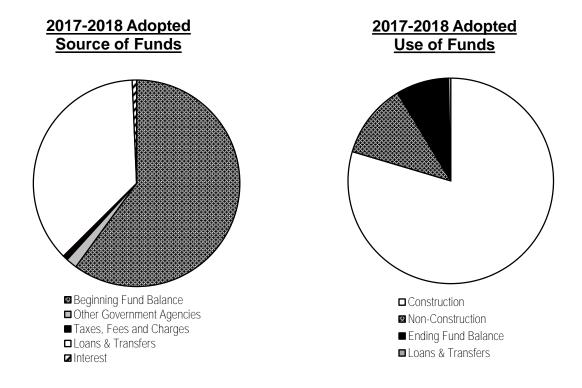
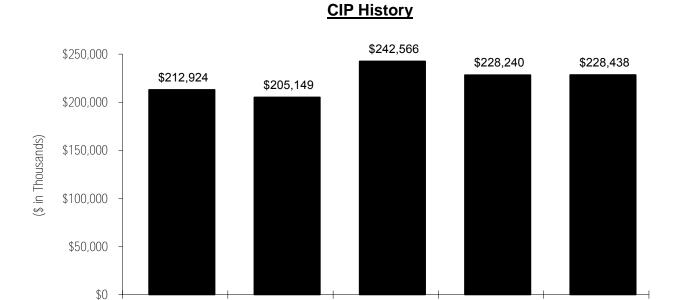
SANITARY SEWER SYSTEM 2018-2022 Capital Improvement Program





Adopted

2016-2020

Adopted

2017-2021

Adopted

2018-2022

Adopted

2015-2019

Adopted

2014-2018



2018-2022 Adopted Capital Improvement Program

- **A)** 60" Brick Interceptor, Phase VIA and VIB
- **B)** Almaden Supplement Sewer Rehabilitation (North)
- **C)** Bollinger Rd. Moorpark Ave. Williams Rd. Sanitary Sewer Imp.
- **D)** Fourth Major Interceptor, Phase VIIA
- **E)** Rincon Ave. Virginia Ave. Sanitary Sewer Imp.
- **F)** Trimble Rd. and Capewood Ln. Sanitary Sewer Imp.
- **G)** Westmont Ave. and Harriet Ave. Sanitary Sewer Imp.





2018-2022 Adopted Capital Improvement Program

Overview

INTRODUCTION

The Sanitary Sewer System of the City of San José consists of approximately 2,030¹ miles of sewer mains ranging in diameter from 6 to 90 inches. The system serves the City, as well as several other jurisdictions, including West Valley Sanitation District (WVSD), City of Santa Clara, County Sanitation Districts 2-3, and Burbank Sanitation District, and conveys sewage to the San José-Santa Clara Water Pollution Control Plant (WPCP). The replacement value of the system is estimated at approximately \$3.5 billion.

SANITARY SEWER SYSTEM PUBLIC INFRASTRUCTURE						
MILES OF SEWER MAINS						
6" TO 8" in diameter	1,580					
10" TO 12" in diameter	200					
OVER 12" in diameter	250					
NUMBER OF MANHOLES	45,000					
NUMBER OF PUMP STATIONS	16					

The 2018-2022 Adopted Capital Improvement Program (CIP) provides funding of \$228.4 million, of which \$87.0 million is allocated in 2017-2018. This program is part of the Environmental and Utility Services City Service Area (CSA) and supports the following outcome: Reliable Utility Infrastructure.

PROGRAM PRIORITIES AND OBJECTIVES

The 2018-2022 Adopted Sanitary Sewer System CIP supports the priorities and objectives of the Environmental and Utility Services CSA by maintaining the following strategic priorities:

- Ensure adequate capacity within the system and to reduce Sanitary Sewer Overflows (SSOs);
- Support the goal of preventing SSOs by providing sufficient system capacity and maintaining system structure integrity;
- Manage system capacity, assess the system's condition, and construct sewer improvement projects;
- Improve sewer capacity in substantially built-out areas and less-developed areas to accommodate economic development; and
- Rehabilitate existing sewers with a higher priority given to those with extensive, severe deterioration.

The Sanitary Sewer System CIP is guided by several interrelated plans, and chief among them is the Envision San José 2040 General Plan (General Plan). The General Plan provides a guide for all capital improvement programs to align public infrastructure investment with San José's plans for future growth. This means that the projects included in the Sanitary Sewer System CIP ensure adequate sewer capacity and reliability to safely convey sewage city-wide, as well as within those areas designated for future development. The land uses and growth included in the General Plan were also used in the development of the Sanitary Sewer Master Plan that was completed in early 2013. The Master Plan

¹ Total length was updated in 2016 based on the latest GIS data to exclude sewer mains that were abandoned or owned by adjacent agencies or private developers.

2018-2022 Adopted Capital Improvement Program

Overview

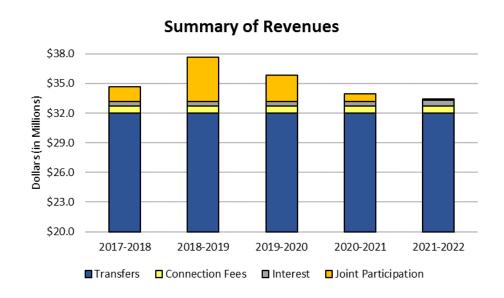
PROGRAM PRIORITIES AND OBJECTIVES

helped identify and address trunk sewer capacity deficiencies in the existing system and forecast additional capacity-enhancing projects required to meet future demands in the context of the General Plan.

As identified in the Status Report on Deferred Maintenance and Infrastructure Backlog accepted by City Council on March 14, 2017, the Sanitary Sewer Collection System has estimated unfunded needs of approximately \$1.7 million per year. With this remaining backlog, the City will continue to evaluate staffing levels and resources and overall strategic capital improvement priorities at both the WPCP and the sanitary collection system to address the remaining unfunded needs in the future.

SOURCES OF FUNDING

The 2018-2022 Adopted CIP provides funding of \$228.4 million, of which \$87.0 million is allocated in 2017-2018. The program funding level increased slightly, by \$198,000, from \$228.2 million in the 2017-2021 Adopted CIP. Revenue for this CIP is derived from the following sources: transfers from the Sewer Service and Use Charge (SSUC) Fund, Sanitary Sewer Connection Fees, and "Joint Participation" contributions from other jurisdictions served by the Sanitary Sewer System for the use of San José sewer lines. Among these revenues, the SSUC Fund transfer continues to be the primary funding source for the program.



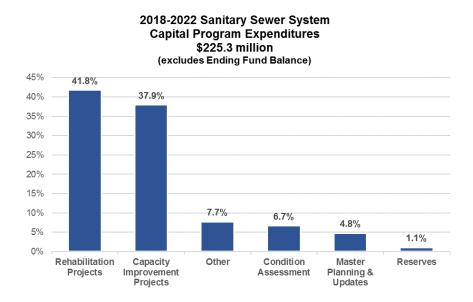
PROGRAM HIGHLIGHTS

The Sanitary Sewer System Capital Program's expenditures are organized to show the use of funds in several categories. The following highlights the major projects in the program. For further information on the program's individual projects, please refer to the Detail Pages.

2018-2022 Adopted Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS



<u>Capacity Improvement and Rehabilitation – North San José Interceptors</u>

For the North San José Interceptor System, funding totaling \$36.4 million is programmed in this Adopted CIP for the completion of the 60" Brick Interceptor, Phase VIA and VIB (\$30.2 million) project and the Fourth Major Interceptor (\$6.2 million) projects. The North San José Interceptor System is a collection of very large sanitary sewer pipes with diameters ranging from 54 to 90 inches. In general, an interceptor can be defined as a large pipe built by the City to serve as the primary sewage collector. Interceptors carry flows from the sub-collector sewers in the drainage basin to the point of treatment or disposal of the wastewater. The North San José Interceptor System Master Plan, originally drafted in 1986, was updated in 2002 and includes an assessment of the hydraulic condition of the large sewers, a determination of the level of corrosion in the pipelines, and validated capacity of the system. The final recommendations for programmed rehabilitation and construction of new sewer interceptors have been incorporated into the 2018-2022 Adopted CIP and will be referred to in the preparation of subsequent CIPs. Capital improvements to the interceptor system consist of large interrelated projects that must be staged in a specified sequence for logical construction of the system.

Presently, the City has three major sewer interceptors in the North San José Interceptor System that originate at the intersection of Seventh and Empire Streets and continue northward to the WPCP, mostly along the full length of Zanker Road. A new, multi-phased fourth major interceptor is also under construction; five out of seven phases of which have been completed. When completed, the fourth major interceptor will allow one of the three older interceptors to be removed from service during dry weather periods for the purpose of routine maintenance or rehabilitation. Such flexibility is important and currently not available in all reaches of the system.

2018-2022 Adopted Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

<u>Capacity Improvement – Other Projects</u>

Funding totaling \$49.7 million is programmed in this Adopted CIP for other projects that improve capacity of the Sanitary Sewer system. These capacity improvement projects are selected using a computerized sewer flow model (which uses the General Plan to project sewage flows in the system), City maintenance records, and flow monitoring to identify sewer capacity constraints. When combined with the North San José Interceptor projects described above, capacity improvement projects total \$85.5 million in this CIP.

Rehabilitation – Other Projects

Funding totaling \$93.5 million is programmed for sewer rehabilitation and/or replacement in other areas of the City, mostly targeted toward older neighborhoods facing structural deterioration or changes in sewage flow patterns. Rehabilitation projects are selected based on hydrogen sulfide studies that analyze pipe corrosion, condition assessment studies, video inspections, maintenance records and reports, and actual pipe failures, whether due to pipe corrosion or other physical deficiencies. This funding also is used to support the newly developed Exfiltration Abatement Program to search for and repair any damages on existing sewer mains to prevent leakage to adjacent storm sewer mains. When combined with the North San José Interceptor projects described above, rehabilitation projects total \$94.2 million in this CIP.



Stevens Creek
Sanitary Sewer Improvement

Other Program Highlights

The Master Planning Program actively monitors and manages sewer system capacity needs using a computerized hydraulic model of the San José sewer system, supported by sewer flow monitoring that collects flow data at strategic locations within the system. The Master Planning Program continues to enhance the accuracy of the computerized model by incorporating land use changes and updated sewer and flow data. The Master Planning Program also supports economic development in the City by providing sewer capacity review and planning using the models.

The Sanitary Sewer Condition Assessment Program, initiated in 2009, is an ongoing program to assess the structural integrity of the collection system including pipes, force mains, manholes, junction structures, and pump stations. Data collected through visual and closed circuit television inspection and as-built information will be reviewed, analyzed, and prioritized based on a risk analysis approach

2018-2022 Adopted Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

using information such as pipe size, location, design flow, physical conditions, and maintenance histories. With this information, rehabilitation budgets and preventive maintenance and improvement programs can be planned and prioritized.

MAJOR CHANGES FROM THE 2017-2021 ADOPTED CIP

The overall size of the Sanitary Sewer System CIP has increased slightly, by \$198,000, from \$228.2 million in the 2017-2021 Adopted CIP to \$228.4 million in the 2018-2022 Adopted CIP. The following table outlines the most significant changes to project budgets, including new/augmented allocations and reduced/eliminated allocations.

Project	Incr/(Decr)
Immediate Replacement and Diversion Projects	\$4.2 million
Cast Iron Pipe – Remove and Replace	\$1.0 million
Condition Assessment Sewer Repairs	\$1.0 million
Urgent Rehabilitation and Repair Projects	\$1.0 million
Trimble Road and Capewood Lane Sanitary Sewer Improvements	(\$4.2 million)
Rehabilitation of Sanitary Sewer Pump Stations	(\$2.6 million)

OPERATING BUDGET IMPACT

All the projects in the Adopted Sanitary Sewer System CIP rehabilitate or replace existing sewers in order to avoid possible future maintenance costs and therefore do not incur additional long-term operating and maintenance costs.

COUNCIL-APPROVED REVISIONS TO THE PROPOSED CAPITAL IMPROVEMENT PROGRAM

During the June budget hearings, City Council approved changes to the Proposed Capital Improvement Program, which consists of the rebudgeting of unexpended funding for projects totaling \$36.7 million due to project delays. For additional information regarding any of these approved actions, please refer to the Manager's Budget Addendum #26, as approved by the City Council on June 13, 2017.



2017-2018 CAPITAL BUDGET

2018-2022 Capital Improvement Program

SANITARY SEWER SYSTEM

Source and Use of Funds Statements

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Sanitary Sewer System

2018-2022 Adopted Capital Improvement Program

Source of Funds (Combined)

		Estimated <u>2016-2017</u>	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	5-Year Total
	Sewer Service and Use Charge Capital Improvement Fund							
	Beginning Balance	59,852,956	48,602,685	5,092,275	3,436,275	3,141,275	2,351,275	48,602,685
	Reserve for Encumbrance	29,248,745						
	Transfers							
	Transfer from the Sewer Service and Use Charge Fund (541)	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000	160,000,000
	TOTAL Transfers	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000	32,000,000	160,000,000
į	Revenue from Use of Money and Property							
	Interest Income TOTAL Revenue from Use of Money and Propert	380,000 y 380,000	531,000 531,000	536,000 536,000	541,000 541,000	546,000 546,000	551,000 551,000	2,705,000 2,705,000
		, 000,000	001,000	000,000	011,000	0.10,000	331,333	_,,
	Revenue from Local Agencies	700 000	1 400 000	4 400 000	2 600 000	700 000		0.400.000
	Sanitary Sewer Joint Participation- TOTAL Revenue from Local Agencies	700,000 700,000	1,400,000 1,400,000	4,400,000 4,400,000	2,600,000 2,600,000	700,000 700,000		9,100,000 9,100,000
	Č	,	, ,	, ,	, ,	,		, ,
	Total Sewer Service and Use Charge Capital Improvement Fund	122,181,701	82,533,685	42,028,275	38,577,275	36,387,275	34,902,275	220,407,685
	Sanitary Sewer Connection Fee Fund							
	Beginning Balance	3,511,971	3,635,574	1,912,574	936,574	849,574	984,574	3,635,574
	Reserve for Encumbrance	3,716,483						

2018-2022 Adopted Capital Improvement Program

Source of Funds (Combined)

	Estimated 2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	5-Year Total
Devenue from Use of Manay and Dramarty	2010-2011	2017-2010	2010-2013	2013-2020	2020-2021	<u> </u>	<u> </u>
Revenue from Use of Money and Property Interest Income	59,000	67,000	68,000	69,000	70,000	71,000	345,000
TOTAL Revenue from Use of Money and Prope		67,000	68,000	69,000	70,000	71,000	345,000
Revenue from Local Agencies							
Sanitary Sewer Joint Participation-		110,000	110,000	110,000	110,000	110,000	550,000
TOTAL Revenue from Local Agencies		110,000	110,000	110,000	110,000	110,000	550,000
Fees, Rates and Charges							
Sanitary Sewer Connection Fees	850,000	700,000	700,000	700,000	700,000	700,000	3,500,000
TOTAL Fees, Rates and Charges	850,000	700,000	700,000	700,000	700,000	700,000	3,500,000
Total Sanitary Sawar Connection Eco Fund	0 427 454	4 540 574	2 700 574	4 04E E74	4 720 574	4 9CE E74	9 020 574
Total Sanitary Sewer Connection Fee Fund	8,137,454	4,512,574	2,790,574	1,815,574	1,729,574	1,865,574	8,030,574
TOTAL SOURCES	130,319,155	87,046,259	44,818,849	40,392,849	38,116,849	36,767,849	228,438,259

2018-2022 Adopted Capital Improvement Program

Use of Funds (Combined)

		036 0	rulius (Combine	ju j			
	_	Estimated 2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	5-Year Total
Ş	Sanitary Sewer System							
_	•							
	30 inch Old Bayshore Supplement	3,450,486	1,326,410					1,326,410
	60 inch Brick Interceptor, Phase VIA and VIB	806,123	29,632,000	600,000				30,232,000
	Almaden Expressway Sanitary Sewer Improvements	241,051						
	Bollinger Road - Moorpark Avenue - Williams Road Sanitary Sewer Improvements	2,807,538	715,000	7,905,000	638,000	35,000		9,293,000
	Capitol Avenue Sanitary Sewer Improvements	1,679,270	529,000					529,000
	Coleman Road Sanitary Sewer Improvements	1,101,861	412,000					412,000
	Coleman Road Sanitary Sewer Improvements - Phase 3	118,024						
<u> </u>	Fourth Major Interceptor, Phase VIIA			500,000	5,000,000			5,500,000
180	Husted Avenue Sanitary Sewer Improvement - Phase II	60,000						
	Husted-Richland Sanitary Sewer Improvements	40,000						
	Immediate Replacement and Diversion Projects	8,884,830	7,700,000	3,700,000	5,400,000	5,300,000	6,400,000	28,500,000
	Monterey-Riverside Relief Sanitary Sewer Improvements	363,896	674,000					674,000
	Rincon Avenue - Virginia Avenue Sanitary Sewer Improvements		3,118,000	349,000				3,467,000
	Stevens Creek Boulevard Sanitary Sewer Improvements	461,346	542,000					542,000
	Trimble Road and Capewood Lane Sanitary Sewer Improvements	4,839,000	922,000					922,000
	Westmont Avenue and Harriet Avenue Sanitary Sewer Improvements		561,000	3,142,000	372,000			4,075,000
	Capacity Improvement Projects	24,853,424	46,131,410	16,196,000	11,410,000	5,335,000	6,400,000	85,472,410
	Almaden Supplement Sewer Rehabilitation (North)					2,730,000	400,000	3,130,000
	Cast Iron Pipe - Remove and Replace	7,382,320	4,500,000	4,500,000	4,500,000	5,000,000	5,000,000	23,500,000
	Condition Assessment Sewer Repairs	10,071,694	5,500,000	5,500,000	5,500,000	6,000,000	6,000,000	28,500,000
	Fourth Major Interceptor, Phase IIB/IIIB	2,465,000	686,000					686,000

2018-2022 Adopted Capital Improvement Program

Use of Funds (Combined)

		036 0	i i ulius	Odilibilio	<i>-</i> u _j				_
		Estimated 2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	5-Year Total	
	Inflow and Infiltration Reduction	700,000	200,000	200,000	200,000	200,000	200,000	1,000,000	-
	Kelez Drive and El Prado Drive Sanitary Sewer Replacement	55,975							
	Mackey Avenue Sanitary Sewer Replacement	0							
	Rehabilitation of Sanitary Sewer Pump Stations	3,571,281	1,690,000	19,000				1,709,000	
	Reinforced Concrete Pipe Rehabilitation Program	1,000,000	500,000	500,000	500,000	500,000	500,000	2,500,000	
	Spreckles Sanitary Sewer Force Main Supplement	100,000							
	Spreckles Sanitary Sewer Force Main Supplement, Phase II	2,800,848	171,000					171,000	
	The Villages Sanitary Sewer Replacement	0							
	Urgent Rehabilitation and Repair Projects	13,458,828	8,000,000	5,000,000	6,000,000	7,000,000	7,000,000	33,000,000	
	Rehabilitation Projects	41,605,945	21,247,000	15,719,000	16,700,000	21,430,000	19,100,000	94,196,000	
181	Sanitary Sewer - Construction	66,459,369	67,378,410	31,915,000	28,110,000	26,765,000	25,500,000	179,668,410	
_	Fee Administration - Sanitary Sewer	84,000	84,000	84,000	85,000	85,000	85,000	423,000	
	Flow Monitoring Program (Master Planning)	776,132	1,180,000	770,000	780,000	780,000	780,000	4,290,000	
	Infrastructure - Sanitary Sewer Condition	6,208,649	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000	
	Assessment Master Planning Updates	1,043,895	1,600,000	1,300,000	1,300,000	1,100,000	1,200,000	6,500,000	
	Payments to West Valley Sanitation District	10,000	10,000	10,000	10,000	10,000	10,000	50,000	
	Permit Review and Inspection for Outside Agencies - Sanitary Sewer	50,000	25,000	25,000	25,000	25,000	25,000	125,000	
	Preliminary Engineering - Sanitary Sewer	950,000	950,000	950,000	950,000	950,000	950,000	4,750,000	
	Program Management - Sanitary Sewer	300,000	300,000	300,000	300,000	300,000	300,000	1,500,000	
	Public Works Engineering Services Equipment (Materials Lab)	40,000	40,000	40,000	40,000	40,000	40,000	200,000	
	General Non-Construction - Sanitary Sewer	9,462,677	7,189,000	6,479,000	6,490,000	6,290,000	6,390,000	32,838,000	
	Sanitary Sewer - Non Construction	9,462,677	7,189,000	6,479,000	6,490,000	6,290,000	6,390,000	32,838,000	
	Public Art Allocation	132,850	1,169,000	149,000	109,000	50,000	60,000	1,537,000	
	Public Art Projects	132,850	1,169,000	149,000	109,000	50,000	60,000	1,537,000	

2018-2022 Adopted Capital Improvement Program

Use of Funds (Combined)

	Estimated						
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	5-Year Total
Capital Program and Public Works Department Support Service Costs	1,594,000	1,512,000	1,479,000	1,265,000	1,244,000	1,253,000	6,753,000
Infrastructure Management System	30,000	66,000	70,000	74,000	78,000	82,000	370,000
Allocations	1,624,000	1,578,000	1,549,000	1,339,000	1,322,000	1,335,000	7,123,000
City Hall Debt Service Fund	389,000	327,000	354,000	354,000	354,000	354,000	1,743,000
Transfers to Special Funds	389,000	327,000	354,000	354,000	354,000	354,000	1,743,000
General Fund - Human Resources/Payroll/ Budget Systems Upgrade	•	ŕ	ŕ	ŕ	·	·	, ,
Transfers to the General Fund	13,000						
Transfers Expense	402,000	327,000	354,000	354,000	354,000	354,000	1,743,000
Montague Sanitary Sewer Pump Station Reserve		2,400,000					2,400,000
Expense Reserves - Non Construction		2,400,000					2,400,000
Total Expenditures	78,080,896	80,041,410	40,446,000	36,402,000	34,781,000	33,639,000	225,309,410
Ending Fund Balance	52,238,259	7,004,849	4,372,849	3,990,849	3,335,849	3,128,849	3,128,849
TOTAL	130,319,155	87,046,259	44,818,849	40,392,849	38,116,849	36,767,849	228,438,259



2017-2018 CAPITAL BUDGET

2018-2022 Capital Improvement Program

SANITARY SEWER SYSTEM

DETAIL OF PROJECTS

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

30 inch Old Bayshore Supplement

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2008
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2010

Department Public Works Revised Start Date

LocationOld Bayshore Highway between Commercial Street and Zanker RoadRevised End Date2nd Qtr. 2018Council Districts4Initial Project Budget\$4,854,000AppropriationA6519FY Initiated2008-2009

Description This project funds the construction of 5,540 linear feet of 30-inch diameter relief sewer parallel to an existing 30-inch

pipe on Old Bayshore Highway between Commercial Street and Zanker Road.

Justification The Sanitary Sewer Master Plan Phase II identified a need for capacity improvements in this area.

Notes

Major Cost 2010-2014 CIP - Increase of \$142,000 due to changes in project scope. **Changes** 2011-2015 CIP - Decrease of \$286,000 due to changes in project scope.

2012-2016 CIP - Increase of \$630,000 to reflect an increase to the scope of the project.

2013-2017 CIP - Decrease of \$829,000 due to changes in project scope. 2014-2018 CIP - Decrease of \$87,000 due to changes in project scope.

2015-2019 CIP - Decrease of \$188,000 due to a refined project scope and cost estimate. 2016-2020 CIP - Increase of \$596,000 due to a refined project scope and cost estimate. 2017-2021 CIP - Increase of \$814,000 due to a refined project scope and cost estimate. 2018-2022 CIP - Decrease of \$321,000 due to a refined project scope and cost estimate.

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditι	ıre Sche	dule (000s	s)				
General Administration Project Feasibility		400								400
Development	90									90
Design	379									379
Bid & Award	42									42
Construction	38	3,050	1,201					1,201		4,289
Post Construction			125					125		125
Total	548	3,450	1,326					1,326		5,325

	Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund	418	1,899	1,326	1,326	3,644				
Sanitary Sewer Connection Fee Fund	130	1,551			1,681				
Total	548	3,450	1,326	1,326	5,325				

	Annual Operating Budget Impact (000s)	
	Annual Operating Budget Impact (000s)	
Total		

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

60 inch Brick Interceptor, Phase VIA and VIB

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2009
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2013

Department Public Works Revised Start Date

Location5th and Commercial Streets to Zanker Road and Old Bayshore HighwayRevised End Date2nd Qtr. 2019Council Districts3Initial Project Budget\$10,442,000AppropriationA4969FY Initiated1991-1992

DescriptionThis project replaces approximately 5,000 linear feet of existing 54-inch reinforced concrete sanitary sewer with an 84-inch lined reinforced concrete pipe. This CIP only provides funding to complete Phase VIA. Phase VIB will rehabilitate

the existing 60-inch brick sewer after the completion of Phase VIA.

Justification Based on the North San José Interceptor Study, this portion of the interceptor system requires additional capacity to

serve the ultimate build out of the City.

Notes The FY Initiated date and Initial Project Budget shown below refer to Phase IIIA, IVB, and VB of the project.

The costs for Phase VIB will be determined after Phase VIA is completed to determine the scope of Phase VIB. The start and completion dates above refer to Phase VIA. The prior year funding shown in the chart below includes earlier

phases of this project.

Major Cost Changes Prior to 2008-2009 - Increase of \$60.8 million due to changes in scope, construction costs, and additional project phases. 2009-2013 CIP - Decrease of \$2.2 million to address scope changes and construction costs. 2010-2014 CIP - Increase of \$6.7 million to address scope changes and construction costs. 2011-2015 CIP - Decrease of \$19.7 million due to scope refinement. 2012-2016 CIP - Increase of \$17.7 million due to scope changes and cost estimate updates. 2014-2018 CIP - Decrease of \$6.3 million due to scope changes. 2015-2019 CIP - Decrease of \$1.2 million due to relocation of utilities on Fourth Street by the utility companies and cost adjustment by design consultant. 2016-2020 CIP - Increase of \$2.2 million due to scope change and cost estimate updates. 2017-2021 CIP - Decrease of \$392,000 due to scope change.

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sche	dule (000:	s)				
Project Feasibility										
Development	63									63
Design	4,283	725								5,008
Bid & Award	10	18								28
Construction	32,932	63	29,632	600				30,232		63,227
Post Construction	9									9
Total	37,297	806	29,632	600				30,232		68,335

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund	37,111	806	29,632	600	30,232	68,149			
Sanitary Sewer Connection Fee Fund	186					186			
Total	37,297	806	29,632	600	30,232	68,335			

Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Bollinger Road - Moorpark Avenue - Williams Road Sanitary Sewer

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2012
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2015

Public Works Department **Revised Start Date**

Blaney Ave, Bollinger Rd, Moorpark Ave, and Williams Rd to Saratoga Ave Location **Revised End Date**

Council Districts 1

Initial Project Budget \$5,404,000 Appropriation A7478 **FY Initiated** 2012-2013

Description The project will include the capacity upgrade of approximately 17,000 feet of sanitary sewer mains. The project will be

completed in two phases. The first phase is at Moorpark Avenue from Lawrence Expressway to Williams Road and along Williams Road to Saratoga Avenue. The second phase is at Bollinger Road from Blaney Avenue to Lawrence

2nd Qtr. 2021

Expressway.

Justification This project will provide additional capacity to the Forest-Rosa Basin as identified in the Sanitary Sewer Master Plan

Capacity Assessment Phase II and Phase I - Update.

CEQA Project: FSR-7 - Bollinger Road - Blaney Avenue Sanitary Sewer Improvements. Prior to 2015-2016, this project **Notes**

was titled "Bollinger Road - Blaney Avenue Sanitary Sewer Improvements". Phase 1 construction began in 2015-2016,

while Phase 2 construction is anticipated to begin in 2018-2019 after the paving moratorium ends for this phase.

Major Cost Changes

Total

2014-2018 CIP - Increase of \$2.7 million due to change in scope to include an additional 6,000 feet of sanitary sewer mains along Williams Road.

2015-2019 CIP - Decrease of \$6.8 million due to a moratorium on trench work.

2016-2020 CIP - Increase of \$3.1 million due to project schedule change.

2017-2021 CIP - Increase of \$8.9 million due to project re-scope to include an additional project phase.

	PRIOR YEARS	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
	ILANO		Expenditu	ure Sched	dule (000s	s)		TOTAL	3 ILANO	TOTAL
Project Feasibility Development	26		•		`	•				26
Design	490	0		116				116		606
Bid & Award	3			31				31		34
Construction		2,808	715	7,758	638	35		9,146		11,954
Total	518	2,808	715	7,905	638	35		9,293		12,619

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	518	2,808	715	7,405	638	35	8,793	12,119		
Sanitary Sewer Connection Fee I	-und			500			500	500		
<u>Total</u>	518	2,808	715	7,905	638	35	9,293	12,619		

An	ual Operating Budget Impact (000s)

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Capitol Avenue Sanitary Sewer Improvements

CSAEnvironmental and Utility ServicesInitial Start Date3rd Qtr. 2014CSA OutcomeReliable Utility InfrastructureInitial End Date2nd Qtr. 2015

Department Public Works Revised Start Date

LocationCapitol Avenue north of Battaglia Court to Hostetter RoadRevised End Date2nd Qtr. 2018Council Districts4Initial Project Budget\$2,773,000AppropriationA7673FY Initiated2014-2015

Description This project replaces approximately 3,520 feet of existing 8-inch diameter sanitary sewer pipes with 12-inch diameter

sanitary sewer pipes on Capitol Avenue, north of Battaglia Court to Hostetter Road.

Justification Requiring capacity improvement, the existing sanitary sewer pipes in this area need to be upsized.

Notes CEQA Project: Brokaw 3 - Capitol Avenue Sanitary Sewer Improvement.

2015-2019 CIP - Project retitled from "Capitol Avenue Sanitary Sewer Improvement - Brokaw Street".

Major Cost2016-2020 CIP - Decrease of \$31,000 due to refined cost estimates.Changes2017-2021 CIP - Decrease of \$130,000 due to refined cost estimates.

Total	318	1.679	529					529		2.527
Post Construction	2									2
Construction	25	1,679	529					529		2,233
Bid & Award	39									39
Design	171									171
Project Feasibility Development	82									82
			Expenditu	ure Sched	dule (000s	s)				
	YEARS	EST						TOTAL	5 YEARS	TOTAL
	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund	318	1,063	355		355	1,737			
Sanitary Sewer Connection Fee	Fund	616	174		174	790			
Total	318	1,679	529		529	2,527			

	Annual Operating Budget Impact (000s)	
	Annual Operating Budget Impact (000s)	
Total		
Total		

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Coleman Road Sanitary Sewer Improvements

CSAEnvironmental and Utility ServicesInitial Start Date3rd Qtr. 2013CSA OutcomeReliable Utility InfrastructureInitial End Date2nd Qtr. 2015

Department Public Works Revised Start Date

LocationColeman Road from Camden Avenue to Alvarado CourtRevised End Date2nd Qtr. 2018Council Districts10Initial Project Budget\$1,233,000AppropriationA7613FY Initiated2013-2014

Description This project upsizes approximately 1,400 feet of 8-inch diameter sanitary sewer pipes along Coleman Road from

Camden Avenue to Alvarado Court.

Justification This project will provide additional capacity of the Almaden Basin as identified in the Sanitary Sewer Master Plan

Capacity Assessment Phase II and Phase I - Update.

Notes CEQA Project: Almaden 3A - Coleman Road Sanitary Sewer Improvements.

Major Cost Changes 2015-2019 CIP - Increase of \$123,000 due to defined scope and estimates that were developed during the preliminary

phase of the project.

2016-2020 CIP - Increase of \$238,000 due to a refined project scope and cost estimate. 2017-2021 CIP - Increase of \$217,000 due to a refined project scope and cost estimate.

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sche	dule (000s	s)				
Project Feasibility										_
Development	105									105
Design	140									140
Bid & Award	18									18
Construction	0	1,102	412					412		1,514
Total	263	1,102	412					412		1,777

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund	263	1,082	412	412	1,757				
Sanitary Sewer Connection Fee I	- und	20			20				
Total	263	1,102	412	412	1,777				

	Annual Operating Budget Impact (000s)
Total	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Fourth Major Interceptor, Phase IIB/IIIB

CSAEnvironmental and Utility ServicesInitial Start Date3rd Qtr. 2009CSA OutcomeReliable Utility InfrastructureInitial End Date2nd Qtr. 2011

Department Public Works Revised Start Date

LocationZanker Road between Holger Way and Structure A at Estancia DriveRevised End Date2nd Qtr. 2018Council Districts4Initial Project Budget\$3,033,000

Appropriation A7077 FY Initiated 2009-2010

Description This project rehabilitates approximately 3,000 linear feet of 84-inch diameter reinforced concrete pipe along Zanker

Road.

Justification This allocation is required due to the structural deterioration of aging sewers.

Notes

Major Cost 2011-2015 CIP - Decrease of \$327,000 due to a lower than expected construction cost.

Changes

2012-2016 CIP - Increase of \$3.5 million due to the addition of Phase IIIB.
2013-2017 CIP - Decrease of \$1.6 million due to decrease in project scope.
2014-2018 CIP - Decrease of \$2.0 million due to decrease in project scope.

2015-2019 CIP - Increase of \$167,000 due to a refined project scope and annual estimate. 2016-2020 CIP - Decrease of \$19,000 due to a refined project scope and cost estimate. 2017-2021 CIP - Increase of \$686,000 due to a refined project scope and cost estimate.

PRIOR BEYOND PROJECT FY17 FY18 FY19 FY20 FY21 FY22 5 YEAR **YEARS EST TOTAL 5 YEARS TOTAL Expenditure Schedule (000s)** Project Feasibility Development 2 2 195 195 Design Bid & Award 58 58 8 Construction 2,465 686 686 3,159 Total 686 263 2,465 686 3,414

Funding Source Schedule (000s)							
Sewer Service and Use Charge Capital Improvement Fund	151	2,465	686	686	3,302		
Sanitary Sewer Connection Fee Fund	112				112		
Total	263	2,465	686	686	3,414		

	Annual Operating Budget Impact (000s)
Total	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Monterey-Riverside Relief Sanitary Sewer Improvements

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works

Location

Council Districts 2 Appropriation

Along Cottle Road between Beswick Drive and Monterey Highway

A7359

FY Initiated 2011-2012

3rd Qtr. 2011

2nd Qtr. 2014

2nd Qtr. 2018

\$3,665,000

Initial Start Date

Initial End Date

Revised Start Date

Revised End Date

Initial Project Budget

This project installs approximately 4,100 linear feet of 30-inch vitrified clay pipe along Cottle Road between Beswick

Drive and Monterey Highway. This is a relief sewer connecting the Monterey-Riverside system to the Edenvale system. This alignment will include a trenchless perpendicular crossing of the Union Pacific railroad tracks along Monterey

Highway.

Justification This project will provide additional capacity for the Monterey-Riverside sanitary sewer system by constructing a relief

sewer that diverts a portion of the sewage flow from the Monterey-Riverside sanitary sewer system to the Edenvale

system.

Notes

Major Cost Changes

Description

2014-2018 CIP - Increase of \$447,000 due to increased project scope.

2015-2019 CIP - Increase of \$1.1 million to construct a new diversion structure to accomodate additional flow coming

from private development.

2016-2020 CIP - Increase of \$3.1 million due to a refined project scope and actual bids received.

2017-2021 CIP - Increase of \$81,000 due to refined cost estimates.

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sche	dule (000s	5)				
Project Feasibility										
Development	36									36
Design	809	0								809
Bid & Award	62									62
Construction	6,464	364	674					674		7,502
Total	7,371	364	674					674		8,409

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund	4,973	294	674	674	5,940			
Sanitary Sewer Connection Fee Fund	2,398	70			2,469			
Total	7,371	364	674	674	8,409			

	Annual Operating Budget Impact (000s)
To	otal

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Rehabilitation of Sanitary Sewer Pump Stations

CSAEnvironmental and Utility ServicesInitial Start Date3rd Qtr. 2008CSA OutcomeReliable Utility InfrastructureInitial End Date2nd Qtr. 2009

Department Public Works Revised Start Date

LocationCity-wideRevised End Date2nd Qtr. 2019Council DistrictsCity-wideInitial Project Budget\$500,000AppropriationA6527FY Initiated2008-2009

DescriptionThis allocation is used to assess, rehabilitate, and/or replace the mechanical and electrical components of the City's sanitary sewer pump stations and manhole structures. At the start of this project, the average age of the City's sanitary

sewer pump stations was approximately 30 years. Electrical and mechanical components should be rehabilitated or

replaced at a minimum every 25 years.

Justification Redesigning and/or replacing aging pump stations will achieve cost savings and enhance the efficiency of the sanitary

sewer system.

Notes

Major Cost Changes 2010-2014 CIP - Increase of \$500,000 to rehabilitate additional sanitary sewer pump stations. 2011-2015 CIP - Increase of \$500,000 to rehabilitate additional sanitary sewer pump stations. 2012-2016 CIP - Increase of \$8.0 million to rehabilitate additional sanitary sewer pump stations. 2013-2017 CIP - Decrease of \$2.9 million because a portion of the work in this project will now be addressed under the new Cast Iron Pipe - Remove and Replace project. 2014-2018 CIP - Increase of \$1.2 million to rehabilitate additional sanitary sewer pump stations. 2016-2020 CIP - Increase of \$890,000 to rehabilitate additional sanitary sewer pump stations. 2017-2021 CIP - Decrease of \$1.4 million due to changes in project scope and the reallocation of \$2.4 million to establish the Montague Sanitary Sewer Pump Station Reserve. 2018-2022 CIP Increase of \$703,000 to rehabilitate additional sanitary sewer pump stations.

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditι	ire Sched	lule (000s	5)				
Project Feasibility										
Development	199	22								221
Property & Land	2									2
Design	931	328								1,259
Bid & Award	10	10								20
Construction	1,525	3,212	1,665	4				1,669		6,405
Post Construction			25	15				40		40
Maintenance, Repairs, Other	0									0
<u>Total</u>	2,668	3,571	1,690	19				1,709		7,948

		Fu	ınding Sou	rce Schedule (000s)		
Sewer Service and Use Charge Capital Improvement Fund	2.668	3.571	1.690	19	1.709	7.948
runu	2,000	3,571	1,090	19	1,709	7,940
Total	2,668	3,571	1,690	19	1,709	7,948

Annual Operation Budget Impact (000c)	
Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Rincon Avenue - Virginia Avenue Sanitary Sewer Improvements

CSA Environmental and Utility Services

Reliable Utility Infrastructure **CSA Outcome**

Department Public Works

Rincon Avenue, Virginia Avenue, Middleton Drive, and Twyla Lane Location

Council Districts 1

Appropriation A7474

Initial End Date 2nd Qtr. 2014

3rd Qtr. 2012

Revised Start Date 3rd Qtr. 2017 **Revised End Date** 2nd Qtr. 2019

Initial Start Date

Initial Project Budget \$3,529,000 **FY Initiated** 2012-2013

Description This project upsizes approximately 5,060 feet of 6-inch, 8-inch, and 10-inch sanitary sewer pipes along Campbell

Avenue from San Tomas Expressway to Virginia Avenue, along Virginia Avenue from Campbell Avenue to Rincon Avenue, along Rincon Avenue from Virginia Avenue to Montezuma Drive, along Montezuma Drive from Rincon Avenue to Acapulco Drive, along Acapulco Drive from Montezuma Drive to Middleton Drive, along Middletown Drive from

Acapulco Drive to Valerie Drive.

Justification This project will provide additional capacity to the Forest-Rosa Basin as identified in the Sanitary Sewer Master Plan

Capacity Assessment Phase II and Phase I - Update.

Notes CEQA Project: FSR1 - Rincon Avenue - Virginia Avenue Sanitary Sewer Improvements.

Major Cost Changes

Total

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sched	dule (000:	s)				
Bid & Award			11					11		11
Construction			3,107	334				3,441		3,441
Post Construction				15				15		15
Total			3,118	349				3,467		3,467

Funding Source Schedule (000s)							
Sewer Service and Use Charge Capital Improvement Fund	3,118	239	3,357	3,357			
Sanitary Sewer Connection Fee Fund		110	110	110			
Total	3,118	349	3,467	3,467			

Annual Operating Budget Impact (000s)	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Spreckles Sanitary Sewer Force Main Supplement, Phase II

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works

Location Water Pollution Control Plant

Council Districts 4

Appropriation A7616

The project funds the installation of 2,200 feet of new force main pipe along the westerly side of the Water Pollution

Initial Start Date

Initial End Date

FY Initiated

Revised Start Date

Revised End Date

Initial Project Budget

3rd Qtr. 2013

2nd Qtr. 2015

2nd Qtr. 2018

\$1,988,000

2013-2014

Control Plant property. There will be two trenchless crossings required.

Justification This project reduces the frequency of maintenance activity performed by the Department of Transportation.

Notes

Major Cost Changes

Description

2015-2019 CIP - Increase of \$146,000 due to an adjusted estimate based on the completed Spreckles Force Main

project.

. 2016-2020 CIP - Increase of \$1.2 million to accommodate rerouting of the force main in the Regional Wastewater

Facility due to conflict with other pipelines and future development in the facility.

2017-2021 CIP - Increase of \$269,000 due to a refined annual estimate.

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sche	dule (000s	s)				
Project Feasibility										_
Development	98	1								100
Design	488	81								569
Bid & Award	0									0
Construction		2,719	166					166		2,885
Post Construction			5					5		5
Total	587	2,801	171					171		3,559

		Fui	nding Sou	rce Schedule (000s)	
Sewer Service and Use Charge Capital Improvement					
Fund	587	2,801	171	171	3,559
Total	587	2,801	171	171	3,559

Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Stevens Creek Boulevard Sanitary Sewer Improvements

CSA Environmental and Utility Services

Reliable Utility Infrastructure **CSA Outcome**

Department Public Works

Stevens Creek Boulevard from Saratoga Avenue to Cronin Drive Location

Council Districts 1

Appropriation A7473

Revised End Date 2nd Qtr. 2018 Initial Project Budget \$3,042,000 **FY Initiated** 2012-2013

3rd Qtr. 2012

2nd Qtr. 2014

Initial Start Date

Initial End Date

Revised Start Date

This project upsizes the existing sanitary sewer system by removing approximately 7,500 linear feet of 8-inch and 10-Description

inch sewer pipes and replacing them with 18-inch sewer pipes along Stevens Creek Boulevard from Saratoga Avenue to

Cronin Drive.

This project is needed to increase capacity in the system as identified in the Sanitary Sewer Master Plan Capacity **Justification**

Assessment Phase II and Phase I - Update.

CEQA Project: FSR11 - Stevens Creek Boulevard Sanitary Sewer Improvements. **Notes**

Major Cost Changes

2015-2019 CIP - Increase of \$339,000 due to an additional study required to accomodate the operations from car

dealers along Stevens Creek Boulevard which was anticipated to increase construction costs. 2016-2020 CIP - Decrease of \$135,000 due to refining of project scope and cost estimate.

2017-2021 CIP - Increase of \$232,000 to reflect an increase in construction costs.

	PRIOR	FY1/	F Y 18	FY19	F Y 20	FY21	FY22	5 YEAR	REYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sche	dule (000s	s)				
General Administration										
Project Feasibility										
Development	115									115
Design	236									236
Bid & Award	27									27
Construction	2,098	461	542					542		3,101
Total	2.476	461	542					542		3.479

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	1,396	253	542	542	2,191					
Sanitary Sewer Connection										
Fee Fund	1,079	209			1,288					
Total	2,476	461	542	542	3,479					

Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Trimble Road and Capewood Lane Sanitary Sewer Improvements

CSA Environmental and Utility Services

Reliable Utility Infrastructure **CSA Outcome**

Department Public Works

Location

Council Districts 4

Total

Appropriation A7620

Between Treewood Lane and Capitol Avenue

Revised End Date 2nd Qtr. 2018 **Initial Project Budget** \$5,233,000 **FY Initiated** 2013-2014

922

5,988

2nd Qtr. 2014

2nd Qtr. 2016

Initial Start Date

Initial End Date

Revised Start Date

This project upsizes approximately 8,200 feet of 8-inch diameter vitrified clay pipe (VCP) sanitary sewer main in the Description

North San José area along Drywood Lane, Warmwood Lane, Laneview Drive, Morrill Avenue, Amberwood Lane, Suttergate Way, Sierra Wood Drive, and Trimble Road, between Treewood Lane and Capitol Avenue with 10- and 12-

inch diameter VCP.

This project will provide additional capacity of the Trimble-Morrill Basin as identified in the Sanitary Sewer Master Plan **Justification**

Capacity Assessment Phase II and Phase I - Update.

227

4,839

Notes CEQA Project: TRM1 - Trimble Road and Capewood Lane Sanitary Sewer Improvement.

Major Cost 2015-2019 CIP - Increase of \$92,000 due to a refined project scope and annual estimate.

Changes 2016-2020 CIP - Increase of \$20,000 due to a refined project scope and cost estimate. 2017-2021 CIP - Increase of \$177,000 due to a refined project scope and cost estimate.

PRIOR FY17 FY18 FY19 FY20 FY21 FY22 **5 YEAR BEYOND PROJECT YEARS EST TOTAL 5 YEARS TOTAL Expenditure Schedule (000s)** Project Feasibility Development 169 169 58 597 Design 655 Bid & Award 14 14 5,133 Construction 4,228 905 905 Post Construction 17 17 17

922

		Fui	nding Sour	ce Schedule (000s)	
Sewer Service and Use Charge Capital Improvement Fund	227	4,666	722	722	5,615
Sanitary Sewer Connection Fee Fund		173	200	200	373
Total	227	4,839	922	922	5,988

Annual Operating Budget Impact (000s)	
<u>Total</u>	

2018-2022 Adopted Capital Improvement Program

Detail of One-Time Construction Projects

Westmont Avenue and Harriet Avenue Sanitary Sewer Improvements

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works

Location Westmont Ave, Harriet Ave

Council Districts 1

Initial Project Budget \$4,075,000 Appropriation A404A

Description This project will install 6,360 linear feet of new 21-inch sanitary sewer and 300 linear feet of new 12-inch double barrel

siphon along Westmont Avenue from San Tomas Aquino Creek to Harriet Avenue, and along Harriet Avenue from

Initial Start Date

Initial End Date

FY Initiated

Revised Start Date

Revised End Date

3rd Qtr. 2017

2nd Qtr. 2020

2013-2014

Westmont Avenue to San Tomas Aguino Creek.

This project is required to provide more capacity to meet existing and future demand. Capacity of existing sanitary **Justification**

sewer system in the area was found to be insufficient to meet existing demand.

Notes CEQA Project - Forest-Rosa 5 - Westmont and Harriet Sanitary Sewer Improvement.

Major Cost Changes

	PRIOR	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sched	dule (000s	s)				
Construction			561	3,142	372			4,075		4,075
Total			561	3.142	372			4.075		4.075

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	561	3,142	272	3,975	3,975					
Sanitary Sewer Connection Fee Fund			100	100	100					
Total	561	3,142	372	4,075	4,075					

	Annual Operating Budget Impact (000s)
Total	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Cast Iron Pipe - Remove and Replace

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A7472

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

DescriptionThis project removes and replaces cast iron sewer pipes city-wide that are aging or corroded. It is estimated that

between 38,000 to 40,000 feet of cast iron pipe will be replaced over the next five years.

Justification This project replaces and/or removes the existing aging or corroded cast iron sewer pipes with new pipes, which will

improve flow, thereby reducing the frequency of maintenance activity performed by the Department of Transportation.

Notes Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility		-	•	•			
Development	50	50	50	50	50	50	250
Design	200	200	200	200	200	200	1,000
Bid & Award	20	20	20	20	20	20	100
Construction	7,112	4,230	4,230	4,230	4,730	4,730	22,150
Post Construction							
Total	7.382	4.500	4.500	4.500	5.000	5.000	23.500

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement									
Fund	7,382	4,500	4,500	4,500	5,000	5,000	23,500		
Total	7,382	4,500	4,500	4,500	5,000	5,000	23,500		

Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Condition Assessment Sewer Repairs

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A7356

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This allocation funds the identification and repair of damaged pipes in the sanitary sewer system, and includes multiple projects each year as they are identified. Areas in which a sanitary sewer overflow would have high consequences will be the focus of these identify-and-repair contracts.

Justification

This allocation is required due to the structural deterioration of aging sewers.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
	E31	Expenditure	Schedule (0	00s)			TOTAL
General Administration Project Feasibility	1,400	Experialtare	ochedule (o	003)		4	4
Development	4	4	4	4	4		16
Property & Land						200	200
Design	200	200	200	200	200	10	810
Bid & Award	10	10	10	10	10		40
Construction	8,458	5,286	5,286	5,286	5,786	5,786	27,430
Post Construction							
Maintenance, Repairs, Other							
Total	10,072	5,500	5,500	5,500	6,000	6,000	28,500

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement									
Fund	10,072	5,500	5,500	5,500	6,000	6,000	28,500		
Total	10,072	5,500	5,500	5,500	6,000	6,000	28,500		

Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Immediate Replacement and Diversion Projects

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A4272

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This allocation funds immediate needs that arise from Department of Transportation (DOT) maintenance and response activities. DOT identifies areas that require immediate sewer replacement as part of their maintenance activities and in response to sanitary sewer overflows. If replacement of the sewer is not feasible or cost effective, sewage may be rerouted (diverted) by installing a new or supplemental sewer along a different route. If these needs are not addressed in a timely manner, additional operations and maintenance costs will be incurred, and an increased possibility of sanitary sewer overflows will result.

Justification

This allocation is needed to address immediate replacement and supplemental sewer needs.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. Prior to 2012-2013, this project was titled "Miscellaneous Projects".

Major Cost Changes

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
General Administration Project Feasibility	700						
Development	40	40	30	35	35	35	175
Property & Land							
Design	500	500	300	400	400	400	2,000
Bid & Award	30	30	10	20	20	20	100
Construction	7,615	7,130	3,360	4,945	4,845	5,945	26,225
Post Construction							
Total	8.885	7.700	3.700	5.400	5.300	6.400	28.500

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	7,722	6,500	3,000	5,000	5,000	6,000	25,500			
Sanitary Sewer Connection Fee Fund	1,163	1,200	700	400	300	400	3,000			
Total	8,885	7,700	3,700	5,400	5,300	6,400	28,500			

Annual Operating Budget Impact (000s)

Total

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Inflow and Infiltration Reduction

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A6444

This project rehabilitates sanitary sewers and manholes that have groundwater or storm water penetration. The Flow Monitoring Program and maintenance reports from the Department of Transportation identify sewers ranging from 6

Initial Start Date

Initial End Date

Revised Start Date

Revised End Date

Initial Project Budget

Ongoing

Ongoing

inches to 36 inches in diameter in various locations throughout the City that require rehabilitation.

Justification This allocation reduces groundwater infiltration into the sanitary sewer collection system, thereby reducing the volume of

effluent discharged by the San José/Santa Clara Water Pollution Control Plant into the San Francisco Bay.

Notes Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. This

allocation was formerly titled "Infiltration Reduction".

Major Cost Changes

Description

	FY17	FY18	FY19	FY20	FY21	FY22	5 YEAR
	EST						TOTAL
		Expenditure	Schedule (0	00s)			
		•	•	•			
Project Feasibility Development							
Design							
Bid & Award							
Construction	700	200	200	200	200	200	1,000
Maintenance, Repairs, Other							
Total	700	200	200	200	200	200	1,000

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund	700	200	200	200	200	200	1,000	
Sanitary Sewer Connection Fee Fund								
Total	700	200	200	200	200	200	1.000	

Annual Operating Budget Impact (000s)	
Total	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Reinforced Concrete Pipe Rehabilitation Program

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

A7361

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Initial Start Date Ongoing Initial End Date Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

Appropriation

This allocation is used to investigate the structural condition of approximately 70,000 feet of reinforced concrete pipe (RCP) and rehabilitate as necessary. Due to the wide range of lengths, diameters, and locations of RCP throughout the City's sanitary sewer system, projects which may contain multiple construction locations will be developed. This allocation provides the flexibility to develop and construct projects which group locations, pipe lengths, and diameters in a cost effective manner.

Justification

There are approximately 70,000 feet of RCP pipes in the City that may require lining or rehabilitation to prevent them from being corroded. All RCP lines requiring rehabilitation will be repaired or lined as they are identified.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Major Cost Changes

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility Development	35	35	35	35	35	35	175
Design	140	140	140	140	140	140	700
Bid & Award	5	5	5	5	5	5	25
Construction	820	320	320	320	320	320	1,600
Total	1,000	500	500	500	500	500	2,500

Funding Source Schedule (000s)							
Sewer Service and Use							
Charge Capital Improvement							
Fund	1,000	500	500	500	500	500	2,500
Total	1,000	500	500	500	500	500	2,500

	Annual Operating Budget Impact (000s)
Total	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Construction Projects

Urgent Rehabilitation and Repair Projects

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksLocationCity-wideCouncil DistrictsCity-wide

Appropriation A4271

Initial Start Date

Ongoing

Initial End Date

Ongoing

Revised Start Date Revised End Date Initial Project Budget

Description

This ongoing allocation is used to investigate, prioritize, and rehabilitate neighborhood sewers that exhibit structural deterioration, root intrusion, and/or blockages. The projects will be developed to respond to the Department of Transportation's ongoing maintenance activities and sewer overflow incidents that are urgent and cannot be programmed during the annual CIP preparation process.

Justification

This allocation is required due to the structural deterioration of aging sewers.

Notes

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. Prior to 2012-2013, this project was titled "Miscellaneous Rehabilitation Projects".

Major Cost Changes

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility Development							
Property & Land							
Design	605	600	300	400	500	500	2,300
Bid & Award	40	40	40	40	40	40	200
Construction	12,794	7,340	4,650	5,550	6,450	6,450	30,440
Post Construction	20	20	10	10	10	10	60
Maintenance, Repairs, Other							
Total	13,459	8,000	5,000	6,000	7,000	7,000	33,000

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	13,459	8,000	5,000	6,000	7,000	7,000	33,000			
Sanitary Sewer Connection Fee Fu	nd									
Total	13,459	8,000	5,000	6,000	7,000	7,000	33,000			

Annual	Operating	Budget	Impact (000s)

Total

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Fee Administration - Sanitary Sewer

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works

Council Districts N/A
Appropriation A5241

Description This allocation provides funding for the Public Works Development Program to collect Sanitary Sewer Connection

Fees.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
General Administration	84	84	84	85	85	85	423
Design							
Total	84	84	84	85	85	85	423

Funding Source Schedule (000s)								
Sanitary Sewer Connection								
Fee Fund	84	84	84	85	85	85	423	
Total	84	84	84	85	85	85	423	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Flow Monitoring Program (Master Planning)

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA4696

Description This allocation funds a city-wide sanitary sewer master planning effort to identify capacity improvement needs and

provides for future updates, flow analysis, and condition assessments.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (00	00s)			
Project Feasibility		-	-	-			
Development	340	520	100	100	100	100	920
Maintenance, Repairs, Other	436	660	670	680	680	680	3,370
Total	776	1.180	770	780	780	780	4.290

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	720	750	670	680	680	680	3,460			
Sanitary Sewer Connection	56	430	100	100	100	100	830			
Fee Fund Total	776	1,180	770	780	780	780	4,290			

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Infrastructure - Sanitary Sewer Condition Assessment

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA6521

Description This allocation funds an ongoing condition assessment program to inspect and evaluate the condition of the existing

pipelines and identify the needs for pipeline rehabilitation and/or replacement.

Notes Selected budget information is not provided due to the ongoing nature of this project. Prior to 2012-2013, this was

a finite project, but was made an ongoing project due to ongoing needs for condition assessment, particularly in

light of State Water Board and Environmental Protection Agency requirements.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	e Schedule (0	00s)			
General Administration Project Feasibility	800						
Development	5,409	3,000	3,000	3,000	3,000	3,000	15,000
Design							
Bid & Award							
Construction							
Post Construction							
Total	6.209	3.000	3.000	3.000	3.000	3.000	15.000

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement									
Fund	6,209	3,000	3,000	3,000	3,000	3,000	15,000		
Total	6,209	3,000	3,000	3,000	3,000	3,000	15,000		

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Master Planning Updates

Environmental and Utility Services CSA

CSA Outcome Reliable Utility Infrastructure

Public Works Department Council Districts City-wide A7242 Appropriation

Description

This allocation funds the updates to the sewer system database and computer models based on land use development, sewer system improvements, survey and field investigations, and record research.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
Project Feasibility Development	1,000	200					200
Maintenance, Repairs, Other	44	1,400	1,300	1,300	1,100	1,200	6,300
Total	1,044	1,600	1,300	1,300	1,100	1,200	6,500

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund	864	1,380	1,200	1,200	1,000	1,100	5,880			
Sanitary Sewer Connection										
Fee Fund	180	220	100	100	100	100	620			
Total	1,044	1,600	1,300	1,300	1,100	1,200	6,500			

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Payments to West Valley Sanitation District

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works

Council Districts N/A
Appropriation A4230

Description This allocation reimburses the West Valley Sanitation District for the City's share of potential joint sanitary sewer

projects within the District's jurisdiction.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL			
Expenditure Schedule (000s)										
General Administration	10	10	10	10	10	10	50			
Total	10	10	10	10	10	10	50			

Funding Source Schedule (000s)								
Sanitary Sewer Connection								
Fee Fund	10	10	10	10	10	10	50	
Total	10	10	10	10	10	10	50	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Permit Review and Inspection for Outside Agencies - Sanitary Sewer

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works **Council Districts** City-wide **Appropriation** A5149

Description This allocation provides for the review and inspection of projects for the Santa Clara Valley Water District (SCVWD)

by City staff. As is customary practice between public agencies, as well as State law, the City and SCVWD do not

charge one another for these services.

Notes Selected budget information is not provided due to the ongoing nature of this project. This project was previously

titled "Permit Review and Inspection for SCVWD".

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (0	00s)			
General Administration	50	25	25	25	25	25	125
Construction							
Total	50	25	25	25	25	25	125

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund	50	25	25	25	25	25	125		
Storm Drainage Fee Fund									
Total	50	25	25	25	25	25	125		

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Preliminary Engineering - Sanitary Sewer

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA4284

Description This allocation supports preliminary engineering, including surveys and evaluations, that evaluates the potential

effects of projects not yet funded in this program.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (00	00s)			
Project Feasibility			-				
Development	950	950	950	950	950	950	4,750
Total	950	950	950	950	950	950	4.750

Funding Source Schedule (000s)								
Sewer Service and Use								
Charge Capital Improvement								
Fund	900	900	900	900	900	900	4,500	
Sanitary Sewer Connection								
Fee Fund	50	50	50	50	50	50	250	
Total	950	950	950	950	950	950	4.750	

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Program Management - Sanitary Sewer

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

DepartmentPublic WorksCouncil DistrictsCity-wideAppropriationA4286

Storm Sewer Capital Fund

Storm Drainage Fee Fund

Total

Description This allocation funds the administration and management of this Capital Improvement Program.

300

Notes Selected budget information is not provided due to the ongoing nature of this project.

300

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL			
Expenditure Schedule (000s)										
General Administration	300	300	300	300	300	300	1,500			
Design										
Maintenance, Repairs, Other										
Total	300	300	300	300	300	300	1,500			
	F	unding Sour	ce Schedule ((000s)						
Sewer Service and Use Charge Capital Improvement Fund Sanitary Sewer Connection Fee Fund	250 50	250 50	250 50	250 50	250 50	250 50	1,250 250			

300

300

300

300

1,500

2018-2022 Adopted Capital Improvement Program

Detail of Ongoing Non-Construction Projects

Public Works Engineering Services Equipment (Materials Lab)

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure

Department Public Works

Council Districts N/A
Appropriation A4135

Description This ongoing allocation funds the purchase of equipment necessary to perform quality assurance testing on

materials used in sewer rehabilitation projects.

	FY17 EST	FY18	FY19	FY20	FY21	FY22	5 YEAR TOTAL
		Expenditure	Schedule (00	00s)			
Design							
Equipment, Materials and							
Supplies	40	40	40	40	40	40	200
Total	40	40	40	40	40	40	200

Funding Source Schedule (000s)									
Sewer Service and Use Charge Capital Improvement Fund	40	40	40	40	40	40	200		
Sanitary Sewer Connection Fee Fund									
Total	40	40	40	40	40	40	200		

2017-2018 CAPITAL BUDGET

2018-2022 Capital Improvement Program

SANITARY SEWER SYSTEM

SUMMARY OF PROJECTS THAT START AFTER 2017-2018

SUMMARY OF RESERVES

2018-2022 Adopted Capital Improvement Program

Summary of Projects that Start After 2017-2018

Project NameAlmaden Supplement Sewer Rehabilitation (North)Initial Start Date3rd Qtr. 20205-Yr CIP Budget\$ 3,130,000Initial End Date2nd Qtr. 2022

Total Budget \$ 3,130,000 Revised Start Date

Council Districts 7 Revised End Date

Description This project will rehabilitate approximately 3,690 feet of 42-inch and 48-inch diameter reinforced concrete pipe with a cured-

in-place pipe liner located on East Alma Avenue between Monterey Highway and South 9th Street.

Project NameFourth Major Interceptor, Phase VIIAInitial Start Date3rd Qtr. 20185-Yr CIP Budget\$ 5,500,000Initial End Date2nd Qtr. 2020

Total Budget \$ 5,500,000 Revised Start Date

Council Districts 3 Revised End Date

Description This project will install approximately 7,200 linear feet of 66-inch reinforced concrete pipe. Completion of the Phase VIIA

project will conclude capacity improvements for the Fourth Major Interceptor system between the intersections of North 5th

Street and Commercial Street, and North 7th Street and Empire Street.

2018-2022 Adopted Capital Improvement Program

Summary of Reserves

Project NameMontague Sanitary Sewer Pump Station ReserveInitial Start DateN/A5-Yr CIP Budget\$ 2,400,000Initial End DateN/A

Total Budget\$ 2,400,000Revised Start DateCouncil Districts4Revised End Date

Description This reserve sets aside funding to rehabilitate and/or upgrade the pump station located on First Street and Montague

Expressway. Due to real estate-related uncertainties, construction is currently delayed.