work is performed by the City, this fee reimburses the City for costs incurred to install the sewer lateral, including labor, equipment, and material costs.

Water Service Line Installation Fee(s) – If no water service line exists between the City water distribution system or an existing water service line is to be increased in size a water service line shall be installed by the City or by the owner of the premises under terms and conditions specified by the City Engineer, upon approval of an application therefore by the City Engineer for the installation of such water service. This fee reimburses the City for costs incurred to install the water service, including labor, equipment, and material costs. This fee shall apply to both potable and recycled water service installations.

Water Service Meter Fee(s) – The fee reimburses the City for the cost to install a water service meter. The fee is charged with every application for installation of a water service meter. The charge for a manifold meter installation shall be the sum of the applicable individual charges for each such installation. The fees range depending on the size and type of meter installed.

Water Main Tapping Fee(s) – The fee reimburses the City for the cost of tapping work required to connect a water service line to a water main. The City performs all tapping work required to connect a water service line to a water main. The fee is charged with every application for such tapping work. The fees range depending on the size of the tap and the corresponding size of the crew required for installation.

After-Hours Water Re-Connection Fee – The fee for direct costs associated with reconnecting or turning on water meters or classes of water meters during non-business hours of the Public Works Department shall be in an amount set by resolution or ordinance of the City Council. When after-hour reconnection or turn-on is requested by a user, this fee shall be charged and collected on the user's next ensuing utility bill.

Backflow and Well Fee for Registration and Annual Administration and Record Filing – The customer-user owning and/or occupying property on which backflow preventers are required to be installed shall pay to the City this fee at the time the backflow preventer is first registered with the City and again each year with the filing of the test results or required annual inspection.

Cross Connection Control Inspection Fee – The fee reimburses the City for the cost of inspections required under the Cross Connection Control Ordinance. Specifically, The customer-user shall pay an Inspection Fee when the City deems it appropriate to inspect the property of a customer-user in order to carry out the purposes of the Cross Connection Control Ordinance, including but not limited to inspecting any property which has a water connection to the City's water supply to determine whether there exists on such property an unreported or unregistered Auxiliary Water Supply or any other condition which requires installation of backflow preventers or inspection of non-operational wells.

Backflow Testing Fee – This fee reimburses the City for the cost to test backflow prevention assemblies. The fee is charged when the City provides backflow preventer testing services and to persons availing themselves of such services.

Termination of Water Service for Failure to Test/Inspect Fee – This fee shall be charged to the customer-user at the time City staff has been dispatched to shut-off water service following failure to respond to notices from the City in compliance with the provisions of the Cross Connection Control Ordinance.

METHODOLOGY

The hourly rates for these fees and charges include the direct salaries and benefits of employees plus overhead costs. Overhead costs include personnel costs that support City operations such as administration, management, and customer service. Overhead costs also include non-personnel overhead associated with functions that support the City's operations and overhead staff. The sum of the direct and overhead costs comprises the fully burdened hourly rates.

Figure 5-1. Fully Burdened Hourly Rates

Position	Fully Burdened Hourly Rate
Lead Public Works Maintanence Worker - Wastewater	$94.98
Public Works Maint Worker II - Wastewater	$89.46
Public Works Maint Worker III/Equip Oper- Wastewater	$88.12
Water Resources Technician	$88.11
Lead Water Resources Technician	$98.89
Lead Water Resources Technician (Wells, Backflow Devices)[1]	$56.80
Water Resources Specialist	$107.28
Public Works Maint Worker II	$126.60
PW Maint III/Equipment Operator	$140.05
Lead Public Wks Maint Worker	$125.69
Assistant Engineer I/II	$178.56
Senior Engineering Technician	$171.35
Permits Technician	$174.77
Comm. Dev. Manager - Engineering	$277.23
Senior Civil Engineer	$224.75
Associate Engineer	$203.36
Administrative Clerk II	$64.48

[1]The value for Lead Water Resource Technician (Wells, Backflow Devices) is based on the number of devices (2,716) in operation. The rate is set per device instead of per hour.

The user fees calculated are the summation of the personnel costs and material costs. The personnel costs are the product of the fully burdened hourly rates for the City staff positions required to perform the service associated with each fee. The City provided the estimates of time spent by each staff position to calculate the personnel costs, as well as the material costs for each fee. Penalty fees, as opposed to user fees, are set at a reasonable amount to deter the illegal activity and are based on a comparison of neighboring agency practice who administer similar fees.

PROPOSED FEES

Proposed fees were calculated using the fully burdened hourly rates shown in **Figure 5-1** and using the calculations shown in Appendix D. See the Fee Comparison section for the proposed amounts, including **Figure 5-2** through **Figure 5-6**.

NEW FEES

New user fees analyzed in this study include all the following entries, including the purpose for collection of the fee:

Penalty Fees

Penalty Fee for Unauthorized Water Use – Persons including individuals, businesses, property owners, and City issued permit holders, found using water from a fire hydrant, water meters, and other City infrastructure and appurtenances without a hydrant construction meter issued by the City shall be subject to penalty fees for repeated offenses of California Penal Code 498.

User Fees

Sanitary Sewer Fats, Oils, and Grease Fee – This fee reimburses the City for staff time to address non-compliance with the fats, oils, and grease (FOG) provisions of Redwood City Municipal Code Article VIII and is assessed per occurrence.

Sewer Discharge Inspection Deposit – A permit is required for industrial users and any user directly discharging to the City's collection system, including temporary discharges as part of construction projects . The deposit accounts for time the City will spend to test and monitor the wastewater to ensure compliance with Silicon Valley Clean Water's treatment system guidelines. However, the actual cost for staff time will be billed to the applicant and if actual costs are less than the deposit, the applicant will be refunded the unused revenues.

Dedicated Irrigation Meter Fee – This fee recoups the cost for City staff to map landscaped areas and for utility account administration for a separate irrigation water service meter.

Construction Meter Reading Fee – The customer reports readings of the construction meter to the City every thirty days for billing purposes. If the customer fails to do so, the customer shall pay to the City a Construction Meter Reading Fee which reimburses the costs incurred for City staff to contact the customer in order to obtain a reading for monthly billing.

Failure to Respond to Cross Connection Program Notice Fee – Redwood City Municipal Code Section 38.40 requires customers to test backflow assemblies. Customer-users who fail to respond to the first and second notice for testing or inspection from the City are subject to a fee to recover the cost for time spent by the City to bring the customer into compliance with the provisions of the Municipal Code.

Fire Flow Testing Fee – This fee recoups the cost of City staff time and water expensed to test for adequate fire flow to ensure the customer's system meets water system demand requirements. Complex requests that would likely exceed normal staff time and water may be charged actual cost instead.

Cut Lock Fee – The fee reimburses the City for the cost of the lock. Water services that do not have an active customer or account, have been shut off due to delinquency, or because of some other violation of City code or resolution will be shut off and locked at the meter. Persons found to have cut locks will be charged this fee.

Recycled Water Fill Station Access Card Fee – The fee reimburses the City for the staff time and materials costs to provide an access card for a user. Residential customers of the City electing to participate in the Residential Recycled Water Fill Station Program shall pay a fee to receive a Recycled Water Fill Station Access Card.

Recycled Water Fill Station Consumption Charge – Participants of the Residential Recycled Water Fill Station Program will pay the Recycled Water Fill Stations Consumption Charge for each gallon of recycled

water taken from the fill station. These fees and charges will be added as separate line item charges on the customer's utility bill. The charge will be equal to the commercial water use charge rate. The cost will be the actual volume of recycled water in gallons x (commercial/MF/irrigation water use charge rate divided by 748 gallons).

Construction Meter Deposit – Temporary service for construction purposes shall be furnished at fire hydrants through hydrant construction meters supplied by the City. As security for returning City property in similar working conditions as when issued and for the payment of the service and use charges the customer shall, upon receipt of a meter, deposit with the City a Construction Meter Deposit for each hydrant construction meter. Immediately upon completion of the construction project, the customer shall return all meters to the City and the City shall refund the deposits less all charges.

Backflow Tag Fee – The fee reimburses the City for the staff time and materials costs to provide backflow tags to qualified testers. Qualified Testers shall affix a unique backflow tag issued by the City upon each backflow prevention assembly upon a passing test. Backflow tags will be sold in sets and are not able to be broken into smaller denominations and are not returnable.

Cross Connection Control Testing Fee – The customer-user shall pay a fee for City staff to conduct or observe a cross-connection control test. The fee shall be at an hourly rate per employee and subject to a minimum of 30 minutes.

Recycled Water Site Annual Inspection Fee – Properties using recycled water are subject to routine inspection to ensure compliance with state and local requirements and regulations. This fee shall be assessed following an inspection and shall be charged at an hourly rate per City Staff member required to complete the inspection subject to a 1 hour minimum.

Recycled Water Plan, Permit, and Engineering Report Review Fee – Projects required or electing to use recycled water must be reviewed by Public Works to ensure compliance with local and state requirements and regulations. This fee will be charged at an hourly rate for time spent.

FEE COMPARISON

Most user fees analyzed are existing fees whose amounts have been updated. **Figure 5-5** compares the existing amount versus the proposed amount for each sewer user fee. **Figure 5-6** compares the existing amount versus the proposed amount for each water user fee. New fees are noted where applicable.

Figure 5-2. Comparison of Existing to Proposed User Fees for Sewer Services

User Fee	Current Amount	Proposed Amount		Notes
Wastewater Discharge Permit Fee	$300.00	$986.43	Fee	Fee plus actual volume discharged times appropriate sewer commercial volumetric rates by customer class.
Sanitary Sewer Fats, Oils and Grease Fee	New	$450.00	Fee	Per occurrence

User Fee	Current Amount	Proposed Minimum Amount		Notes
Sewer Lateral Installation Fee	$2,500.00	Price as quoted	Fee	Actual cost of City labor, CalTrans equipment rentals, plus any direct materials.
Sewer Discharge Inspection Deposit	New	$5,000.00	Deposit	Actual fee amount will be calculated based on actual costs incurred. Any unused portion of the deposit will be refunded.

Note: City labor hours associated with the sewer lateral installation fee will be charged at a blended hourly rate of $108.11.

Figure 5-3. Comparison of Existing to Proposed User Fees for Water Services (Meters Fees)

User Fee	Current Amount	Proposed Amount	
Water Service Meter Fee			
5/8" - Displacement	$631.00	$803.45	Fee
3/4" - Displacement	$673.00	$833.97	Fee
1" - Displacement	$756.00	$885.85	Fee
1.5" - Displacement	$1,197.00	$1,275.92	Fee
2" - Displacement	$1,738.00	$1,444.10	Fee
1.5" - Turbine	$2,082.00	$1,275.92	Fee
2" - Turbine	$1,738.00	$1,444.10	Fee
3" - Turbine	$2,750.00	$1,455.24	Fee
4" - Turbine	$4,779.00	$1,866.17	Fee
6" - Turbine	$8,225.00	$3,648.32	Fee
8" - Turbine	$12,815.00	$5,189.51	Fee
10" - Turbine	$16,962.00	$6,446.82	Fee
2" - Compound	$2,602.00	$2,553.39	Fee
3" - Compound	$3,310.00	$2,602.78	Fee
4" - Compound	$5,344.00	$3,722.21	Fee
6" - Compound	$9,079.00	$5,056.37	Fee
8" - Compound	$14,945.00	$8,729.37	Fee
10" - Compound	$18,289.00	$9,614.37	Fee
4" - Fire Rated	$13,335.00	$8,235.60	Fee
6" - Fire Rated	$16,527.00	$10,781.60	Fee
8" - Fire Rated	$24,372.00	$16,992.37	Fee
10" - Fire Rated	$32,642.00	$23,551.37	Fee
Dedicated Irrigation Meter Fee	New	$80.46	Fee

Note: dedicated irrigation meter fee is in addition to any of the meter service fees for irrigation services to recover costs for mapping landscaped areas and account administration.

Figure 5-4. Comparison of Existing to Proposed User Fees for Water Services

User Fee	Current Amount	Proposed Amount		Notes
Water Main Tapping Fee				
2" or smaller	$348.00	$506.40	Fee	
4 to 12”	$1,044.00	$1,136.67	Fee	
After-Hours Water Re-connection Fee	$518.00	$251.38	Fee	
Backflow and Well Fee for Initial Registration and Annual Administration/Record Filing	$100.00	$56.80	Fee	
Recycled Water Fill Station Access Card Fee	New	$10.00	Fee	
Recycled Water Fill Station Consumption Charge	New	Equal to the commercial water use charge rate	Fee	The cost is actual volume of recycled water in gallons x (commercial/MF/irrigation water use charge rate divided by 748 gallons).
Construction Meter Deposit	New	$1,500.00	Deposit	
Backflow Tag Fee	New	$6.00	Fee	Per (3) backflow tags
Fire Flow Testing Fee	New	$716.19	Fee	Per test report or actual cost.
Construction Meter Reading Fee	New	$49.45	Fee	Per monthly billing period that customer fails to report construction meter reading.
Failure to Respond to Cross Connection Program Notice Fee	New	$28.40	Fee	
Termination of Water Service for Failure to Test/Inspect Fee	$50.00	$98.89	Fee	
Cut Lock Fee	New	$25.00	Fee	

Note: Current main tapping fees based on hourly rates for specific crew size assumed per main diameter.

Figure 5-5. Comparison of Existing to Proposed User Fees for Water Services (Penalty Fees)

User Fee	Current Amount	Proposed Amount	
Fee for Unauthorized Water Use			
1st offense	New	warning	Fee
2nd offense	New	$1,000	Fee
3rd offense	New	$2,000	Fee
Subsequent offenses	New	$3,000 per day	Fee

Figure 5-6. Comparison of Existing to Proposed User Fees (Actual Cost Services)

User Fee	Current Amount	Proposed Minimum Fee		Hourly Rate	Notes
Cross Connection Control Inspection Fee	$128.00	$49.05	Fee	$98.09	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Cross Connection Control Testing Fee	New	$49.05	Fee	$98.09	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Backflow Testing Fee	$128.00	$49.45	Fee	$98.09	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Water Service Line Installation - < 4"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 4"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 6"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 8"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Water Service Line Installation - 10"	Price as quoted	Price as quoted	Fee	$154.85	Actual cost of CalTrans equipment rentals plus any direct materials which includes meter box and lid
Recycled Water Site Annual Inspection Fee	New	$88.11	Fee	$88.11	Minimum fee for first hour. Additional staff time billed according to hourly rate.
Plan, Permit, and Engineering Report Review Fee for Recycled Water	New	$107.28	Fee	$107.28	Actual cost

APPENDIX A. FIXED ASSET LISTINGS

SEWER ENTERPRISE ASSETS

SEWER AND WATER CAPACITY FEES AND USER FEES STUDY

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Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1995	MSC OFFICE RENOVATION/DESIGN	50	21,634	11,881	9,753	6,558	15,367	2.34	22,854	
1996	MSC OFFICE RENOVATION/SPACE ALLOC. PROJ.	50	198,373	105,126	93,247	6,630	15,367	2.32	216,143	
1997	MSC Space Allocation Project	50	9,609	4,896	4,713	6,731	15,367	2.28	10,760	
1989	PUMP STATION MODIF. R/S	50	15,196	10,152	5,044	5,933	15,367	2.59	13,066	
2004	SEWER MAIN REPLACEMENT-2002/03	50	30,538	11,286	19,252	8,228	15,367	1.87	35,955	
2004	SEWER MAIN REPLACEMENT-2002/03	50	39,429	14,579	24,850	8,228	15,367	1.87	46,410	
2004	SEWER MAIN REPLACEMENT-2002-03	50	3,479	1,278	2,201	8,228	15,367	1.87	4,111	
2004	SEWER MAIN REPLACEMENT-2002/03	50	13,684	5,052	8,632	8,228	15,367	1.87	16,122	
2004	SEWER MAIN REPLACEMENT-2002/03	50	26,286	9,714	16,572	8,228	15,367	1.87	30,950	
2004	SEWER MAIN REPLACEMENT-2002/03	50	56,438	20,869	35,569	8,228	15,367	1.87	66,429	
2004	SEWER MAIN REPLACEMENT-2002/03	50	26,673	9,861	16,812	8,228	15,367	1.87	31,397	
2004	SEWER MAIN REPLACEMENT-2002/03	50	26,286	9,714	16,572	8,228	15,367	1.87	30,950	
2004	SEWER MAIN REPLACEMENT-2002/03	50	31,311	11,581	19,730	8,228	15,367	1.87	36,847	
2004	SEWER MAIN REPLACEMENT-2002/03	50	34,404	12,728	21,676	8,228	15,367	1.87	40,482	
2004	SEWER MAIN REPLACEMENT-2002/03	50	30,693	11,342	19,351	8,228	15,367	1.87	36,140	
2004	SEWER MAIN REPLACEMENT-2002/03	50	40,898	15,116	25,782	8,228	15,367	1.87	48,150	
2004	SEWER MAIN REPLACEMENT-2002/03	50	14,071	5,199	8,872	8,228	15,367	1.87	16,568	
2004	SEWER MAIN REPLACEMENT-2002/03	50	24,740	9,140	15,600	8,228	15,367	1.87	29,135	
2004	SEWER MAIN REPLACEMENT-2002/03	50	34,945	12,914	22,031	8,228	15,367	1.87	41,145	
2004	SEWER MAIN REPLACEMENT-2002/03	50	27,214	10,064	17,150	8,228	15,367	1.87	32,029	
2004	SEWER MAIN REPLACEMENT-2002/03	50	32,857	12,155	20,702	8,228	15,367	1.87	38,663	
2004	SEWER MAIN REPLACEMENT-2002/03	50	22,884	8,456	14,428	8,228	15,367	1.87	26,946	
1989	MARINA LIFT STATION - DESIGN	50	28,462	19,062	9,400	5,933	15,367	2.59	24,348	
1989	MARINA LIFT STATION CONSTR.	50	11,500	7,705	3,795	5,933	15,367	2.59	9,830	
2006	SEWER MAIN REPLACEMENT-2004/05	50	40,531	13,366	27,165	8,468	15,367	1.81	49,296	
2006	SEWER MAIN REPLACEMENT-2004/05	50	26,305	8,679	17,626	8,468	15,367	1.81	31,985	
2006	SEWER MAIN REPLACEMENT-2004/05	50	40,531	13,366	27,165	8,468	15,367	1.81	49,296	
2006	SEWER MAIN REPLACEMENT-2004/05	50	60,852	20,081	40,771	8,468	15,367	1.81	73,985	
2006	SEWER MAIN REPLACEMENT-2004/05	50	46,063	15,197	30,866	8,468	15,367	1.81	56,010	
2006	SEWER MAIN REPLACEMENT-2004/05	50	10,048	3,301	6,747	8,468	15,367	1.81	12,244	
2006	SEWER MAIN REPLACEMENT-2004/05	50	62,546	20,626	41,920	8,468	15,367	1.81	76,070	
2006	SEWER MAIN REPLACEMENT-2004/05	50	39,176	12,921	26,255	8,468	15,367	1.81	47,644	
2006	SEWER MAIN REPLACEMENT-2004/05	50	17,612	5,808	11,804	8,468	15,367	1.81	21,420	
2006	SEWER MAIN REPLACEMENT-2004/05	50	102,738	33,892	68,846	8,468	15,367	1.81	124,932	
2006	SEWER MAIN REPLACEMENT-2004/05	50	111,092	36,648	74,444	8,468	15,367	1.81	135,090	
2006	SEWER MAIN REPLACEMENT-2004/05	50	19,531	6,436	13,095	8,468	15,367	1.81	23,764	
2006	SEWER MAIN REPLACEMENT-2004/05	50	95,399	31,467	63,932	8,468	15,367	1.81	116,014	
2006	SEWER MAIN REPLACEMENT-2004/05	50	62,433	20,593	41,840	8,468	15,367	1.81	75,926	
2006	SEWER MAIN REPLACEMENT-2004/05	50	50,578	16,683	33,895	8,468	15,367	1.81	61,508	
2006	SEWER MAIN REPLACEMENT-2004/05	50	32,741	10,792	21,949	8,468	15,367	1.81	39,830	
2008	SEWER MAIN REPLACEMENT-2006/07	50	220,233	63,859	156,374	9,134	15,367	1.68	263,101	
2008	SEWER MAIN REPLACEMENT-2006/07	50	44,197	12,805	31,392	9,134	15,367	1.68	52,817	
2008	SEWER MAIN REPLACEMENT-2006/07	50	82,080	23,796	58,284	9,134	15,367	1.68	98,064	
1989	SEWER PUMP STAT	50	7,746	5,160	2,586	5,933	15,367	2.59	6,699	
2009	SEWER MAIN REPLACEMENT 07-08	50	102,464	27,662	74,802	9,769	15,367	1.57	117,663	
2009	SEWER MAIN REPLACEMENT 07/08	50	147,165	39,731	107,434	9,769	15,367	1.57	168,993	
2009	SEWER MAIN REPLACEMENT 07/08	50	96,137	25,948	70,189	9,769	15,367	1.57	110,407	
2009	SEWER MAIN REPLACEMENT 07/08	50	150,227	40,555	109,672	9,769	15,367	1.57	172,514	
2009	SEWER MAIN REPLACEMENT 07/08	50	56,539	15,256	41,283	9,769	15,367	1.57	64,938	
2009	SEWER MAIN REPLACEMENT 07/08	50	95,933	25,894	70,039	9,769	15,367	1.57	110,172	
2009	SEWER MAIN REPLACEMENT 07/08	50	34,699	9,357	25,342	9,769	15,367	1.57	39,863	
2009	SEWER MAIN REPLACEMENT 07/08	50	53,069	14,324	38,745	9,769	15,367	1.57	60,945	
2009	SEWER MAIN REPLACEMENT 07/08	50	75,522	20,385	55,137	9,769	15,367	1.57	86,730	
2009	SEWER MAIN REPLACEMENT 07/08	50	72,664	19,616	53,048	9,769	15,367	1.57	83,444	
2009	SEWER MAIN REPLACEMENT 07/08	50	126,958	34,277	92,681	9,769	15,367	1.57	145,787	
2010	12" PVC PIPE REPLACING 10" VCP SEWER PIPE	50	190,409	47,600	142,809	9,720	15,367	1.58	225,770	
2010	8" PVC PIPE REPLACING 2" GIP PIPE	50	128,354	32,088	96,266	9,720	15,367	1.58	152,189	
2011	REHAB EXISTING PS & PROVISION OF EMERGENCY GENERATOR	50	636,637	146,419	490,218	10,116	15,367	1.52	744,671	
2011	REPLACED 12"SEWER FORCE MAIN PIPELINE	50	625,423	143,842	481,581	10,116	15,367	1.52	731,550	
2011	INSTALLATION OF 8" PVC PIPE & 11 MANHOLES & 27 SANITARY SEWER LATERALS	50	468,874	107,836	361,038	10,116	15,367	1.52	548,438	
2011	REPLACEMENT OF 8" PVC PIPE, SEWER LATERALS	50	349,941	80,478	269,463	10,116	15,367	1.52	409,331	
2011	CONSTRUCTION OF SEWER MAIN	50	630,716	145,061	485,655	10,116	15,367	1.52	737,739	
2012	SANITARY SEWER REPLACEMENT (PO# 48850)	50	1,053,054	221,141	831,913	10,208	15,367	1.51	1,252,399	
2012	SANITARY SEWER REPLACEMENT (PO #48850)	50	106,432	22,345	84,087	10,208	15,367	1.51	126,589	
2012	SANITARY SEWER REPLACEMENT (PO #48850)	50	76,381	16,035	60,346	10,208	15,367	1.51	90,848	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2012	SANITARY SEWER REPLACEMENT (PO #48543)	50	311,412	65,394	246,018	10,208	15,367	1.51	370,366	
2012	SANITARY SEWER REPLACEMENT (PO #48850)	50	271,184	56,943	214,241	10,208	15,367	1.51	322,528	
2012	SANITARY SEWER REPLACEMENT (PO #48850)	50	215,510	45,255	170,255	10,208	15,367	1.51	256,309	
2012	SANITARY SEWER REPLACEMENT (PO #48850)	50	242,449	50,905	191,544	10,208	15,367	1.51	288,359	
2012	SANITARY SEWER REPLACEMENT (PO #48850)	50	364,931	76,630	288,301	10,208	15,367	1.51	434,022	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	41,019	7,790	33,229	10,361	15,367	1.48	49,285	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	74,925	14,232	60,694	10,361	15,367	1.48	90,021	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	97,687	18,555	79,132	10,361	15,367	1.48	117,369	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	62,358	11,847	50,511	10,361	15,367	1.48	74,918	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	104,563	19,865	84,698	10,361	15,367	1.48	125,624	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	127,562	24,235	103,327	10,361	15,367	1.48	153,255	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	146,767	27,883	118,884	10,361	15,367	1.48	176,329	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	51,689	9,815	41,874	10,361	15,367	1.48	62,108	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	24,659	4,684	19,975	10,361	15,367	1.48	29,627	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	36,988	7,022	29,966	10,361	15,367	1.48	44,446	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	133,015	25,270	107,745	10,361	15,367	1.48	159,808	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	168,343	31,978	136,365	10,361	15,367	1.48	202,258	
2013	11-12 SANITARY SEWER REPL (LINEAR FEET)	50	55,008	10,450	44,558	10,361	15,367	1.48	66,088	
2013	REPAIR/REPLACE WET WALL LINING, INSTALL FLEX BALL JOINT,INSTALL SAFETY GRATES	50	248,593	47,226	201,367	10,361	15,367	1.48	298,669	
1991	SEWER PUMP STATION	50	18,966	11,939	7,027	6,222	15,367	2.47	17,355	
2014	402 LF 8"PVC SANITARY SEWER,91 LF 6"PVC SANITARY SEWER	50	43,263	7,353	35,910	10,896	15,367	1.41	50,644	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	62,491	10,618	51,873	10,896	15,367	1.41	73,157	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	43,763	7,438	36,325	10,896	15,367	1.41	51,229	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	60,125	10,218	49,908	10,896	15,367	1.41	70,385	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	75,304	12,801	62,503	10,896	15,367	1.41	88,149	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	55,788	9,479	46,309	10,896	15,367	1.41	65,311	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	226,898	38,566	188,332	10,896	15,367	1.41	265,607	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	251,343	42,722	208,621	10,896	15,367	1.41	294,221	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	165,985	28,213	137,772	10,896	15,367	1.41	194,302	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	100,537	17,086	83,451	10,896	15,367	1.41	117,692	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	165,985	28,213	137,772	10,896	15,367	1.41	194,302	
2014	12-13 SANITARY REPLACEMENT PROJECT	50	53,817	9,146	44,671	10,896	15,367	1.41	63,000	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	99,749	16,950	82,799	10,896	15,367	1.41	116,773	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	90,286	15,344	74,942	10,896	15,367	1.41	105,692	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	85,161	14,476	70,685	10,896	15,367	1.41	99,688	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	85,161	14,476	70,685	10,896	15,367	1.41	99,688	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	45,340	7,702	37,638	10,896	15,367	1.41	53,082	
2014	12-13 SANITARY SEWER REPLACEMENT PROGRAM	50	24,839	4,217	20,622	10,896	15,367	1.41	29,084	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	75,501	12,835	62,666	10,896	15,367	1.41	88,379	
2014	SANITARY SEWER ARV REPLACEMENT ALONG SEAPORT & REDWOOD SHORES	50	50,512	8,585	41,927	10,896	15,367	1.41	59,130	
2014	SANITARY SEWER ARV REPLACEMENT ALONG SEAPORT & REDWOOD SHORES	50	101,024	17,170	83,854	10,896	15,367	1.41	118,260	
1993	PUMP STATION MODIF. R/S	50	15,196	8,940	6,256	6,478	15,367	2.37	14,841	
2014	11-12 SEWER REHAB PROGRAM	50	70,474	11,977	58,497	10,896	15,367	1.41	82,498	
2014	11-12 SEWER REHAB PROGRAM	50	53,569	9,104	44,465	10,896	15,367	1.41	62,709	
2014	11-12 SEWER REHAB PROGRAM	50	66,704	11,339	55,365	10,896	15,367	1.41	78,082	
2014	11-12 SEWER REHAB PROGRAM	50	64,877	11,026	53,851	10,896	15,367	1.41	75,947	
2014	11-12 SEWER REHAB PROGRAM	50	61,050	10,379	50,671	10,896	15,367	1.41	71,462	
2014	11-12 SEWER REHAB PROGRAM	50	79,154	13,456	65,698	10,896	15,367	1.41	92,655	
2014	11-12 SEWER REHAB PROGRAM	50	54,026	9,181	44,845	10,896	15,367	1.41	63,246	
2014	11-12 SEWER REHAB PROGRAM	50	23,529	3,996	19,533	10,896	15,367	1.41	27,548	
2014	11-12 SEWER REHAB PROGRAM	50	85,779	14,579	71,200	10,896	15,367	1.41	100,415	
2014	11-12 SEWER REHAB PROGRAM	50	91,033	15,471	75,562	10,896	15,367	1.41	106,567	
2014	11-12 SEWER REHAB PROGRAM	50	25,928	4,404	21,524	10,896	15,367	1.41	30,356	
2014	11-12 SEWER REHAB PROGRAM	50	65,277	11,094	54,183	10,896	15,367	1.41	76,416	
2014	11-12 SEWER REHAB PROGRAM	50	32,781	5,569	27,212	10,896	15,367	1.41	38,378	
2014	11-12 SEWER REHAB PROGRAM	50	30,497	5,178	25,319	10,896	15,367	1.41	35,708	
2014	11-12 SEWER REHAB PROGRAM	50	30,154	5,126	25,028	10,896	15,367	1.41	35,297	
2014	11-12 SEWER REHAB PROGRAM	50	29,012	4,930	24,082	10,896	15,367	1.41	33,963	
2014	11-12 SEWER REHAB PROGRAM	50	106,681	18,132	88,549	10,896	15,367	1.41	124,882	
2014	11-12 SEWER REHAB PROGRAM	50	59,623	10,132	49,491	10,896	15,367	1.41	69,797	
2014	11-12 SEWER REHAB PROGRAM	50	26,271	4,463	21,808	10,896	15,367	1.41	30,756	
2014	11-12 SEWER REHAB PROGRAM	50	60,536	10,286	50,250	10,896	15,367	1.41	70,869	
2014	11-12 SEWER REHAB PROGRAM	50	54,483	9,258	45,225	10,896	15,367	1.41	63,782	
2014	11-12 SEWER REHAB PROGRAM	50	35,865	6,095	29,770	10,896	15,367	1.41	41,985	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	18,154	3,086	15,068	10,896	15,367	1.41	21,250	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	12,714	2,159	10,555	10,896	15,367	1.41	14,885	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	17,467	2,967	14,500	10,896	15,367	1.41	20,449	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	21,876	3,716	18,160	10,896	15,367	1.41	25,612	
2014	12-13 SANITARY SEWER REPLACEMENT PROGRAM	50	16,207	2,754	13,453	10,896	15,367	1.41	18,973	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	65,916	11,203	54,713	10,896	15,367	1.41	77,162	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	73,017	12,410	60,607	10,896	15,367	1.41	85,474	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	48,220	8,194	40,026	10,896	15,367	1.41	56,449	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	29,207	4,964	24,243	10,896	15,367	1.41	34,190	
2014	12-13 SANITARY SEWER REPLACEMENT PROGRAM	50	48,220	8,194	40,026	10,896	15,367	1.41	56,449	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	15,634	2,653	12,981	10,896	15,367	1.41	18,308	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	28,978	4,923	24,055	10,896	15,367	1.41	33,926	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	26,229	4,455	21,774	10,896	15,367	1.41	30,709	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	24,740	4,200	20,540	10,896	15,367	1.41	28,968	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	24,740	4,200	20,540	10,896	15,367	1.41	28,968	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	13,171	2,236	10,935	10,896	15,367	1.41	15,421	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	7,216	1,224	5,992	10,896	15,367	1.41	8,450	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	21,934	3,724	18,210	10,896	15,367	1.41	25,682	
2014	SEWER FORCE MAIN REPLACEMENT PROJECT (FROM P.S. #1 TO M.H.)	50	271,098	46,080	225,018	10,896	15,367	1.41	317,346	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	4,161	706	3,455	10,896	15,367	1.41	4,872	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	2,914	493	2,421	10,896	15,367	1.41	3,414	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	4,003	680	3,323	10,896	15,367	1.41	4,686	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	5,014	850	4,164	10,896	15,367	1.41	5,872	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	3,715	629	3,086	10,896	15,367	1.41	4,352	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	15,108	2,567	12,541	10,896	15,367	1.41	17,687	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	16,735	2,840	13,895	10,896	15,367	1.41	19,597	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	11,052	1,879	9,173	10,896	15,367	1.41	12,937	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	6,694	1,132	5,562	10,896	15,367	1.41	7,844	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	11,052	1,879	9,173	10,896	15,367	1.41	12,937	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	3,583	605	2,978	10,896	15,367	1.41	4,200	
2014	12-13 SANITARY SEWER REPLACEMENT PROGRAM	50	6,642	1,123	5,519	10,896	15,367	1.41	7,784	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	6,012	1,020	4,992	10,896	15,367	1.41	7,040	
2014	12-13 SA12-13 SANITARY SEWER REPLACEMENT PROJECT	50	5,670	961	4,709	10,896	15,367	1.41	6,641	
2014	12-13 SANITARY SEWER REPLACEMENT PROGRAM	50	5,670	961	4,709	10,896	15,367	1.41	6,641	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	3,019	510	2,509	10,896	15,367	1.41	3,538	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	1,654	281	1,373	10,896	15,367	1.41	1,936	
2014	12-13 SANITARY SEWER REPLACEMENT PROJECT	50	5,027	851	4,176	10,896	15,367	1.41	5,890	
2015	530LF PVC PIPE, MANHOLES,CRADLE FOR SS LATERAL,CONNECTION/TIE-IN TO LATERAL,MANHOLES	50	90,390	13,554	76,836	11,173	15,367	1.38	105,678	
2015	8"PVC SS LATERAL W CLEANOUT	50	5,750	863	4,887	11,173	15,367	1.38	6,721	
2015	580LF 18"SS PVC,595LF 12"SS PVC, MANHOLES, CONNECTION	50	272,550	40,883	231,667	11,173	15,367	1.38	318,628	
2015	52LF PVC FOR SEWER LATERAL,MANHOLE,CLEANOUT	50	7,660	1,148	6,512	11,173	15,367	1.38	8,956	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	53,394	8,004	45,390	11,173	15,367	1.38	62,428	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	63,348	9,496	53,852	11,173	15,367	1.38	74,067	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	97,737	14,656	83,081	11,173	15,367	1.38	114,268	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	104,072	15,608	88,464	11,173	15,367	1.38	121,670	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	97,285	14,589	82,696	11,173	15,367	1.38	113,738	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	372,397	55,854	316,543	11,173	15,367	1.38	435,365	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	102,715	15,405	87,310	11,173	15,367	1.38	120,083	
2015	13-14 SANITARY SEWER REHABILITATION PROJECT	50	117,194	17,574	99,620	11,173	15,367	1.38	137,015	
2016	DEV IMPROVEMENT-SEWER MANHOLE,22 LF 6" SEWER MAIN	50	8,671	1,125	7,546	11,153	15,367	1.38	10,396	Developer contributions
2016	50 LF PVC LATERAL;MANHOLE AT EXISTING MAIN	50	14,375	1,867	12,509	11,153	15,367	1.38	17,234	
2016	333LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	52,101	6,773	45,328	11,153	15,367	1.38	62,453	
2016	753LF PIPLINE;MANHOLE AT EXISTING SANITARY SEWER	50	117,813	15,314	102,499	11,153	15,367	1.38	141,224	
2016	282LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	44,121	5,733	38,388	11,153	15,367	1.38	52,891	
2016	294LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	45,999	5,975	40,024	11,153	15,367	1.38	55,145	
2016	290LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	45,373	5,896	39,477	11,153	15,367	1.38	54,391	
2016	170LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	26,598	3,453	23,145	11,153	15,367	1.38	31,889	
2016	187LF PIPLINE;MANHOLE AT EXISTING SANITARY SEWER	50	29,258	3,803	25,455	11,153	15,367	1.38	35,072	
2016	1268LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	198,389	25,787	172,602	11,153	15,367	1.38	237,813	
2016	358LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	56,012	7,280	48,732	11,153	15,367	1.38	67,143	
2016	237LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	37,081	4,818	32,263	11,153	15,367	1.38	44,453	
2016	655LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	102,480	13,320	89,160	11,153	15,367	1.38	122,846	
2016	400LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	62,583	8,133	54,450	11,153	15,367	1.38	75,022	
2016	351LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	54,917	7,137	47,780	11,153	15,367	1.38	65,831	
2016	300LF PIPELINE;MANHOLE AT EXISTING SANITARY SEWER	50	46,937	6,098	40,839	11,153	15,367	1.38	56,269	
2016	282LF PIPLINE;MANHOLE AT EXISTING SANITARY SEWER	50	44,121	5,733	38,388	11,153	15,367	1.38	52,891	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2016	186LF PIPELINE	50	47,343	6,150	41,193	11,153	15,367	1.38	56,756	
2016	319LF PIPELINE	50	81,196	10,551	70,645	11,153	15,367	1.38	97,335	
2016	320LF PIPELINE	50	81,451	10,589	70,862	11,153	15,367	1.38	97,634	
2016	809LF PIPELINE	50	205,917	26,767	179,150	11,153	15,367	1.38	246,834	
2016	1095LF PIPELINE	50	278,714	36,231	242,483	11,153	15,367	1.38	334,095	
2016	320LF PIPELINE	50	81,451	10,589	70,862	11,153	15,367	1.38	97,634	
2016	971LF PIPELINE	50	247,152	32,130	215,022	11,153	15,367	1.38	296,259	
2016	1125LF PIPELINE	50	286,350	37,226	249,124	11,153	15,367	1.38	343,245	
2016	827LF PIPELINE	50	210,499	27,360	183,139	11,153	15,367	1.38	252,330	
2016	1463LF PIPELINE	50	372,382	48,407	323,975	11,153	15,367	1.38	446,376	
2016	1755LF PIPELINE	50	446,705	58,071	388,634	11,153	15,367	1.38	535,463	
2016	293LF PIPELINE	50	74,576	9,693	64,883	11,153	15,367	1.38	89,397	
2016	REPL 152LF EXIST PIPE,57LF NEW PIPE,CONNECT TO EXIST	50	108,790	11,964	96,826	11,153	15,367	1.38	133,408	
2016	6" VCP SEWER,CLEANOUT, TAP EXISTING 10" SEWER	50	12,351	1,359	10,992	11,153	15,367	1.38	15,145	
2017	MANHOLE,76LF 6"LINE,CONNECT TO MAIN	50	17,043	1,871	15,172	11,609	15,367	1.32	20,083	
2017	80LF 6"SS LINE,3CLEANOUTS,3WYE CONNECT TO MAIN	50	8,740	958	7,782	11,609	15,367	1.32	10,301	
2016	310LF 4",6",8",10"HDPE;2MANHOLES;3CLEANOUTS	50	79,261	8,718	70,543	11,153	15,367	1.38	97,194	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	10,311	1,133	9,178	11,609	15,367	1.32	12,149	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	15,568	1,711	13,857	11,609	15,367	1.32	18,342	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	61,932	6,810	55,122	11,609	15,367	1.32	72,965	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	30,044	3,301	26,743	11,609	15,367	1.32	35,400	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	15,364	1,689	13,675	11,609	15,367	1.32	18,101	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	11,608	1,276	10,332	11,609	15,367	1.32	13,676	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	30,522	3,355	27,167	11,609	15,367	1.32	35,960	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	43,701	4,807	38,894	11,609	15,367	1.32	51,483	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	34,278	3,769	30,509	11,609	15,367	1.32	40,385	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	81,119	8,921	72,198	11,609	15,367	1.32	95,567	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	73,130	8,042	65,088	11,609	15,367	1.32	86,157	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	55,308	6,083	49,225	11,609	15,367	1.32	65,158	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	55,309	6,083	49,226	11,609	15,367	1.32	65,160	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	50,597	5,562	45,035	11,609	15,367	1.32	59,612	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	27,518	3,025	24,493	11,609	15,367	1.32	32,421	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	44,042	4,841	39,201	11,609	15,367	1.32	51,890	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	18,505	2,035	16,470	11,609	15,367	1.32	21,801	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	20,485	2,251	18,234	11,609	15,367	1.32	24,136	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	55,240	6,073	49,167	11,609	15,367	1.32	65,082	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	76,818	8,448	68,370	11,609	15,367	1.32	90,500	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	21,646	2,377	19,269	11,609	15,367	1.32	25,506	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	31,546	3,466	28,080	11,609	15,367	1.32	37,169	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	29,020	3,190	25,830	11,609	15,367	1.32	34,190	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	29,498	3,241	26,257	11,609	15,367	1.32	34,756	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	14,544	1,596	12,948	11,609	15,367	1.32	17,139	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	13,656	1,502	12,154	11,609	15,367	1.32	16,088	
2017	15-16 SANITARY SEWER REPLACEMENT PROJECT	50	3,687	403	3,284	11,609	15,367	1.32	4,347	
1993	PUMP STATION MODIF R/S	50	33,924	20,001	13,923	6,478	15,367	2.37	33,028	
2018	CONSTRUCTION IMPROVEMENTS BY DEVELOPER OF 550 ALLERTON	50	7,274	653	6,621	12,015	15,367	1.28	8,468	Developer contributions
2017	CONSTRUCTION IMPROVEMENTS BY DEVELOPER OF "THE GROVE"	50	5,658	509	5,149	11,609	15,367	1.32	6,815	Developer contributions
2017	CONSTRUCTION IMPROVEMENTS BY DEVELOPER OF "LOCALE"	50	33,810	3,042	30,768	11,609	15,367	1.32	40,727	Developer contributions
2018	900LF 6",8"PVC,6 MANHOLES,15 CLEANOUTS,CONNECT TO EXIST	50	82,776	7,449	75,327	12,015	15,367	1.28	96,347	
2018	94LF 6"PVC,2CLEANOUTS, CONNECT TO EXISTING	50	11,233	1,009	10,224	12,015	15,367	1.28	13,077	
2018	870LF 6"PVC,SEWER LIFT STN,8 MANHOLES,7CLEANOUTS,CONNECT	50	70,252	6,323	63,929	12,015	15,367	1.28	81,767	
2018	410LF 4",8"PVC,4CLEANOUTS,MANHOLE,DEMO,CONNECT TO EXIST	50	64,849	5,833	59,016	12,015	15,367	1.28	75,484	
2018	WALNUT/MAPLE ST. SEWER INTERCEPTOR IMPROVEMENT PROJECT	50	3,430,274	308,723	3,121,551	12,015	15,367	1.28	3,992,576	
2019	2015-2016 SANITARY SEWER REPLACEMENT PROJECT	50	499,726	34,980	464,746	12,115	15,367	1.27	589,514	
2019	2015-2016 SANITARY SEWER REPLACEMENT PROJECT	50	891,130	62,378	828,752	12,115	15,367	1.27	1,051,241	
2019	2015-2016 SANITARY SEWER REPLACEMENT PROJECT	50	628,846	44,017	584,829	12,115	15,367	1.27	741,834	
1994	SEWER PUMP REPL. & REHAB	50	49,977	28,473	21,504	6,530	15,367	2.35	50,604	
2019	2016-2017 SANITARY SEWER AND WATERMAIN REPLACEMENT PROJ	50	2,257,052	157,994	2,099,058	12,115	15,367	1.27	2,662,577	
2019	2016-2017 SANITARY SEWER AND WATERMAIN REPLACEMENT PROJ	50	1,668,480	116,793	1,551,687	12,115	15,367	1.27	1,968,257	
2019	2016-2017 SANITARY SEWER AND WATERMAIN REPLACEMENT PROJ	50	1,032,858	72,300	960,558	12,115	15,367	1.27	1,218,432	
1994	SEWER PUMP REPL. & REHAB	50	25,503	14,535	10,968	6,530	15,367	2.35	25,810	
1994	SEWER PUMP STATION #10 C/E	50	5,735	3,250	2,485	6,530	15,367	2.35	5,848	
1994	SEWER PUMP STATION MODIF - R/S	50	108,884	62,046	46,838	6,530	15,367	2.35	110,220	
1995	SEWER PUMP STATION #10	50	411,623	226,380	185,243	6,558	15,367	2.34	434,065	
2018	29 LF 6"PVC LATERAL, 3 CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM, 2 SANITARY SEWER MAN	50	29,153	2,041	27,112	12,015	15,367	1.28	34,677	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2019	INSTALL CLEANOUT W/PRECAST CONCRETE BOX TO GRADE AND INSTALL 4"PVC SANITARY SEWER PIPE	50	13,915	973	12,942	12,115	15,367	1.27	16,416	
2018	107LF OFF-SITE 8"PVC SANITARY SEWER, 1 OFF-SITE CONNECT TO EX. SSMH	50	18,055	1,264	16,791	12,015	15,367	1.28	21,476	
2018	2 RECONNECT LATS,491LF 12"PVC SDR-26,8LF 8"PVC SDR-26, 18 MANHOLES,1728LF 6" PVC ASTM,965LF	50	315,045	22,051	292,994	12,015	15,367	1.28	374,750	
2018	MANHOLES,RAISE STRUCTURES,CLEANOUTS,1000GAL GREASE INTERCEPT,40LF 4"CAST IRON VENT PIPE,8	50	116,955	8,187	108,768	12,015	15,367	1.28	139,118	
2020	55 LF 8"PVC LATERAL; 1 SEWER CONNECTION; 1 SEWER CLEANOUT	50	15,238	761	14,477	12,806	15,367	1.20	17,373	
2019	SANITARY SEWER TAP AND LATERAL	50	5,750	288	5,462	12,115	15,367	1.27	6,928	
2019	2 MANHOLES;268 LF SS PIPE PVC;NEW SERVICE;3 CONNECT EXISTING SEWER	50	73,686	3,684	70,002	12,115	15,367	1.27	88,795	
2019	2017-2018 SANITARY SEWER REPLACEMENT PROJECT	50	5,413,291	270,664	5,142,627	12,115	15,367	1.27	6,523,230	
2020	31 LF 6" SEWER LATERAL 1 SANITARY SEWER MANHOLE 12 SANITARY SEWER CLEANOUT 1 CONNECTION	50	26,048	781	25,267	12,806	15,367	1.20	30,320	
2020	2018-19 SANITARY SEWER REPLAC PROJ	50	4,094,252	122,828	3,971,424	12,806	15,367	1.20	4,765,664	
1995	SEWER PUMP STATION #10	50	313,232	172,261	140,971	6,558	15,367	2.34	330,328	
1983	GID 1-64 AND 3-65 IMPS	30	3,962,965	3,962,965	-	5,123	15,367	3.00	-	
1989	SANITARY SEWER REPLACEMENT	50	7,964	5,327	2,637	5,933	15,367	2.59	6,830	
1989	CHESTNUT ST. RECONSTRUCTION	50	45,505	30,485	15,020	5,933	15,367	2.59	38,906	
1989	CHESTNUT ST. RECONSTRUCTION	50	180,835	121,137	59,698	5,933	15,367	2.59	154,638	
1989	SEWER SYSTEM REPLACEMENT & REHAB	50	34,632	23,183	11,449	5,933	15,367	2.59	29,658	
1989	COLLECTION SYSTEM REPL. PROGRAM	50	24,876	16,651	8,225	5,933	15,367	2.59	21,307	
1995	PUMP STATION #10	50	78,682	43,259	35,423	6,558	15,367	2.34	83,005	
1989	CONGESTION MGNT. PROGRAM	50	22,269	14,908	7,361	5,933	15,367	2.59	19,066	Developer contributions
1989	R/S PARKWAY V-CONST.	50	59,307	39,731	19,576	5,933	15,367	2.59	50,708	
1989	SANITARY SEWER REPL. PROGRAM	50	27,973	18,727	9,246	5,933	15,367	2.59	23,949	
1989	SANITARY SEWER REPL. PROGRAM	50	16,620	11,122	5,498	5,933	15,367	2.59	14,241	
1995	PUMP STATION #10	50	109,695	60,309	49,386	6,558	15,367	2.34	115,723	
1996	REPL. PUMP STATION	50	44,004	23,320	20,684	6,630	15,367	2.32	47,945	
1989	1980/81 IMPS	50	397,805	266,526	131,279	5,933	15,367	2.59	340,054	
1996	PUMPS & CONTROLS REPL.	50	8,485	4,480	4,005	6,630	15,367	2.32	9,284	
1996	SEWER PUMP STATION #10	50	21,931	11,608	10,323	6,630	15,367	2.32	23,929	
1991	TREATMENT PLANT DEMO	50	6,687	4,191	2,496	6,222	15,367	2.47	6,165	
1991	SANITARY SEWER REPL.	50	8,971	5,639	3,332	6,222	15,367	2.47	8,228	
1993	CHESTNUT ST. RECONSTRUCTION	50	180,835	106,673	74,162	6,478	15,367	2.37	175,931	
1993	CHESTNUT ST. RECONSTRUCTION	50	45,505	26,845	18,660	6,478	15,367	2.37	44,266	
1993	CHESTNUT ST. RECONST.	50	18,191	10,710	7,481	6,478	15,367	2.37	17,747	
1993	SEWER SYSTEM REPL. & REHAB	50	34,632	20,415	14,217	6,478	15,367	2.37	33,727	
1993	CHESTNUT STREET RECONST.	50	8,395	4,928	3,467	6,478	15,367	2.37	8,225	
1996	PUMP STATION MODIF. R/S	50	30,656	16,245	14,411	6,630	15,367	2.32	33,404	
1993	CHESTNUT ST. RECONST.	50	13,324	7,847	5,477	6,478	15,367	2.37	12,992	
1993	SEWER INFILTR & REPLACE.	50	42,608	25,134	17,474	6,478	15,367	2.37	41,452	
1993	SEWER INFILTR & REPLACE	50	42,133	24,840	17,293	6,478	15,367	2.37	41,024	
1993	SEWER INFILTR & REPLACE	50	381,253	224,938	156,315	6,478	15,367	2.37	370,817	
1997	Repl. Pump Stn. Fuel Tanks	50	345,030	175,951	169,079	6,731	15,367	2.28	386,013	
1997	Pumps & Controls Repl/Sewer Pump Stn.#10	50	232,310	118,473	113,837	6,731	15,367	2.28	259,893	
1997	Pump Stn. Modif. R/S	50	32,259	16,448	15,811	6,731	15,367	2.28	36,097	
1997	Marina Pump Stn. Rehab.	50	54,770	27,923	26,847	6,731	15,367	2.28	61,292	
1994	SEWER INFILTRATION & REPL.	50	26,853	15,305	11,548	6,530	15,367	2.35	27,175	
1994	SEWER INFILTRATION & REPL.	50	27,414	15,618	11,796	6,530	15,367	2.35	27,758	
1994	SEWER INFILTRATION & REPL.	50	227,577	129,705	97,872	6,530	15,367	2.35	230,314	
1997	Pump Stn. #2 Rehab	50	46,365	23,639	22,726	6,731	15,367	2.28	51,883	
1998	REPL. PUMP STN. FUEL TANKS	50	5,493	2,672	2,821	6,846	15,367	2.24	6,333	
1995	SEWER SYSTEMS REPL.MAINT.	50	8,812	4,840	3,972	6,558	15,367	2.34	9,307	
1995	SEWER REPL-JEFFERSON/VERA	50	15,360	8,443	6,917	6,558	15,367	2.34	16,208	
1998	PUMP & CONTROLS REPLACE PROG.	50	17,976	8,797	9,179	6,846	15,367	2.24	20,606	
1995	COLLECTION SYSTEM REPL.	50	82,314	45,265	37,049	6,558	15,367	2.34	86,814	
1998	PUMP STATION MODIF. R/S	50	70,564	34,570	35,994	6,846	15,367	2.24	80,800	
1998	MARINA PUMP STATION REHAB.	50	351,262	172,113	179,149	6,846	15,367	2.24	402,160	
1996	JAMES ST. RECONSTRUCTION	50	267,849	141,935	125,914	6,630	15,367	2.32	291,865	
1998	PUMP STN.#1 & 2 REHAB.	50	128,054	62,745	65,309	6,846	15,367	2.24	146,608	
1999	PUMP STN. MODIF. R/S	50	167,182	78,562	88,620	6,817	15,367	2.25	199,782	
1999	PUMP STN. REHAB	50	248,252	116,678	131,574	6,817	15,367	2.25	296,614	
1996	COLLECTION SYSTEM REPL. PROG.	50	971,808	515,054	456,754	6,630	15,367	2.32	1,058,743	
1999	SEWER PUMP STN. #23 AREA 1	50	245,951	115,597	130,354	6,817	15,367	2.25	293,864	
1997	James St. Reconstruction	50	84,736	43,198	41,538	6,731	15,367	2.28	94,833	
1999	SEWAGE PUMP STN.#22 AREA 1	50	318,511	149,695	168,816	6,817	15,367	2.25	380,571	
1999	SEWER PUMP STN. #24	50	265,051	124,574	140,477	6,817	15,367	2.25	316,685	
1997	Collection System Repl.Program	50	1,258,930	642,040	616,890	6,731	15,367	2.28	1,408,380	
2000	SEWER PUMP STATION #23 AREA 1	50	67,288	30,264	37,024	7,448	15,367	2.06	76,391	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2000	SEWAGE PUMP STATION #22 AREA 1	50	85,428	38,431	46,997	7,448	15,367	2.06	96,969	
2001	SEWER PUMP STATION #24	50	66,263	28,488	37,775	7,399	15,367	2.08	78,455	
1997	Jefferson/Vera Sewer Main	50	7,628	3,877	3,751	6,731	15,367	2.28	8,565	
2005	PUMP STATION #1 REHAB	50	474,385	166,024	308,361	8,230	15,367	1.87	575,806	
2005	PUMP STATION #3 RENOVATION	50	339,157	118,703	220,454	8,230	15,367	1.87	411,656	
1998	COLLECTION SYSTEM REPLACE. PROG.	50	1,048,652	513,839	534,813	6,846	15,367	2.24	1,200,570	
2008	REDWOOD SHORES PUMP STATION #15	50	609,829	176,843	432,986	9,134	15,367	1.68	728,502	
2013	REPLACE PUMPS AND CONTROL SYSTEM, ADD PERMANENT GENERATOR	50	543,601	103,284	440,317	10,361	15,367	1.48	653,081	
2014	SANITARY SEWER PUMP STATION 10 IMPROVEMENT PROJECT	50	473,099	80,420	392,679	10,896	15,367	1.41	553,801	
1998	JEFFERSON-VERA SEWER MAIN	50	626,845	307,133	319,712	6,846	15,367	2.24	717,703	
1999	COLLECT. SYSTEM REPL. PROGRAM	50	417,873	196,390	221,483	6,817	15,367	2.25	499,300	
2018	REPLACEMENT PUMPS AT SEWER STATION#10	15	133,505	40,050	93,455	12,015	15,367	1.28	119,532	
2019	SANITARY SEWER PUMP STATION IMPROVEMENTS	50	513,962	35,977	477,985	12,115	15,367	1.27	606,306	
1999	JEFFERSON-VERA SEWER MAIN	50	136,271	64,038	72,233	6,817	15,367	2.25	162,838	
2019	SANITARY SEWER PUMP STATION IMPROVEMENTS	50	533,083	37,315	495,768	12,115	15,367	1.27	628,864	
2019	SANITARY SEWER PUMP STATION IMPROVEMENTS PROJECT	50	530,250	37,118	493,132	12,115	15,367	1.27	625,520	
2019	SANITARY SEWER PUMP STATION IMPROVEMENTS PROJECT	50	926,015	64,820	861,195	12,115	15,367	1.27	1,092,393	
2000	COLLECTION SYSTEM REPL. PROG.	50	600,620	270,270	330,350	7,448	15,367	2.06	681,602	
2019	SANITARY SEWER PUMP STATION IMPROVEMENT PROJECT	50	926,015	64,820	861,195	12,115	15,367	1.27	1,092,393	
2020	SANITARY SEWER PUMP STAT IMPROV PROJECT- P.S 18 & 20	50	1,937,236	58,117	1,879,119	12,806	15,367	1.20	2,254,922	
2022	SANITARY SEWER IMPROVEMENTS	50	4,731,777	94,636	4,637,141	14,301	15,367	1.07	4,982,796	
2022	DEV IMPR - 513 CLEVELAND - SEWER IMPR	50	121,992	2,440	119,552	14,301	15,367	1.07	128,464	Developer contributions
2022	DEV IMPR - 601 ECR -SEWER IMPR	50	178,825	3,577	175,249	14,301	15,367	1.07	188,312	Developer contributions
2022	DEV IMPR - 707 BRADFORD - SEWER IMPR	50	14,410	288	14,122	14,301	15,367	1.07	15,174	Developer contributions
2022	DEV IMPR - 2075 BROADWAY - SEWER IMPR	50	19,982	400	19,582	14,301	15,367	1.07	21,042	Developer contributions
2006	COPIER BIZHUB 750	7	14,239	14,239	-	8,468	15,367	1.81	-	
2012	HANDHELD TABLET COMPUTER	5	5,414	5,414	-	10,208	15,367	1.51	-	
2012	HANDHELD TABLET COMPUTER	5	5,414	5,414	-	10,208	15,367	1.51	-	
2012	HANDHELD TABLET COMPUTER	5	5,414	5,414	-	10,208	15,367	1.51	-	
2012	HANDHELD TABLET COMPUTER	5	5,414	5,414	-	10,208	15,367	1.51	-	
2012	HANDHELD COMPUTER TABLET	5	5,414	5,414	-	10,208	15,367	1.51	-	
1995	CAMERA	5	13,878	13,878	-	6,558	15,367	2.34	-	
1997	CMD Automation Program	5	23,792	23,792	-	6,731	15,367	2.28	-	
1998	FIBER OPTIC CABLE CONNECTORS	5	6,654	6,654	-	6,846	15,367	2.24	-	
1999	CAMERA/CABLE/MONITOR/VCR	5	8,121	8,121	-	6,817	15,367	2.25	-	
2004	DIGITAL CAMERA SYSTEM	5	41,947	41,947	-	8,228	15,367	1.87	-	
2004	STANDBY DIESEL ENGINE/GENERATOR/FUEL TANK	10	35,000	35,000	-	8,228	15,367	1.87	-	
2013	CRANE BUCKET	12	7,673	6,071	1,602	10,361	15,367	1.48	2,375	
1984	FURNITURE AND EQUIPMENT	5	10,116	10,116	-	5,049	15,367	3.04	-	
1989	FLYGT SUBMERS. PUMP	5	5,949	5,949	-	5,933	15,367	2.59	-	
1990	SEWER INSP. CAMERA	10	49,838	49,838	-	6,056	15,367	2.54	-	
1996	MSC EMERGENCY GENERATOR	10	56,641	56,641	-	6,630	15,367	2.32	-	
1999	MODEL 4012-21NCUE AUTO PRIME & TRASH HANDLING PUMP JOHN DEERE MODEL 4045D	5	19,887	19,887	-	6,817	15,367	2.25	-	
	TOTAL VALUE		**$69,600,035**	**$16,570,864**	**$53,029,171**				**$75,442,449**	
	Developer Contributions Subtotal		$412,891	$26,943	$385,948				$438,465	

APPENDIX B. FIXED ASSET LISTINGS

WATER ENTERPRISE ASSETS

SEWER AND WATER CAPACITY FEES AND USER FEES STUDY

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Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1994	**LAND**	50	50,543			6,530	15,367	2.35	-	
1974	760 LF FENCE	25	8,370	8,370	-	2,483	15,367	6.19	-	
1956	1600 LF FENCE	25	7,551	7,551	-	851	15,367	18.07	-	
1995	MSC OFFICE RENOVATION/SPACE ALLOCATION PROJECT	50	25,634	14,081	11,553	6,558	15,367	2.34	27,072	
1996	MSC OFFICE RENOVATION/SPACE ALLOCATION PROJECT	50	202,037	107,061	94,976	6,630	15,367	2.32	220,152	
2006	MSC REMODEL PHASE 5	50	480,244	158,467	321,777	8,468	15,367	1.81	583,912	
2008	PUMPING AND STORAGE FACILITY	50	21,409,358	6,208,712	15,200,646	9,134	15,367	1.68	25,575,162	
2012	OVERHEAD ON PUMPING AND STORAGE FACILITY ADDITION	50	1,868,612	423,281	1,445,331	10,208	15,367	1.51	2,175,865	
2013	DESIGN EXPENSE FOR PUMPING AND STORAGE FACILITY ADDITION	45	916,792	193,544	723,248	10,361	15,367	1.48	1,072,726	
2009	PUMPING AND STORAGE FACILITY ADDITION	50	3,029,522	833,415	2,196,107	9,769	15,367	1.57	3,454,467	
2012	OVERHEAD PUMPING AND STORAGE FACILITY ADDITION	50	251,624	56,997	194,627	10,208	15,367	1.51	292,999	
1962	E.R.P.	30	8,959	8,959	-	1,072	15,367	14.34	-	
1974	CATHODIC PROTECTION RECTIFIER	30	33,480	33,480	-	2,483	15,367	6.19	-	
1985	ANODES	30	17,823	17,823	-	5,055	15,367	3.04	-	
1985	WATER SERVICES	30	43,964	43,964	-	5,055	15,367	3.04	-	
1986	WATER SERVICES	30	395,672	395,672	-	5,508	15,367	2.79	-	
1987	6.0 IN. REDUCER	30	7,667	7,667	-	5,732	15,367	2.68	-	
1987	PRESSURE REGULATING STATION	30	15,974	15,974	-	5,732	15,367	2.68	-	
1987	6.0 IN. METER	30	5,112	5,112	-	5,732	15,367	2.68	-	
2004	730,000 GAL.. CONCRETE RESERVO	50	32,642	32,642	-	8,228	15,367	1.87	-	
2009	670,000 GAL. CONCRETE RESERVOI	50	13,618	13,618	-	9,769	15,367	1.57	-	
1964	150,000 GAL. STEEL TANK	50	28,537	28,537	-	1,151	15,367	13.36	-	
1962	500,000 GAL. STEEL TANK	50	61,789	61,789	-	1,072	15,367	14.34	-	
2004	3,750,000 GAL. RESERVOIR	50	103,659	103,659	-	8,228	15,367	1.87	-	
1968	1,200,000 GAL. STEEL TANK	50	120,000	120,000	-	1,420	15,367	10.82	-	
2004	1,000,000 GAL. RESERVOIR	50	29,268	29,268	-	8,228	15,367	1.87	-	
1974	3.2 MIL. GAL. STEEL WATER TANK	50	554,146	537,478	16,668	2,483	15,367	6.19	103,161	
1956	4 MIL. GAL. CONCRETE TANK	50	793,496	793,496	-	851	15,367	18.07	-	
1958	250,000 GAL. STEEL TANK	50	34,045	34,045	-	933	15,367	16.47	-	
1946	2.0 IN. ASBESTOS CEMENT PIPE	60	38,703	38,703	-	425	15,367	36.13	-	Smaller pipes
1946	4.0 IN. ASBESTOS CEMENT PIPE	60	7,067	7,067	-	425	15,367	36.13	-	Smaller pipes
1946	4.0 IN. ASBESTOS CEMENT PIPE	60	6,099	6,099	-	425	15,367	36.13	-	Smaller pipes
1946	4.0 IN. ASBESTOS CEMENT PIPE	60	5,529	5,529	-	425	15,367	36.13	-	Smaller pipes
1957	4.0 IN. ASBESTOS CEMENT PIPE	60	7,415	7,415	-	890	15,367	17.27	-	Smaller pipes
1971	4.0 IN. ASBESTOS CEMENT PIPE	60	31,475	26,987	4,488	1,943	15,367	7.91	35,493	Smaller pipes
1973	4.0 IN. ASBESTOS CEMENT PIPE	60	13,323	10,989	2,334	2,329	15,367	6.60	15,398	Smaller pipes
1977	4.0 IN. ASBESTOS CEMENT PIPE	60	7,836	5,916	1,920	3,166	15,367	4.85	9,320	Smaller pipes
1978	4.0 IN. ASBESTOS CEMENT PIPE	60	6,360	4,717	1,643	3,412	15,367	4.50	7,399	Smaller pipes
1979	4.0 IN. ASBESTOS CEMENT PIPE	60	9,262	6,699	2,563	3,806	15,367	4.04	10,347	Smaller pipes
1982	4.0 IN. ASBESTOS CEMENT PIPE	60	19,095	12,879	6,216	4,993	15,367	3.08	19,129	Smaller pipes
1949	6.0 IN. ASBESTOS CEMENT PIPE	60	19,307	19,307	-	586	15,367	26.21	-	Smaller pipes
1950	6.0 IN. ASBESTOS CEMENT PIPE	60	23,834	23,834	-	627	15,367	24.51	-	Smaller pipes
1960	6.0 IN. ASBESTOS CEMENT PIPE	60	12,116	12,116	-	1,013	15,367	15.17	-	Smaller pipes
1964	6.0 IN. ASBESTOS CEMENT PIPE	60	8,811	8,542	269	1,151	15,367	13.36	3,595	Smaller pipes
1967	6.0 IN. ASBESTOS CEMENT PIPE	60	5,503	5,052	451	1,320	15,367	11.64	5,253	Smaller pipes
1968	6.0 IN. ASBESTOS CEMENT PIPE	60	39,796	36,134	3,662	1,420	15,367	10.82	39,636	Smaller pipes
1969	6.0 IN. ASBESTOS CEMENT PIPE	60	6,839	6,047	792	1,560	15,367	9.85	7,803	Smaller pipes
1971	6.0 IN. ASBESTOS CEMENT PIPE	60	44,106	37,853	6,253	1,943	15,367	7.91	49,446	Smaller pipes
1972	6.0 IN. ASBESTOS CEMENT PIPE	60	29,934	25,150	4,784	2,155	15,367	7.13	34,119	Smaller pipes
1974	6.0 IN. ASBESTOS CEMENT PIPE	60	26,616	21,487	5,129	2,483	15,367	6.19	31,747	Smaller pipes
1975	6.0 IN. ASBESTOS CEMENT PIPE	60	54,903	43,463	11,440	2,719	15,367	5.65	64,658	Smaller pipes
1976	6.0 IN. ASBESTOS CEMENT PIPE	60	8,792	6,790	2,002	2,951	15,367	5.21	10,427	Smaller pipes
1977	6.0 IN. ASBESTOS CEMENT PIPE	60	55,226	41,860	13,366	3,166	15,367	4.85	64,867	Smaller pipes
1978	6.0 IN. ASBESTOS CEMENT PIPE	60	89,060	66,038	23,022	3,412	15,367	4.50	103,681	Smaller pipes
1979	6.0 IN. ASBESTOS CEMENT PIPE	60	36,304	26,318	9,986	3,806	15,367	4.04	40,318	Smaller pipes
1980	6.0 IN. ASBESTOS CEMENT PIPE	60	48,755	34,511	14,244	4,372	15,367	3.51	50,069	Smaller pipes
1981	6.0 IN. ASBESTOS CEMENT PIPE	60	17,498	12,078	5,420	4,592	15,367	3.35	18,138	Smaller pipes
1982	6.0 IN. ASBESTOS CEMENT PIPE	60	241,103	162,729	78,374	4,993	15,367	3.08	241,201	Smaller pipes
1983	6.0 IN. ASBESTOS CEMENT PIPE	60	22,901	15,051	7,850	5,123	15,367	3.00	23,549	Smaller pipes
1984	6.0 IN. ASBESTOS CEMENT PIPE	60	151,221	97,020	54,201	5,049	15,367	3.04	164,962	Smaller pipes
1985	6.0 IN. ASBESTOS CEMENT PIPE	60	46,170	28,839	17,332	5,055	15,367	3.04	52,688	Smaller pipes
1986	6.0 IN. ASBESTOS CEMENT PIPE	60	186,162	113,224	72,938	5,508	15,367	2.79	203,481	Smaller pipes
1987	6.0 IN. ASBESTOS CEMENT PIPE	60	492,080	291,136	200,944	5,732	15,367	2.68	538,687	Smaller pipes
1949	8.0 IN. ASBESTOS CEMENT PIPE	60	20,613	20,613	-	586	15,367	26.21	-	
1958	8.0 IN. ASBESTOS CEMENT PIPE	60	29,116	29,116	-	933	15,367	16.47	-	
1960	8.0 IN. ASBESTOS CEMENT PIPE	60	18,722	18,722	-	1,013	15,367	15.17	-	
1961	8.0 IN. ASBESTOS CEMENT PIPE	60	54,872	54,872	-	1,041	15,367	14.76	-	
1962	8.0 IN. ASBESTOS CEMENT PIPE	60	6,010	6,010	-	1,072	15,367	14.34	-	
1964	8.0 IN. ASBESTOS CEMENT PIPE	60	24,338	23,694	644	1,151	15,367	13.36	8,607	
1965	8.0 IN. ASBESTOS CEMENT PIPE	60	17,226	16,503	723	1,194	15,367	12.88	9,308	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1966	8.0 IN. ASBESTOS CEMENT PIPE	60	13,282	12,487	795	1,253	15,367	12.27	9,749	
1968	8.0 IN. ASBESTOS CEMENT PIPE	60	89,377	81,152	8,225	1,420	15,367	10.82	89,034	
1969	8.0 IN. ASBESTOS CEMENT PIPE	60	110,288	98,333	11,955	1,560	15,367	9.85	117,778	
1971	8.0 IN. ASBESTOS CEMENT PIPE	60	129,668	111,292	18,376	1,943	15,367	7.91	145,311	
1972	8.0 IN. ASBESTOS CEMENT PIPE	60	16,476	13,838	2,638	2,155	15,367	7.13	18,817	
1974	8.0 IN. ASBESTOS CEMENT PIPE	60	55,942	45,202	10,740	2,483	15,367	6.19	66,469	
1975	8.0 IN. ASBESTOS CEMENT PIPE	60	84,909	67,213	17,696	2,719	15,367	5.65	100,016	
1976	8.0 IN. ASBESTOS CEMENT PIPE	60	18,696	14,463	4,233	2,951	15,367	5.21	22,043	
1977	8.0 IN. ASBESTOS CEMENT PIPE	60	109,215	82,810	26,405	3,166	15,367	4.85	128,150	
1978	8.0 IN. ASBESTOS CEMENT PIPE	60	162,598	120,552	42,046	3,412	15,367	4.50	189,359	
1979	8.0 IN. ASBESTOS CEMENT PIPE	60	71,543	51,852	19,691	3,806	15,367	4.04	79,501	
1980	8.0 IN. ASBESTOS CEMENT PIPE	60	57,932	41,014	16,918	4,372	15,367	3.51	59,468	
1981	8.0 IN. ASBESTOS CEMENT PIPE	60	72,703	50,258	22,445	4,592	15,367	3.35	75,106	
1982	8.0 IN. ASBESTOS CEMENT PIPE	60	609,870	411,643	198,228	4,993	15,367	3.08	610,060	
1983	8.0 IN. ASBESTOS CEMENT PIPE	60	65,167	42,897	22,270	5,123	15,367	3.00	66,805	
1984	8.0 IN. ASBESTOS CEMENT PIPE	60	167,784	107,646	60,138	5,049	15,367	3.04	183,032	
1985	8.0 IN. ASBESTOS CEMENT PIPE	60	52,270	32,663	19,607	5,055	15,367	3.04	59,605	
1986	8.0 IN. ASBESTOS CEMENT PIPE	60	176,097	107,092	69,005	5,508	15,367	2.79	192,508	
1987	8.0 IN. ASBESTOS CEMENT PIPE	60	28,187	16,651	11,536	5,732	15,367	2.68	30,926	
1961	10.0 IN. ASBESTOS CEMENT PIPE	60	12,965	12,965	-	1,041	15,367	14.76	-	
1964	10.0 IN. ASBESTOS CEMENT PIPE	60	9,438	9,185	253	1,151	15,367	13.36	3,375	
1971	10.0 IN. ASBESTOS CEMENT PIPE	60	11,063	9,476	1,587	1,943	15,367	7.91	12,546	
1972	10.0 IN. ASBESTOS CEMENT PIPE	60	28,235	23,736	4,499	2,155	15,367	7.13	32,089	
1979	10.0 IN. ASBESTOS CEMENT PIPE	60	56,502	40,935	15,567	3,806	15,367	4.04	62,853	
1986	10.0 IN. ASBESTOS CEMENT PIPE	60	25,935	15,768	10,167	5,508	15,367	2.79	28,363	
1957	12.0 IN. ASBESTOS CEMENT PIPE	60	6,715	6,715	-	890	15,367	17.27	-	
1960	12.0 IN. ASBESTOS CEMENT PIPE	60	43,313	43,313	-	1,013	15,367	15.17	-	
1961	12.0 IN. ASBESTOS CEMENT PIPE	60	13,296	13,296	-	1,041	15,367	14.76	-	
1964	12.0 IN. ASBESTOS CEMENT PIPE	60	26,879	26,151	728	1,151	15,367	13.36	9,724	
1967	12.0 IN. ASBESTOS CEMENT PIPE	60	83,067	76,812	6,255	1,320	15,367	11.64	72,807	
1969	12.0 IN. ASBESTOS CEMENT PIPE	60	17,930	15,944	1,986	1,560	15,367	9.85	19,568	
1975	12.0 IN. ASBESTOS CEMENT PIPE	60	31,828	25,175	6,653	2,719	15,367	5.65	37,600	
1977	12.0 IN. ASBESTOS CEMENT PIPE	60	9,063	6,871	2,192	3,166	15,367	4.85	10,638	
1978	12.0 IN. ASBESTOS CEMENT PIPE	60	106,540	78,989	27,551	3,412	15,367	4.50	124,081	
1979	12.0 IN. ASBESTOS CEMENT PIPE	60	89,950	65,207	24,743	3,806	15,367	4.04	99,899	
1980	12.0 IN. ASBESTOS CEMENT PIPE	60	51,293	36,296	14,997	4,372	15,367	3.51	52,714	
1982	12.0 IN. ASBESTOS CEMENT PIPE	60	57,850	39,042	18,808	4,993	15,367	3.08	57,883	
1986	12.0 IN. ASBESTOS CEMENT PIPE	60	38,687	23,507	15,180	5,508	15,367	2.79	42,349	
1987	12.0 IN. ASBESTOS CEMENT PIPE	60	27,109	16,012	11,097	5,732	15,367	2.68	29,749	
1986	14.0 IN. CONCRETE CYLINDER PIP	60	25,401	15,440	9,961	5,508	15,367	2.79	27,788	
1986	16.0 IN. CONCRETE CYLINDER PIP	60	173,596	105,595	68,001	5,508	15,367	2.79	189,706	
1945	1.0 IN. GALVANIZED IRON PIPE	60	11,219	11,219	-	379	15,367	40.59	-	Smaller pipes
1974	1.0 IN. GALVANIZED IRON PIPE	60	9,962	8,051	1,911	2,483	15,367	6.19	11,827	Smaller pipes
1945	1.5 IN. GALVANIZED IRON PIPE	60	64,798	64,798	-	379	15,367	40.59	-	Smaller pipes
1961	1.5 IN. GALVANIZED IRON PIPE	60	5,140	5,140	-	1,041	15,367	14.76	-	Smaller pipes
1963	1.5 IN. GALVANIZED IRON PIPE	60	7,916	7,796	120	1,107	15,367	13.88	1,666	Smaller pipes
1964	1.5 IN. GALVANIZED IRON PIPE	60	6,059	5,851	208	1,151	15,367	13.36	2,778	Smaller pipes
1966	1.5 IN. GALVANIZED IRON PIPE	60	12,724	11,978	746	1,253	15,367	12.27	9,152	Smaller pipes
1970	1.5 IN. GALVANIZED IRON PIPE	60	5,591	4,883	708	1,697	15,367	9.05	6,408	Smaller pipes
1930	2.0 IN. GALVANIZED IRON PIPE	60	5,725	5,725	-	250	15,367	61.59	-	Smaller pipes
1936	2.0 IN. GALVANIZED IRON PIPE	60	11,593	11,593	-	253	15,367	60.69	-	Smaller pipes
1937	2.0 IN. GALVANIZED IRON PIPE	60	5,882	5,882	-	289	15,367	53.20	-	Smaller pipes
1941	2.0 IN. GALVANIZED IRON PIPE	60	5,450	5,450	-	317	15,367	48.46	-	Smaller pipes
1945	2.0 IN. CAST IRON PIPE	60	5,937	5,937	-	379	15,367	40.59	-	Smaller pipes
1945	2.0 IN. DUCTILE IRON PIPE	60	9,229	9,229	-	379	15,367	40.59	-	Smaller pipes
1945	2.0 IN. GALVANIZED IRON PIPE	60	219,473	219,473	-	379	15,367	40.59	-	Smaller pipes
1946	2.0 IN. GALVANIZED IRON PIPE	60	7,075	7,075	-	425	15,367	36.13	-	Smaller pipes
1956	2.0 IN. CAST IRON PIPE	60	7,290	7,290	-	851	15,367	18.07	-	Smaller pipes
1957	2.0 IN. CAST IRON PIPE	60	12,850	12,850	-	890	15,367	17.27	-	Smaller pipes
1958	2.0 IN. CAST IRON PIPE	60	8,007	8,007	-	933	15,367	16.47	-	Smaller pipes
1958	2.0 IN. GALVANIZED IRON PIPE	60	12,812	12,812	-	933	15,367	16.47	-	Smaller pipes
1961	2.0 IN. CAST IRON PIPE	60	5,378	5,378	-	1,041	15,367	14.76	-	Smaller pipes
1961	2.0 IN. GALVANIZED IRON PIPE	60	10,756	10,756	-	1,041	15,367	14.76	-	Smaller pipes
1962	2.0 IN. GALVANIZED IRON PIPE	60	9,991	9,991	-	1,072	15,367	14.34	-	Smaller pipes
1963	2.0 IN. CAST IRON PIPE	60	37,914	37,546	368	1,107	15,367	13.88	5,108	Smaller pipes
1963	2.0 IN. GALVANIZED IRON PIPE	60	28,988	28,739	249	1,107	15,367	13.88	3,453	Smaller pipes
1964	2.0 IN. CAST IRON PIPE	60	21,907	21,353	554	1,151	15,367	13.36	7,398	Smaller pipes
1964	2.0 IN. GALVANIZED IRON PIPE	60	11,652	11,349	303	1,151	15,367	13.36	4,044	Smaller pipes
1965	2.0 IN. DUCTILE IRON PIPE	60	6,059	5,751	308	1,194	15,367	12.88	3,966	Smaller pipes
1965	2.0 IN. GALVANIZED IRON PIPE	60	11,000	10,523	477	1,194	15,367	12.88	6,137	Smaller pipes

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1966	2.0 IN. CAST IRON PIPE	60	9,914	9,323	591	1,253	15,367	12.27	7,248	Smaller pipes
1966	2.0 IN. GALVANIZED IRON PIPE	60	52,117	49,043	3,074	1,253	15,367	12.27	37,719	Smaller pipes
1967	2.0 IN. GALVANIZED IRON PIPE	60	9,083	8,381	702	1,320	15,367	11.64	8,167	Smaller pipes
1968	2.0 IN. CAST IRON PIPE	60	26,558	24,090	2,468	1,420	15,367	10.82	26,718	Smaller pipes
1968	2.0 IN. GALVANIZED IRON PIPE	60	86,583	78,644	7,939	1,420	15,367	10.82	85,934	Smaller pipes
1969	2.0 IN. CAST IRON PIPE	60	23,491	20,920	2,571	1,560	15,367	9.85	25,334	Smaller pipes
1969	2.0 IN. GALVANIZED IRON PIPE	60	28,109	25,038	3,071	1,560	15,367	9.85	30,250	Smaller pipes
1970	2.0 IN. CAST IRON PIPE	60	5,318	4,621	697	1,697	15,367	9.05	6,313	Smaller pipes
1970	2.0 IN. GALVANIZED IRON PIPE	60	18,880	16,486	2,394	1,697	15,367	9.05	21,676	Smaller pipes
1972	2.0 IN. CAST IRON PIPE	60	25,533	21,464	4,069	2,155	15,367	7.13	29,023	Smaller pipes
1973	2.0 IN. GALVANIZED IRON PIPE	60	19,720	16,237	3,483	2,329	15,367	6.60	22,981	Smaller pipes
1977	2.0 IN. GALVANIZED IRON PIPE	60	6,686	5,051	1,635	3,166	15,367	4.85	7,933	Smaller pipes
2003	4.0 IN. CAST IRON PIPE	60	7,284	7,284	-	7,789	15,367	1.97	-	Smaller pipes
2008	4.0 IN. CAST IRON PIPE	60	26,631	26,631	-	9,134	15,367	1.68	-	Smaller pipes
1914	4.0 IN. CAST IRON PIPE	60	9,064	9,064	-	109	15,367	140.47	-	Smaller pipes
1919	4.0 IN. CAST IRON PIPE	60	6,591	6,591	-	243	15,367	63.14	-	Smaller pipes
1919	4.0 IN. CAST IRON PIPE	60	41,594	41,594	-	243	15,367	63.14	-	Smaller pipes
1922	4.0 IN. CAST IRON PIPE	60	12,763	12,763	-	214	15,367	71.85	-	Smaller pipes
1923	4.0 IN. CAST IRON PIPE	60	10,667	10,667	-	263	15,367	58.42	-	Smaller pipes
1924	4.0 IN. CAST IRON PIPE	60	20,604	20,604	-	264	15,367	58.15	-	Smaller pipes
1926	4.0 IN. CAST IRON PIPE	60	37,530	37,530	-	256	15,367	60.11	-	Smaller pipes
1927	4.0 IN. CAST IRON PIPE	60	8,440	8,440	-	253	15,367	60.69	-	Smaller pipes
1928	4.0 IN. CAST IRON PIPE	60	24,718	24,718	-	254	15,367	60.40	-	Smaller pipes
1929	4.0 IN. CAST IRON PIPE	60	9,200	9,200	-	254	15,367	60.40	-	Smaller pipes
1930	4.0 IN. CAST IRON PIPE	60	5,505	5,505	-	250	15,367	61.59	-	Smaller pipes
1932	4.0 IN. CAST IRON PIPE	60	9,563	9,563	-	193	15,367	79.63	-	Smaller pipes
1936	4.0 IN. CAST IRON PIPE	60	6,183	6,183	-	253	15,367	60.69	-	Smaller pipes
1946	4.0 IN. CAST IRON PIPE	60	24,178	24,178	-	425	15,367	36.13	-	Smaller pipes
1948	4.0 IN. CAST IRON PIPE	60	5,375	5,375	-	567	15,367	27.12	-	Smaller pipes
1950	4.0 IN. CAST IRON PIPE	60	12,418	12,418	-	627	15,367	24.51	-	Smaller pipes
1953	4.0 IN. CAST IRON PIPE	60	10,038	10,038	-	738	15,367	20.84	-	Smaller pipes
1954	4.0 IN. CAST IRON PIPE	60	5,889	5,889	-	772	15,367	19.91	-	Smaller pipes
1956	4.0 IN. CAST IRON PIPE	60	17,939	17,939	-	851	15,367	18.07	-	Smaller pipes
1958	4.0 IN. CAST IRON PIPE	60	10,104	10,104	-	933	15,367	16.47	-	Smaller pipes
1959	4.0 IN. CAST IRON PIPE	60	14,146	14,146	-	980	15,367	15.69	-	Smaller pipes
1960	4.0 IN. CAST IRON PIPE	60	10,459	10,459	-	1,013	15,367	15.17	-	Smaller pipes
1965	4.0 IN. CAST IRON PIPE	60	9,940	9,489	451	1,194	15,367	12.88	5,811	Smaller pipes
1966	4.0 IN. CAST IRON PIPE	60	10,544	9,889	655	1,253	15,367	12.27	8,039	Smaller pipes
1967	4.0 IN. CAST IRON PIPE	60	61,833	57,166	4,667	1,320	15,367	11.64	54,332	Smaller pipes
1968	4.0 IN. CAST IRON PIPE	60	10,759	9,756	1,003	1,420	15,367	10.82	10,853	Smaller pipes
1970	4.0 IN. CAST IRON PIPE	60	6,040	5,251	789	1,697	15,367	9.05	7,146	Smaller pipes
1976	4.0 IN. CAST IRON PIPE	60	13,071	10,092	2,979	2,951	15,367	5.21	15,512	Smaller pipes
1908	6.0 IN. CAST IRON PIPE	60	16,527	16,527	-	119	15,367	128.89	-	Smaller pipes
1918	6.0 IN. CAST IRON PIPE	60	9,988	9,988	-	232	15,367	66.15	-	Smaller pipes
1919	6.0 IN. CAST IRON PIPE	60	15,180	15,180	-	243	15,367	63.14	-	Smaller pipes
1922	6.0 IN. CAST IRON PIPE	60	12,525	12,525	-	214	15,367	71.85	-	Smaller pipes
1923	6.0 IN. CAST IRON PIPE	60	7,499	7,499	-	263	15,367	58.42	-	Smaller pipes
1924	6.0 IN. CAST IRON PIPE	60	14,786	14,786	-	264	15,367	58.15	-	Smaller pipes
1925	6.0 IN. CAST IRON PIPE	60	5,650	5,650	-	254	15,367	60.40	-	Smaller pipes
1926	6.0 IN. CAST IRON PIPE	60	9,322	9,322	-	256	15,367	60.11	-	Smaller pipes
1928	6.0 IN. CAST IRON PIPE	60	18,121	18,121	-	254	15,367	60.40	-	Smaller pipes
1929	6.0 IN. CAST IRON PIPE	60	15,901	15,901	-	254	15,367	60.40	-	Smaller pipes
1931	6.0 IN. CAST IRON PIPE	60	19,670	19,670	-	222	15,367	69.07	-	Smaller pipes
1932	6.0 IN. CAST IRON PIPE	60	12,209	12,209	-	193	15,367	79.63	-	Smaller pipes
1935	6.0 IN. CAST IRON PIPE	60	10,130	10,130	-	241	15,367	63.79	-	Smaller pipes
1936	6.0 IN. CAST IRON PIPE	60	19,294	19,294	-	253	15,367	60.69	-	Smaller pipes
1937	6.0 IN. CAST IRON PIPE	60	6,910	6,910	-	289	15,367	53.20	-	Smaller pipes
1939	6.0 IN. CAST IRON PIPE	60	7,858	7,858	-	290	15,367	52.97	-	Smaller pipes
1941	6.0 IN. CAST IRON PIPE	60	7,286	7,286	-	317	15,367	48.46	-	Smaller pipes
1946	6.0 IN. CAST IRON PIPE	60	68,640	68,640	-	425	15,367	36.13	-	Smaller pipes
1947	6.0 IN. CAST IRON PIPE	60	51,900	51,900	-	508	15,367	30.27	-	Smaller pipes
1948	6.0 IN. CAST IRON PIPE	60	67,315	67,315	-	567	15,367	27.12	-	Smaller pipes
1949	6.0 IN. CAST IRON PIPE	60	24,506	24,506	-	586	15,367	26.21	-	Smaller pipes
1950	6.0 IN. CAST IRON PIPE	60	123,757	123,757	-	627	15,367	24.51	-	Smaller pipes
1951	6.0 IN. CAST IRON PIPE	60	263,073	263,073	-	667	15,367	23.02	-	Smaller pipes
1951	6.0 IN. DUCTILE IRON PIPE	60	7,846	7,846	-	667	15,367	23.02	-	Smaller pipes
1952	6.0 IN. CAST IRON PIPE	60	67,695	67,695	-	699	15,367	21.97	-	Smaller pipes
1953	6.0 IN. CAST IRON PIPE	60	73,824	73,824	-	738	15,367	20.84	-	Smaller pipes
1954	6.0 IN. CAST IRON PIPE	60	61,647	61,647	-	772	15,367	19.91	-	Smaller pipes
1955	6.0 IN. CAST IRON PIPE	60	34,758	34,758	-	811	15,367	18.94	-	Smaller pipes

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1956	6.0 IN. CAST IRON PIPE	60	211,789	211,789	-	851	15,367	18.07	-	Smaller pipes
1957	6.0 IN. CAST IRON PIPE	60	165,609	165,609	-	890	15,367	17.27	-	Smaller pipes
1958	6.0 IN. CAST IRON PIPE	60	60,333	60,333	-	933	15,367	16.47	-	Smaller pipes
1959	6.0 IN. CAST IRON PIPE	60	96,327	96,327	-	980	15,367	15.69	-	Smaller pipes
1960	6.0 IN. CAST IRON PIPE	60	62,264	62,264	-	1,013	15,367	15.17	-	Smaller pipes
1961	6.0 IN. CAST IRON PIPE	60	76,573	76,573	-	1,041	15,367	14.76	-	Smaller pipes
1962	6.0 IN. CAST IRON PIPE	60	69,160	69,160	-	1,072	15,367	14.34	-	Smaller pipes
1963	6.0 IN. CAST IRON PIPE	60	20,386	20,172	214	1,107	15,367	13.88	2,973	Smaller pipes
1964	6.0 IN. CAST IRON PIPE	60	76,916	74,940	1,976	1,151	15,367	13.36	26,394	Smaller pipes
1965	6.0 IN. CAST IRON PIPE	60	165,208	158,298	6,910	1,194	15,367	12.88	88,963	Smaller pipes
1966	6.0 IN. CAST IRON PIPE	60	24,986	23,504	1,482	1,253	15,367	12.27	18,177	Smaller pipes
1967	6.0 IN. CAST IRON PIPE	60	148,073	136,920	11,153	1,320	15,367	11.64	129,830	Smaller pipes
1968	6.0 IN. CAST IRON PIPE	60	85,618	77,718	7,900	1,420	15,367	10.82	85,512	Smaller pipes
1968	6.0 IN. DUCTILE IRON PIPE	60	17,680	16,024	1,656	1,420	15,367	10.82	17,929	Smaller pipes
1969	6.0 IN. CAST IRON PIPE	60	26,368	23,487	2,881	1,560	15,367	9.85	28,379	Smaller pipes
1970	6.0 IN. CAST IRON PIPE	60	20,530	17,955	2,575	1,697	15,367	9.05	23,310	Smaller pipes
1970	6.0 IN. DUCTILE IRON PIPE	60	8,819	7,666	1,153	1,697	15,367	9.05	10,438	Smaller pipes
1971	6.0 IN. CAST IRON PIPE	60	25,721	22,043	3,678	1,943	15,367	7.91	29,087	Smaller pipes
1972	6.0 IN. CAST IRON PIPE	60	19,887	16,716	3,171	2,155	15,367	7.13	22,612	Smaller pipes
1972	6.0 IN. DUCTILE IRON PIPE	60	13,361	11,212	2,149	2,155	15,367	7.13	15,329	Smaller pipes
1973	6.0 IN. CAST IRON PIPE	60	62,622	51,630	10,992	2,329	15,367	6.60	72,520	Smaller pipes
1973	6.0 IN. DUCTILE IRON PIPE	60	11,415	9,405	2,010	2,329	15,367	6.60	13,259	Smaller pipes
1974	6.0 IN. CAST IRON PIPE	60	63,597	51,363	12,234	2,483	15,367	6.19	75,718	Smaller pipes
1974	6.0 IN. DUCTILE IRON PIPE	60	37,258	30,071	7,187	2,483	15,367	6.19	44,482	Smaller pipes
1975	6.0 IN. CAST IRON PIPE	60	21,248	16,815	4,433	2,719	15,367	5.65	25,054	Smaller pipes
1975	6.0 IN. DUCTILE IRON PIPE	60	59,427	47,025	12,402	2,719	15,367	5.65	70,093	Smaller pipes
1976	6.0 IN. CAST IRON PIPE	60	80,644	62,496	18,148	2,951	15,367	5.21	94,497	Smaller pipes
1985	6.0 IN. CAST IRON PIPE	60	35,133	21,939	13,194	5,055	15,367	3.04	40,111	Smaller pipes
1976	6.0 IN. DUCTILE IRON PIPE	60	45,972	35,619	10,353	2,951	15,367	5.21	53,907	Smaller pipes
1977	6.0 IN. DUCTILE IRON PIPE	60	66,983	50,778	16,205	3,166	15,367	4.85	78,646	Smaller pipes
1978	6.0 IN. DUCTILE IRON PIPE	60	81,044	60,076	20,968	3,412	15,367	4.50	94,433	Smaller pipes
1979	6.0 IN. DUCTILE IRON PIPE	60	117,785	85,391	32,394	3,806	15,367	4.04	130,790	Smaller pipes
1980	6.0 IN. DUCTILE IRON PIPE	60	82,781	58,609	24,172	4,372	15,367	3.51	84,965	Smaller pipes
1981	6.0 IN. DUCTILE IRON PIPE	60	198,547	137,324	61,223	4,592	15,367	3.35	204,864	Smaller pipes
1982	6.0 IN. DUCTILE IRON PIPE	60	89,895	60,669	29,226	4,993	15,367	3.08	89,944	Smaller pipes
1983	6.0 IN. DUCTILE IRON PIPE	60	65,920	43,372	22,548	5,123	15,367	3.00	67,641	Smaller pipes
1984	6.0 IN. DUCTILE IRON PIPE	60	93,346	59,869	33,477	5,049	15,367	3.04	101,890	Smaller pipes
1985	6.0 IN. DUCTILE IRON PIPE	60	14,604	9,113	5,491	5,055	15,367	3.04	16,691	Smaller pipes
1922	8.0 IN. CAST IRON PIPE	60	17,883	17,883	-	214	15,367	71.85	-	
1928	8.0 IN. CAST IRON PIPE	60	34,139	34,139	-	254	15,367	60.40	-	
1931	8.0 IN. CAST IRON PIPE	60	19,857	19,857	-	222	15,367	69.07	-	
1934	8.0 IN. CAST IRON PIPE	60	27,247	27,247	-	243	15,367	63.14	-	
1946	8.0 IN. CAST IRON PIPE	60	25,559	25,559	-	425	15,367	36.13	-	
1947	8.0 IN. DUCTILE IRON PIPE	60	20,736	20,736	-	508	15,367	30.27	-	
1948	8.0 IN. CAST IRON PIPE	60	7,394	7,394	-	567	15,367	27.12	-	
1949	8.0 IN. CAST IRON PIPE	60	41,847	41,847	-	586	15,367	26.21	-	
1950	8.0 IN. CAST IRON PIPE	60	35,308	35,308	-	627	15,367	24.51	-	
1951	8.0 IN. CAST IRON PIPE	60	93,216	93,216	-	667	15,367	23.02	-	
1952	8.0 IN. CAST IRON PIPE	60	107,014	107,014	-	699	15,367	21.97	-	
1953	8.0 IN. CAST IRON PIPE	60	47,473	47,473	-	738	15,367	20.84	-	
1954	8.0 IN. CAST IRON PIPE	60	34,219	34,219	-	772	15,367	19.91	-	
1955	8.0 IN. CAST IRON PIPE	60	10,514	10,514	-	811	15,367	18.94	-	
1956	8.0 IN. CAST IRON PIPE	60	71,643	71,643	-	851	15,367	18.07	-	
1957	8.0 IN. CAST IRON PIPE	60	7,190	7,190	-	890	15,367	17.27	-	
1958	8.0 IN. CAST IRON PIPE	60	33,588	33,588	-	933	15,367	16.47	-	
1960	8.0 IN. CAST IRON PIPE	60	20,814	20,814	-	1,013	15,367	15.17	-	
1961	8.0 IN. CAST IRON PIPE	60	16,852	16,852	-	1,041	15,367	14.76	-	
1962	8.0 IN. CAST IRON PIPE	60	18,656	18,656	-	1,072	15,367	14.34	-	
1963	8.0 IN. CAST IRON PIPE	60	67,026	66,462	564	1,107	15,367	13.88	7,825	
1964	8.0 IN. CAST IRON PIPE	60	72,683	70,844	1,839	1,151	15,367	13.36	24,558	
1964	8.0 IN. DUCTILE IRON PIPE	60	10,457	10,179	278	1,151	15,367	13.36	3,709	
1965	8.0 IN. CAST IRON PIPE	60	94,480	90,506	3,974	1,194	15,367	12.88	51,171	
1966	8.0 IN. CAST IRON PIPE	60	13,425	12,601	824	1,253	15,367	12.27	10,113	
1967	8.0 IN. CAST IRON PIPE	60	229,682	212,454	17,228	1,320	15,367	11.64	200,545	
1968	8.0 IN. CAST IRON PIPE	60	100,564	91,342	9,222	1,420	15,367	10.82	99,821	
1969	8.0 IN. CAST IRON PIPE	60	139,418	124,282	15,136	1,560	15,367	9.85	149,122	
1970	8.0 IN. CAST IRON PIPE	60	8,739	7,614	1,125	1,697	15,367	9.05	10,188	
1970	8.0 IN. DUCTILE IRON PIPE	60	58,986	51,608	7,378	1,697	15,367	9.05	66,791	
1971	8.0 IN. CAST IRON PIPE	10	14,320	13,451	869	1,943	15,367	7.91	6,872	
1971	8.0 IN. DUCTILE IRON PIPE	60	6,163	5,254	909	1,943	15,367	7.91	7,190	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1972	8.0 IN. CAST IRON PIPE	60	6,477	5,405	1,072	2,155	15,367	7.13	7,646	
1974	8.0 IN. CAST IRON PIPE	60	19,841	16,006	3,835	2,483	15,367	6.19	23,737	
1975	8.0 IN. CAST IRON PIPE	60	42,323	33,488	8,835	2,719	15,367	5.65	49,933	
1975	8.0 IN. DUCTILE IRON PIPE	60	25,134	19,856	5,278	2,719	15,367	5.65	29,831	
1976	8.0 IN. DUCTILE IRON PIPE	60	17,589	13,625	3,964	2,951	15,367	5.21	20,640	
1977	8.0 IN. CAST IRON PIPE	60	6,307	4,778	1,529	3,166	15,367	4.85	7,420	
1978	8.0 IN. DUCTILE IRON PIPE	60	9,517	7,032	2,485	3,412	15,367	4.50	11,193	
1979	8.0 IN. DUCTILE IRON PIPE	60	49,707	36,018	13,689	3,806	15,367	4.04	55,267	
1980	8.0 IN. DUCTILE IRON PIPE	60	15,557	11,008	4,549	4,372	15,367	3.51	15,989	
1987	8.0 IN. DUCTILE IRON PIPE	60	9,006	5,325	3,681	5,732	15,367	2.68	9,868	
1910	10.0 IN. CAST IRON PIPE	60	10,112	10,112	-	118	15,367	130.23	-	
1922	10.0 IN. CAST IRON PIPE	60	13,046	13,046	-	214	15,367	71.85	-	
1935	10.0 IN. CAST IRON PIPE	60	33,248	33,248	-	241	15,367	63.79	-	
1950	10.0 IN. CAST IRON PIPE	60	19,660	19,660	-	627	15,367	24.51	-	
1951	10.0 IN. CAST IRON PIPE	60	33,119	33,119	-	667	15,367	23.02	-	
1952	10.0 IN. CAST IRON PIPE	60	60,091	60,091	-	699	15,367	21.97	-	
1953	10.0 IN. CAST IRON PIPE	60	28,407	28,407	-	738	15,367	20.84	-	
1956	10.0 IN. CAST IRON PIPE	60	104,543	104,543	-	851	15,367	18.07	-	
1962	10.0 IN. CAST IRON PIPE	60	7,001	7,001	-	1,072	15,367	14.34	-	
1964	10.0 IN. CAST IRON PIPE	60	18,882	18,370	512	1,151	15,367	13.36	6,843	
1967	10.0 IN. CAST IRON PIPE	60	9,083	8,381	702	1,320	15,367	11.64	8,167	
1935	12.0 IN. CAST IRON PIPE	60	24,484	24,484	-	241	15,367	63.79	-	
1940	12.0 IN. CAST IRON PIPE	60	15,735	15,735	-	297	15,367	51.66	-	
1947	12.0 IN. CAST IRON PIPE	60	15,780	15,780	-	508	15,367	30.27	-	
1951	12.0 IN. CAST IRON PIPE	60	6,646	6,646	-	667	15,367	23.02	-	
1952	12.0 IN. CAST IRON PIPE	60	128,362	128,362	-	699	15,367	21.97	-	
1953	12.0 IN. CAST IRON PIPE	60	27,585	27,585	-	738	15,367	20.84	-	
1954	12.0 IN. CAST IRON PIPE	60	17,295	17,295	-	772	15,367	19.91	-	
1956	12.0 IN. CAST IRON PIPE	60	81,339	81,339	-	851	15,367	18.07	-	
1957	12.0 IN. CAST IRON PIPE	60	47,701	47,701	-	890	15,367	17.27	-	
1958	12.0 IN. CAST IRON PIPE	60	15,600	15,600	-	933	15,367	16.47	-	
1959	12.0 IN. CAST IRON PIPE	60	18,483	18,483	-	980	15,367	15.69	-	
1965	12.0 IN. CAST IRON PIPE	60	32,485	31,108	1,377	1,194	15,367	12.88	17,724	
1967	12.0 IN. CAST IRON PIPE	60	105,810	97,848	7,963	1,320	15,367	11.64	92,689	
1968	12.0 IN. CAST IRON PIPE	60	187,385	170,204	17,181	1,420	15,367	10.82	185,971	
1969	12.0 IN. CAST IRON PIPE	60	16,937	15,087	1,850	1,560	15,367	9.85	18,223	
1970	12.0 IN. DUCTILE IRON PIPE	60	18,800	16,433	2,367	1,697	15,367	9.05	21,425	
1971	12.0 IN. CAST IRON PIPE	60	102,545	88,014	14,531	1,943	15,367	7.91	114,906	
1979	12.0 IN. DUCTILE IRON PIPE	60	11,702	8,483	3,219	3,806	15,367	4.04	12,997	
1971	14.0 IN. DUCTILE IRON PIPE	60	7,310	6,233	1,077	1,943	15,367	7.91	8,518	
1951	16.0 IN. CAST IRON PIPE	60	37,819	37,819	-	667	15,367	23.02	-	
1952	16.0 IN. CAST IRON PIPE	60	83,942	83,942	-	699	15,367	21.97	-	
1953	16.0 IN. CAST IRON PIPE	60	7,426	7,426	-	738	15,367	20.84	-	
1958	16.0 IN. CAST IRON PIPE	60	59,040	59,040	-	933	15,367	16.47	-	
1967	16.0 IN. CAST IRON PIPE	60	47,646	44,067	3,579	1,320	15,367	11.64	41,661	
1967	16.0 IN. DUCTILE IRON PIPE	60	75,844	70,152	5,692	1,320	15,367	11.64	66,258	
1968	16.0 IN. CAST IRON PIPE	60	52,574	47,742	4,832	1,420	15,367	10.82	52,300	
1968	16.0 IN. DUCTILE IRON PIPE	60	34,883	31,665	3,218	1,420	15,367	10.82	34,828	
1971	16.0 IN. DUCTILE IRON PIPE	60	20,420	17,510	2,910	1,943	15,367	7.91	23,009	
1972	16.0 IN. CAST IRON PIPE	60	12,507	10,504	2,003	2,155	15,367	7.13	14,282	
1975	4.0 IN. WELDED STEEL PIPE	50	20,972	19,903	1,069	2,719	15,367	5.65	6,039	Smaller pipes
1937	8.0 IN. WELDED STEEL PIPE	50	44,920	44,920	-	289	15,367	53.20	-	
1968	8.0 IN. WELDED STEEL PIPE	50	21,649	21,649	-	1,420	15,367	10.82	-	
1970	8.0 IN. WELDED STEEL PIPE	50	12,978	12,978	-	1,697	15,367	9.05	-	
1971	8.0 IN. WELDED STEEL PIPE	50	9,969	9,969	-	1,943	15,367	7.91	-	
1960	10.0 IN. STEEL PIPE	5	13,859	13,859	-	1,013	15,367	15.17	-	
1968	12.0 IN. WELDED STEEL PIPE	50	10,626	10,626	-	1,420	15,367	10.82	-	
1969	12.0 IN. WELDED STEEL PIPE	50	5,916	5,916	-	1,560	15,367	9.85	-	
1971	12.0 IN. WELDED STEEL PIPE	50	59,091	59,091	-	1,943	15,367	7.91	-	
1968	16.0 IN. WELDED STEEL PIPE	50	155,581	155,581	-	1,420	15,367	10.82	-	
1970	16.0 IN. WELDED STEEL PIPE	50	50,995	50,995	-	1,697	15,367	9.05	-	
1971	16.0 IN. WELDED STEEL PIPE	50	9,687	9,687	-	1,943	15,367	7.91	-	
1977	16.0 IN. WELDED STEEL PIPE	50	7,824	7,098	726	3,166	15,367	4.85	3,521	
1978	16.0 IN. WELDED STEEL PIPE	50	511,792	455,459	56,333	3,412	15,367	4.50	253,703	
1983	16.0 IN. WELDED STEEL PIPE	50	163,462	129,126	34,336	5,123	15,367	3.00	103,001	
1980	16.0 IN. LINED & COATED STEEL	50	349,080	296,694	52,386	4,372	15,367	3.51	184,136	
1982	16.0 IN. LINED & COATED STEEL	50	398,333	322,624	75,709	4,993	15,367	3.08	233,001	
1970	18.0 IN. WELDED STEEL PIPE	50	119,223	119,223	-	1,697	15,367	9.05	-	
1971	18.0 IN. WELDED STEEL PIPE	50	30,080	30,080	-	1,943	15,367	7.91	-	
1980	24.0 IN. LINED & COATED STEEL	50	1,389,456	1,181,033	208,423	4,372	15,367	3.51	732,598	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1981	24.0 IN. LINED & COATED STEEL	50	2,068,813	1,717,104	351,709	4,592	15,367	3.35	1,176,888	
1974	2.0 IN. POLY VINYL CHLORIDE P	30	14,280	14,280	-	2,483	15,367	6.19	-	Smaller pipes
1975	2.0 IN. POLY VINYL CHLORIDE P	30	12,262	12,262	-	2,719	15,367	5.65	-	Smaller pipes
1976	2.0 IN. POLY VINYL CHLORIDE P	30	13,719	13,719	-	2,951	15,367	5.21	-	Smaller pipes
1977	2.0 IN. POLY VINYL CHLORIDE P	30	12,627	12,627	-	3,166	15,367	4.85	-	Smaller pipes
1978	2.0 IN. POLY VINYL CHLORIDE P	30	9,799	9,799	-	3,412	15,367	4.50	-	Smaller pipes
1979	2.0 IN. POLY VINYL CHLORIDE P	30	5,160	5,160	-	3,806	15,367	4.04	-	Smaller pipes
1980	2.0 IN. POLY VINYL CHLORIDE P	30	5,663	5,663	-	4,372	15,367	3.51	-	Smaller pipes
1981	2.0 IN. POLY VINYL CHLORIDE P	30	6,694	6,694	-	4,592	15,367	3.35	-	Smaller pipes
1982	2.0 IN. POLY VINYL CHLORIDE P	30	7,905	7,905	-	4,993	15,367	3.08	-	Smaller pipes
1983	2.0 IN. POLY VINYL CHLORIDE P	30	5,335	5,335	-	5,123	15,367	3.00	-	Smaller pipes
1975	4.0 IN. POLY VINYL CHLORIDE P	30	35,503	35,503	-	2,719	15,367	5.65	-	Smaller pipes
1976	4.0 IN. POLY VINYL CHLORIDE P	30	21,078	21,078	-	2,951	15,367	5.21	-	Smaller pipes
1982	4.0 IN. POLY VINYL CHLORIDE P	30	19,028	19,028	-	4,993	15,367	3.08	-	Smaller pipes
1978	6.0 IN. POLY VINYL CHLORIDE P	30	28,298	28,298	-	3,412	15,367	4.50	-	Smaller pipes
1979	6.0 IN. POLY VINYL CHLORIDE P	30	40,079	40,079	-	3,806	15,367	4.04	-	Smaller pipes
1982	6.0 IN. POLY VINYL CHLORIDE P	30	23,458	23,458	-	4,993	15,367	3.08	-	Smaller pipes
1983	6.0 IN. POLY VINYL CHLORIDE P	30	33,772	33,772	-	5,123	15,367	3.00	-	Smaller pipes
1987	6.0 IN. POLY VINYL CHLORIDE P	30	155,156	155,156	-	5,732	15,367	2.68	-	Smaller pipes
1978	8.0 IN. POLY VINYL CHLORIDE P	30	29,119	29,119	-	3,412	15,367	4.50	-	
1980	8.0 IN. POLY VINYL CHLORIDE P	30	61,879	61,879	-	4,372	15,367	3.51	-	
1985	1.0 IN. COPPER PIPE	50	14,861	11,138	3,723	5,055	15,367	3.04	11,317	Smaller pipes
1985	1.5 IN. COPPER PIPE	50	5,283	3,939	1,344	5,055	15,367	3.04	4,087	Smaller pipes
1946	6.0 IN. VALVES	40	5,479	5,479	-	425	15,367	36.13	-	Smaller pipes
1950	6.0 IN. VALVES	40	12,835	12,835	-	627	15,367	24.51	-	Smaller pipes
1951	6.0 IN. VALVES	40	21,233	21,233	-	667	15,367	23.02	-	Smaller pipes
1952	6.0 IN. VALVES	40	11,520	11,520	-	699	15,367	21.97	-	Smaller pipes
1953	6.0 IN. VALVES	40	7,804	7,804	-	738	15,367	20.84	-	Smaller pipes
1954	6.0 IN. VALVES	40	6,278	6,278	-	772	15,367	19.91	-	Smaller pipes
1956	6.0 IN. VALVES	40	18,697	18,697	-	851	15,367	18.07	-	Smaller pipes
1957	6.0 IN. VALVES	40	14,475	14,475	-	890	15,367	17.27	-	Smaller pipes
1958	6.0 IN. VALVES	40	5,523	5,523	-	933	15,367	16.47	-	Smaller pipes
1959	6.0 IN. VALVES	40	7,250	7,250	-	980	15,367	15.69	-	Smaller pipes
1960	6.0 IN. VALVES	40	8,333	8,333	-	1,013	15,367	15.17	-	Smaller pipes
1961	6.0 IN. VALVES	40	8,561	8,561	-	1,041	15,367	14.76	-	Smaller pipes
1962	6.0 IN. VALVES	40	5,623	5,623	-	1,072	15,367	14.34	-	Smaller pipes
1964	6.0 IN. VALVES	40	11,377	11,377	-	1,151	15,367	13.36	-	Smaller pipes
1965	6.0 IN. VALVES	40	15,663	15,663	-	1,194	15,367	12.88	-	Smaller pipes
1967	6.0 IN. VALVES	40	16,572	16,572	-	1,320	15,367	11.64	-	Smaller pipes
1968	6.0 IN. VALVES	40	13,867	13,867	-	1,420	15,367	10.82	-	Smaller pipes
1969	6.0 IN. VALVES	40	11,364	11,364	-	1,560	15,367	9.85	-	Smaller pipes
1970	6.0 IN. VALVES	40	8,090	8,090	-	1,697	15,367	9.05	-	Smaller pipes
1971	6.0 IN. VALVES	40	13,799	13,799	-	1,943	15,367	7.91	-	Smaller pipes
1972	6.0 IN. VALVES	40	9,115	9,115	-	2,155	15,367	7.13	-	Smaller pipes
1974	6.0 IN. VALVES	40	8,405	8,405	-	2,483	15,367	6.19	-	Smaller pipes
1975	6.0 IN. VALVES	40	15,200	15,200	-	2,719	15,367	5.65	-	Smaller pipes
1976	6.0 IN. VALVES	40	7,876	7,876	-	2,951	15,367	5.21	-	Smaller pipes
1977	6.0 IN. VALVES	40	10,943	10,943	-	3,166	15,367	4.85	-	Smaller pipes
1978	6.0 IN. VALVES	40	18,644	18,644	-	3,412	15,367	4.50	-	Smaller pipes
1979	6.0 IN. VALVES	40	19,785	19,785	-	3,806	15,367	4.04	-	Smaller pipes
1980	6.0 IN. VALVES	40	15,380	15,380	-	4,372	15,367	3.51	-	Smaller pipes
1981	6.0 IN. VALVES	40	12,806	12,806	-	4,592	15,367	3.35	-	Smaller pipes
1982	6.0 IN. VALVES	40	45,760	45,760	-	4,993	15,367	3.08	-	Smaller pipes
1983	6.0 IN. VALVES	40	10,121	9,994	127	5,123	15,367	3.00	381	Smaller pipes
1984	6.0 IN. VALVES	40	21,646	20,829	817	5,049	15,367	3.04	2,486	Smaller pipes
1985	6.0 IN. VALVES	40	7,337	6,863	474	5,055	15,367	3.04	1,440	Smaller pipes
1986	6.0 IN. VALVES	40	15,803	14,418	1,385	5,508	15,367	2.79	3,864	Smaller pipes
1987	6.0 IN. VALVES	40	19,477	17,254	2,223	5,732	15,367	2.68	5,960	Smaller pipes
1987	6.0 IN. AIR RELIEF VALVE	40	5,728	5,077	651	5,732	15,367	2.68	1,745	Smaller pipes
1951	8.0 IN. VALVES	40	5,321	5,321	-	667	15,367	23.02	-	
1952	8.0 IN. VALVES	40	6,265	6,265	-	699	15,367	21.97	-	
1956	8.0 IN. VALVES	40	5,945	5,945	-	851	15,367	18.07	-	
1964	8.0 IN. VALVES	40	6,299	6,299	-	1,151	15,367	13.36	-	
1965	8.0 IN. VALVES	40	7,819	7,819	-	1,194	15,367	12.88	-	
1967	8.0 IN. VALVES	40	18,267	18,267	-	1,320	15,367	11.64	-	
1968	8.0 IN. VALVES	40	17,582	17,582	-	1,420	15,367	10.82	-	
1969	8.0 IN. VALVES	40	27,367	27,367	-	1,560	15,367	9.85	-	
1970	8.0 IN. VALVES	40	9,170	9,170	-	1,697	15,367	9.05	-	
1971	8.0 IN. VALVES	40	19,247	19,247	-	1,943	15,367	7.91	-	
1974	8.0 IN. VALVES	40	7,513	7,513	-	2,483	15,367	6.19	-	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1975	8.0 IN. VALVES	40	11,929	11,929	-	2,719	15,367	5.65	-	
1977	8.0 IN. VALVES	40	17,206	17,206	-	3,166	15,367	4.85	-	
1978	8.0 IN. VALVES	40	11,528	11,528	-	3,412	15,367	4.50	-	
1980	8.0 IN. VALVES	40	7,747	7,747	-	4,372	15,367	3.51	-	
1982	8.0 IN. VALVES	40	48,635	48,635	-	4,993	15,367	3.08	-	
1984	8.0 IN. VALVES	40	11,406	10,973	433	5,049	15,367	3.04	1,317	
1986	8.0 IN. VALVES	40	14,126	12,885	1,241	5,508	15,367	2.79	3,462	
1987	8.0 IN. AIR RELIEF VALVE	40	6,792	6,001	791	5,732	15,367	2.68	2,121	
1952	12.0 IN. VALVES	40	7,642	7,642	-	699	15,367	21.97	-	
1957	12.0 IN. VALVES	40	6,114	6,114	-	890	15,367	17.27	-	
1967	12.0 IN. VALVES	40	16,049	16,049	-	1,320	15,367	11.64	-	
1968	12.0 IN. VALVES	40	9,400	9,400	-	1,420	15,367	10.82	-	
1971	12.0 IN. VALVES	40	9,629	9,629	-	1,943	15,367	7.91	-	
1978	12.0 IN. VALVES	40	8,598	8,598	-	3,412	15,367	4.50	-	
1979	12.0 IN. VALVES	40	9,314	9,314	-	3,806	15,367	4.04	-	
1986	12.0 IN. VALVES	40	5,101	4,637	464	5,508	15,367	2.79	1,296	
1952	16.0 IN. VALVES	40	6,021	6,021	-	699	15,367	21.97	-	
1967	16.0 IN. VALVES	40	8,350	8,350	-	1,320	15,367	11.64	-	
1968	16.0 IN. VALVES	40	13,825	13,825	-	1,420	15,367	10.82	-	
1978	16.0 IN. VALVES	40	13,006	13,006	-	3,412	15,367	4.50	-	
1980	16.0 IN. VALVES	40	8,590	8,590	-	4,372	15,367	3.51	-	
1982	16.0 IN. VALVES	40	5,925	5,925	-	4,993	15,367	3.08	-	
1986	16.0 IN. BUTTERFLY VALVES	40	6,431	5,841	590	5,508	15,367	2.79	1,647	
1970	18.0 IN. VALVES	40	9,045	9,045	-	1,697	15,367	9.05	-	
1980	24.0 IN. AIR RELIEF VALVES	40	9,134	9,134	-	4,372	15,367	3.51	-	
1980	24.0 IN. BLOW OFFS	40	15,224	15,224	-	4,372	15,367	3.51	-	
1980	24.0 IN. TURN OUT	40	6,524	6,524	-	4,372	15,367	3.51	-	
1980	24.0 IN. VALVES	40	15,224	15,224	-	4,372	15,367	3.51	-	
1981	24.0 IN. BLOW OFFS	40	29,835	29,835	-	4,592	15,367	3.35	-	
1981	24.0 IN. TURN OUT	40	9,472	9,472	-	4,592	15,367	3.35	-	
1981	24.0 IN. VALVES	40	16,575	16,575	-	4,592	15,367	3.35	-	
1989	ROOSEVELT AVE.	50	25,343	16,952	8,391	5,933	15,367	2.59	21,736	
1989	OAK ST.	50	24,023	16,080	7,943	5,933	15,367	2.59	20,574	
1989	SEISMIC IMPROVEMENTS	50	51,343	34,372	16,971	5,933	15,367	2.59	43,961	
1989	SEISMIC IMPROVEMENTS	50	933,628	625,513	308,115	5,933	15,367	2.59	798,118	
1989	MAIN REPLACEMENT	50	54,959	36,817	18,142	5,933	15,367	2.59	46,993	
1989	MAIN REPLACEMENT	50	55,801	37,386	18,415	5,933	15,367	2.59	47,701	
1989	MAIN REPLACEMENT	50	716,530	480,056	236,474	5,933	15,367	2.59	612,545	
1989	CATHODIC PROTECTION SYSTEM	50	9,542	6,366	3,176	5,933	15,367	2.59	8,227	
1989	CATHODIC PROTECTION SYSTEM	50	68,892	46,131	22,761	5,933	15,367	2.59	58,959	
1989	MAIN EXTENSION	50	11,102	7,437	3,665	5,933	15,367	2.59	9,493	
1989	EMERALD LAKE IMPROVEMENTS	50	25,067	16,784	8,283	5,933	15,367	2.59	21,455	
1991	CHESTNUT STREET	50	51,857	32,666	19,191	6,222	15,367	2.47	47,398	
1991	BROADWAY SIDEWALK	50	361,000	227,430	133,570	6,222	15,367	2.47	329,892	
1991	SEISMIC IMPS	50	149,490	94,155	55,335	6,222	15,367	2.47	136,667	
1991	MAIN REPLACE	50	20,371	12,821	7,550	6,222	15,367	2.47	18,646	
1991	MAIN REPLACE	50	264,668	166,730	97,938	6,222	15,367	2.47	241,887	
1991	RESV. ROOFS	50	298,132	187,804	110,328	6,222	15,367	2.47	272,489	
1991	DISTRIB. IMPS.	50	55,082	34,683	20,399	6,222	15,367	2.47	50,382	
1991	DISTRIB. IMPS.	50	55,608	35,028	20,580	6,222	15,367	2.47	50,828	
1991	DISTRIB. IMPS.	50	623,067	392,522	230,545	6,222	15,367	2.47	569,400	
1991	PUMPING IMPS	50	19,455	12,254	7,201	6,222	15,367	2.47	17,785	
1991	PUMPNG IMPS	50	8,510	5,355	3,155	6,222	15,367	2.47	7,792	
1991	CATHODIC	50	23,614	14,868	8,746	6,222	15,367	2.47	21,600	
1991	MAIN EXTEN	50	19,500	12,285	7,215	6,222	15,367	2.47	17,820	
1992	WATER DIST IMP	50	32,494	19,796	12,698	6,295	15,367	2.44	30,999	
1992	WATER DIST IMP	50	115,020	70,150	44,870	6,295	15,367	2.44	109,538	
1992	WATER DIST IMP	50	638,415	389,424	248,991	6,295	15,367	2.44	607,848	
1992	PUMPING SYS IMP	50	9,003	5,490	3,513	6,295	15,367	2.44	8,576	
1992	WATER DIST IMP	50	83,149	50,692	32,457	6,295	15,367	2.44	79,236	
1992	WATER DIST IMP	50	44,982	27,421	17,561	6,295	15,367	2.44	42,872	
1992	WATER DIST IMP	50	889,103	542,351	346,752	6,295	15,367	2.44	846,507	
1992	PUMPING SYS IMP	50	6,632	4,027	2,605	6,295	15,367	2.44	6,360	
1992	EMRG POWER GEN	10	8,962	8,962	-	6,295	15,367	2.44	-	
1992	STORAGE SYS IMP	50	9,922	6,039	3,883	6,295	15,367	2.44	9,478	
1993	CHESTNUT ST. RECONSTRUCTION	50	95,578	56,376	39,202	6,478	15,367	2.37	92,998	
1993	CHESTNUT ST. RECONSTRUCTION	50	32,890	19,383	13,507	6,478	15,367	2.37	32,042	
1993	CHESTNUT ST. RECONST.	50	20,995	12,362	8,633	6,478	15,367	2.37	20,480	
1993	WATER DIST. SYSTEM IMPR. & REPAIR	50	69,577	41,036	28,541	6,478	15,367	2.37	67,707	
1993	WATER DIST. SYSTEM IMPR. & REPAIR	50	33,219	19,588	13,631	6,478	15,367	2.37	32,335	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1993	WATER DIST. SYSTEM IMPR. & REPAIR	50	1,197,241	706,349	490,892	6,478	15,367	2.37	1,164,515	
1993	SEISMIC IMPR. OTHER RESERVOIR	50	10,287	6,049	4,238	6,478	15,367	2.37	10,054	
1993	CHESTNUT ST. RECONST.	50	25,907	15,281	10,626	6,478	15,367	2.37	25,207	
1993	CHESTNUT ST. RECONST.	50	67,170	39,619	27,551	6,478	15,367	2.37	65,357	
1993	CHESTNUT ST. RECONST.	50	852,678	503,065	349,613	6,478	15,367	2.37	829,367	
1994	CORROSION PROTECTION PROGRAM	50	5,274	2,993	2,281	6,530	15,367	2.35	5,367	
1994	WATER DIST. SYSTEM IMPROV. & REPL.	50	87,308	49,761	37,547	6,530	15,367	2.35	88,355	
1994	WATER DIST. SYSTEM IMPROV. & REPL.	50	38,887	22,146	16,741	6,530	15,367	2.35	39,396	
1994	WATER DIST. SYSTEM IMPROV. & REPL.	50	821,833	468,427	353,406	6,530	15,367	2.35	831,638	
1994	CORROSION PROTECTION PROGRAM	50	8,500	4,845	3,655	6,530	15,367	2.35	8,601	
1995	MSC EMERGENCY GENERATOR	50	9,251	5,088	4,163	6,558	15,367	2.34	9,755	
1995	ELH PUMPING & STORAGE FACILITIES	50	543,705	299,035	244,670	6,558	15,367	2.34	573,317	
1995	TANKS SEISMIC/COATING PROGRAM	50	28,033	15,401	12,632	6,558	15,367	2.34	29,600	
1995	DIST.SYSTEM REPL. PROG.	50	248,333	136,566	111,767	6,558	15,367	2.34	261,896	
1995	PUMPS CONTROL & REPL. PROG.	50	45,653	25,108	20,545	6,558	15,367	2.34	48,141	
1995	CORROSION PROTECTION PROG.	50	58,345	32,066	26,279	6,558	15,367	2.34	61,578	
1996	ELH PUMPING STORAGE FAC.	50	65,477	34,690	30,787	6,630	15,367	2.32	71,365	
1996	PENN.TANK/TANKS SEISMIC COATIN PROJ.	50	52,637	27,879	24,758	6,630	15,367	2.32	57,389	
1996	DIST SYSTEM REPL. PROG.	50	605,509	320,915	284,594	6,630	15,367	2.32	659,681	
1997	Water Distribution System	50	1,215,396	619,830	595,566	6,731	15,367	2.28	1,359,695	
1997	Tank Seismic Coating Program	50	614,246	313,243	301,003	6,731	15,367	2.28	687,199	
1997	Cathodic Protection Repl. Prog.	50	11,400	5,814	5,586	6,731	15,367	2.28	12,753	
1997	Emergency Power Pump Stn.	50	140,457	71,630	68,827	6,731	15,367	2.28	157,134	
1997	TANKS/SEISMIC COATING PROJECT	50	133,929	68,290	65,639	6,731	15,367	2.28	149,857	
1998	DISTRIBUTION SYSTEM REPL. PROG.	50	709,192	347,485	361,707	6,846	15,367	2.24	811,975	
1998	TELEMETRY/HOPKINS & SPRING ST. WATER MAIN (74293,74473/83)	50	682,879	334,598	348,281	6,846	15,367	2.24	781,836	
1999	DIST. SYSTEM REPL. PROGRAM	50	225,545	105,986	119,559	6,817	15,367	2.25	269,529	
1999	HOPKINS AVE. WATER MAIN	50	43,415	20,398	23,017	6,817	15,367	2.25	51,888	
1999	SPRING STREET WATER MAIN	50	16,339	7,662	8,677	6,817	15,367	2.25	19,562	
1999	FERNSIDE STREET WATER MAIN	50	11,494	5,383	6,111	6,817	15,367	2.25	13,777	
1999	REPLACE EASTER CROSS TANK	50	237,757	111,743	126,014	6,817	15,367	2.25	284,080	
2000	DISTRIBUTION SYSTEM REPL. PROG.	50	1,144,213	514,890	629,323	7,448	15,367	2.06	1,298,467	
2000	SPRING STREET WATER MAIN	50	357,416	160,830	196,586	7,448	15,367	2.06	405,611	
2000	FERNSIDE STREET WATER MAIN	50	184,100	82,845	101,255	7,448	15,367	2.06	208,917	
2000	PENINSULA TANK NO. 1 RECOATING	50	469,527	211,276	258,251	7,448	15,367	2.06	532,844	
2000	KATHERINE AVE. AREA UPGRADE	50	587,930	264,556	323,374	7,448	15,367	2.06	667,211	
2001	DISTRIBUTION SYSTEM REPL PROG	50	838,610	360,598	478,012	7,399	15,367	2.08	992,791	
2001	FERNSIDE STREET WATER MAIN	50	10,376	4,452	5,924	7,399	15,367	2.08	12,305	
2001	KATHERINE AVE. AREA UPGRADE	50	637,640	274,169	363,471	7,399	15,367	2.08	754,900	
2001	ALAMEDA MAIN LINE EMERG. REPAIR	50	490,000	210,700	279,300	7,399	15,367	2.08	580,083	
2001	RECYCLED WATER SYST. DEVELOP.	50	51,312	22,059	29,253	7,399	15,367	2.08	60,756	
2001	PENINSULA TANK NO.1 RECOATING	50	245,774	105,673	140,101	7,399	15,367	2.08	290,977	
2002	WHIPPLE AVENUE AREA UPGRADE	50	999,861	409,939	589,922	7,644	15,367	2.01	1,185,889	
2004	MADISON AVENUE AREA UPGRADE PROJECT 74623	50	1,000,000	370,000	630,000	8,228	15,367	1.87	1,176,582	
2005	CHLORAMINE CONVERSION SYS. MOD.	50	190,662	66,728	123,934	8,230	15,367	1.87	231,423	
2005	LAKEVIEW WATER TANK REHAB.	50	768,321	268,905	499,416	8,230	15,367	1.87	932,564	
2006	WATER MAIN REPLACEMENT-2004/05	50	306,800	101,244	205,556	8,468	15,367	1.81	373,012	
2006	WATER MAIN REPLACEMENT-2004/05	50	47,200	15,576	31,624	8,468	15,367	1.81	57,386	
2006	WATER MAIN REPLACEMENT-2004/05	50	94,400	31,152	63,248	8,468	15,367	1.81	114,773	
2006	WATER MAIN REPLACEMENT-2004/05	50	94,400	31,152	63,248	8,468	15,367	1.81	114,773	
2006	WATER MAIN REPLACEMENT-2004/05	50	70,800	23,364	47,436	8,468	15,367	1.81	86,080	
2006	WATER MAIN REPLACEMENT-2004/05	50	94,400	31,152	63,248	8,468	15,367	1.81	114,773	
2006	WATER MAIN REPLACEMENT-2004/05	50	47,200	15,576	31,624	8,468	15,367	1.81	57,386	
2006	WATER MAIN REPLACEMENT-2004/05	50	165,200	54,516	110,684	8,468	15,367	1.81	200,853	
2006	WATER MAIN REPLACEMENT-2004/05	50	47,200	15,576	31,624	8,468	15,367	1.81	57,386	
2006	WATER MAIN REPLACEMENT-2002/03	50	455,000	150,150	304,850	8,468	15,367	1.81	553,196	
2006	WATER MAIN REPLACEMENT-2002/03	50	65,000	21,450	43,550	8,468	15,367	1.81	79,028	
2006	WATER MAIN REPLACEMENT-2002/03	50	91,000	30,030	60,970	8,468	15,367	1.81	110,639	
2006	WATER MAIN REPLACEMENT-2002/03	50	66,100	21,813	44,287	8,468	15,367	1.81	80,365	
2006	WATER MAIN REPLACEMENT-2002/03	50	91,000	30,030	60,970	8,468	15,367	1.81	110,639	
2006	WATER MAIN REPLACEMENT-2002/03	50	151,200	49,896	101,304	8,468	15,367	1.81	183,831	
2006	WATER MAIN REPLACEMENT-2002/03	50	52,000	17,160	34,840	8,468	15,367	1.81	63,222	
2006	WATER MAIN REPLACEMENT-2002-03	50	104,000	34,320	69,680	8,468	15,367	1.81	126,445	
2006	WATER MAIN REPLACEMENT-2002/03	50	65,000	21,450	43,550	8,468	15,367	1.81	79,028	
2006	WATER MAIN REPLACEMENT-2002/03	50	39,000	12,870	26,130	8,468	15,367	1.81	47,417	
2006	WATER MAIN REPLACEMENT-2002/03	50	97,500	32,175	65,325	8,468	15,367	1.81	118,542	
2006	WATER MAIN REPLACEMENT-2002/03	50	104,000	34,320	69,680	8,468	15,367	1.81	126,445	
2006	WATER MAIN REPLACEMENT-2002/03	50	65,000	21,450	43,550	8,468	15,367	1.81	79,028	
2007	WATER MAIN REPLACEMENT-2006/07	50	214,400	66,464	147,936	9,101	15,367	1.69	249,802	
2007	WATER MAIN REPLACEMENT-2006/07	50	80,400	24,924	55,476	9,101	15,367	1.69	93,676	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2007	WATER MAIN REPLACEMENT-2006/07	50	53,600	16,616	36,984	9,101	15,367	1.69	62,451	
2007	WATER MAIN REPLACEMENT-2006/07	50	93,800	29,078	64,722	9,101	15,367	1.69	109,289	
2007	WATER MAIN REPLACEMENT-2006/07	50	107,200	33,232	73,968	9,101	15,367	1.69	124,901	
2007	WATER MAIN REPLACEMENT-2006/07	50	26,800	8,308	18,492	9,101	15,367	1.69	31,225	
2007	WATER MAIN REPLACEMENT-2006-07	50	107,200	33,232	73,968	9,101	15,367	1.69	124,901	
2007	WATER MAIN REPLACEMENT-2006/07	50	107,200	33,232	73,968	9,101	15,367	1.69	124,901	
2007	WATER MAIN REPLACEMENT-2006/07	50	67,000	20,770	46,230	9,101	15,367	1.69	78,063	
2007	WATER MAIN REPLACEMENT-2006/07	50	455,000	141,050	313,950	9,101	15,367	1.69	530,131	
2009	WATER MAIN REPLACEMENT-2006/07	50	1,007,752	272,093	735,659	9,769	15,367	1.57	1,157,189	
2009	WATER MAIN REPLACEMENT-2006/07	50	771,856	208,400	563,456	9,769	15,367	1.57	886,314	
2009	WATER MAIN REPLACEMENT-2006/07	50	337,288	91,059	246,229	9,769	15,367	1.57	387,318	
2009	WATER MAIN REPLACEMENT-2006/07	50	203,607	54,972	148,635	9,769	15,367	1.57	233,802	
2009	WATER MAIN REPLACEMENT-2006/07	50	273,533	73,846	199,687	9,769	15,367	1.57	314,107	
2009	WATER MAIN REPLACEMENT-2006/07	50	178,927	48,304	130,623	9,769	15,367	1.57	205,470	
2008	MEMBRANE FILTER	50	3,964,696	1,149,750	2,814,946	9,134	15,367	1.68	4,736,161	
2012	OVERHEAD ON MEMBRANE FILTER	50	346,039	78,380	267,659	10,208	15,367	1.51	402,946	
2013	DESIGN EXPENSE FOR MEMBRANE FILTER	45	169,776	35,835	133,941	10,361	15,367	1.48	198,662	
2008	PIPELINE SYSTEM IN SBSA POND	50	1,057,252	306,603	750,649	9,134	15,367	1.68	1,262,971	
2012	OVERHEAD ON PIPELINE SYSTEM IN SBSA POND	50	92,277	20,903	71,374	10,208	15,367	1.51	107,450	
2013	DESIGN EXPENSE FOR PIPELINE SYSTEM IN SBSA POND	45	45,274	9,557	35,717	10,361	15,367	1.48	52,976	
2008	RW SHORES DISTRIBUTION PIPELINE BID PKG 3 #400503	50	4,787,881	1,388,478	3,399,403	9,134	15,367	1.68	5,719,513	
2012	OVERHEAD ON RW SHORES DISTRIBUTION PIPELINE	50	417,887	94,656	323,231	10,208	15,367	1.51	486,607	
2013	DESIGN EXPENSE FOR RW SHORES DISTRIBUTION PIPELINE BID PKG 3 #400503	45	205,027	43,282	161,745	10,361	15,367	1.48	239,901	
2008	RW SHORES DISTRIBUTION PIPELINE BID PKG 1 #400501	50	5,522,137	1,601,410	3,920,727	9,134	15,367	1.68	6,596,643	
2012	OVERHEAD ON RW SHORES DISTRIBUTION PIPELINE #400501	50	481,973	109,171	372,802	10,208	15,367	1.51	561,232	
2013	DESIGN EXPENSE FOR RW SHORES DISTRIBUTION PIPELINE BID PACKAGE 1 #400501	45	236,469	49,914	186,555	10,361	15,367	1.48	276,700	
2008	RW SHORES (SKYWAY RD) DISTRIBUTION PIPE BID PKG#4	50	3,202,205	928,638	2,273,567	9,134	15,367	1.68	3,825,288	
2012	OVERHEAD ON RW SHORES (SKYWAY RD) TWIN DOLPHIN DR, ELECTRIC ARTS	50	279,489	63,303	216,186	10,208	15,367	1.51	325,456	
2013	DESIGN EXPENSE FOR RW SHORES (SKYWAY RD) DISTRIBUTION PIPEBID PKG #4	45	558,701	117,944	440,757	10,361	15,367	1.48	653,734	
2008	CITY OWNED SITE RETROFITS BID PKG 1 #400401	50	232,153	67,324	164,829	9,134	15,367	1.68	277,326	
2012	OVERHEAD CITY OWNED SITE RETROFITS BID PKG 1 #400401	50	20,262	4,585	15,677	10,208	15,367	1.51	23,600	
2013	DESIGN EXPENSE FOR CITY OWNED SITE RETROFITS BID PACKAGE 1 #400401	45	9,941	2,091	7,850	10,361	15,367	1.48	11,643	
2009	LAKEVIEW PUMP STATION IMPROVEMENTS	50	802,185	216,582	585,603	9,769	15,367	1.57	921,152	
2009	RECYCLED WATER DISTRIBUTION PIPELINE ALONG HIGHWAY 101	50	1,886,922	509,463	1,377,459	9,769	15,367	1.57	2,166,737	
2012	OVERHEAD ON RECYCLED WATER DISTRIBUTION PIPELINE ALONG HIGHWAY 101	50	156,723	34,807	121,916	10,208	15,367	1.51	183,537	
2013	DESIGN EXPENSE FOR RECYCLED WATER DISTRIBUTION PIPELINE ALONG HIGHWAY 101	50	43,916	8,987	34,929	10,361	15,367	1.48	51,806	
2009	RW SHORES DISTRIBUTION PIPELINE BID PKG 2	50	4,346,458	1,173,542	3,172,916	9,769	15,367	1.57	4,990,984	
2012	OVERHEAD ON RW SHORES DISTRIBUTION PIPELINE BID PKG 2	50	361,005	80,180	280,825	10,208	15,367	1.51	422,766	
2010	TO EXTEND RECYCLED WATER SERVICE IN THE SEAPORT AREA.	50	3,593,829	898,451	2,695,378	9,720	15,367	1.58	4,261,193	
2012	OVERHEAD ON RECYCLED WATER SERVICE IN THE SEAPORT AREA	50	483,372	105,332	378,040	10,208	15,367	1.51	569,118	
2013	DESIGN EXPENSE TO EXTND RECYCLED WATER SERVICE IN THE SEAPORT AREA	50	384,519	77,229	307,290	10,361	15,367	1.48	455,774	
2010	EXTEND RECYCLED WATER SERVICE TO GRT BAYFRONT & SEAPORT	50	2,052,438	513,101	1,539,337	9,720	15,367	1.58	2,433,578	
2012	OVERHEAD ON EXTEND RECYCLED WATER SERVICE TO GRT BAYFRONT & SEAPORT	50	252,765	55,073	197,692	10,208	15,367	1.51	297,614	
2013	DESIGN EXPENSE TO EXTEND RECYCLED WATER SERVICE TO GRT BAYFRONT & SEAPORT	50	614,352	123,391	490,961	10,361	15,367	1.48	728,196	
2010	WATER MAIN REPLACEMENT	50	203,279	50,814	152,465	9,720	15,367	1.58	241,036	
2010	WATER MAIN REPLACEMENT	50	271,038	67,751	203,287	9,720	15,367	1.58	321,382	
2010	WATER MAIN REPLACEMENT	50	304,918	76,225	228,693	9,720	15,367	1.58	361,546	
2010	MATER MAIN REPLACEMENT	50	321,828	80,451	241,377	9,720	15,367	1.58	381,600	
2010	WATER MAIN REPLACEMENT	50	304,918	76,225	228,693	9,720	15,367	1.58	361,546	
2010	WATER MAIN REPLACEMENT	50	100,793	25,189	75,604	9,720	15,367	1.58	119,525	
2011	CONSTRUCTION OF MEDIAN REFUGE & STREET FRONTAGE IMPROVEMENT	50	438,770	100,913	337,857	10,116	15,367	1.52	513,225	
2011	RECYCLED WATER BID 7-SEVENTH PIPELINE CONSTRUCTION	50	972,800	223,744	749,056	10,116	15,367	1.52	1,137,862	
2011	WATER MAIN REPLACEMENT	50	165,892	38,147	127,745	10,116	15,367	1.52	194,053	
2011	WATER MAIN REPLACEMENT	50	214,705	49,381	165,324	10,116	15,367	1.52	251,137	
2011	RECYCLED WATER PROJECT PHASE I RETROFITS PJ#400402	50	693,721	159,551	534,170	10,116	15,367	1.52	811,436	
2012	OVERHEAD RECYCLED WATER PROJECT PHASE I RETROFITS PJ#400402	50	165,936	35,486	130,450	10,208	15,367	1.51	196,386	
2011	RECYCLED WATER PROJECT PHASE I RETROFITS PJ400403	50	377,385	86,792	290,593	10,116	15,367	1.52	441,429	
2012	OVERHEAD ON RECYCLED WATER PROJECT PHASE I RETROFITS PJ400403	50	65,341	13,971	51,370	10,208	15,367	1.51	77,335	
2011	RECYCLED WATER PROJECT PHASE I RETROFITS PJ#400406	50	160,648	36,939	123,709	10,116	15,367	1.52	187,922	
2012	OVERHEAD ON RECYCLED WATER PROJECT PHASE I RETROFITS PJ#400406	50	36,820	7,871	28,949	10,208	15,367	1.51	43,581	
2011	RECYCLED WATER PROJECT PHASE I RETROFITS PJ#400406	50	326,949	75,188	251,761	10,116	15,367	1.52	382,440	
2012	OVERHEAD ON RECYCLED WATER PROJECT PHASE I RETROFITS PJ#400406	50	53,005	11,330	41,675	10,208	15,367	1.51	62,739	
2011	RECYCLED WATER PROJECT PHASE I SEAPORT DIST. PRJ#400706	50	1,577,669	362,860	1,214,809	10,116	15,367	1.52	1,845,368	
2012	OVERHEAD RECYCLED WATER PROJECT PHASE I SEAPORT DIST. PRJ#400706	50	325,209	69,546	255,663	10,208	15,367	1.51	384,886	
2013	DESIGN EXPENSE FOR RECYCLED WATER PROJECT PHASE I SEAPORT DIST PRJ#400706	50	582,890	114,874	468,016	10,361	15,367	1.48	694,164	
2011	RECYCLED WATER PROJECT PHASE I RWS DIST. PJ#401109	50	1,945,816	447,534	1,498,282	10,116	15,367	1.52	2,275,981	
2012	OVERHEAD ON RECYCLED WATER PROJECT PHASE I RWS DIST. PJ#401109	50	394,506	84,375	310,131	10,208	15,367	1.51	466,885	
2013	DESIGN EXPENSE FOR RECYCLED WATER PROJECT PHASE I RWS DIST. PJ#401109	50	481,681	94,932	386,749	10,361	15,367	1.48	573,629	
2012	2010-11 SLURRY SEAL RESURFACING OF ROADWAYS	20	250,000	131,250	118,750	10,208	15,367	1.51	178,772	
2012	OVERHEAD 2010-11 SLURRY SEAL RESURFACING OF ROADWAYS	20	9,910	5,199	4,712	10,208	15,367	1.51	7,093	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2012	RWC RECYCLED WATER DISTRIBUTION PUMPS P#400206	50	2,490,764	523,058	1,967,706	10,208	15,367	1.51	2,962,272	
2012	OVERHEAD RWC RECYCLED WATER DISTRIBUTION PUMPS P#400206	50	416,378	87,435	328,943	10,208	15,367	1.51	495,206	
2012	RWC RECYCLED WATER PROJECT PHASE 1 BID 8 P#401008	50	1,855,619	389,676	1,465,943	10,208	15,367	1.51	2,206,895	
2012	OVERHEAD RWC RECYCLED WATER PROJECT PHASE 1 BID 8 P#401008	50	382,098	80,232	301,866	10,208	15,367	1.51	454,443	
2013	DESIGN EXPENSE FOR RWC RECYCLED WATER PROJECT PHASE 1 BID 8 P#401008	50	488,057	94,421	393,636	10,361	15,367	1.48	583,843	
2012	GLENWOOD PUMP STATION IMPROVEMENTS	50	916,872	192,539	724,333	10,208	15,367	1.51	1,090,442	
2012	2010-11 WATERMAIN REPLACEMENT	50	162,855	34,199	128,656	10,208	15,367	1.51	193,684	
2012	2010-11 WATERMAIN REPLACEMENT	50	161,102	33,831	127,271	10,208	15,367	1.51	191,599	
2012	2010-11 WATERMAIN REPLACEMENT	50	247,680	52,008	195,672	10,208	15,367	1.51	294,574	
2012	2010-11 WATERMAIN REPLACEMENT	50	154,526	32,446	122,080	10,208	15,367	1.51	183,785	
2012	2010-11 WATERMAIN REPLACEMENT	50	173,157	36,362	136,795	10,208	15,367	1.51	205,937	
2012	2010-11 WATERMAIN REPLACEMENT	50	247,680	52,008	195,672	10,208	15,367	1.51	294,574	
2012	2010-11 WATERMAIN REPLACEMENT	50	174,253	36,593	137,660	10,208	15,367	1.51	207,239	
2012	2011-12 WATERMAIN REPLACEMENT	50	206,679	43,398	163,281	10,208	15,367	1.51	245,811	
2012	2011-12 WATERMAIN REPLACEMENT	50	349,300	73,353	275,947	10,208	15,367	1.51	415,423	
2012	2011-12 WATERMAIN REPLACEMENT	50	251,401	52,794	198,607	10,208	15,367	1.51	298,992	
2012	2011-12 WATERMAIN REPLACEMENT	50	292,010	61,320	230,690	10,208	15,367	1.51	347,291	
2012	2011-12 WATERMAIN REPLACEMENT	50	91,857	19,289	72,568	10,208	15,367	1.51	109,247	
2013	CONVERSION OF 27 EXISTING IRRIGATION SYSTEMS FROM POTABLE WATER TO RECYCLED WATE	50	718,585	136,526	582,059	10,361	15,367	1.48	863,314	
2013	12-13 WATERMAIN REPLACEMENTS LINEAR FEET	50	234,234	44,499	189,735	10,361	15,367	1.48	281,417	
2013	12-13 WATERMAIN REPLACEMENT (LINEAR FEET)	50	103,267	19,618	83,649	10,361	15,367	1.48	124,068	
2013	12-13 WATERMAIN REPLACEMENT (LINEAR FEET)	50	303,728	57,704	246,024	10,361	15,367	1.48	364,905	
2013	12-13 WATERMAIN REPLACEMENT (LINEAR FEET)	50	148,219	28,158	120,061	10,361	15,367	1.48	178,075	
2013	12-13 WATERMAIN REPLACEMENT (LINEAR FEET)	50	187,096	35,541	151,555	10,361	15,367	1.48	224,787	
2013	12-13 WATERMAIN REPLACEMENT (LINEAR FEET)	50	114,201	21,698	92,503	10,361	15,367	1.48	137,201	
2013	12-13 WATERMAIN REPLACEMENT (LINEAR FEET)	50	100,837	19,153	81,684	10,361	15,367	1.48	121,155	
2013	INSTALL 9 TEST STATIONS,1 DEEP WELL ANODE, 1 RECTIFIER	50	411,077	78,101	332,976	10,361	15,367	1.48	493,873	
2014	FIRE LINE TAPS/LATERALS,DOMESTIC TAP/LATERAL,IRRIGATION TAP/LATERAL,HYDRANT TAPS/LA	50	196,650	33,431	163,219	10,896	15,367	1.41	230,190	
2014	WATER MAIN SEISMIC IMPROVEMENT PROJECT PHASE 1	50	782,146	132,958	649,188	10,896	15,367	1.41	915,559	
2014	2012-2013 WATERMAIN REPLACEMENT PROJECT	50	327,131	55,608	271,523	10,896	15,367	1.41	382,933	
2014	2012-2013 WATERMAIN REPLACEMENT PROJECT	50	327,131	55,608	271,523	10,896	15,367	1.41	382,933	
2014	2012-2013 WATERMAIN REPLACEMENT PROJECT	50	327,129	55,608	271,521	10,896	15,367	1.41	382,930	
2015	8"PVC-FIRE;4"PVC,LATERAL,METER;1"PE,LATERAL,METER;4"RECY,LATERAL,METER;FIRE HYDRAN	50	8,625	1,291	7,335	11,173	15,367	1.38	10,088	
2015	250 LF 8"WATER LINE ON MARSHALL STREET	50	56,250	8,438	47,812	11,173	15,367	1.38	65,759	
2015	8"PVC FROM SAMSON ST TO VETERANS BLVD, 3 FIRE HYDRANTS, DEDICATED WATER SERVICES F	50	98,613	14,790	83,823	11,173	15,367	1.38	115,288	
2015	PIPE,LATERALS,CONNECTIONS,BACKFLOW ASSEMBLIES FOR DOM/IRR/FIRE SERVICE	50	264,557	39,683	224,874	11,173	15,367	1.38	309,285	
2015	781 LF HDPE,VALVES,FIRE HYDRANT,TIE-IN TO LATERALS,CATHODIC PROTECTION TO SUPPORT D	50	234,405	35,160	199,245	11,173	15,367	1.38	274,036	
2015	665 LF PVC PIPE,VALVES,CATHODIC PROTECTION TO SUPPORT RECYCLED WATER SERVICE AT LO	50	105,245	15,781	89,464	11,173	15,367	1.38	123,046	
2015	INSTALL 1244LF PVC PIPE,METER,HYDRANT,VALVES	50	108,710	16,305	92,405	11,173	15,367	1.38	127,091	
2015	RELOCATE/INSTALL PIPE,METER,FIRE HYDRANT,IRRIGATION	50	34,190	5,124	29,066	11,173	15,367	1.38	39,977	
2015	INSTALL PIPE,METERS,ASSEMBLY FOR FIRE,DOMESTIC WATER SERVICE	50	41,000	6,150	34,850	11,173	15,367	1.38	47,932	
2015	WATER MAIN SEISMIC IMPROVEMENT PROJECT	50	934,307	140,145	794,162	11,173	15,367	1.38	1,092,269	
2015	CARSON RESERVOIR SEISMIC IMPROVEMENT PROJECT	50	896,746	134,506	762,240	11,173	15,367	1.38	1,048,364	
2016	DEV IMPR-WATER MAIN,METER,FIRE HYDRANT	50	34,546	4,486	30,060	11,153	15,367	1.38	41,417	Developer improvements
2016	681 LF PVC-CONNECT TO FIRE/MAIN/EXISTING;HYDRANTS	50	172,644	22,439	150,205	11,153	15,367	1.38	206,954	
2016	WATERMAIN REPLACEMENT PROJECT	50	259,209	33,696	225,513	11,153	15,367	1.38	310,713	
2016	WATERMAIN REPLACEMENT PROJECT	50	246,700	32,071	214,629	11,153	15,367	1.38	295,718	
2016	WATERMAIN REPLACEMENT PROJECT	50	199,098	25,878	173,220	11,153	15,367	1.38	238,664	
2016	WATERMAIN REPLACEMENT PROGRAM	50	70,188	9,121	61,067	11,153	15,367	1.38	84,139	
2016	WATERMAIN REPLACEMENT PROJECT	50	195,623	25,428	170,195	11,153	15,367	1.38	234,495	
2016	WATERMAIN REPLACEMENT PROJECT	50	17,721	2,301	15,420	11,153	15,367	1.38	21,245	
2016	WATERMAIN REPLACEMENT PROJECT	50	13,899	1,802	12,097	11,153	15,367	1.38	16,667	
2016	WATERMAIN REPLACEMENT PROJECT	50	130,647	16,979	113,668	11,153	15,367	1.38	156,613	
2016	WATERMAIN REPLACEMENT PROJECT	50	157,054	20,417	136,637	11,153	15,367	1.38	188,259	
2016	WATERMAIN REPLACEMENT PROJECT	50	163,656	21,275	142,381	11,153	15,367	1.38	196,174	
2016	WATERMAIN REPLACEMENT PROJECT	50	155,664	20,235	135,429	11,153	15,367	1.38	186,595	
2016	WATERMAIN REPLACEMENT PROJECT	50	70,883	9,212	61,671	11,153	15,367	1.38	84,971	
2017	120LF PVC PIPE,CONNECT TO EXISTING,CATHODIC PROTECTION	50	74,175	8,158	66,018	11,609	15,367	1.32	87,386	
2017	101LF PVC IRRIG/DW/FIRE;METERS,BCKFLOWS;CONNECT TO FIRE	50	37,410	4,114	33,296	11,609	15,367	1.32	44,073	
2017	40 LF 1.5" WATER SERVICE LINE	50	4,830	529	4,301	11,609	15,367	1.32	5,694	
2017	CONNECT TO WTR MAIN,METERS,96LF 2",8",12"WTR LINES	50	17,388	1,910	15,478	11,609	15,367	1.32	20,488	
2017	240LF WTRLINE-FIRE,DOMES,IRRIG,MAIN CONNECT,HYDRANT,OTH	50	49,807	5,478	44,329	11,609	15,367	1.32	58,678	
2017	WATER IMPROVEMENTS(PER ENGR ESTIMATE)	50	31,827	3,499	28,328	11,609	15,367	1.32	37,498	
2017	WATERMAIN REPLACEMENT PROJECT	50	80,101	8,811	71,290	11,609	15,367	1.32	94,366	
2017	WATERMAIN REPLACEMENT PROJECT	50	114,534	12,596	101,938	11,609	15,367	1.32	134,934	
2017	WATERMAIN REPLACEMENT PROJECT	50	62,203	6,842	55,361	11,609	15,367	1.32	73,281	
2017	WATERMAIN REPLACEMENT PROJECT	50	158,678	17,453	141,225	11,609	15,367	1.32	186,938	
2017	WATERMAIN REPLACEMENT PROJECT	50	256,277	28,189	228,088	11,609	15,367	1.32	301,918	
2017	WATERMAIN REPLACEMENT PROJECT	50	130,827	14,389	116,438	11,609	15,367	1.32	154,128	
2017	RECYCLED WATER PROJECT MAIN CITY DIST. SYS. PHASE 2A	50	1,088,674	119,752	968,922	11,609	15,367	1.32	1,282,548	

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
2017	CATHODIC PROTECTION UPGRADE OF RECY. WAT. PIPELINE	50	134,921	14,839	120,082	11,609	15,367	1.32	158,950	
2017	RECYCLED WATER PROJECT MAIN CITY DIST. SYS PHASE 2A	50	1,010,908	111,199	899,709	11,609	15,367	1.32	1,190,933	
2018	CONSTRUCTION IMPR BY DEVELOPER OF 550 ALLERTON	50	36,743	3,304	33,439	12,015	15,367	1.28	42,770	
2018	CONSTRUCTION IMPROVEMENTS BY DEVELOPER OF THE GROVE	50	140,645	12,655	127,990	12,015	15,367	1.28	163,704	
2018	CONSTRUCTION IMPROVEMENTS BY DEVELOPER OF "LOCALE"	50	138,685	12,480	126,205	12,015	15,367	1.28	161,421	
2019	2016-2017 SANITARY SEWER AND WATERMAIN REPLACEMENT PROJ	50	760,403	53,228	707,175	12,115	15,367	1.27	897,025	
2019	2016-2017 SANITARY SEWER AND WATERMAIN REPLACEMENT PROJ	50	562,113	39,347	522,766	12,115	15,367	1.27	663,109	
2018	190LF PIPE,INSTALL GATE VALVES,METERS,HYDRANT	50	86,111	7,749	78,362	12,015	15,367	1.28	100,228	
2019	2016-2017 SANITARY SEWER AND WATERMAIN REPLACEMENT PROJ	50	347,971	24,357	323,614	12,115	15,367	1.27	410,492	
2018	2311LF WATER/FIRE LINE,GATE VALVES,HYDRANTS,CATHODIC PROTECTION	50	460,398	41,433	418,965	12,015	15,367	1.28	535,871	
2018	492LF WATER/FIRE LINE,GATE VALVES,CATHODIC PROT,CONNECT	50	116,546	10,486	106,060	12,015	15,367	1.28	135,655	
2018	2155LF WTR LINE,HYRANTS,DOM WTR SVC BOXES,CATHODIC PROT	50	594,024	53,460	540,564	12,015	15,367	1.28	691,400	
2018	2016-2017 WATERMAIN REPLACEMENT PROJECT	50	2,176,866	195,917	1,980,949	12,015	15,367	1.28	2,533,705	
2018	RWS POTABLE WATER TRANSMISSION SYSTEM SEISMIC IMPROV.	50	1,051,865	94,667	957,198	12,015	15,367	1.28	1,224,290	
2019	2017-2018 WATERMAIN REPLACEMENT PROJECT	50	1,488,542	104,196	1,384,346	12,115	15,367	1.27	1,755,991	
2019	NEW RESIDUAL CONTROL SYSTEM	15	110,918	25,880	85,038	12,115	15,367	1.27	107,868	
2019	NEW RESIDUAL CONTROL SYSTEM	15	110,918	25,880	85,038	12,115	15,367	1.27	107,868	
2019	625LF 8"PVC DW MAIN, 4LF 8"PVC SERVICE LINE(FIRE), 128LF 4"PVC SERVICE LINE(DOM), 46LF 4	50	244,001	17,080	226,921	12,115	15,367	1.27	287,841	
2019	REMOVE EXIST WATER METER AND INSTALL NEW 1"WATER METEF	50	7,590	530	7,060	12,115	15,367	1.27	8,956	
2019	179LF OFF-SITE 8"PVC WATER, 2 OFF-SITE CONNECT TO EX. MAIN, 664LF EASEAMENT 8"PVC WA	50	209,001	14,630	194,371	12,115	15,367	1.27	246,552	
2019	467LF 10"PVC RW,469LF 16"HDPE DW,2 RECONNECT LATS,2 10" GATE VALVE,2 14"GATE VALVE,	50	1,564,194	109,492	1,454,702	12,115	15,367	1.27	1,845,235	
2019	2 6"WATER METER & RELOCATION,11 6"VALVE,50LF 1"COPPER PIPE,240LF 6"PVC,4 CONNECT TC	50	393,990	27,578	366,412	12,115	15,367	1.27	464,780	
2020	108LF PVC;3 BACKFLOW PREVENTER;1 DETECTOR VALVE;2 HYDRANT ASSEMBLY;1 HYDRANT REL	50	97,146	4,856	92,290	12,806	15,367	1.20	110,747	
2020	FIRE LINE TAP & LATERAL;DOMESTIC TAP & LATERAL;RELOCATE FIRE HYDRANT	50	21,850	1,093	20,757	12,806	15,367	1.20	24,908	
2020	IRRIGATION TAP & LATERAL;RECYCLE WATER TAP&LATERAL	50	6,325	316	6,010	12,806	15,367	1.20	7,211	
2020	953 LF W PIPE PVC;3 VALVE;2 HYDRANTS;4 BACKFLOW PREVENTION;CONNECTION EXISTING WA	50	282,383	14,119	268,264	12,806	15,367	1.20	321,914	
2020	INSTALL OF NEW SIMMONS MODEL SK16C 2 STAGE VERTICAL BOOSTER PUMP WITH US 200 HP I	50	23,010	1,150	21,860	12,806	15,367	1.20	26,232	
2020	INSTALL OF PACO 4"X3" CENTRIFUGAL PUMP CAT#10-30957-2742P 1800 RPM 230/460V MOTOI	50	7,710	385	7,325	12,806	15,367	1.20	8,790	
2021	3FIRE HYDRANT ASBLY,390LF8"PVC MAIN,50 1.5"PE SVC LINE& CONNECTIONS,1LS CATHODIC PR	50	422,671	12,680	409,991	13,098	15,367	1.17	481,026	
2021	1LSWATER POLLUTION CONTROL	50	11,500	345	11,155	13,098	15,367	1.17	13,088	
2021	7 RECYCLED WATER LATERALS FOR STANFORD, 6025 LF 16" HDE RECYCLED WATER MAIN	50	3,788,880	113,667	3,675,213	13,098	15,367	1.17	4,311,983	Developer improvements
2021	PENINSULA NO. 2 POTABLE WATER TANK SEISMIC IMPROVEMENT PROJECT	50	1,578,818	47,364	1,531,454	13,098	15,367	1.17	1,796,794	
2022	EDGEWOOD STATION PUMP REPAIR	20	52,824	1,321	51,503	14,301	15,367	1.07	55,342	
2022	19-20 WATERMAIN REPL	50	4,072,223	40,722	4,031,501	14,301	15,367	1.07	4,332,010	
2022	SUBMERSIBLE TANK MIXING STATION	20	33,963	849	33,114	14,301	15,367	1.07	35,582	
2022	EDGEWOOD STATION MOTOR 2 REPAIR	20	21,401	535	20,866	14,301	15,367	1.07	22,421	
2022	CARSON STATION PUMP 3 REPAIR	20	11,546	289	11,257	14,301	15,367	1.07	12,096	
2022	DEV IMPR - 15 CLEVELAND	20	398,217	9,955	388,262	14,301	15,367	1.07	417,203	Developer improvements
2022	DEV IMPR - 601 EL CAMINO REAL	20	802,931	20,073	782,858	14,301	15,367	1.07	841,212	Developer improvements
2022	DEV IMPR - 707 BRADFORD	20	76,032	1,901	74,131	14,301	15,367	1.07	79,657	Developer improvements
2022	DEV IMPR - 2075 BROADWAY	20	21,761	544	21,217	14,301	15,367	1.07	22,798	Developer improvements
1959	12 GH PUMP-BYRON-JACKSON	30	9,077	9,077	-	980	15,367	15.69	-	
1959	1200 GPM PUMP-BYRON-JACKSON	30	9,077	9,077	-	980	15,367	15.69	-	
1959	12 GH PUMP-BYRON-JACKSON	30	9,077	9,077	-	980	15,367	15.69	-	
1956	PUMP-STA-RITE	30	5,753	5,753	-	851	15,367	18.07	-	
1984	GENERATOR, DIESEL ONAN S/N G830669700	5	32,356	32,356	-	5,049	15,367	3.04	-	
1996	MSC EMERGENCY GENERATOR	50	13,859	13,859	-	6,630	15,367	2.32	-	
1996	WATER & SUPPLY DISTRIBUTION	5	18,378	18,378	-	6,630	15,367	2.32	-	
1999	ITRON METER READERS	5	13,997	13,997	-	6,817	15,367	2.25	-	
2001	PUMP & MOTOR	5	18,993	18,993	-	7,399	15,367	2.08	-	
2006	MEGA LITE TAPPING MACHINE & PARTS	60	14,320	14,320	-	8,468	15,367	1.81	-	
2011	NEW STARTER MORTORS	10	31,931	31,931	-	10,116	15,367	1.52	-	
2011	INFRAMAP SOFTWARE	10	56,499	56,499	-	10,116	15,367	1.52	-	
2011	NWE MORTOR STARTERS	10	30,358	30,358	-	10,116	15,367	1.52	-	
2011	PREMIUM ELECTRIC MOTORS	10	18,373	18,373	-	10,116	15,367	1.52	-	
2014	DUSTLESS BLASTER	20	6,582	2,797	3,785	10,896	15,367	1.41	5,338	
2018	EMERGENCY RESPONSE HOSE & DEPLOYMENT REEL	10	59,950	26,978	32,972	12,015	15,367	1.28	42,172	
2018	EMERGENCY RESPONSE UTILITY TRAILER	10	100,000	45,000	55,000	12,015	15,367	1.28	70,347	
	TOTAL VALUE		**$171,662,043**	**$59,334,057**	**$112,277,442**				**$183,449,225**	
	Small Pipes Subtotal		$7,896,585	$6,900,404	$996,181				$4,214,093	
	Developer Contributions Subtotal		$1,333,487	$36,959	$1,296,528				$1,402,287	
	Excluded Assets									
2011	REPLACEMENT OF EXISTING NATURAL TURF WITH SYNTHETIC TURF	25	1,349,634	620,828	728,806	10,116	15,367	1.52	1,107,100	Exclude from capacity
2012	OVERHEAD REPLACEMENT OF EXISTING NATURAL TURF WITH SYNTHETIC TUR	25	281,048	122,487	158,561	10,208	15,367	1.51	238,705	Exclude from capacity
2011	INSTALL 2 ACRES OF SYNTHETIC TURF SURFACE AND APPUTENANCES	25	1,301,441	598,657	702,784	10,116	15,367	1.52	1,067,572	Exclude from capacity
2012	OVERHEAD INSTALL 2 ACRES OF SYNTHETIC TURF SURFACE AND APPUTENAN	25	271,012	118,114	152,898	10,208	15,367	1.51	230,179	Exclude from capacity
2011	INSTALL 2 ACRES OF SYNTHETIC TURF SURFACE AND APPUTENANCE	25	1,301,441	598,657	702,784	10,116	15,367	1.52	1,067,572	Exclude from capacity
2012	OVERHEAD INSTALL 2 ACRES OF SYNTHETIC TURF SURFACE AND APPUTENAN	25	271,012	118,114	152,898	10,208	15,367	1.51	230,179	Exclude from capacity

Year	DESC	LIFE	PURCHASE VALUE	TOTAL DEPR	NBV	ENR CCI	Current ENR	ENR Ratio	RCNLD	Notes
1993	ABANDON OAKVIEW RESERVOIR	50	74,808	44,132	30,676	6,478	15,367	2.37	72,770	Retired asset
1997	Repl. Easter Cross/Demo Redwood Tanks Prog.	50	32,862	16,754	16,108	6,731	15,367	2.28	36,775	Retired asset
1998	REPL.EASTER CROSS/DEMO REDWOOD TANKS (75253/73)	50	20,549	10,046	10,503	6,846	15,367	2.24	23,578	Retired asset
1999	DEMO REDWOOD TANKS PROJECT	50	94,273	44,298	49,975	6,817	15,367	2.25	112,660	Retired asset
			4,998,080	**$2,292,088**	**$2,705,992**				**$4,187,090**	

APPENDIX C. CIP – SEWER AND WATER

SEWER AND WATER CAPACITY FEES AND USER FEES STUDY

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Figure C-1. Five-Year Sewer CIP Projects

Conditions Projects	5-Year CIP[1]
Closed Circuit Television (CCTV) Program	$2,055,362
Collection System Replacement Program	$24,442,020
Finance & Human Resources Software	$0
Pump and Controls Replacement Program	$438,840
Redwood City Pump Station Improvements (SVCW)	$4,809,270
Redwood Shores Isolation Valve Installation	$0
Sequoia Station Groundwater Mitigation	$0
Sewer Inflow and Infiltration	$877,681
Sewer Pump Station Rehabilitation Program	$8,521,446
Sewer Rehabilitation Program	$4,388,404
Veteran's Blvd Sewer Capacity Improvements (Design)	$0
Total CIP	**$45,533,023**

1. Escalated project costs for FY 2024-25 through FY 2028-29.

Figure C-2. Sewer Master Plan Projects

Project ID	Capacity-Related Projects (Master Plan Update)	Capital Cost
C2	Bradford St. (Jefferson Ave. to Main St.)	$1,324,000
C3	Beech St., Stambaugh St., Walnut St. (Caltrain ROW to Bradford St.)	$6,160,000
C4	California St., Broadway St., Marshall St., Jefferson Ave. (south of Winklebleck St. to Bradford St.)	$3,285,000
C5	Jefferson Ave. (n/o Redwood Creek siphon, Broadway St. to Marshall St.)	$683,000
C6	Franklin St., Wilson St., Middlefield Rd., Jeffersion Ave. (Sequoia Station to s/o Redwood Creek siphon)	$2,143,000
C7	Winslow St. (Standish St. to Brewster Ave.), Brewster Ave (Winslow St. to west of Veterans Blvd.)	$1,184,000
C8	Whipple Ave. (Woodstock Pl. to Arguello St.)	$3,219,000
C9	Brewster Ave. (Hudson St. to Arch St.)	$1,789,000
C10	James Ave. (Jeter St. to Hudson St.)	$601,000
C11	Jefferson Ave. (Jeter St. to Iris St.)	$949,000
C12	Vera Ave. (w/o King St. to Hudston St.)	$968,000
C13	Lincoln Ave. (Hudson St. to El Camino Real)	$3,778,000
C14	Roosevelt Ave. (Valota Rd. to Hudson St.)	$3,414,000
C15	Roosevelt Ave. (Grand St. to Fulton St.)	$464,000
C16	Maddux Dr., Washington Ave., Virginia Ave. (Kensington Rd. to Godwin Ave.)	$2,962,000
C17	Hampton Ave., Sierra St., Palm Ave., Kentfield Ave. (e/o Valota Rd. to Palm Ave.)	$1,543,000
C18	McGarvy Ave., Fairview Ave., Roosevelt Ave. (Truman St. to Junipero Ave.)	$1,205,000
C19	Carson St. (Dewey St. to s/e of Roosevelt Ave.)	$615,000
C20	Glenwood Ave., Canyon Rd., Jefferson Ave. (Breeze Pl. to Oak Ridge Dr.)	$1,189,000
C21	Vista Dr. (Hamilton Way to Toyon Way)	$252,000
C22	Jefferson Ave. (Ruby St. to Quartz St.)	$240,000
C23	Madison Ave. (Topaz St. to Ruby St.)	$621,000
C24	Myrtle St. (northwest of Harrison Ave.)	$268,000
C25	Broadway St. (El Camino Real to California St.)	$324,000
C26	PS 09 force main extension (Keelson Cir. And Davit Ln. to PS10)	$1,235,000
C27	PS09 Upgrade (City-defined project)	$1,839,000
	Total Costs	**$42,254,000**

Figure C-3. Five-Year Water CIP Projects

Project	5-Year CIP[1]
Downtown Recycled Water Distribution Phase 2C Extension	$14,665,212
Main City Recycled Water Tank and Pump Station	$10,776,808
Cathodic Protection Program	$638,840
Distribution System Replacement Program	$29,524,626
Pump Station and Tank Rehabilitation/Replacement	$15,323,479
Recycled Water Quality Improvements	$200,000
Water System Seismic Improvement Program	$4,194,202
Future Water Storage Tank and Booster Pump Station	$16,130,000
Future Water Storage Tank Land Purchase	$25,532,927
Total CIP	$116,986,094

1. Escalated project costs for FY 2023-24 through FY 2027-28.

APPENDIX D. USER FEES CALCULATIONS

SEWER AND WATER CAPACITY FEES AND USER FEES STUDY

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Figure D-1. Total Personnel Costs

User Fees	Fully Burdened Hourly Rate	Sewer Discharge Permit Fee	Water Service Meter Fee				Dedicated Irrigation Meter Fee	Water Main Tapping Fee		After-Hours Water Re-connection Fee	Construction Meter Reading Fee	Backflow and well fee for initial reg. and annual admin.	Termination of water service for failure to test backflow	Fire Flow Testing Fee	Recycled Water Fill Station Access Card Fee	Backflow Tag Fee
			5/8, 3/4, and 1"	1.5 to 2"	3" to 6"	8" and up		2" or smaller	4 to 12"							
Lead Public Works Maintanence Worker - Wastewater	$94.98															
Public Works Maint Worker II - Wastewater	$89.46															
Public Works Maint Worker III/Equip Oper-Wastewater	$88.12															
Water Resources Technician	$88.11		1.00	3.00	4.00											
Lead Water Resources Technician	$98.89		0.75	0.75	0.75	0.75					0.50		1.00			
Lead Water Resources Technician (Wells, Backflow Devices)	$56.80											1.00				
Water Resources Specialist	$107.28						0.75								0.08	
Public Works Maint Worker II	$126.60					12.00		4.00	6.00					2.00		
PW Maint III/Equipment Operator	$140.05															
Lead Public Wks Maint Worker	$125.69								3.00	2.00						
Assistant Engineer I/II	$178.56	3.00	1.00	1.00	0.00	0.00	0.00							2.00		
Senior Engineering Technician	$171.35		1.00	1.00	0.00	0.00	0.00									
Permits Technician	$174.77	0.50														
Comm. Dev. Manager - Engineering	$277.23	0.50														
Senior Civil Engineer	$224.75	1.00														
Associate Engineer	$203.36															
Admin. Clerk II	$64.48															0.08
Total Hours		5.00	3.75	5.75	4.75	12.75	0.75									
Personnel Costs		**$986.43**	**$512.19**	**$688.40**	**$426.60**	**$1,593.37**	**$80.46**	**$506.40**	**$1,136.67**	**$251.38**	**$49.45**	**$56.80**	**$98.89**	**$610.32**	**$8.94**	**$5.37**

Figure D-2. Hourly Personnel Costs

User Fees	Fully Burdened Hourly Rate	Cross Connection Control Inspection Fee	Cross Connection Control Testing Fee	Backflow Testing Fee	Water Service Line Installation - minimum 2"	Recycled Water Site Annual Inspection Fee	Plan, Permit, and Engineering Report Review Fee for Recycled Water	Sewer Lateral Installation Fee
Lead Public Works Maintanence Worker - Wastewater	$94.98							1.00
Public Works Maint Worker II - Wastewater	$89.46							2.00
Public Works Maint Worker III/Equip Oper-Wastewater	$88.12							1.00
Water Resources Technician	$88.11	1.00	1.00			1.00		
Lead Water Resources Technician	$98.89	1.00	1.00	1.00				
Lead Water Resources Technician (Wells, Backflow Devices)	$56.80							
Water Resources Specialist	$107.28	1.00	1.00				2.00	
Public Works Maint Worker II	$126.60				1.00			
PW Maint III/Equipment Operator	$140.05				1.00			
Lead Public Wks Maint Worker	$125.69				1.00			
Assistant Engineer I/II	$178.56				1.00			1.00
Senior Engineering Technician	$171.35							
Permits Technician	$174.77							
Comm. Dev. Manager - Engineering	$277.23							
Senior Civil Engineer	$224.75							
Associate Engineer	$203.36				1.00			
Admin. Clerk II	$64.48							
Total Hours		**3.00**	**3.00**	**1.00**	**5.00**	**1.00**	**2.00**	**5.00**
Hourly Personnel Costs		**$98.09**	**$98.09**	**$98.89**	**$154.85**	**$88.11**	**$107.28**	**$108.11**

Figure D-3. Sewer User Fees Calculation

Sewer User Fees	Personnel Cost	Supply/ Material Costs	Penalty/Other Expense	Proposed Amount	Notes
Sewer Discharge Permit Fee	$986.43	$0.00	$0.00	$986.43	Plus actual volume discharged times appropriate sewer commercial volumetric rates by customer class.
Sanitary Sewer Fats, Oils and Grease Penalty	$0.00	$0.00	$450.00	$450.00	per occurrence
Sewer Lateral Installation Fee			$3,459.67	$3,459.67	Actual Cost
Sewer Discharge Inspection Deposit			$5,000.00	$5,000.00	Actual Cost

Figure D-4A. Water User Fees Calculation

Water User Fees	Personnel Cost	Supply/ Material Costs	Penalty/Other Expense	Proposed Amount	Notes
Water Service Meter Fee					
5/8" - Displacement	$512.19	$291.26	$0.00	$803.45	
3/4" - Displacement	$512.19	$321.78	$0.00	$833.97	
1" - Displacement	$512.19	$373.66	$0.00	$885.85	
1.5" - Displacement	$688.40	$587.52	$0.00	$1,275.92	
2" - Displacement	$688.40	$755.70	$0.00	$1,444.10	
1.5" - Turbine	$688.40	$587.52	$0.00	$1,275.92	
2" - Turbine	$688.40	$755.70	$0.00	$1,444.10	
3" - Turbine	$426.60	$1,028.64	$0.00	$1,455.24	
4" - Turbine	$426.60	$1,439.57	$0.00	$1,866.17	
6" - Turbine	$426.60	$3,221.72	$0.00	$3,648.32	
8" - Turbine	$1,593.37	$3,596.14	$0.00	$5,189.51	
10" - Turbine	$1,593.37	$4,853.45	$0.00	$6,446.82	
2" - Compound	$688.40	$1,864.99	$0.00	$2,553.39	
3" - Compound	$426.60	$2,176.18	$0.00	$2,602.78	
4" - Compound	$426.60	$3,295.61	$0.00	$3,722.21	
6" - Compound	$426.60	$4,629.77	$0.00	$5,056.37	
8" - Compound	$1,593.37	$7,136.00	$0.00	$8,729.37	
10" - Compound	$1,593.37	$8,021.00	$0.00	$9,614.37	
4" - Fire Rated	$426.60	$7,809.00	$0.00	$8,235.60	
6" - Fire Rated	$426.60	$10,355.00	$0.00	$10,781.60	
8" - Fire Rated	$1,593.37	$15,399.00	$0.00	$16,992.37	
10" - Fire Rated	$1,593.37	$21,958.00	$0.00	$23,551.37	
Dedicated Irrigation Meter Fee	$80.46	$0.00	$0.00	$80.46	
Water Main Tapping Fee					
2" or smaller	$506.40	$0.00	$0.00	$506.40	
4 to 12”	$1,136.67	$0.00	$0.00	$1,136.67	
After-Hours Water Re-connection Fee	$251.38	$0.00	$0.00	$251.38	
Construction Meter Reading Fee	$49.45	$0.00	$0.00	$49.45	Per monthly billing period that customer fails to report construction meter reading.
Backflow and Well Fee for Initial Registration and Annual Administration/Record Filing	$56.80	$0.00	$0.00	$56.80	Rate is per device
Failure to Respond to Cross Connection Program Notice Fee	$0.00	$0.00	$28.40	$28.40	
Termination of Water Service for Failure to Test/Inspect Fee	$98.89	$0.00	$0.00	$98.89	

Figure D-4B. Water User Fees Calculation (Continued)

Water User Fees	Personnel Cost	Supply/Material Costs	Penalty/Other Expense	Proposed Amount	Notes
Fire Flow Testing Fee	$610.32	$105.87	$0.00	$716.19	Per test report or actual cost.
Cut Lock Fee	$0.00	$0.00	$25.00	$25.00	
Recycled Water Fill Station Access Card Fee	$8.94	$0.00	$1.00	$10.00	
Recycled Water Fill Station Consumption Charge	$0.00	$0.00	$0.00	$1.06	Per 100 gallons ($7.92/HCF). Actual charges will be for a fraction of 100 gallons for each gallon taken.
Fee for Unauthorized Water Use	$0.00	$0.00	* 2nd offense - $1,000 * 3rd offense - $2,000 * Subsequent offenses - $3,000 per day	$0.00	
Construction Meter Deposit	$0.00	$0.00	$0.00	$1,500.00	
Backflow Tag Fee	$5.37	$0.84	$0.00	$6.00	Per 3 backflow tags
Cross Connection Control Inspection Fee	$98.09	$0.00	$0.00	$49.05	Minimum fee based on 0.5 hours
Cross Connection Control Testing Fee	$98.09	$0.00	$0.00	$49.05	Minimum fee based on 0.5 hours
Backflow Testing Fee	$98.89	$0.00	$0.00	$49.45	Minimum fee based on 0.5 hours
Water Service Line Installation - < 4"	$154.85	Variable	$0.00	Actual Cost	City hourly rate + cost of CalTrans rentals and other equipment costs.
Water Service Line Installation - 4"	$154.85	Variable	$0.00	Actual Cost	City hourly rate + cost of CalTrans rentals and other equipment costs.
Water Service Line Installation - 6"	$154.85	Variable	$0.00	Actual Cost	City hourly rate + cost of CalTrans rentals and other equipment costs.
Water Service Line Installation - 8"	$154.85	Variable	$0.00	Actual Cost	City hourly rate + cost of CalTrans rentals and other equipment costs.
Water Service Line Installation - 10"	$154.85	Variable	$0.00	Actual Cost	City hourly rate + cost of CalTrans rentals and other equipment costs.
Recycled Water Site Annual Inspection Fee	$88.11	$0.00	$0.00	$88.11	
Plan, Permit, and Engineering Report Review Fee for Recycled Water	$107.28	$0.00	$0.00	$107.28	

EXHIBIT B

ARTICLE III. CONNECTION, CAPACITY AND USER FEES

Sec. 38.10. FEES—INSTALLATION OF WATER SERVICE METER ONLY:

A. Every application for installation of a water service meter only shall be accompanied by a fee in an amount set by ordinance or resolution of the City Council.

B. The charge for a manifold meter installation shall be the sum of the applicable individual charges for each such installation.

C. Dedicated Irrigation Meter Fee. Every application for installation of a separate irrigation water service meter shall be accompanied by a fee in an amount set by ordinance or resolution of the City Council, to recoup the costs of City staff to map landscaped areas and for utility account administration for a separate irrigation water service meter.

Sec. 38.10.1. FEES—CONNECTION OF WATER LINE TO WATER MAIN:

The City shall perform all tapping work required to connect a water line to a water main. Every application for such tapping work shall be accompanied by a fee in an amount set by ordinance or resolution of the City Council. The City may perform work required to install a service line connecting a water line to the water main at the request of the property owner or the property owner's designated representative. Every application for the City to install such a service line shall be accompanied by a fee in an amount set by ordinance or resolution of the City Council.

~~Sec. 38.11. ADDITIONAL FEES; EXCEPTIONS~~:

~~A. In the event the City constructs, or causes the construction of, any water system facilities from monies in the Water Fund or from any general funds of the City (including the proceeds of any bond issue for which the general credit of the City is obligated), an additional fee in the amount of five hundred dollars ($500.00) shall be paid for each connection to that portion of the City water system. This Section shall not be applicable to portions of the City water system upon which the City funds are expended to partially pay the expense of construction if the purpose of the City's contribution to the overall cost is to cause the construction of a larger water main than would have been constructed without the City's contribution. This Section shall not be applicable to water mains constructed to replace or supplement previously constructed water mains in the same vicinity. This Section shall not be applicable to portions of the water system upon which proceeds from any bonds issued by or in connection with a general improvement district are expended.~~

~~B. For purposes of this Section, water system facilities constructed prior to October 27, 1965, shall be presumed to have been constructed at the sole cost of the adjoining property owners. The Director of Public Works Services shall maintain an accurate record of all facilities of the system installed subsequent to the aforesaid date for the~~

purpose of establishing a record of those facilities which have been constructed at the City's expense.

C. In the event two (2) public water mains are installed, either of which could serve a parcel of property, one of which was installed at the City's expense and the other at the expense of a subdivider, assessment district or otherwise, and it is determined to require connection to the water main constructed at the City's expense, the additional fee required by this Section shall not be applicable.

Sec. 38.1112. ADDITIONAL FEE FOR AREAS 2 AND 4:

Every application for a connection for water service to serve property located in water service Areas 2 and 4 shall, in addition to all other fees, be accompanied by a fee in the amount of five hundred dollars ($500.00), which feepay all time and materials costs, which shall be refundable to the person making the payment (upon request therefor made within one year after the date of annexation) if the property for which the connection is applied for is annexed to the City within two (2) years after the installation of the water service connection. The feespayments required by this Section shall not be applicable to connections serving property located in incorporated territory of another city.

Sec. 38.13. PROHIBITED WATER CONNECTION PERMITS; EXCEPTION:

A. No water connection permit shall be issued to serve any premises located within water service Area 3 from water facilities located in another water service area.

B. Notwithstanding the foregoing prohibition and upon application, the City Council may authorize the issuance of a water connection permit to serve premises located in one water service area from water facilities located in another water service area when it finds the existence of exceptional or extraordinary conditions affecting such premises. The authorization shall be made by resolution and may be subject to such terms, conditions and fees as the Council finds necessary or appropriate.

Sec. 38.14. FACILITIES FEE:

A. Established: A facilities fee is hereby established to provide for the use and construction of existing and future water system capital facilities in accordance with a capital improvement program duly approved by the City Council. Said fee shall be collected concurrently with the connection fees specified in Section 38.10 of this Article and shall be in addition to all other fees and charges specified in this Chapter or otherwise provided for the use of the City's water system.

The amount of the facilities fee per dwelling unit equivalent (DUE hereinafter defined), effective corresponding to the dates hereinafter specified, is as follows:

	Effective Date July 1, 1994
Facilities fee per DUE	$1,787.00

~~B. Dwelling Unit Equivalent: As used in this Section, "dwelling unit equivalent" means the average consumption of water pertaining to a single-family residence served by a five-eighths inch by three-fourths inch (⅝″ × ¾″) water meter, as determined by the Public Works Services Director. The fee hereinabove specified shall be payable for residential use structures based upon the number of dwelling units therein, irrespective of the number of meters through which water service is provided to such units. Calculations of the amount payable for commercial, industrial or other use structures shall be based upon the aforesaid dwelling unit equivalent standard with reference to average consumption pertaining to such uses likewise determined by said Director.~~

~~C. Exclusion: The facilities fee hereby established shall not apply to premises located within Area 3.~~

~~Sec. 38.15. WATER CAPACITY CHARGE~~:

~~A. Established: A water capacity charge is hereby established to provide for capital facilities that improve the City's ability to supply water within the City's service area, by increasing the supply available and reducing demand for potable water. The water capacity charge shall be in addition to all other fees and charges specified in this chapter or otherwise provided for the use of the City's water system.~~

~~B. Amount: The water capacity charge is eleven dollars and fifty-eight cents ($11.58) per gallon per day of projected consumption of water on the property to be connected to the water system, as such projected consumption (both indoor and outdoor) is determined by application of the factors set forth in Attachment Q of the City's Engineering Standards.~~

~~C. When Payable: The water capacity charge shall be payable and collected concurrently with the connection fees specified in Section 38.10 and the facilities fees specified in Section 38.14.~~

~~D. Applicability: The water capacity charge applies to all new water demand on the City's water system (potable and recycled water) in the service areas 1, 2, 3, 4, 5, and 6 as established in Section 38.1.~~

Sec. 38.12. WATER CAPACITY FEE:

A. Established: Except as otherwise provided in this Chapter, persons applying for new or expanded water service shall pay a water capacity fee in an amount established by ordinance or resolution of the City Council in accordance with a nexus study that demonstrates that the fees do not exceed the estimated reasonable cost of providing the service for which the fees are imposed. Said fee shall be collected concurrently with the connection fees specified in Section 38.10 of this Article and shall be in addition to all other fees and charges specified in this Chapter or otherwise provided for the use of the City's water system.

B. Purpose: The purpose of the water capacity fees is to fund a proportionate share of the costs of existing and future water system facilities and assets that are reasonably necessary to provide potable and recycled water capacity for new development. For

the purposes of this Section, "new development" means all new building construction, conversion to a new use, or additional use within an existing building that creates a need for additional water capacity. The purposes of the water capacity fee include the purposes of the former water facilities fee and the former water capacity charge.

C. Determination of Required Fees.

1. The City Engineer or their designee shall be responsible for determining the fees required by this Section. This determination shall be made at the time of application for increased water service.

2. The water capacity fee shall automatically increase starting on July 1, 2025, and in each year thereafter, in accordance with any changes in regional construction costs. Specifically, the amount of the adjustment shall be based on May over May construction cost changes according to the "Construction Cost Index" for the San Francisco Bay Area, as reported monthly in the Engineering News Record. This adjustment shall not require any action of the City Council.

D. Water Capacity Fee Account. The revenues from the water capacity fee shall be deposited in a segregated water capacity fee account for the purpose of funding public facilities reasonably necessary to provide water capacity service to new or expanded connections to the City's water system.

E. Fee Adjustments.

1. Any person subject to a fee required by this Section may apply to the City Engineer for a reduction, adjustment or waiver of that fee based upon the absence of a reasonable relationship between the impact of that applicant's development project on water capacity in the City's water system and the amount of the fee charged.

a. Application. An applicant shall file a written request to adjust fees with the City Engineer not later than 10 days after the City notifies the developer of the amount of the fee to be charged. The application shall provide evidence illustrating that the payment of the fee authorized by this Section and imposed by implementing ordinance or resolution bears no reasonable relationship or nexus with the impact of the development on the need for water capacity in the City's water system and shall state in detail the factual basis for the request for reduction, adjustment or waiver. If an applicant desires to obtain the new or increased water connection prior to completion of the appeal process, the applicant shall deposit the fee being appealed with the application. Such fee or portion thereof will be refunded if the appeal is successful.

b. Decision of the City Engineer. The City Engineer shall issue a decision on the application within 30 days after the application is filed. The City Engineer's decision shall state their determination regarding the amount of the water capacity fee that may reasonably be imposed on the new development and include a brief description of the basis for the City Engineer's decision.

c. Appeal of the Decision of the City Engineer. Decisions of the City Engineer may be appealed to the City Manager or their designee. Appeals must be filed within 10 days of the City Engineer's decision. The City Manager or their designee shall review the application and evidence presented to the City Engineer and issue a decision within 15 days. The City Manager may reverse, affirm, or modify in any respect the determination of the City Engineer.

F. Fee Credits for Improvements Extra to the Project. An applicant for additional water service may be entitled to a reduction in the amount of the water capacity fees required by this Section, in an amount to be determined by the City Engineer, if that development project was required to construct specific water system improvements which are extra to the project. The City Engineer's determination of the amount of reduction required pursuant to this subsection shall be based upon the actual costs reasonably incurred for the construction of the water improvements.

Sec. 38.13. USER FEES AND PENALTIES:

A. After-Hours Water Re-Connection Fee.

The fee for direct costs associated with reconnecting or turning on water meters or classes of water meters during non-business hours of the Public Works Department shall be in an amount set by ordinance or resolution of the City Council. When after-hour reconnection or turn on is requested by a user, this fee shall be charged and collected on the user's next ensuing utility bill.

B. Cut Lock Fee

Where a connection does not have an active customer account, or water services have been disconnected due to delinquency or because of some other violation of City code or resolution, water services will be disconnected and locked at the meter. Persons found to have cut locks will be charged the Cut Lock Penalty Fee. The Cut Lock Penalty Fee shall be established by ordinance or resolution of the City Council.

C. Recycled Water Fill Station Fees

Residential customers of the City electing to participate in the Residential Recycled Water Fill Station Program shall pay a fee to receive a Recycled Water Fill Station Access Card, in an amount to be established by ordinance or resolution of the City Council. Participants will also pay the Recycled Water Fill Stations Consumption Charge for each gallon of recycled water taken from the fill station, in an amount to be established by ordinance or resolution of the City Council. These fees and charges will be added as separate line item on the customer's utility bill.

D. Service through Fire Hydrants

Temporary service for construction purposes shall be furnished at fire hydrants through hydrant construction meters supplied by the City on the following conditions:

a) As security for returning City property in similar working conditions as when issued and for the payment of the service and use charges the customer shall, upon receipt of a meter, deposit with the City a Construction Meter Deposit for each hydrant construction meter, in an amount to be established by ordinance or resolution of the City Council. Immediately upon completion of the construction project, the customer shall return all meters to the City and the City shall refund the deposits less all charges.
b) The customer shall pay the City a monthly service charge based on the size of the meter in accordance with Commercial water rates in effect at the time of billing for each month, or fraction of a month, the meter is in the possession of the customer.
c) The customer shall report readings of the meter to the City every thirty days for billing purposes. If the customer fails to do so, the customer shall pay to the City a Construction Meter Reading Fee, in an amount to be established by ordinance or resolution of the City Council, for the costs incurred for City staff to contact the customer in order to obtain a reading for monthly billing.
d) The customer shall return the meter to the City on demand.
e) The customer shall pay the City its actual costs to replace or repair a meter that is lost or damaged while in the possession of the customer.

E. Fire Flow Testing Fee

Persons seeking to test for adequate fire flow shall pay a Fire Flow Testing Fee in an amount to be established by ordinance or resolution of the City Council. This fee recoups the cost of City staff time and water expensed to ensure the customer's system meets water system demand requirements. Complex requests that would likely exceed normal staff time and water may be charged actual cost instead.

F. Unauthorized Water Use from Fire Hydrants, Water Meters, and other City Water System Infrastructure and Appurtenances

Persons found using water from a fire hydrant, water meters, and other City infrastructure and appurtenances without a hydrant construction meter issued by the City in violation of California Penal Code 498 shall be subject to the following:

a) First offense - Written warning with payment required for water taken as determined by the City.
b) Second offense – Penalty of $1,000 in addition to payment for water taken, as may be determined by the City.
c) Third offense – Penalty of $2,000 in addition to payment for water taken, as may be determined by the City.
d) All subsequent offenses – Penalty of $3,000 in addition to payment for water taken, as may be determined by the City

e) Each day in which persons are found to be using water from a fire hydrant, water meters, and other City infrastructure shall be considered a separate offense.

f) Persons may be defined as individuals, businesses, property owners, and City issued permit holders.

Secs. 38.14~~16~~—38.19. RESERVED:

EXHIBIT C

ARTICLE VII. CROSS CONNECTION CONTROL

Sec. 38.30. PURPOSE:

The City of Redwood City has a responsibility of protecting the public water supply from contamination occurring through backflow. This can only be achieved by implementing an effective cross connection control program. This program has been designed to:

A. Protect the public water supply against actual or potential cross-contamination or pollution that may occur because of some undiscovered or unauthorized cross-connection on a customer-user's system;

B. Eliminate existing connections between drinking water systems and other sources of water that are not approved as safe and potable for human consumption;

C. Encourage the exclusive use of public sources of water supply for domestic purposes;

D. Protect the drinking water supply within the premises where plumbing defects or cross-connections may endanger the drinking water supply available on the customer-user's system;

E. Mitigate the burden on ratepayers arising from costs associated with remediating contamination of the City's water supply due to backflow from private water sources caused by a property owner's failure to comply with the requirements of this Article.

Sec. 38.31. INCORPORATION OF REGULATIONS:

The regulations of the California Department of Public Health, Title 17, California Code of Regulations, Sections 7583—7605, inclusive, herein after referred to as Title 17, and Article VII (Plumbing Code) of Chapter 9 of this Code and all amendments thereto, are hereby adopted, incorporated by references herein and made a part hereof, insofar as the same are applicable to the protection of the City's water distribution system.

Sec. 38.32. PROTECTION REQUIRED FOR WATER SERVICE:

No water service connection to any premises shall be installed or maintained by the City unless the water supply is protected as required by state laws and regulations and this Article.

Sec. 38.33. EQUIPMENT REQUIRING BACKFLOW PREVENTION:

No person shall advertise, sell or offer for use or sale, any waste-treating chemical or substance, water-using or water-oriented equipment, mechanism or contrivance, which

when utilized may cause contamination or pollution of the domestic water supply unless such operation has been equipped with an approved backflow prevention assembly.

Sec. 38.34. ASSEMBLY REQUIREMENTS:

Any backflow prevention assembly required herein shall be a model and size approved by the Director and it shall be the customer-user's property, responsibility and at the customer-user's expense to install and maintain such assembly.

Sec. 38.35. RESPONSIBLE AUTHORITY:

The Director of Public Works Services is invested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this Article.

Sec. 38.36. RIGHT OF ENTRY:

The customer-user's system should be open for inspection at all reasonable times, or in case of emergency at any time, to authorized representatives of the City to determine whether cross connections or other structural or sanitary hazards, including violations of these regulations, exist.

Sec. 38.37. DEFINITIONS:

The following words or phrases shall, for the purpose of this Article, have the meanings respectively ascribed to them in this Section:

A. AUXILIARY WATER SUPPLY: Any water supply on or available to the premises other than the City approved public water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural source(s), such as a well, spring, river, stream, harbor, and so forth; used waters; recycled water; or industrial fluids. These waters may be contaminated or polluted, or they may be objectionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

B. BACKFLOW: The undesirable reversal of flow in a potable water distribution system as a result of cross connection.

C. BACKPRESSURE: A pressure, higher than the supply pressure, caused by a pump, elevated tank, boiler, or any other means that may cause backflow.

D. BACKSIPHONAGE: Backflow caused by negative or reduced pressure in the supply piping.

E. BACKFLOW PREVENTION ASSEMBLY: An assembly or means designed to prevent backflow.

F. CITY: The City of Redwood City.

G. CONTAMINATION: An impairment of a potable water supply by the introduction or admission of any foreign substance that degrades the quality and creates a health hazard.

H. CROSS CONNECTION: A connection or potential connection between any part of a potable water system and any other environment containing other substances in a manner that, under any circumstances would allow such substances to enter the potable water system. Other substances may be gases, liquids, or solids, such as chemicals, waste products, steam, water from other sources (potable or non-potable), or any matter that may change the color, add odor, or in any way change the quality of the potable water system.

I. CUSTOMER-USER: Any person or organization whose premises contains a customer water system and who receives water or water service from the City's water system and whose name appears on the water bill for water serving that premises.

J. DIRECTOR: Director of ~~Community Development~~Public Works Services for the City or authorized representative.

K. HAZARD, DEGREE OF: The term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

L. INDUSTRIAL-FLUIDS SYSTEMS: Any system containing a fluid or solution that may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration, such as would constitute a health, system, pollution, or plumbing hazard, if introduced into an approved water supply. This may include, but not be limited to, polluted or contaminated waters; all types of process waters and used waters originating from the public potable water system that may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalies; circulating cooling water connected to an open cooling tower; and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters, such as wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, and so forth; oils, gases, glycerin, paraffins, caustic and acid solutions, and other liquid and gaseous fluids used in industrial or other purposes for firefighting purposes.

M. POLLUTION: The presence of any foreign substance in water that tends to degrade its quality so as to constitute a non-health hazard or impair the usefulness of the water.

N. PUBLIC WORKS SERVICES: The Public Works Services ~~division~~Department of the City of Redwood City.

O. WATER - POTABLE: Water that is safe for human consumption as described by the California Department of Public Health.

P. WATER - NONPOTABLE: Water that is not safe for human consumption or that is of questionable quality.

Q. QUALIFIED TESTER: A person who meets the following criteria and who provides evidence of such to the satisfaction of the ~~Community Development~~Public Works Services Director: (1) a current valid Backflow Prevention Tester's Certificate issued by the American Water Works Association and current valid calibration certifications for differential pressure gauges to be

used for the purposes of testing backflow prevention assemblies; (2) a current valid Redwood City business license; and (3) for any persons who will perform testing of backflow prevention assemblies and other work required by this article, proof of insurance as follows: (a) Commercial General Liability Insurance in the amount of one million dollars ($1,000,000.00) combined single-limit per occurrence for bodily injury, personal injury and property damage; (b) Automobile Liability in the amount of one million dollars ($1,000,000.00) combined single-limit per accident for bodily injury and property damage; and (c) Workers' Compensation and Employer's Liability in the amount of the limits as required by the California Labor Code and Employer's Liability limits of one million dollars ($1,000,000.00) per accident for bodily injury.

R. QUALIFIED CROSS-CONNECTION SPECIALIST: A person who meets the following criteria and who provides evidence of such to the satisfaction of the Public Works Services Director: (1) a current valid Cross-Connection Control Program Specialist issued by the American Water Works Association; (2) a current valid Redwood City business license; and (3) for any persons who will perform cross-connection control tests of plumbing systems and other work required by this article, proof of insurance as follows: (a) Commercial General Liability Insurance in the amount of one million dollars ($1,000,000.00) combined single-limit per occurrence for bodily injury, personal injury and property damage; (b) Automobile Liability in the amount of one million dollars ($1,000,000.00) combined single-limit per accident for bodily injury and property damage; and (c) Workers' Compensation and Employer's Liability in the amount of the limits as required by the California Labor Code and Employer's Liability limits of one million dollars ($1,000,000.00) per accident for bodily injury.

~~R~~S. WATER - USED: Any water supplied by the City from the public potable water system to a customer-user's water system after it has passed through the point of delivery and is no longer under the sanitary control of the City.

~~S~~T. WATER SERVICE CONNECTION: The terminal end of a service connection from the public potable water system, that is, where the City loses jurisdiction and sanitary control over the water at its point of delivery to the customer-user's water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. There should be no unprotected takeoffs from the service line ahead of any meter or backflow-prevention assembly located at the point of delivery to the customer-user's water system. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public potable water system.

~~T~~U. WATER SYSTEM, CITY: The City water system shall consist of the source facilities and the distribution system and shall include all those facilities of the water system under the complete control of the City, up to the point where the customer-user's system begins. The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system. This distribution system shall include those parts of the

facilities beyond the termination of the City distribution system that are utilized in conveying City delivered domestic water to points of use.

~~U~~V. WATER SYSTEM, CUSTOMER: The customer-user's water system shall include those parts of the facilities beyond the termination of the City distribution system that are utilized in conveying City delivered domestic water to points of use.

Sec. 38.38. REQUIREMENTS FOR BACKFLOW PROTECTION:

A. Conditions Necessitating Backflow. In the case of premises having any of the following, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line, appropriate to the degree of hazard:

1. An auxiliary water supply or a supply that is not or may not be of safe bacteriological or chemical quality and that is not acceptable as an additional source by the City.

2. Industrial fluids or any other objectionable substances are handled in such a fashion as to create an actual or potential hazard to the public water system. This shall include the handling of process waters and waters originating from the utility system that have been subject to deterioration in quality.

3. Internal cross connections that cannot be permanently corrected and controlled.

4. Intricate plumbing and piping arrangements.

5. Where entry to all portions of the premises is not readily accessible for inspections purposes, making it impracticable or impossible to ascertain whether or not dangerous cross connections exist.

B. Type of Backflow Protection. The type of protective assembly required under subsection 38.38(A) shall depend upon the degree of hazard that exists.

1. The public water system shall be protected by an approved air gap separation, or a reduced pressure principle backflow prevention assembly if approved by the Director, on each service to the premises for the following degrees of hazard:

a. In the case of any premises where there is an auxiliary water supply.

b. In the case of any premises where there is any material dangerous to health that is handled in such a fashion as to create an actual or potential hazard to the public water system. Examples of premises where these conditions will exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries, and plating plants.

c. In the case of any premises where there are cross connections, either actual or potential.

d. In the case of any premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete in-plant cross connection survey.

2. In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system shall be protected by an approved double check valve assembly.

3. In the case of any premises where, in the opinion of the Director, an undue health threat is posed because of the presence of extremely toxic substances, the Director may require an air gap at the service connection to protect the public water system. This requirement will be at the discretion of the Director and is dependent of the degree of hazard.

Sec. 38.39. INSTALLATION OF BACKFLOW PREVENTION ASSEMBLIES:

A. Where Backflow Prevention Assembly Are Required. In addition to the requirements of Article VII (Plumbing Code) of Chapter 9 of this Code and all amendments thereto, an approved backflow prevention assembly shall be installed on each service line to a customer-user's water system at or as near possible the terminal end of the service connection from the City water system or immediately inside the building being served; but in all cases, before the first branch line leading off the service line.

B. Installation and Permits. Every backflow prevention assembly installed for the purpose of eliminating a cross-connection shall be so installed with all applicable City permits, in accordance with City standards, and at a location approved by the Director. The approval required hereunder shall be in addition to all applicable requirements of Title 17 of the California Administrative Code and Article VII (Plumbing Code) of Chapter 9 of this Code and all amendments thereto.

Sec. 38.40. TESTING OF BACKFLOW PREVENTION ASSEMBLIES:

A. Customer-User Responsibilities: The customer-user shall have the following responsibilities:

1. Testing: It shall be the duty of the customer-user at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made immediately upon the installation, repair or relocation of such assembly and at least once per year thereafter. In those instances where the Director determines that there is a high degree of hazard, the customer-user shall have the backflow prevention assembly or assemblies tested by a Qualified Tester at more frequent intervals as required by the Director.

2. Inspection and Testing Costs. Certified inspections and operational tests shall be at the expense of the customer-user.

3. Repair Cost. Backflow prevention assemblies shall be repaired, overhauled, or replaced at the expense of the customer-user whenever said assemblies are found to be defective.

4. Record Keeping. Copies of records of such tests, repairs, and overhaul shall be kept by the customer-user for a period of three (3) years and shall be provided to the Director and maintained by the City for a period of no less than three (3) years.

5. Access. The customer-user's system should be open for inspection and testing at all reasonable times, or in case of emergency at any time, to authorized representatives of the City to determine whether cross connections or other structural or sanitary hazards, including violations of these regulations, exist.

B. Notice of Testing Due.

1. The Director shall notify each affected customer-user when it is time for the backflow preventer installed on the customer-user system to be tested. This written notice shall give the customer-user thirty (30) days to have the backflow preventer tested by a Qualified Tester and to submit the results to the Director.

2. The Director shall send a second notice to each customer-user who does not submit their test results as prescribed in the first notice within the thirty (30) day period allowed. The second notice shall give the customer-user a two (2) week period to have their backflow preventer tested and to submit the test results to the City.

3. Failure to submit required test results within the time required by the notice is a violation of this Article subjecting the customer-user to the remedies and penalties provided herein.

C. Test Reporting. The customer-user shall submit to the Director, upon forms provided by the Director, a record of each backflow preventer test, within thirty (30) days after the test to which such record pertains, unless the Director has directed that the report be submitted within a different number of days.

D. Billing for Testing. The cost of any certified inspection or operational test performed by Public Works Services Personnel or by a contractor hired by the Director shall be included as part of the next ensuing municipal water bill presented to the customer-user.

E. Frequency of Testing. Tests shall be made immediately upon the installation or relocation of backflow prevention assemblies and at least once per year thereafter. In those instances where the Director determines there is a high degree of hazard, such as a chemical plant, certified inspections may be required at more frequent intervals.

F. Test Failure. For backflow prevention assemblies which fail to pass certified inspection or operational testing, the customer-user shall, immediately after notification of test results, provide for maintenance and repair of the assembly at their own expense and have the assembly retested.

G. Qualified Testers.

1. No person shall test or shall make reports on backflow prevention assemblies as required in Title 17 of the California Administrative Code and this Article unless such person is a Qualified Tester pursuant to this Article.

2. At the Director's discretion, required operational tests may also be performed by properly certified City staff or contractors hired by the Director.

3. Upon completion of a passing test, a Qualified Tester shall affix a tag issued by the City to each backflow prevention assembly and report the tag number on the test report provided by the Director.

Sec. 38.41. FEES:

The following fees shall be established by City Council ordinance or resolution and when assessed shall be included as part of the customer-user's municipal water bill and must be paid by the customer-user in the same manner as the water bill:

A. Administrative Fee (~~Cross-Connection Registration Fee and Annual Test Result/Record Filing Fee~~Backflow and well fee for initial registration and annual administration/record filing): The customer-user owning and/or occupying property on which backflow preventers are required to be installed shall pay to the City an Administrative Fee at the time the backflow preventer is first registered with the City and again each year with the filing of the test results.

B. ~~Operational~~Backflow Testing Fee: In the event the Director provides backflow preventer testing services, persons availing themselves of such services shall pay an ~~Operational~~Backflow Testing Fee.

C. Cross-Connection Control Inspection Fee: The customer-user shall pay an Inspection Fee when the Director deems it appropriate to inspect the property of a customer-user in order to carry out the purposes of this Article, including but not limited to inspecting any property which has a water connection to the City's water supply to determine whether there exists on such property an unreported or unregistered Auxiliary Water Supply or any other condition which requires installation of backflow preventers~~.~~ or inspection of non-operational wells. If the Director determines that backflow preventer installation is required by this Article, the owner of such property shall pay the Inspection Fee established by Council Resolution and any penalties and fines authorized this Article. If the Director determines that no condition exists on such property which requires backflow preventers, no inspection fee will be charged to the property owner.

D. Cross-Connection Control Testing Fee: The customer-user shall pay a fee for City staff to conduct or observe a cross-connection control test.

E. Backflow Tag Fee: Qualified Testers shall affix a unique backflow tag issued by the City upon each backflow prevention assembly upon a passing test. Backflow tags will be sold in sets and are not able to be broken into smaller denominations and are not returnable.

F. Penalty for Failure to Respond to Cross-Connection Program Notice: Customer-users who fail to respond to the first and second notice for testing or inspection from the City are subject to a penalty to recover the cost for time spent by the City to bring the customer into compliance with the provisions of this Article.

G. Termination of Water Service for Failure to Test/Inspect Fee: This fee shall be charged to the customer-user at the time City staff has been dispatched to shut-

off water service following failure to respond to notices from the City in compliance with the provisions of this Article.

Sec. 38.42. CROSS CONNECTION PROHIBITION:

A. It shall be unlawful for any person to construct, install, use, keep, or maintain, or to permit, cause, or allow the construction, installation, use, or maintenance of a cross-connection.

B. It shall be unlawful for any person to construct or install, or to cause to be constructed or installed, a backflow prevention assembly which does not meet pertinent requirements of Title 17 of the California Administrative Code and Article VII (Plumbing Code) of Chapter 9 of this Code and all amendments thereto, and this Article.

C. It shall be unlawful for any person to operate, use or maintain, or to permit, or cause the use, operation, or maintenance of any backflow prevention assembly which is not tested at least once each calendar year.

D. It shall be unlawful for any person to use, operate, or maintain, or to permit or cause the use, operation, or maintenance of any backflow prevention assembly which is not in good repair.

E. Any customer-user whose property or premises with an Auxiliary Water Supply is not in compliance with this Article shall immediately inform the Director and take all required actions to come into compliance with this Article at customer-user's expense.

Sec. 38.43. REAL ESTATE TRANSFER DISCLOSURE STATEMENT:

In addition to disclosures required by California Civil Code Section 1102.6a, the following additional disclosure shall be made: Upon any transfer of real property, including but not limited to commercial and residential real properties, by sale, exchange, installment land sale contract, lease with option to purchase, or ground lease coupled with improvements, or transfer of residential stock cooperative, the transferor shall provide to the buyer an additional disclosure statement, using the form set forth in California Civil Code Section 1102.6a of the California Civil Code, disclosing whether or not backflow preventers are required to be installed on the property pursuant to this Article. If so, the disclosure shall disclose the conditions or auxiliary water supply located on the property which subjects it to requirements for the installation and maintenance of backflow preventers and other requirements and expenses of this Article, and shall also attach a copy of this Article. Such disclosure statement shall be signed by the transferor and the purchaser or lessee and a copy of the executed disclosure statement shall be filed with the Director.

Sec. 38.44. PUBLIC NUISANCE:

Any cross-connection, or any condition which is in any manner a violation of the provisions of this Article, or of any state law pertaining thereto, shall be, and the same is hereby declared to be a public nuisance. Such nuisance may be abated, removed, or enjoined, and damages assessed therefor by City, in any manner provided by law.

Sec. 38.45. ENFORCEMENT, REMEDIES:

The remedies provided for or specified in this Article shall be cumulative and not exclusive, and shall be in addition to and do not supersede or limit any other civil or criminal remedies available to the City in the exercise of its powers.

Sec. 38.45.1. COSTS OF ABATEMENT:

A. The Director shall keep an itemized statement of costs incurred by the City in abating or otherwise responding to violations of this Article. When a violation is established and abated, the Director shall provide a copy of this statement to the violator and to the City. The violator may request a hearing before the Director to contest the statement of costs. The request for a hearing shall be made within ten days of receipt of the statement or the right to hearing shall be deemed waived. The Director shall review the statement of costs and any information presented by the violator, and may make any necessary revisions, corrections or modifications. The decision of the Director is final.

B. The procedure for recording the statement of costs as a lien against the property involved shall be as follows:

    1. If payment of the assessed costs and expenses is not received by the City within thirty days of the date appearing on the decision of the Director, the City's Finance Director shall set a notice and hearing before the City Council for the purpose of adopting a resolution confirming the statement of costs.

    2. After holding a hearing the City may adopt a resolution, which shall be recorded by the Finance Director as a lien against the property.

Sec. 38.45.2. CIVIL PENALTY:

Any person or entity violating this Code shall be liable for a civil penalty of up to one thousand dollars ($1,000.00) for each separate violation and for continuing violations a civil penalty up to one thousand dollars ($1,000.00) for each day such violation is committed or permitted to continue, which penalty shall be assessed and recovered in a civil action brought in the name of the people of the City of Redwood City by the City Attorney in any court of competent jurisdiction.

Sec. 38.45.3. CRIMINAL PROSECUTION:

Any person, who is found to have failed to comply with any provisions of this Article, and the orders, rules, regulations and permits issued hereunder, may be charged with a misdemeanor for each offense and, upon conviction, shall be punished in accordance

with Chapter 1 of this Code, unless otherwise specified. Each day on which a violation shall occur or continue shall be deemed a separate and distinct offense.

Sec. 38.45.4. ADMINISTRATIVE FINES:

Notwithstanding any other provision of this Article, the Director may deem a violation to be an infraction instead of a misdemeanor and may issue fines in accordance with Chapter 1 of this Code. Each day on which a violation shall occur or continue shall be deemed a separate and distinct offense.

Sec. 38.45.5. COST RECOVERY:

In addition to the penalties provided herein, the City may recover costs, fees and penalties assessed against the City, reasonable attorneys' fees, court costs, court reporters' fees and other expenses of litigation against the person found to have violated this Article or state law pertaining thereto or the orders, rules, and regulations implementing this Article or having caused contamination of the City's water supply through backflow or cross-connection from property owned or occupied by such person.

Sec. 38.45.6. TERMINATION OF WATER SERVICE:

In addition to the rights granted herein, the City may terminate water service to any premises served if a required backflow prevention assembly is not installed, not properly installed in accordance with the provisions herein, is not tested annually in accordance with the provisions herein, or removed or tampered with by customer-user. The term "tampered with" shall include, but is not limited to, those instances where the City finds evidence that an installed backflow prevention assembly has been by-passed, modified, made or allowed to remain ineffective.

EXHIBIT D

ARTICLE IX. FEES AND CHARGES

Sec. 27.100. SEWER SERVICE CHARGES:

A. Established: The following charges are hereby established and levied upon each premises or any portion thereof which receives or uses sewerage service from the sewerage facilities:

1. Residential (with One (1) Dwelling Unit) Customers: All residential uses with one (1) dwelling unit per parcel shall pay the following rates:

   Effective July 1, 2020: Eighty-five dollars and forty-four cents ($85.44) per dwelling unit per month;

   Effective July 1, 2021: Eighty-nine dollars and twenty-eight cents ($89.28) per dwelling unit, per month or one thousand seventy-one dollars and thirty-six cents ($1,071.36) per dwelling unit, per year. The City Council shall decide, in its sole discretion, whether to impose the charges on a monthly or yearly basis. Should the City Council decide to impose the charges on a yearly basis, it may elect by resolution to have such charges collected on the tax roll in accordance with Health and Safety Code Section 5473, et seq.

2. Residential (with Two (2) to Nine (9) Dwelling Units) Customers: All residential uses, including single-family, duplexes, multi-family dwellings or structures, and similar classes of uses with between two (2) and nine (9) dwelling units per parcel shall pay the following monthly rate:

   Effective August 1, 2019: Eighty-one dollars and seventy-six cents ($81.76) per dwelling unit;

   Effective July 1, 2020: Eighty-five dollars and forty-four cents ($85.44) per dwelling unit;

   Effective July 1, 2021: Eighty-nine dollars and twenty-eight cents ($89.28) per dwelling unit.

3. Residential (with Ten (10) or More Dwelling Units) Customers: All residential uses including multi-family dwellings or structures, and similar classes of uses with ten (10) or more dwelling units per parcel shall pay the following monthly rate:

   Effective August 1, 2019: Seventy-three dollars and fifty-nine cents ($73.59) per dwelling unit;

   Effective July 1, 2020: Seventy-six dollars and ninety cents ($76.90) per dwelling unit;

   Effective July 1, 2021: Eighty dollars and thirty-six cents ($80.36) per dwelling unit.

4. Non-Residential Customers:

   a. Minimum Charges: All uses other than residential uses shall pay the greater of (i) the charge calculated pursuant to subdivision 27.100(A)(4)(c) of this Section, or (ii) the following minimum monthly charge:

      Effective August 1, 2019: Seventy-three dollars and fifty-nine cents ($73.59);

      Effective July 1, 2020: Seventy-six dollars and ninety cents ($76.90);

      Effective July 1, 2021: Eighty dollars and thirty-six cents ($80.36).

   b. Rate Classes: For purposes of calculating the charge pursuant to subdivision 27.100(A)(4)(c) of this Section, each customer shall be assigned to one (1) of the following rate classes:

      Class A: All establishments used for industrial purposes including, but not limited to, manufacturing plants, processing plants, producers, laundries, photo processors, electric service institutions, packagers, and other similar classes of use.

      Class B: All establishments used for institutional purposes, both private and public, including schools, colleges, rest homes, clubs, public buildings, lodges, and other similar classes of use.

      Class C: Business establishments including, but not limited to, office buildings, warehouses, filling stations, retail stores, motels, mortuaries, fast-food establishments without on-site food preparation, markets without garbage grinders, and all other similar classes of use not hereinafter expressly described; all institutions where the sick or injured are given medical or surgical care.

      Class D: All establishments with mixture of one (1) of commercial classes A through C and commercial class E, such as office buildings with food services.

      Class E: Food establishments where food is prepared and served on the premises and other similar classes of use; markets with garbage grinders, and all other similar classes of use not hereinafter expressly described.

   c. Volumetric Rate: The monthly charge for each non-residential use, except where lower than the minimum monthly rate set forth above shall be calculated by charging the following amount per hundred cubic feet of water use.

Commercial Customers (Section 27.100, A2—A7) Additional User Charges	Effective August 1, 2019	Effective July 1, 2020	Effective July 1, 2021
Class A	$ 6.26	$ 6.54	$ 6.83
Class B	$ 7.28	$ 7.61	$ 7.95
Class C	$ 7.70	$ 8.05	$ 8.41
Class D	$12.27	$12.82	$13.40
Class E	$18.45	$19.28	$20.15

d. Determination: The determination of the appropriate user category for particular premises shall be made by City's Director based upon the waste or wastewater constituents or characteristics of such user, including such factors as biochemical oxygen demand, suspended solids, and volume, consistent with the categories hereinabove in subdivision b. established. The user category for any particular premises may be revised, changed, or redesignated by Authority's Manager with the consent of City's Director upon a determination by them that the waste or wastewater characteristics of the user of such premises have changed in such manner, or to such an extent, as to justify such reclassification. Any user, permittee, applicant, or other person aggrieved by a determination of City's Director made pursuant hereto may appeal such determination to Authority's Commission in accordance with the provisions of Section 27.130, et seq.; provided that references in said Section to "Authority's Manager" shall be deemed to mean "Director."

B. Payment: The monthly charges established in subdivision A hereof shall be paid by the owner or occupant of the premises receiving sewerage service to the City Collector within thirty (30) calendar days after presentation of a bill therefor, and shall be deemed delinquent if not paid within said period. Such charges may be included in the City's water bills. Should the City Council elect to impose the charges on Residential (with One (1) Dwelling Unit) Customers on an annual basis, as provided in subdivision (A)(1) hereof, then those charges shall be collected on the tax roll in accordance with Health and Safety Code Section 5473, et seq.

C. Remedies: Upon non-payment of the monthly charge for sewerage service within the time specified in subdivision B hereof, an action may be brought in the name of the City in any court of competent jurisdiction against the owner or occupant of the premises to which such charge pertains for the collection of such delinquent charges. If the occupant of such premises is not also the owner, such action may be brought against both the owner and occupant, both of whom shall be jointly and severally liable for said charges. Water service to such premises may be discontinued by the City in the case of non-payment of the monthly charges established in subdivision A hereof within the time required under subdivision B hereof. The remedies herein established shall be cumulative and in addition to any and all other remedies available to the City for the collection of sewer service charges.

Sec. 27.101. WASTEWATER TREATMENT CAPACITY CHARGE; ~~FACILITY~~WASTEWATER COLLECTION CAPACITY CHARGE:

A. Wastewater Treatment Capacity Fee: Except as provided in subsection (A)(3) of this Section, every application for a permit to connect to the sewerage facilities or to a sewer lateral required pursuant to Article VI of this Chapter shall be accompanied by the applicable wastewater treatment capacity fee established by the following schedule:

1. Residential Structures:

a. Single-Family: For a connection serving a single-family residential structure, including an original connection and a connection or reconnection to a new or an existing sewer lateral to serve a new structure - two thousand one hundred thirty-five dollars and seventy cents ($2,135.70).

b. Duplex: For a connection serving a duplex or two-family dwelling - three thousand four hundred eighty dollars and forty cents ($3,480.40).

c. Multi-Dwelling Unit Structures: For a connection serving any residential structure or group of residential structures on a building site in one ownership, containing a total of more than two (2) dwelling units - one thousand four hundred twenty-three dollars and eighty cents ($1,423.80) per unit.

2. Commercial, Industrial Structures: For a connection serving any commercial, industrial, institutional (including schools, hospitals and churches), or other nonresidential structure there shall be charged a wastewater treatment capacity fee calculated in accordance with the following formula:

Wastewater Treatment Capacity Fee = $2,135.70 (Vi/Vr)

where:

Vi =	volume of waste or wastewater to be discharged from the commercial, industrial, or institutional structure to be connected to the sewerage facilities, in gallons per day;
Vr =	average volume of waste or wastewater per residential structure, in gallons per day (determined to be 270 gallons per day for single-family structures, 220 gallons per unit for duplex structures, and 180 gallons per unit for multi-family structures);

Notwithstanding the foregoing, the wastewater treatment capacity fee for service to any commercial, industrial, or institutional structure shall be not less than two thousand one hundred thirty-five dollars and seventy cents ($2,135.70).

3. Exclusions:

a. The foregoing fee shall not be applicable to connections to the sewerage facilities or to a sewer lateral with respect to which sewerage treatment

capacity included within City's allocation of eleven million four hundred thousand (11,400,000) gallons per day flow in Authority's treatment facilities has been purchased pursuant to agreement entered into between the City and the owner of the property to be served by such capacity or with respect to which sewerage treatment capacity has been otherwise purchased or provided by, or on behalf of, such owner, as determined by ~~City's Director.~~City Engineer.

b. The foregoing fee shall not be applicable to connections made to public sewers maintained by the West Bay Sanitary District or the Fair Oaks Sewer Maintenance District within the City.

c. The foregoing fee shall not be applicable to connections made to the sewerage facilities for the purpose of drawing down the ground water table to excavate for the foundation of a structure or for removal of contaminated soils for a period not to exceed thirty (30) days.

d. The foregoing fee shall not be applicable to connections made to the sewerage facilities for the purpose of ground water cleanup. The fee for a permit to connect to the sewerage facilities for the purpose of ground water cleanup shall be the facilities fee calculated under the formula set forth in subsection (B)(2)(c) of this Section.

4. Additional Dwelling Units: In the event additional dwelling units are to be constructed which would increase the number of dwelling units being served by a single sewer connection, a wastewater treatment capacity fee shall be paid for such additional dwelling units in accordance with subsection (A)(1) of this Section. The fee payable shall be the amount by which the wastewater treatment capacity fee calculated upon the number of dwelling units after such construction exceeds the wastewater treatment capacity fee calculated upon the number of dwelling units prior to such construction.

5. Additional Industrial Volume: In the event the volume of waste or wastewater to be discharged into the sewerage facilities from a commercial, industrial, institutional, or other nonresidential structure is increased by installation of additional plumbing fixtures or enlargement, expansion, or reconstruction of said structure, and such structure is to be served by an existing sewer connection, a wastewater treatment capacity fee shall be paid for such additional volume in accordance with subsection (A)(2) of this Section. The fee payable shall be the amount by which the wastewater treatment capacity fee calculated upon the total volume after the increase exceeds the wastewater treatment capacity fee calculated upon the volume prior to such increase.

B. ~~Facilities Fee:~~Wastewater Collection Capacity Charge:

1. Established: A ~~facilities fee~~wastewater collection capacity charge is hereby established to provide for the use and construction of existing and future sanitary sewerage system capital facilities in accordance with a capital improvements program duly approved by the City Council. Said ~~fee~~charge shall be ~~collected concurrently with the~~paid prior to the issuance of a development permit to

connect to the sewerage facilities or to a sewer lateral required pursuant to Article VI of this Chapter. The wastewater treatment capacity fee specified in subsection A of this Section~~, and~~ shall be in addition to all other fees and charges specified in this Chapter or otherwise provided for the use of the City's sewerage facilities.

~~The amount of the facilities fee (the "facilities fee"), per equivalent dwelling unit (hereinafter defined) is nine hundred sixty dollars ($960.00).~~

~~2. Equivalent Dwelling Unit: The facilities fee hereinabove established shall be calculated on the basis of "Equivalent Dwelling Units" (EDU). One EDU shall equal two thousand (2,000) square feet.~~

~~a. Multi-Family Residential Structures: The amount payable for multi-family residential structures shall be determined by multiplying the above specified amount times the number of dwelling units contained therein.~~

~~b. Commercial And Industrial Structures: The amount payable for commercial and industrial structures shall be determined by multiplying the above-specified amount times the square footage of the structure for which calculation is being made divided by two thousand (2,000).~~

~~c. Ground Water Contamination Cleanup: The amount payable for any premises from which discharge ground water is discharged by extraction wells into the sewerage facilities shall be based upon the anticipated daily discharge. The amount payable shall be calculated by multiplying the authorized daily discharge, expressed in gallons per day (gpd) times the above-specified amount divided by 270 (the allocation of gpd per EDU).~~

~~The foregoing formula is:~~

~~Authorized gpd × $960 = Facilities Fee (in dollars)~~
~~270 gpd~~

~~The Director reserves the right to adjust the facilities fee at any time and from time to time based upon the increase in the volume discharged from the premises to the sewerage facilities.~~

~~d. Other: Notwithstanding the formula specified in this subsection B2, the amount payable for any industrial premises which are used for the storage or discharge of materials which will be discharged into the sewerage facilities shall be based upon the anticipated discharge from the premises. The amount payable shall be calculated by multiplying the authorized daily discharge, expressed in gallons per day (gpd) times the above specified fee divided by 270 (the allocation of gpd per EDU).~~

~~The foregoing formula is:~~

~~Authorized gpd × $960 = Facilities Fee (in dollars)~~
~~270 gpd~~

~~The Director reserves the right to adjust the facilities fee at any time and from time to time based upon the increase in volume discharged from the premises to the sewerage facilities.~~

~~The facility fees specified under subsections B2a through B2d of this Section are not mutually exclusive.~~

~~3. Exceptions: Notwithstanding the provisions of subsections B1 and B2 of this Section, exceptions to the amount of the facilities fee and the basis for establishing said facilities fee may be granted by the Council set forth in an agreement or upon application of a user, upon the finding by the Council that the aforesaid facilities fee or the basis therefor is not equitable with respect to a particular premises or user.~~

~~4. Exclusion: The facilities fee hereby established shall not apply to the premises located within General Improvement District No. 1-64, a general improvement district duly organized and existing under the General Improvement District Ordinance (being Ordinance No. 1128, adopted March 9, 1964, as amended), and all territory annexed to said District.~~

2. Purpose of Fee. The purpose of the wastewater collection capacity charge is to fund a proportionate share of the costs of existing and future wastewater system facilities and assets that are reasonably necessary to provide wastewater collection capacity to new development. For the purpose of this subsection, "new development" means all new building construction, conversion to a new use, or additional use within an existing building that creates a need for additional wastewater collection capacity.

3. Increased Wastewater Service. An applicant for increased wastewater service capacity over and above the existing service capacity at a property shall pay the wastewater collection capacity charge in the amount set by ordinance or resolution of the City Council.

4. Determination of Required Fees.

a. The City Engineer or their designee shall be responsible for determining the fees required by this subsection. This determination shall be made at the time of application for increased wastewater service.

b. If new development changes or intensifies the existing use on the project site, thereby requiring the payment of a new or additional wastewater collection capacity charge, the charge amount associated with the existing use on the project site shall be credited against the new total charge due, as determined by the City Engineer; provided, however, that in no event shall the City refund the charges previously paid.

c. The fees required by this subsection shall automatically increase starting on July 1, 2025, and in each year thereafter, in accordance with any changes in regional construction costs. Specifically, the amount of the adjustment shall be based on

May over May construction cost changes according to the "Construction Cost Index" for the San Francisco Bay Area, as reported monthly in the Engineering News Record. This adjustment shall not require any action of the City Council.

5. Fee Adjustments.

a. Any person subject to a fee required by this subsection may apply to the City Engineer for a reduction, adjustment or waiver of that fee based upon the absence of a reasonable relationship between the impact of that applicant's development project on wastewater collection capacity in the City's wastewater system and the amount of the fee charged or the type of facilities to be provided.

b. Application. An applicant shall file a written request to adjust fees with the City Engineer not later than 10 days after the City notifies the developer of the amount of the fee to be charged. The application shall provide evidence illustrating that the payment of the fee authorized by this subsection and imposed by implementing ordinance or resolution bears no reasonable relationship or nexus with the impact of the development on wastewater collection capacity in the City's wastewater system and shall state in detail the factual basis for the request for reduction, adjustment or waiver. If an applicant desires to obtain the new or increased wastewater connection prior to the completion of the appeal process, the applicant shall deposit the fee being appealed with the application. Such fee or portion thereof will be refunded if the appeal is successful.

c. Decision of the City Engineer. The City Engineer shall issue a decision on the application within 30 days after the application is filed with the City. The City Engineer's decision shall state their determination regarding the amount of the wastewater collection capacity fee that may reasonably be imposed on the new development and include a brief description of the basis for the City Engineer's decision.

d. Appeal of the Decision of the City Engineer. Decisions of the City Engineer may be appealed to the City Manager or their designee. Appeals must be filed within 10 days of the City Engineer's decision. The City Manager or their designee shall review the application and evidence presented to the City Engineer and issue a decision within 15 days. The City Manager may reverse, affirm, or modify in any respect the determination of the City Engineer.

6. Fee Credits for Improvements Extra to the Project. An applicant for additional wastewater service may be entitled to a reduction in the amount of the wastewater collection capacity fees required by this Chapter, in an amount to be determined by the City Engineer, if that development project was required to construct specific sewerage facility improvements which are extra to the project. The City Engineer's determination of the amount of reduction required pursuant to this subsection shall be based upon the actual costs reasonably incurred for the construction of the sewerage system improvements.

C. Other Fees; Effect Of Nonpayment: The fees provided in this Section are in addition to all other fees pertaining to connection to and/or use of the sewerage facilities. No plumbing permit and no building permit involving the installation of plumbing facilities

shall be issued by the Building Official until the applicable fees provided in subsections A and B of this Section, have been paid or provision therefor has otherwise been made. No discharge permit issued pursuant to subsection 27.10B, Section 27.11 or Article IV of this Chapter by Authority's Manager, the issuance of which pertains to the connection of a user's premises to the sewerage facilities, shall be effective unless and until the fees provided in subsections A and B of this Section, have been paid or provision therefor has otherwise been made.

~~Sec. 27.102. CONSTRUCTION COSTS~~:

~~For the construction by the City of a sewer lateral pursuant to the provisions of Section 27.54 of this Chapter, the applicant for the installation of such lateral shall pay the sum of two thousand five hundred dollars ($2,500.00) for the construction of a four inch (4″) diameter sewer lateral or the sum of two thousand five hundred fifty dollars ($2,550.00) for a six inch (6″) diameter sewer lateral, whichever is appropriate, in addition to connection charges in Section 27.101 of this Article.~~

~~Sec. 27.103. SPECIAL BENEFIT REIMBURSEMENT FEE~~:

~~In the event the City constructs or causes the construction of any public sewer other than a replacement sewer which serves properties located on both sides of the street or public right-of-way in which such sewer line is located, from monies in the Sewer Fund or from any general funds of the City (including the proceeds of any bond issue for which the general credit of the City is obligated), a fee in the amount of two thousand six hundred fifty dollars ($2,650.00) shall be paid for each connection to that portion of the sewerage facilities so constructed; provided, that in any case where City's Director determines that any sewer line, or segment thereof, so financed and constructed after July 1, 1966, will benefit and serve properties abutting on one side of such sewer line or segment, only, four thousand five hundred eighty dollars ($4,580.00) shall be paid for each connection thereto. This subdivision shall not be applicable to portions of the sewerage facilities upon which City funds are expended to pay partially for the expense of construction if the only purpose of the City's contribution to the overall cost is to cause the construction of a larger sewer main than would have been constructed without the City's contribution. This subdivision shall not be applicable to portions of the sewerage facilities upon which proceeds from any bonds issued by or in connection with a general improvement district are expended.~~

~~For purposes of this subdivision, every public sewer constructed prior to January 1, 1960, shall be presumed to have been installed at the sole cost of the adjoining property owners. City's Director shall maintain an accurate record of all public sewers installed subsequent to January 1, 1960, for the purpose of establishing a record of those sewers or specific portions of sewers, which have been constructed at the City's expense, for which the fee herein established provides reimbursement.~~

~~In the event two (2) public sewers are installed adjacent to each other in any public right-of-way, one of which is installed at the City's expense and the other at the expense of a subdivider, assessment district, or other private source, and City's Director determines~~

~~that a connection should be made to the sewer constructed at the City's expense, the fee required by this subsection shall not be applicable~~.

Sec. 27.102~~104~~. ADMINISTRATIVE CHARGES; DEPOSITS:

The following categories of charges, to be set by City Council ordinance or resolution, are hereby established to defray the costs of processing and issuing permits or performing the services corresponding thereto:

A. ~~Discharge permits (subsection 27.10B and Section 27.11 of this Chapter; Article IV of this Chapter, commencing with Section 27.30 of this Chapter): fees established by Authority;~~ A permit is required for any user directly discharging to the City's sanitary sewer system, including temporary discharges as part of construction projects. The applicant must pay: 1) a wastewater discharge permit fee; and 2) a sewer discharge inspection permit deposit. The wastewater discharge permit fee includes a fee accounting for the time the City will spend to process the permit plus any wastewater treatment and disposal costs associated with the discharge. The sewer discharge inspection permit deposit accounts for time the City will spend to test and monitor the wastewater to ensure compliance with Silicon Valley Clean Water's treatment system regulations and guidelines.

B. ~~City's review of discharge permit applications in conjunction with Authority's issuance thereof (subsection 27.10B and Section 27.11 of this Chapter; Article IV of this Chapter, commencing with Section 27.30 of this Chapter): three hundred dollars ($300.00) deposit;~~ If no sewer lateral exists between the sewerage facilities and the property line of the adjacent premises to be served thereby, a sewer lateral shall be installed by the City or by the owner of the premises under terms and conditions specified by the City Engineer, upon approval of an application therefore by the City Engineer for the installation of such lateral. If the work is performed by the City, the owner shall pay a sewer lateral installation fee which reimburses the City for costs incurred to install the sewer lateral, including labor, equipment, and material costs.

C. A sanitary sewer fats, oils and grease fee, shall be assessed to reimburse the City for staff time to address non-compliance with Article VIII's provisions.~~City's review of applications for installation of monitoring, sampling or metering facilities or other equipment on public property (Section 27.32.1 of this Chapter): five hundred dollars ($500.00) deposit;~~

~~D. Review of application for permit for construction of sewer laterals (Section 27.54 of this Chapter): one hundred dollars ($100.00) deposit;~~

~~E. Review of application for private disposal facilities permit (Section 27.58.5 of this Chapter): one hundred dollars ($100.00) deposit;~~

~~F. Inspection of abandoned septic tank (Section 27.61 of this Chapter): one hundred dollars ($100.00) deposit;~~

The ~~deposit, adjustable as hereinafter provided, established in accordance with the foregoing schedule~~ charges shall be paid at the time the application for the work to which

it pertains is made or requested. No application shall be processed, nor work performed, until said charge or deposit has first been made. ~~The actual fee shall be calculated at the cost to the City for performing the corresponding services based upon rates of compensation payable to City personnel performing such services, plus administrative overhead. The foregoing amounts specified as deposits are minimum amounts and additional amounts shall be based upon actual costs; provided, that no services shall be performed by the City corresponding to costs in excess of the amounts hereinabove specified unless additional funds have been deposited with the City corresponding to the estimated additional services; provided, further that amounts deposited in excess of actual costs shall be refunded upon completion of performance of services.~~ The fees and charges in this Section shall be in addition to such other fees, charges or expenses as may be payable pursuant to other provisions of this Chapter.

Sec. 27.103~~105~~. UNITEMIZED COSTS:

Services or work which are or is expressly or impliedly required to be performed by the City pursuant to the provisions of this Chapter, the payment for which is not otherwise provided for herein, shall be paid in advance of the performance of such services or work in an amount equal to the estimated costs thereof to the City. Upon performance of such services or work, and upon the calculation of the actual costs thereof, sums deposited in excess of such actual costs shall be refunded, or additional charges shall be made, equal to the amount by which the actual costs exceed the estimated cost, as appropriate.

Sec. 27.104~~106~~. REFUNDS:

Whenever the amount of any fee, service charge, interest, or penalty has been overpaid or paid more than once or has been erroneously collected or received by the City under this Chapter, said amount so collected or received may be refunded; provided, that a written claim therefor is filed with the Director of Finance within three (3) years from the date of such payment. The claim shall be made on forms furnished and approved by the Director of Finance.

No refund shall be paid under the provisions of this Section unless the claimant establishes his or her right thereto supported by written records or other documents proving entitlement thereto.

Secs. 27.105~~107~~—27.109. RESERVED:

EXHIBIT E

ARTICLE X. SEWER FUND

Sec. 27.110. FUND ESTABLISHED; USE OF FUND:

A special fund to be known as the Sewer Fund is hereby established. All revenues arising from the imposition of the charges and fees authorized under Authority's regulations or this Chapter shall be deposited in the Sewer Fund. ~~Such revenues shall be expended solely for the purposes hereinafter specified; provided, however, that the portion of such revenues which are derived from the imposition of such charges and fees relating to premises within General Improvement District No. 1-64, a general improvement district duly organized and existing under the General Improvement District Ordinance, and all territory annexed to said District shall be used for the hereinafter specified purposes within said District only.~~

~~The revenues and sums deposited in the Sewer Fund shall be used for the acquisition, construction and reconstruction (including the extension or replacement) of existing sewer mains, collector mains and trunk lines, and the enlargement or construction of the sewerage facilities, the maintenance, management, operation and repair of the sewerage facilities; the payment of bond interest and principal or charges due on any bond issue or other evidence of indebtedness (including facilities bonds, all or any portion of the proceeds of which are used for the aforesaid purposes); and for such other lawful purposes of the City as the Council may provide from time to time.~~

Within the Sewer Fund the City shall maintain separate and segregated accounts for the revenues for each charge, rate, or fee imposed pursuant to this Chapter. The revenues from each charge, rate, or fee shall be used for the purposes for which they were imposed.

Secs. 27.111—27.119. RESERVED:

Exhibit F

Water and Sewer Capacity Fees

Water Capacity Fee

Water Meter Size	Meter Ratio	Meter Rating[2] (gpm)	Capacity Fee
Single-family residences[1]	1.00	20	$5,679
Multi Family/Commercial customers			
5/8" Meters	1.00	20	$5,679
3/4" Meters	1.50	30	$8,519
1" Meters	2.50	50	$14,198
1.5" Meters	5.00	100	$28,396
2" Meters	8.00	160	$45,433
3" Meters	21.75	435	$123,521
4" Meters	37.50	750	$212,966
6" Meters	80.00	1600	$454,328
8" Meters	140.00	2800	$795,075
10" Meters	210.00	4200	$1,192,612
Accessory Dwelling Unit[3]			$3.19 /square foot

[1]Single-family residences with a meter sized 1" or smaller will be charged a fee of $5,679 per meter.
[2]Meter ratings are based on an average of available meter types for each meter size within the City system.
[3]The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet. ADUs will be charged capacity fees in accordance with Gov. Code. Section 65852.2(f)(5).

Sewer Collection Capacity Fee

Sewer Customer	Average Flow per DU (gpd)	Sewer Collection Capacity Fee	Unit
Single-family residence	128	$3,166	per DU
Multi-family dwelling unit	94	$2,333	per DU
All Commercial customers		$3,166	per EDU[1]
Accessory Dwelling Unit[2]		$1.78	Per square foot

[1]Commercial/Industrial customers calculate total EDU by the ratio of estimated volume of wastewater discharged divided by 128 gpd.

[2]The fees for Accessory Dwelling Units (ADUs) were calculated based on the average square footage of an existing single-family dwelling unit in Redwood City, which is 1,780 livable square feet. ADUs will be charged capacity fees in accordance with Gov. Code. Section 65852.2(f)(5).

Sewer Collection Capacity Fee for commercial customers shall be established as follows:

1. Fee is based on the average daily volume of wastewater per day (V).

2. The fee is: $24.73 (V)

    a. V is the estimated volume of wastewater discharge determined by one of the following formulas: V1 = unit x (gal. per unit / day) or V2 = (gross floor area / floor area per person) x (gal. per person / day)
        i. The gallons per person per day or gallons per unit per day, is based on the attached Sewer Demand Projection Table (see Exhibit 1).
        ii. For floor area per person, and other Sewer Demands, see Exhibit 2-A or 2-B.
        iii. Gross floor area is to the outside face of exterior walls, including shafts, elevator, stairwell, balcony with roof cover.
            1. Top floor penthouse used as a mechanical/electrical area is excluded from the gross floor area.
            2. Interior courtyard (without roof) is excluded from the gross floor area.

3. For each area of the building floor which has a designed use different than another area, a separate calculation is to be included.

EXHIBIT 1

SEWER DEMAND PROJECTION TABLE

DESIGNATED USE**	DEMAND
A. Office/ Commercial (other than retail)	0.12 gpd/ sf
B. Motel	160 gpd/ room
C. Hotel	185 gpd/ room
D. Restaurants	29 gpd/ seat
E. General Hospitals	0.26 gpd/ sf
F. Medical Offices (other than hospitals)	0.17 gpd/ sf
G. Others, see Exhibit 2-A and 2-B	

*** From "Technical Memorandum" prepared by the City of Redwood City, July 2003.*

EXHIBIT 2-A

OCCUPANCY LOADS TABLE
(for estimating sewer discharge)

TYPE OF FACILITY	OCCUPANT LOAD OF FLOOR AREA (sq. ft. per person)
1. School/Classroom	20
2. Health Club	50
3. Manufacturing Areas	200
4. Nurseries (Day Care)	35
5. Storage Facilities	300
6. Auction Rooms	7
7. Assembly Areas, Concentrated Use (without fixed seats) such as: auditoriums, churches and chapels, dance floors, lobby, lodge rooms, reviewing stands, and stadiums.	7
8. Waiting Area (Medical/ Dental)	3
9. Assembly Areas, Less Concentrated Use (fixed seats) such as: conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages, and gaming.	15
10. Children's Homes and Homes for the Aged	80

11. Rooming/Boarding Houses	200
12. Courtrooms	40
13. Dormitories	50
14. Exercising Rooms	50
15. Kitchen – Commercial	200
16. Library Reading Rooms	50
17. Locker Rooms	50
18. Manufacturing Areas	200
19. School Shops and Vocational Rooms	50
20. Warehouses	500

EXHIBIT 2-B

OTHER SEWER DEMANDS TABLE

Type of Establishment (or portion thereof)	Volume of Consumption	Unit
Assembly Halls	2	gallon per seat
Bowling Alley	75	gallon per lane
Churches	7	gallon per seat
Dance Halls	2	gallon per person
Health Clubs	25	gallon per person
Laundries	400	gallon per machine
Manufacturing (excluding industrial usage)	30	gallon per person/ shift
Nursing Homes/ Day Care	75	gallon per person
Research and Development	0.21	gallon per sq. ft.
Schools	35	gallon per person
Service Station	750	gallon per bay
Storage Facilities	1	gallon per person
Day Camp	25	gallon per person

Trailer Parks or Tourist Camps (with built-in bath)	50	gallon per person
Trailer Parks or Tourist Camps (with central bathhouse)	35	gallon per person
Work or construction camps	50	gallon per person
Public Picnic Parks (toilet wastes only)	5	gallon per person
Public Picnic Parks (bathhouse, showers, and flush toilets)	10	gallon per person
Public Swimming Pools and Beaches	10	gallon per person
Rooming Houses	40	gallon per person
Boarding Houses	50	gallon per person
Boarding Schools	100	gallon per person
Kitchen Wastes from Camps, Boarding Houses, etc. (serving three meals a day)	10	gallon per person
Country Club	25	gallon per locker
Drive-In Theatres	5	gallon per car space
Stores (retail)	400	gallon per toilet room
Service Station	10	gallon per vehicle served
Churches (small)	3 to 5	gallon per sanctuary seat
Churches (large with kitchens)	5 to 7	gallon per sanctuary seat
Marinas		
- Flush Toilets	36	gallon per fixture per hour
- Urinals	10	gallon per fixture per hour
- Wash Basins	15	gallon per fixture per hour
- Showers	150	gallon per fixture per hour
All Others	To be determined on a case-by-case basis from similar type of building uses	

Exhibit G

Water and Sewer User Fees

Sewer User Fees

Description	Amount		Notes
Wastewater Discharge Permit Fee	$986.43	Fee	Fee plus actual volume discharged times appropriate sewer commercial volumetric rates by customer class.
Sanitary Sewer Fats, Oils and Grease Fee	$450.00	Fee	Per occurrence

Description	Minimum Amount		Notes
Sewer Lateral Installation Fee	Price as quoted	Fee	Actual cost of City labor, CalTrans equipment rentals, plus any direct materials.
Sewer Discharge Inspection Deposit	$5,000.00	Deposit	Actual fee amount will be calculated based on actual costs incurred. Any unused portion of the deposit will be refunded.

Note: City labor hours associated with the sewer lateral installation fee will be charged at a blended hourly rate of $108.11.

Water User Fees

Description	Amount		Notes
Water Service Meter Fee			
5/8" - Displacement	$803.45	Fee	
3/4" - Displacement	$833.97	Fee	
1" - Displacement	$885.85	Fee	
1.5" - Displacement	$1,275.92	Fee	
2" - Displacement	$1,444.10	Fee	
1.5" - Turbine	$1,275.92	Fee	
2" - Turbine	$1,444.10	Fee	
3" - Turbine	$1,455.24	Fee	
4" - Turbine	$1,866.17	Fee	
6" - Turbine	$3,648.32	Fee	
8" - Turbine	$5,189.51	Fee	
10" - Turbine	$6,446.82	Fee	
2" - Compound	$2,553.39	Fee	
3" - Compound	$2,602.78	Fee	
4" - Compound	$3,722.21	Fee	
6" - Compound	$5,056.37	Fee	
8" - Compound	$8,729.37	Fee	
10" - Compound	$9,614.37	Fee	
4" - Fire Rated	$8,235.60	Fee	
6" - Fire Rated	$10,781.60	Fee	
8" - Fire Rated	$16,992.37	Fee	
10" - Fire Rated	$23,551.37	Fee	
Dedicated Irrigation Meter Fee	$80.46	Fee	

Description	Amount		Notes
Water Main Tapping Fee			
2" or smaller	$506.40	Fee	
4 to 12”	$1,136.67	Fee	
After-Hours Water Re-connection Fee	$251.38	Fee	
Backflow and Well Fee for Initial Registration and Annual Administration/Record Filing	$56.80	Fee	
Recycled Water Fill Station Access Card Fee	$10.00	Fee	
Recycled Water Fill Station Consumption Charge	Equal to the commercial water use charge rate	Fee	The cost is actual volume of recycled water in gallons x (commercial/MF/irrigation water use charge rate divided by 748 gallons).
Construction Meter Deposit	$1,500.00	Deposit	
Backflow Tag Fee	$6.00	Fee	Per (3) backflow tags
Fire Flow Testing Fee	$716.19	Fee	Per test report or actual cost.
Construction Meter Reading Fee	$49.45	Fee	Per monthly billing period that customer fails to report construction meter reading.
Failure to Respond to Cross Connection Program Notice Fee	$28.40	Fee	
Termination of Water Service for Failure to Test/Inspect Fee	$98.89	Fee	
Cut Lock Fee	$25.00	Fee	

Description	Minimum Fee		Hourly Rate	Notes
Cross Connection Control Inspection Fee	$49.05	Fee	$98.09	Per staff member. Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Cross Connection Control Testing Fee	$49.05	Fee	$98.09	Per staff member. Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Backflow Testing Fee	$49.45	Fee	$98.89	Minimum fee for first half hour. Additional staff time billed according to hourly rate.
Water Service Line Installation - < 4"	Price as quoted	Fee	$154.85	Plus actual cost of CalTrans equipment rentals and any direct materials which includes meter box and lid
Water Service Line Installation - 4"	Price as quoted	Fee	$154.85	Plus actual cost of CalTrans equipment rentals and any direct materials which includes meter box and lid
Water Service Line Installation - 6"	Price as quoted	Fee	$154.85	Plus actual cost of CalTrans equipment rentals and any direct materials which includes meter box and lid
Water Service Line Installation - 8"	Price as quoted	Fee	$154.85	Plus actual cost of CalTrans equipment rentals and any direct materials which includes meter box and lid
Water Service Line Installation - 10"	Price as quoted	Fee	$154.85	Plus actual cost of CalTrans equipment rentals and any direct materials which includes meter box and lid
Recycled Water Site Annual Inspection Fee	$88.11	Fee	$88.11	Per staff member. Minimum fee for first hour. Additional staff time billed according to hourly rate.
Plan, Permit, and Engineering Report Review Fee for Recycled Water	$107.28	Fee	$107.28	Per staff member per hour.

Water Penalty Fees

Description	Amount		Notes
Fee for unauthorized water use		Fee	
1st offense	warning	Fee	
2nd offense	$1,000	Fee	
3rd offense	$2,000	Fee	
Subsequent offenses	$3,000 per day	Fee	