Funded Projects

Overview

The Wastewater Services Capital Improvement Program (CIP) provides for the planning, design and construction of improvements to the City's wastewater collection, conveyance and treatment (WWTP) systems. The CIP is essential to help provide Gresham customers sustainable, reliable and affordable wastewater collection, conveyance and treatment services that are protective of the environment and public health. In addition, while preserving the existing infrastructure investment, the CIP provides capacity for future growth, as a catalyst for the economic viability of the community.

Highlights

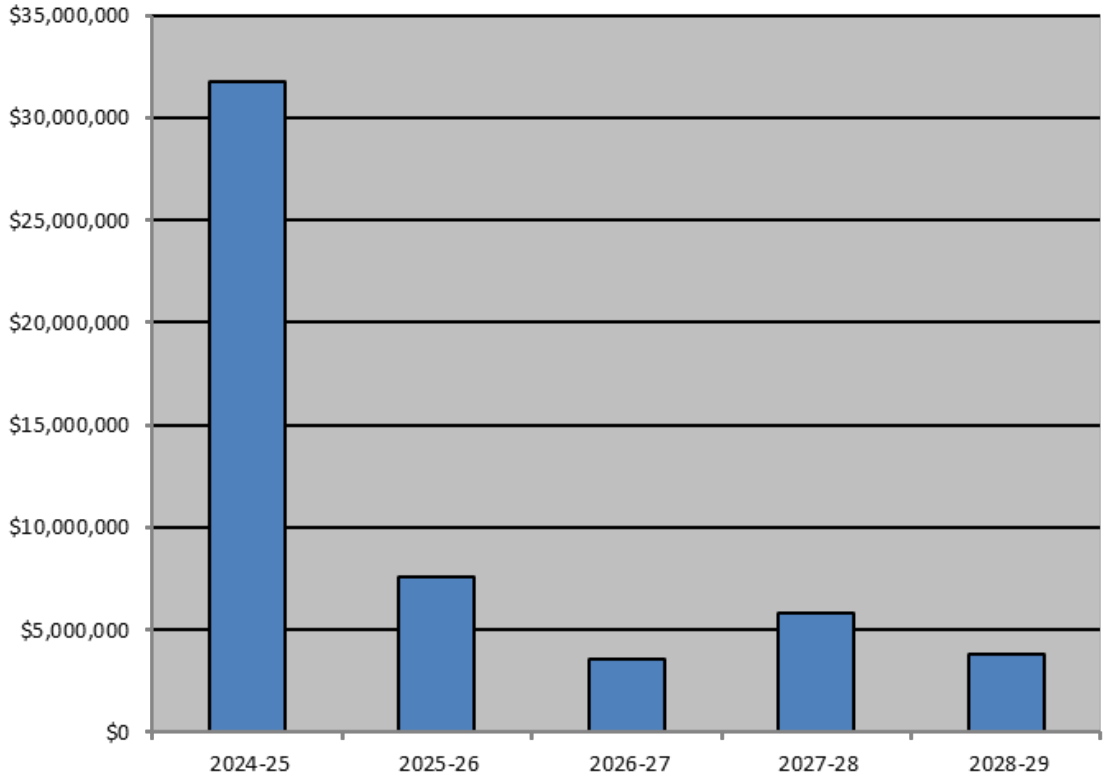
Key projects within the current CIP include:

1. Repair and replacement projects for the collection system including #CIPWW00007, #CIPWW00052 and #CIPWW00053 for planned repairs and #CIPWW00006 for unanticipated needs that arise;
2. Repair and replacement projects for the treatment plant including #CIPWW00005 for planned repairs and #CIPWW00002 for unanticipated needs that arise;
3. Collection system capacity increasing project #CIPWW00008 – East Basin Trunk Upgrade Phase III will provide for additional capacity in the Springwater area;
4. Nitrification improvement projects at the treatment plant constructed in partnership with Microchip Technology, Inc. (#CIPWW00018 – WWTP Upper Plant Nitrification Improvements and #CIPWW00049 – WWTP Upper Plant Secondary Clarifier No. 5);
5. Treatment plant projects for the refurbishment and replacement of aging equipment (#CIPWW00047 – WWTP Belt Press Replacement), as well as, for system and processing improvements (#CIPWW00022 – WWTP Control System Improvements, #CIPWW00046 – WWTP Disinfection Improvements);

6. Seismic upgrades to a sewer line crossing over Johnson Creek (#CIPWW00023 – Overhead Johnson Creek Crossing Seismic).

These projects will help address many ongoing and future operational and maintenance concerns as well as provide system capacity for growth.

Wastewater Expenditure Graph by Fiscal Year



Wastewater Funded Summary								
Project	Project Name	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
CIPWW00001	I & I Control Program	892,007	364,651	364,651	0	0	0	1,621,309
CIPWW00002	WWTP Maintenance Project	923,315	502,607	522,711	543,619	608,853	657,561	3,758,666
CIPWW00005	WWTP Asset Replacement and Refurbishment (R&R) Proj	1,476,034	1,017,775	1,058,486	1,100,825	1,232,924	1,331,558	7,217,602
CIPWW00006	Collection System Asset Repair and Replacement Project	1,901,079	744,891	0	0	0	0	2,645,970
CIPWW00007	Mainline and Lateral Replacement Program	948,944	1,097,048	1,134,159	1,172,384	1,313,070	1,418,116	7,083,721
CIPWW00008	East Basin Trunk Upgrade Phase III	1,904,226	0	0	0	0	0	1,904,226
CIPWW00013	Wastewater Mainline Extension	389,574	600,000	0	0	0	0	989,574
CIPWW00018	WWTP Upper Plant Nitrification Improvements	3,198,284	6,634,942	0	0	0	0	9,833,226
CIPWW00022	WWTP Control System Improvements	3,787,913	1,325,770	0	0	0	0	5,113,683
CIPWW00023	Overhead Johnson Creek Crossing Seismic	2,163,484	1,810,000	0	0	0	0	3,973,484
CIPWW00024	WWTP Organics Digestion Capacity Evaluation	277,469	0	0	0	0	0	277,469
CIPWW00026	Lower Kelly Creek Trunk Upgrade Phase 1	0	0	2,245,447	0	0	0	2,245,447
CIPWW00027	Linneman Pump Station Parallel Force Main, Phase 2	0	0	0	600,000	2,500,000	0	3,100,000
CIPWW00030	WWTP Earthquake Resiliency Projects	256,469	140,383	145,998	151,838	170,059	183,664	1,048,411
CIPWW00035	CCTV Inspection of Collection System Large Diameter Pipe	207,701	223,000	223,000	0	0	0	653,701
CIPWW00045	Upper Kelly Creek Basin Trunk Improvement, Phase 1	0	266,958	1,512,758	0	0	0	1,779,716
CIPWW00046	WWTP Disinfection Improvements	1,697,069	230,000	0	0	0	0	1,927,069
CIPWW00047	WWTP Belt Press Replacement	5,939,400	890,910	0	0	0	0	6,830,310
CIPWW00049	WWTP Upper Plant Secondary Clarifier No. 5	2,928,964	14,296,056	0	0	0	0	17,225,020
CIPWW00050	Nechacokee Creek Bank Stabilization	638,400	0	0	0	0	0	638,400
CIPWW00051	185th St. Pump Station Improvements	581,400	114,000	0	0	0	0	695,400
CIPWW00052	San Rafael Sewer Main Replacement	0	747,593	0	0	0	0	747,593
CIPWW00053	Birdsdale Sewer Main Replacement	0	754,382	0	0	0	0	754,382
CIPWW00054	WWTP Master Plan Update	0	0	0	0	0	228,000	228,000
CIPWW00055	WWTP Lower Plant Aeration Piping Improvements	0	0	364,800	0	0	0	364,800
Grand Total		**30,111,732**	**31,760,966**	**7,572,010**	**3,568,666**	**5,824,906**	**3,818,899**	**82,657,179**

Wastewater Funded Summary by Resource							
Description	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**Total**
Other	6,114,722	9,772,614	0	0	0	0	15,887,336
Grant	491,280	959,752	0	0	0	0	1,451,032
Operating	13,528,158	12,638,534	4,856,654	151,838	2,370,059	411,664	33,956,907
Repair/Replacement Reserves	9,037,285	6,190,066	2,715,356	2,816,828	3,154,847	3,407,235	27,321,617
SDC	940,287	2,200,000	0	600,000	300,000	0	4,040,287
Grand Total	**30,111,732**	**31,760,966**	**7,572,010**	**3,568,666**	**5,824,906**	**3,818,899**	**82,657,179**

Wastewater Funded Resource Detail

Project	Project Name	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
CIPWW00001	I & I Control Program	Operating	892,007	364,651	364,651	0	0	0	1,621,309
CIPWW00001 Total			**892,007**	**364,651**	**364,651**	**0**	**0**	**0**	**1,621,309**
CIPWW00002	WWTP Maintenance Project	Repair/Replace	923,315	502,607	522,711	543,619	608,853	657,561	3,758,666
CIPWW00002 Total			**923,315**	**502,607**	**522,711**	**543,619**	**608,853**	**657,561**	**3,758,666**
CIPWW00005	WWTP Asset Replacement and Refurbishment (R&R) Pı	Repair/Replace	1,476,034	1,017,775	1,058,486	1,100,825	1,232,924	1,331,558	7,217,602
CIPWW00005 Total			**1,476,034**	**1,017,775**	**1,058,486**	**1,100,825**	**1,232,924**	**1,331,558**	**7,217,602**
CIPWW00006	Collection System Asset Repair and Replacement Proje	Repair/Replace	1,901,079	744,891	0	0	0	0	2,645,970
CIPWW00006 Total			**1,901,079**	**744,891**	**0**	**0**	**0**	**0**	**2,645,970**
CIPWW00007	Mainline and Lateral Replacement Program	Repair/Replace	948,944	1,097,048	1,134,159	1,172,384	1,313,070	1,418,116	7,083,721
CIPWW00007 Total			**948,944**	**1,097,048**	**1,134,159**	**1,172,384**	**1,313,070**	**1,418,116**	**7,083,721**
CIPWW00008	East Basin Trunk Upgrade Phase III	Operating	963,939	0	0	0	0	0	963,939
		SDC	940,287	0	0	0	0	0	940,287
CIPWW00008 Total			**1,904,226**	**0**	**0**	**0**	**0**	**0**	**1,904,226**
CIPWW00013	Wastewater Mainline Extension	Operating	389,574	600,000	0	0	0	0	989,574
CIPWW00013 Total			**389,574**	**600,000**	**0**	**0**	**0**	**0**	**989,574**
CIPWW00018	WWTP Upper Plant Nitrification Improvements	Grant	0	959,752	0	0	0	0	959,752
		Operating	12,526	959,576	0	0	0	0	972,102
		Other	3,185,758	4,715,614	0	0	0	0	7,901,372
CIPWW00018 Total			**3,198,284**	**6,634,942**	**0**	**0**	**0**	**0**	**9,833,226**
CIPWW00022	WWTP Control System Improvements	Repair/Replace	3,787,913	1,325,770	0	0	0	0	5,113,683
CIPWW00022 Total			**3,787,913**	**1,325,770**	**0**	**0**	**0**	**0**	**5,113,683**
CIPWW00023	Overhead Johnson Creek Crossing Seismic	Grant	371,280	0	0	0	0	0	371,280
		Operating	1,792,204	1,810,000	0	0	0	0	3,602,204
CIPWW00023 Total			**2,163,484**	**1,810,000**	**0**	**0**	**0**	**0**	**3,973,484**
CIPWW00024	WWTP Organics Digestion Capacity Evaluation	Grant	120,000	0	0	0	0	0	120,000
		Operating	157,469	0	0	0	0	0	157,469
CIPWW00024 Total			**277,469**	**0**	**0**	**0**	**0**	**0**	**277,469**
CIPWW00026	Lower Kelly Creek Trunk Upgrade Phase 1	Operating	0	0	2,245,447	0	0	0	2,245,447
CIPWW00026 Total			**0**	**0**	**2,245,447**	**0**	**0**	**0**	**2,245,447**
CIPWW00027	Linneman Pump Station Parallel Force Main, Phase 2	Operating	0	0	0	0	2,200,000	0	2,200,000
		SDC	0	0	0	600,000	300,000	0	900,000
CIPWW00027 Total			**0**	**0**	**0**	**600,000**	**2,500,000**	**0**	**3,100,000**
CIPWW00030	WWTP Earthquake Resiliency Projects	Operating	256,469	140,383	145,998	151,838	170,059	183,664	1,048,411
CIPWW00030 Total			**256,469**	**140,383**	**145,998**	**151,838**	**170,059**	**183,664**	**1,048,411**
CIPWW00035	CCTV Inspection of Collection System Large Diameter P	Operating	207,701	223,000	223,000	0	0	0	653,701
CIPWW00035 Total			**207,701**	**223,000**	**223,000**	**0**	**0**	**0**	**653,701**
CIPWW00045	Upper Kelly Creek Basin Trunk Improvement, Phase 1	Operating	0	266,958	1,512,758	0	0	0	1,779,716
CIPWW00045 Total			**0**	**266,958**	**1,512,758**	**0**	**0**	**0**	**1,779,716**
CIPWW00046	WWTP Disinfection Improvements	Operating	1,697,069	230,000	0	0	0	0	1,927,069
CIPWW00046 Total			**1,697,069**	**230,000**	**0**	**0**	**0**	**0**	**1,927,069**
CIPWW00047	WWTP Belt Press Replacement	Operating	5,939,400	890,910	0	0	0	0	6,830,310

Wastewater Funded Resource Detail

Project	Project Name	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
CIPWW00047 Total			**5,939,400**	**890,910**	**0**	**0**	**0**	**0**	**6,830,310**
CIPWW00049	**WWTP Upper Plant Secondary Clarifier No. 5**	Operating	0	7,039,056	0	0	0	0	7,039,056
		Other	2,928,964	5,057,000	0	0	0	0	7,985,964
		SDC	0	2,200,000	0	0	0	0	2,200,000
CIPWW00049 Total			**2,928,964**	**14,296,056**	**0**	**0**	**0**	**0**	**17,225,020**
CIPWW00050	**Nechacokee Creek Bank Stabilization**	Operating	638,400	0	0	0	0	0	638,400
CIPWW00050 Total			**638,400**	**0**	**0**	**0**	**0**	**0**	**638,400**
CIPWW00051	**185th St. Pump Station Improvements**	Operating	581,400	114,000	0	0	0	0	695,400
CIPWW00051 Total			**581,400**	**114,000**	**0**	**0**	**0**	**0**	**695,400**
CIPWW00052	**San Rafael Sewer Main Replacement**	Repair/Replace	0	747,593	0	0	0	0	747,593
CIPWW00052 Total			**0**	**747,593**	**0**	**0**	**0**	**0**	**747,593**
CIPWW00053	**Birdsdale Sewer Main Replacement**	Repair/Replace	0	754,382	0	0	0	0	754,382
CIPWW00053 Total			**0**	**754,382**	**0**	**0**	**0**	**0**	**754,382**
CIPWW00054	**WWTP Master Plan Update**	Operating	0	0	0	0	0	228,000	228,000
CIPWW00054 Total			**0**	**0**	**0**	**0**	**0**	**228,000**	**228,000**
CIPWW00055	**WWTP Lower Plant Aeration Piping Improvements**	Operating	0	0	364,800	0	0	0	364,800
CIPWW00055 Total			**0**	**0**	**364,800**	**0**	**0**	**0**	**364,800**
Grand Total			**30,111,732**	**31,760,966**	**7,572,010**	**3,568,666**	**5,824,906**	**3,818,899**	**82,657,179**

CIPWW00001: I & I Control Program

Description: This on-going analysis is to reduce the excessive stormwater inflow and infiltration (I&I) into the sanitary sewer system. The project includes flow monitoring, smoke and dye testing to identify illicit connections and high I&I areas, pipe repair, pressure grouting, and other methods to reduce I&I. I&I Control includes sustainability/energy conservation projects within the collection system.

Justification: The project will reduce costs to service users by reducing I&I rather than processing it thorough the treatment plant or increasing the collection system capacity. The project ensures compliance with the City's NPDES Waste Discharge Permit.

Type of project: Repair and rehabilitation of facilities and utilities.

Estimated Dollars:

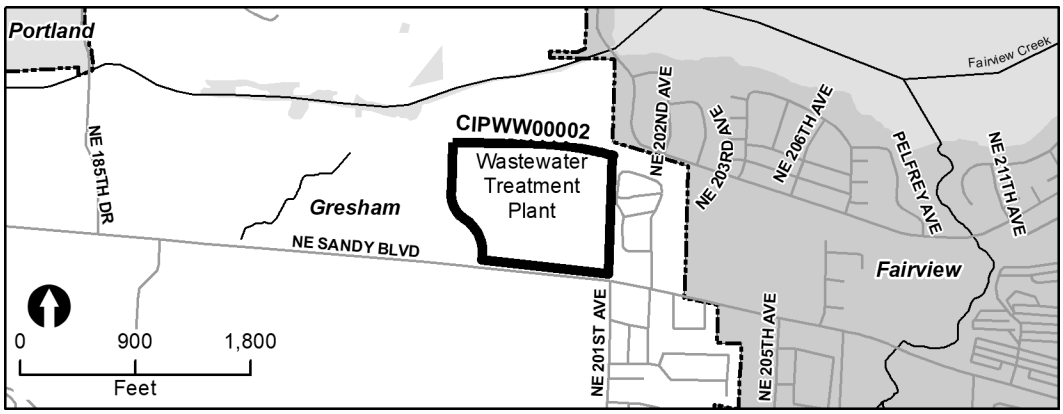
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	892,007	364,651	364,651	0	0	0	1,621,309
Resources Total		**892,007**	**364,651**	**364,651**	**0**	**0**	**0**	**1,621,309**
Expenses	Construction	782,507	319,851	319,851	0	0	0	1,422,209
	Admin (14%)	109,500	44,800	44,800	0	0	0	199,100
Expenses Total		**892,007**	**364,651**	**364,651**	**0**	**0**	**0**	**1,621,309**

CIPWW00002: WWTP Maintenance Project

Description: This project funds unanticipated repair and replacement of Wastewater Treatment Plant and pump station equipment and processes that are not scheduled for replacement under the WWTP Asset R&R CIP #CIPWW00005. It includes contractual reimbursement to the WWTP contract operator for repair and replacement items over $5,000. This project also includes contractual reimbursables, such as construction related expenses and other items as required by the contract. The project is located in the North Gresham Neighborhood District.

Justification: Timely repair and replacement of the failed machinery and equipment at the WWTP and/or pump stations are critical to the overall performance of the WWTP. Asset failures can lead to loss of service and non-compliance of permits.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

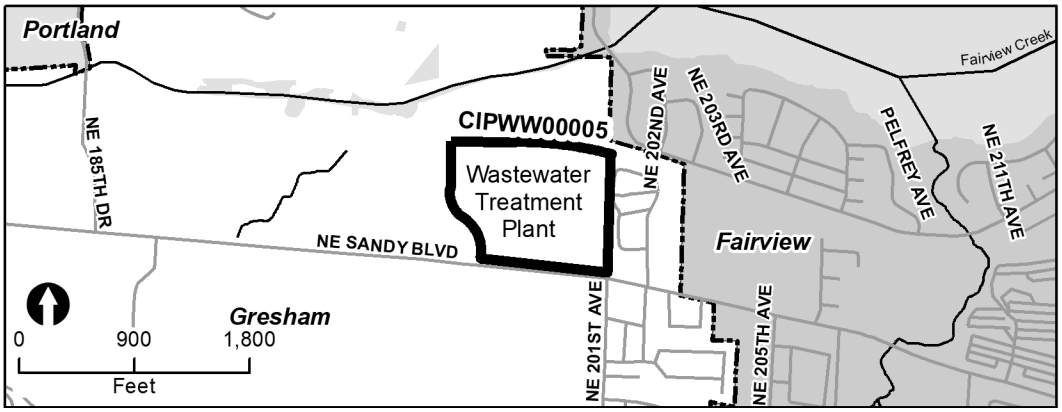
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	923,315	502,607	522,711	543,619	608,853	657,561	3,758,666
Resources Total		**923,315**	**502,607**	**522,711**	**543,619**	**608,853**	**657,561**	**3,758,666**
Expenses	Design/Const Admin	162,000	88,177	91,704	95,372	85,300	115,400	637,953
	Construction	647,915	352,707	366,815	381,487	448,753	461,361	2,659,038
	Admin (14%)	113,400	61,723	64,192	66,760	74,800	80,800	461,675
Expenses Total		**923,315**	**502,607**	**522,711**	**543,619**	**608,853**	**657,561**	**3,758,666**

CIPWW00005: WWTP Asset Replacement and Refurbishment (R&R) Project

Description: This is an ongoing project that designs and constructs the R&R of assets at the WWTP and wastewater pumping stations that are scheduled per the WWTP asset management plan. Wastewater's Asset Management Program has developed a comprehensive asset inventory, asset condition and long range asset replacement planning methodology. This methodology will ensure that the City is appropriately planning, evaluating and replacing assets to ensure the lowest life cycle cost at an appropriate level of service with adequate long-range funding for the projects. This project may contribute eligible R&R funding to other CIP's as needed. (CIP# CIPWW00002 is in response to unanticipated asset failures, such as repairing air line leaks, replacing flow meters, repairing digester mixers, repairing rolling stock and other unanticipated items as needed.)

Justification: On-going repair and replacement of aging assets are critical to the overall performance of the WWTP. Asset failures can lead to loss of service and non-compliance with permit requirements.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	1,476,034	1,017,775	1,058,486	1,100,825	1,232,924	1,331,558	7,217,602
Resources Total		**1,476,034**	**1,017,775**	**1,058,486**	**1,100,825**	**1,232,924**	**1,331,558**	**7,217,602**
Expenses	Design/Const Admin	200,000	178,557	185,699	193,127	216,300	233,600	1,207,283
	Construction	1,094,734	714,228	742,797	772,509	865,224	934,458	5,123,950
	Admin (14%)	181,300	124,990	129,990	135,189	151,400	163,500	886,369
Expenses Total		**1,476,034**	**1,017,775**	**1,058,486**	**1,100,825**	**1,232,924**	**1,331,558**	**7,217,602**

CIPWW00006: Collection System Asset Repair and Replacement Project

Description: This ongoing city-wide project designs and constructs unanticipated repair or replacement of wastewater collection system assets, such as, but not limited to, mainlines, laterals and manholes, that are not scheduled for replacement using CIPWW00007. These projects are generally localized and arise from emergency system failures or are identified by wastewater operations staff during routine cleaning and inspection of the wastewater collection system as operational concerns or having a high probability of failure without immediate intervention.

Justification: Repair and replacement of wastewater collection system assets that create operational concerns, have failed or passed their industry standard lifespan will reduce long term operational and maintenance costs and lower the risk of system failure. System failures can lead to non-compliance with NPDES permit requirements resulting in fines or penalties, in addition to loss of service, sewage backups and possibly spills to streams.

Type of project: Repair and rehabilitation of facilities and utilities.

Estimated Dollars:

Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	1,901,079	744,891	0	0	0	0	2,645,970
Resources Total		**1,901,079**	**744,891**	**0**	**0**	**0**	**0**	**2,645,970**
Expenses	Design/Const Admin	150,000	104,300	0	0	0	0	254,300
	Construction	1,517,579	549,091	0	0	0	0	2,066,670
	Admin (14%)	233,500	91,500	0	0	0	0	325,000
Expenses Total		**1,901,079**	**744,891**	**0**	**0**	**0**	**0**	**2,645,970**

CIPWW00007: Mainline and Lateral Replacement Program

Description: This ongoing city-wide project designs and constructs planned, and systematic pipeline rehabilitation and maintenance projects as identified from the Sanitary Sewer Evaluation Study project, or as determined from ongoing collection system asset management evaluation. This project improves ongoing and anticipated operational concerns, primarily with the oldest sanitary sewer lines in the City. Funds from this CIP may be used as needed for portions of other wastewater collection CIP project's that will repair or replace existing wastewater collection system assets.

Justification: Repair and replacement of wastewater collection system assets that create operational concerns, have failed or passed their industry standard lifespan will reduce long term operational and maintenance costs and lower the risk of system failure. System failures can lead to non-compliance with NPDES permit requirements resulting in fines or penalties, in addition to loss of service, sewage backups and possibly spills to streams.

Type of Project: Repair and rehabilitation of pipeline facilities.

Estimated Dollars:

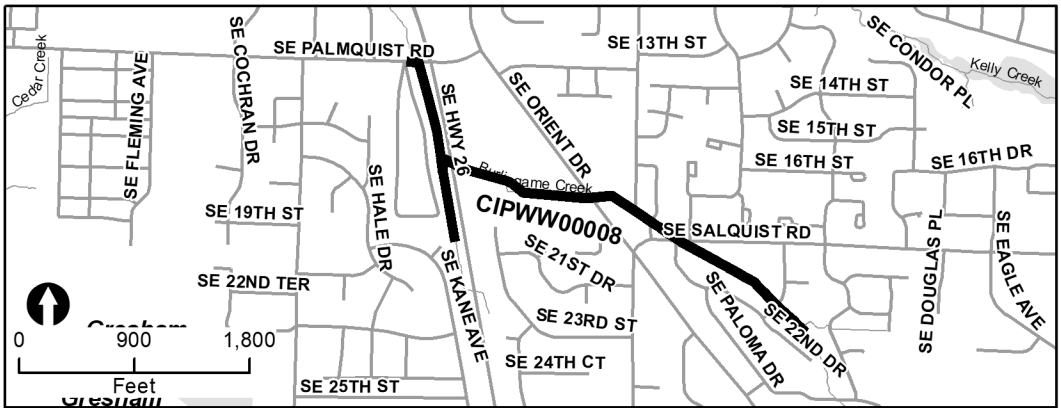
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	948,944	1,097,048	1,134,159	1,172,384	1,313,070	1,418,116	7,083,721
Resources Total		**948,944**	**1,097,048**	**1,134,159**	**1,172,384**	**1,313,070**	**1,418,116**	**7,083,721**
Expenses	Design/Const Admin	100,000	115,600	119,500	123,500	138,400	149,400	746,400
	Construction	732,444	846,748	875,359	904,884	1,013,370	1,094,516	5,467,321
	Admin (14%)	116,500	134,700	139,300	144,000	161,300	174,200	870,000
Expenses Total		**948,944**	**1,097,048**	**1,134,159**	**1,172,384**	**1,313,070**	**1,418,116**	**7,083,721**

CIPWW00008: East Basin Trunk Upgrade Phase 3

Description: This project is phase 3 of east basin sanitary sewer trunk improvements and will upsize approximately 1,500 linear feet of sewer main using pipe bursting or other means as determined during design. This project will increase the capacity of the sanitary sewer system as needed for growth. This is 2020 collection system master plan project E1 (near term) and SDC project #6.3.

Justification: Wastewater collection system upsize required as detailed in 2020 collection system master plan for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	963,939	0	0	0	0	0	963,939
	SDC	940,287	0	0	0	0	0	940,287
Resources Total		**1,904,226**	**0**	**0**	**0**	**0**	**0**	**1,904,226**
Expenses	Design/Const Admin	242,100	0	0	0	0	0	242,100
	Construction	1,428,226	0	0	0	0	0	1,428,226
	Admin (14%)	233,900	0	0	0	0	0	233,900
Expenses Total		**1,904,226**	**0**	**0**	**0**	**0**	**0**	**1,904,226**

CIPWW00013: Wastewater Mainline Extension

Description: This project constructs wastewater mainlines with associated laterals on an as needed basis for in-fill situations. The next potential projects are located on Towle Road and SW 14th Street. These projects rely on the formation of reimbursement districts. Locations may change based on need.

Justification: This project is to meet the immediate needs of citizens with failed or failing septic systems. The properties involved are within the urban growth boundary.

Type of project: Construction of facilities and utilities.

Estimated Dollars:

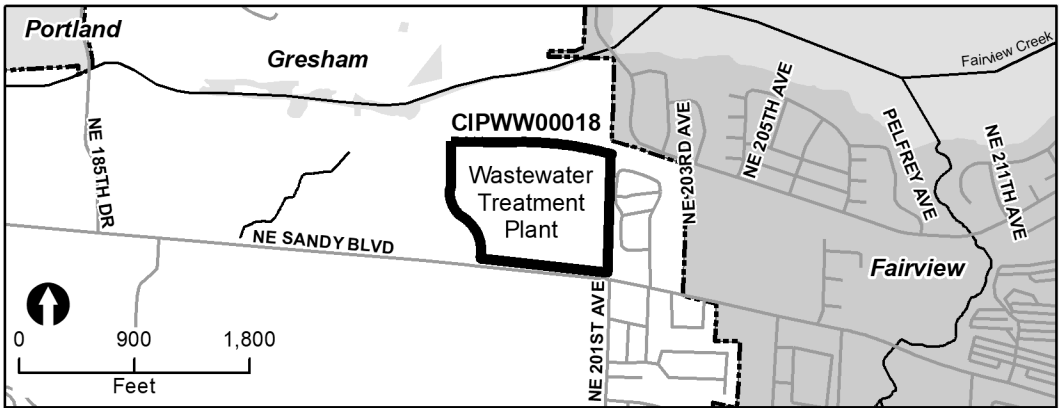
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	389,574	600,000	0	0	0	0	989,574
Resources Total		**389,574**	**600,000**	**0**	**0**	**0**	**0**	**989,574**
Expenses	Design/Const Admin	20,000	80,000	0	0	0	0	100,000
	Construction	321,774	446,300	0	0	0	0	768,074
	Admin (14%)	47,800	73,700	0	0	0	0	121,500
Expenses Total		**389,574**	**600,000**	**0**	**0**	**0**	**0**	**989,574**

CIPWW00018: WWTP Upper Plant Nitrification Improvements

Description: This project will design and construct improvements and modifications to the upper plant secondary treatment system and supporting processes that will allow the nitrification of the upper plant secondary treatment system. This will include aeration basin improvements, blower building modifications, chemical feed installation, standby power, dissolved oxygen control improvements and other improvements identified as needed during design of the project. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. SDC project #WWTP 7.

Justification: This project is needed to construct the nitrification capabilities of the upper plant secondary treatment system in order to comply with NPDES wastewater discharge permit requirements and the Microchip Public Works Improvement Contract.

Type of project: Upgrade of existing facilities and utilities.



Estimated Dollars:

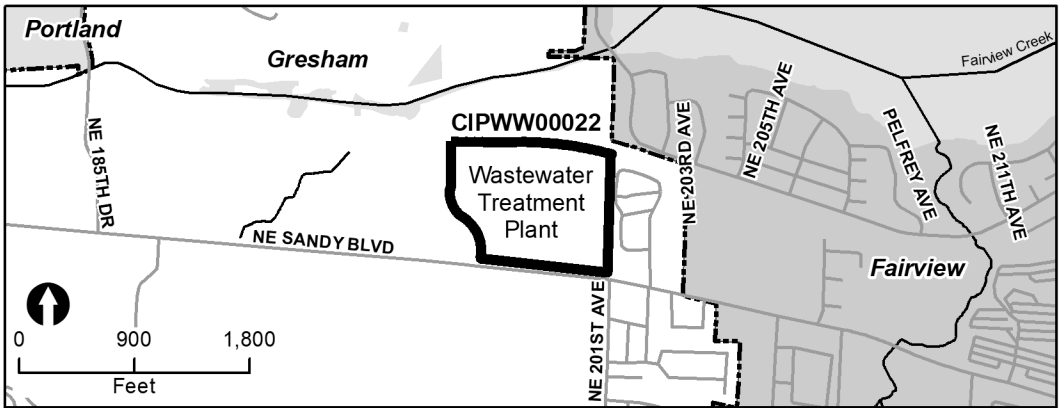
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Other	3,185,758	4,715,614	0	0	0	0	7,901,372
	Grant	0	959,752	0	0	0	0	959,752
	Operating	12,526	959,576	0	0	0	0	972,102
Resources Total		**3,198,284**	**6,634,942**	**0**	**0**	**0**	**0**	**9,833,226**
Expenses	Design/Const Admin	500,000	150,000	0	0	0	0	650,000
	Construction	2,305,484	5,670,042	0	0	0	0	7,975,526
	Admin (14%)	392,800	814,900	0	0	0	0	1,207,700
Expenses Total		**3,198,284**	**6,634,942**	**0**	**0**	**0**	**0**	**9,833,226**

CIPWW00022: WWTP Control System Improvements

Description: This project will design, upgrade and modernize the control system at the WWTP. The current control system, comprising of hardware, software, programming, reporting and other functions will be evaluated and updated as necessary to increase reliability and security while modernizing and improving the system. The current control system was originally installed in 2000 and partially upgraded in 2010. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: This project is needed to ensure that the control systems that operate, report and alarm complex processes throughout the WWTP are evaluated and upgraded as needed. This project is required of the City of Gresham/OMI operations and maintenance contract.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

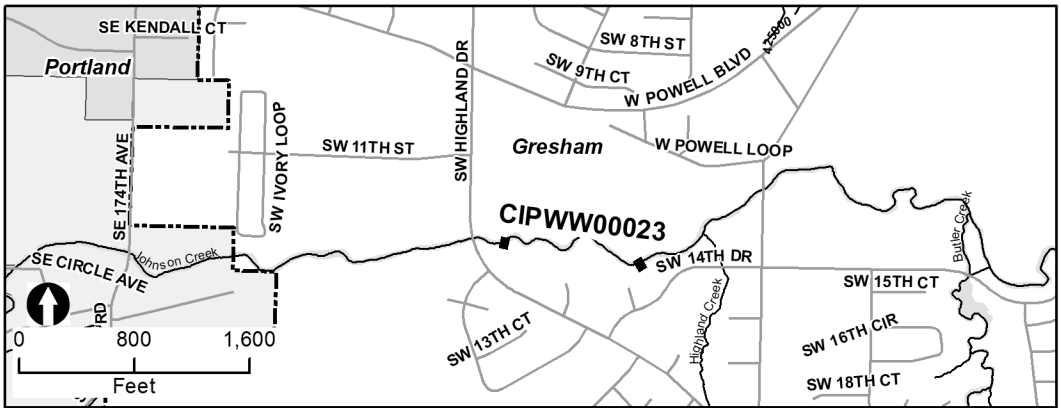
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	3,787,913	1,325,770	0	0	0	0	5,113,683
Resources Total		**3,787,913**	**1,325,770**	**0**	**0**	**0**	**0**	**5,113,683**
Expenses	Design/Const Admin	577,917	200,000	0	0	0	0	777,917
	Construction	2,744,796	962,970	0	0	0	0	3,707,766
	Admin (14%)	465,200	162,800	0	0	0	0	628,000
Expenses Total		**3,787,913**	**1,325,770**	**0**	**0**	**0**	**0**	**5,113,683**

CIPWW00023: Overhead Johnson Creek Crossing Seismic

Description: This project consists of a concrete bridge over the creek and the bridge abutments and manholes that transport and support the ductile iron pipe conveying the flow over the creek. The seismic upgrade will replace the concrete bridge with a steel pipe that will include the sewer pipe in its interior. Micro-piles will be used to support the bridge abutments and manholes hardening the structure to new seismic standards. The grant is a Federal Emergency Management Agency Pre-Disaster Mitigation Program grant.

Justification: This project is needed to meet seismic standards so the structure can withstand a seismic event without collapsing allowing raw sewage to flow into the creek.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

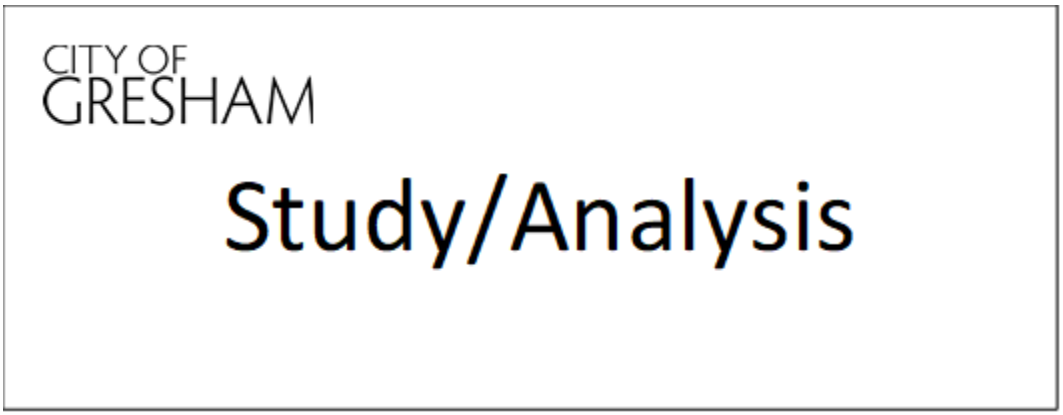
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Grant	371,280	0	0	0	0	0	371,280
	Operating	1,792,204	1,810,000	0	0	0	0	3,602,204
Resources Total		**2,163,484**	**1,810,000**	**0**	**0**	**0**	**0**	**3,973,484**
Expenses	Design/Const Admin	30,000	30,000	0	0	0	0	60,000
	Construction	1,867,784	1,557,700	0	0	0	0	3,425,484
	Admin (14%)	265,700	222,300	0	0	0	0	488,000
Expenses Total		**2,163,484**	**1,810,000**	**0**	**0**	**0**	**0**	**3,973,484**

CIPWW00024: WWTP Organics Digestion Capacity Evaluation

Description: This project will evaluate and provide preliminary design options for the Gresham WWTP to accept and process additional organic loads at the WWTP. This study will evaluate liquid organic markets, including food waste markets, and determine the feasibility of constructing additional processing facilities at the WWTP to accept more organic waste. Currently, the WWTP processes approximately 13,000 gallons per day of liquid organic waste or Fats, Oils and Grease (FOG) resulting in tipping fee revenues to the City of approximately $350,000 per year. The WWTP also uses a biogas cogeneration system to convert digester methane to electricity to offset its energy usage from the power grid, contributing to the WWTP goal of "net-zero" energy usage. Increasing the digestion and cogeneration capacity of the WWTP will increase tipping fee revenues and increase power production, resulting in additional revenues from the sale of renewable energy credits or similar arrangement.

Justification: This project will determine the feasibility, cost effectiveness and potential revenue streams of constructing and operating additional digestion capacity at the WWTP.

Type of project: Study.



Estimated Dollars:

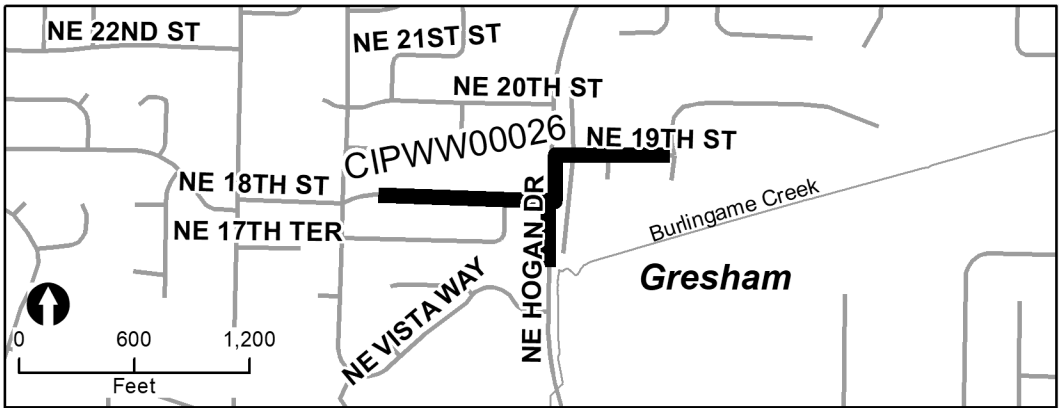
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Grant	120,000	0	0	0	0	0	120,000
	Operating	157,469	0	0	0	0	0	157,469
Resources Total		**277,469**	**0**	**0**	**0**	**0**	**0**	**277,469**
Expenses	Design/Const Admin	243,369	0	0	0	0	0	243,369
	Admin (14%)	34,100	0	0	0	0	0	34,100
Expenses Total		**277,469**	**0**	**0**	**0**	**0**	**0**	**277,469**

CIPWW00026: Lower Kelly Creek Trunk Upgrade Phase 1

Description: This project would increase the capacity of the system in the problem area and reduce the amount of inflow entering the system. This sewer line is located in a low lying area within the Gresham Golf Course. The construction of the project is time sensitive because of the impact on the golf course and the creek in the area. 2020 Collection Master Plan Project KC2 (near term) and SDC project #2.1.

Justification: This project provides sewerage system capabilities for transmitting current and projected sewerage flows. The addition of the flows from Barlow High School into this basin add to the justification for construction of this project.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

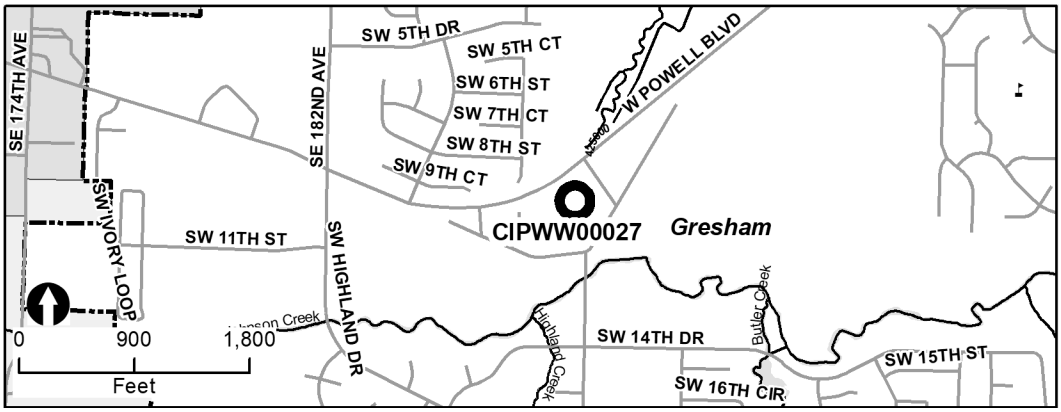
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	0	0	2,245,447	0	0	0	2,245,447
Resources Total		**0**	**0**	**2,245,447**	**0**	**0**	**0**	**2,245,447**
Expenses	Design/Const Admin	0	0	314,400	0	0	0	314,400
	Construction	0	0	1,655,247	0	0	0	1,655,247
	Admin (14%)	0	0	275,800	0	0	0	275,800
Expenses Total		**0**	**0**	**2,245,447**	**0**	**0**	**0**	**2,245,447**

CIPWW00027: Linneman Pump Station Parallel Force Main, Phase 2

Description: This project constructs additional capacity at the Linneman Pump Station as identified in the 2005 Linneman Pump Station Master Plan to provide capacity for growth in the South Gresham area. The project consists of finishing the second phase of a new parallel force main to the pump station. SDC project #WWTP 2.

Justification: This project will provide the needed capacity for additional growth in the Johnson Creek Basin, including the Pleasant Valley and Springwater areas.

Type of Project: Construction of new facilities.



Estimated Dollars:

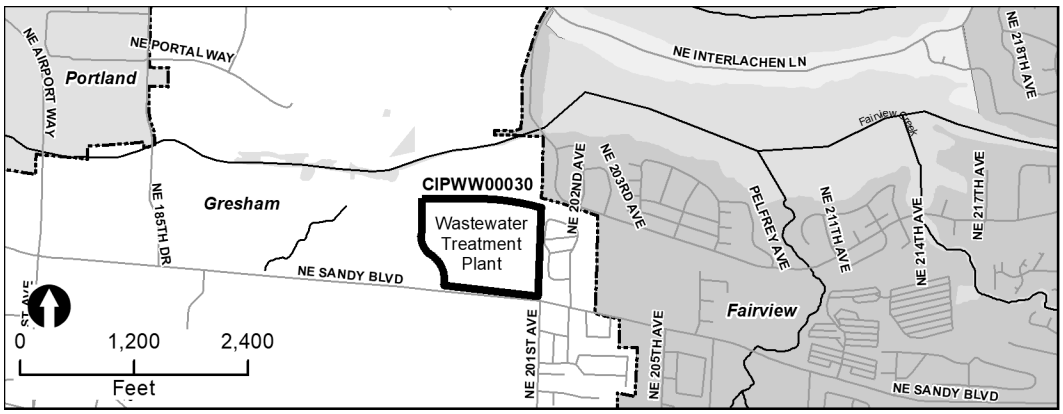
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	0	0	0	0	2,200,000	0	2,200,000
	SDC	0	0	0	600,000	300,000	0	900,000
Resources Total		**0**	**0**	**0**	**600,000**	**2,500,000**	**0**	**3,100,000**
Expenses	Design/Const Admin	0	0	0	426,300	93,000	0	519,300
	Construction	0	0	0	100,000	2,100,000	0	2,200,000
	Admin (14%)	0	0	0	73,700	307,000	0	380,700
Expenses Total		**0**	**0**	**0**	**600,000**	**2,500,000**	**0**	**3,100,000**

CIPWW00030: WWTP Earthquake Resiliency Projects

Description: This project will design and construct earthquake resiliency improvements at the WWTP and wastewater pumping stations. These projects were identified in the 2019 Wastewater Seismic Resilience Plan. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: This project will upgrade specific assets at the WWTP and wastewater pumping stations to better withstand a catastrophic seismic event. This project will strengthen elements and allow facilities to more rapidly return to normal operations after an event.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

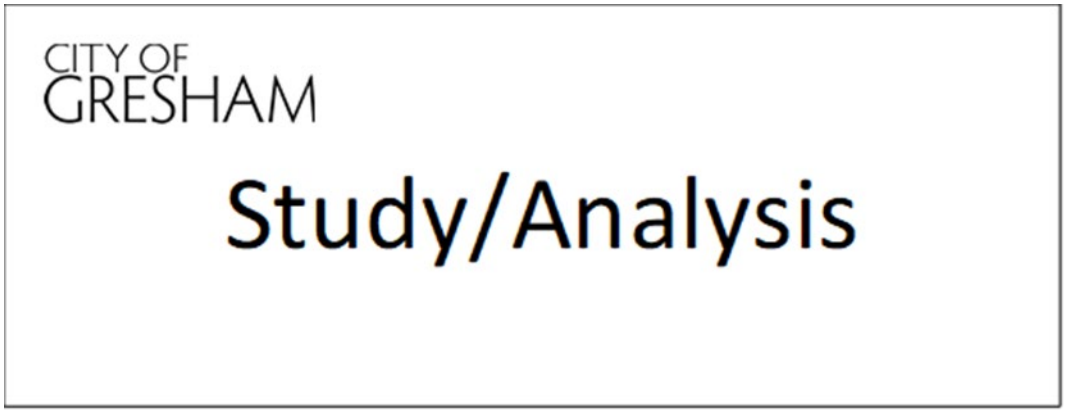
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	256,469	140,383	145,998	151,838	170,059	183,664	1,048,411
Resources Total		**256,469**	**140,383**	**145,998**	**151,838**	**170,059**	**183,664**	**1,048,411**
Expenses	Design/Const Admin	45,000	24,629	25,614	26,638	30,600	33,000	185,481
	Construction	179,969	98,514	102,454	106,553	118,559	128,064	734,113
	Admin (14%)	31,500	17,240	17,930	18,647	20,900	22,600	128,817
Expenses Total		**256,469**	**140,383**	**145,998**	**151,838**	**170,059**	**183,664**	**1,048,411**

CIPWW00035: CCTV Inspection of Collection System Large Diameter Pipe

Description: This project will fund the CCTV inspection of the 24" and over pipe in the collection system. The proposal will include the use of sonar to determine the amount of debris in the flow areas of the pipe. With the use of this advanced equipment, the shape and thickness of the pipe can be determined, along with recording the condition of the pipe. This is initial budget will provide guidance for how best to approach the inspection of the City's trunk sewers.

Justification: This project is needed to provide information on a system of pipes that have not been inspected since constructed. Some of the pipes are over sixty years old.

Type of project: Inspection/Study.



Estimated Dollars:

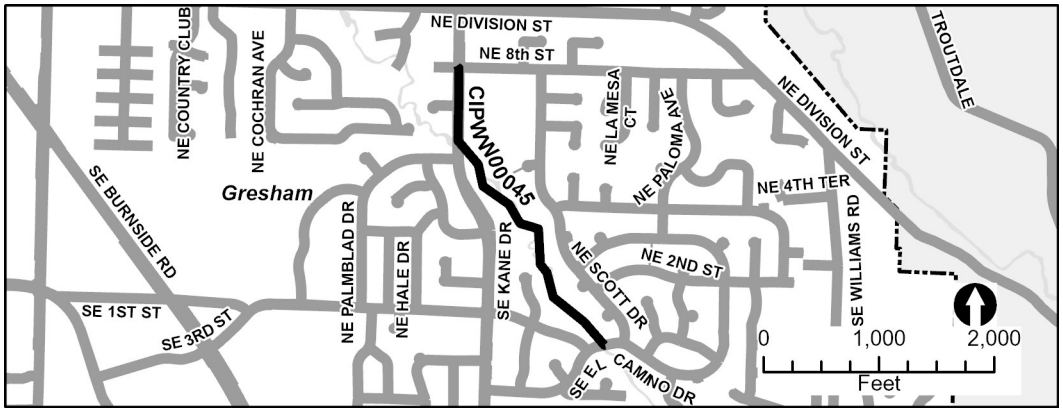
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	207,701	223,000	223,000	0	0	0	653,701
Resources Total		**207,701**	**223,000**	**223,000**	**0**	**0**	**0**	**653,701**
Expenses	Design/Const Admin	182,201	195,600	195,600	0	0	0	573,401
	Admin (14%)	25,500	27,400	27,400	0	0	0	80,300
Expenses Total		**207,701**	**223,000**	**223,000**	**0**	**0**	**0**	**653,701**

CIPWW00045: Upper Kelly Creek Basin Trunk Improvement, Phase 1

Description: This project would increase the capacity of the system in the problem area and reduce the amount of inflow entering the system. 2020 Collection Master Plan Project KC1 and SDC project #1.1.

Justification: This project provides sewerage system capabilities for transmitting current and projected sewerage flows.

Type of project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

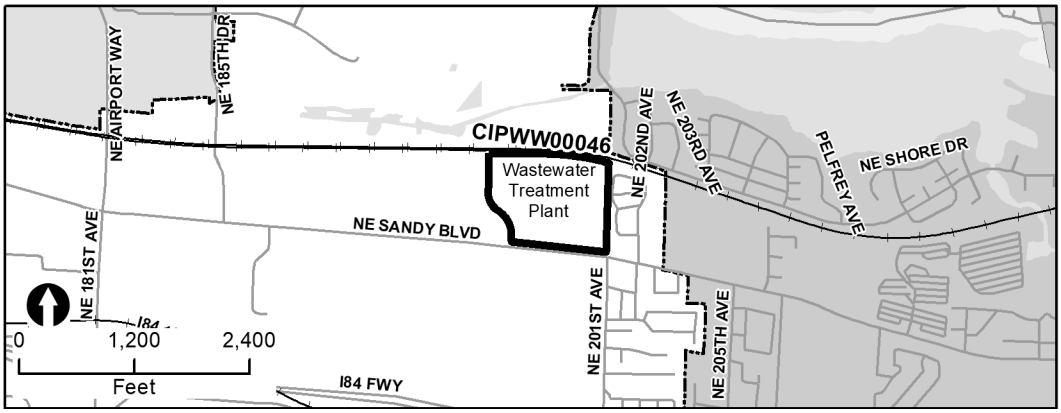
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	0	266,958	1,512,758	0	0	0	1,779,716
Resources Total		**0**	**266,958**	**1,512,758**	**0**	**0**	**0**	**1,779,716**
Expenses	Design/Const Admin	0	100,000	100,000	0	0	0	200,000
	Construction	0	134,158	1,226,958	0	0	0	1,361,116
	Admin (14%)	0	32,800	185,800	0	0	0	218,600
Expenses Total		**0**	**266,958**	**1,512,758**	**0**	**0**	**0**	**1,779,716**

CIPWW00046: WWTP Disinfection Improvements

Description: This project will improve and modernize existing disinfection equipment such as the chlorine contact basins, residual chlorine sensors, equipment controls, and ancillary components. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. SDC project #WWTP 9.

Justification: Much of the existing disinfection equipment requires replacement or upgrades to continue operating reliably. Failure of disinfection system components could result in not meeting NPDES permit requirements. The existing equipment was installed in 1995 and has reached the end of its useful life.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

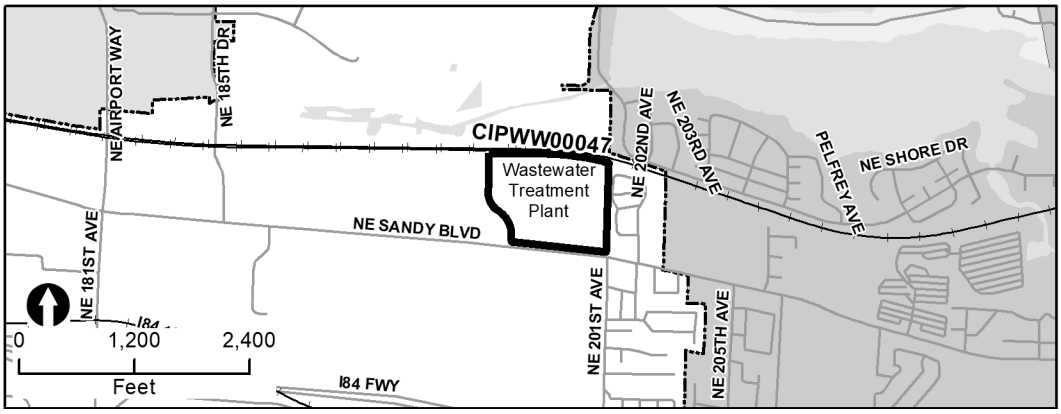
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	1,697,069	230,000	0	0	0	0	1,927,069
Resources Total		**1,697,069**	**230,000**	**0**	**0**	**0**	**0**	**1,927,069**
Expenses	Design/Const Admin	175,000	15,000	0	0	0	0	190,000
	Construction	1,313,669	186,800	0	0	0	0	1,500,469
	Admin (14%)	208,400	28,200	0	0	0	0	236,600
Expenses Total		**1,697,069**	**230,000**	**0**	**0**	**0**	**0**	**1,927,069**

CIPWW00047: WWTP Belt Press Replacement

Description: This project designs and constructs the replacement of the WWTP Belt Press Thickener and ancillary equipment. The existing equipment is reaching the end of its useful life and requires replacement and modernization. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: Replacing existing aging equipment with new modern equipment will improve reliability and performance, as well as reducing the cost of solids handling and disposal. The existing belt press was installed in 1987 and has reached the end of its useful life.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

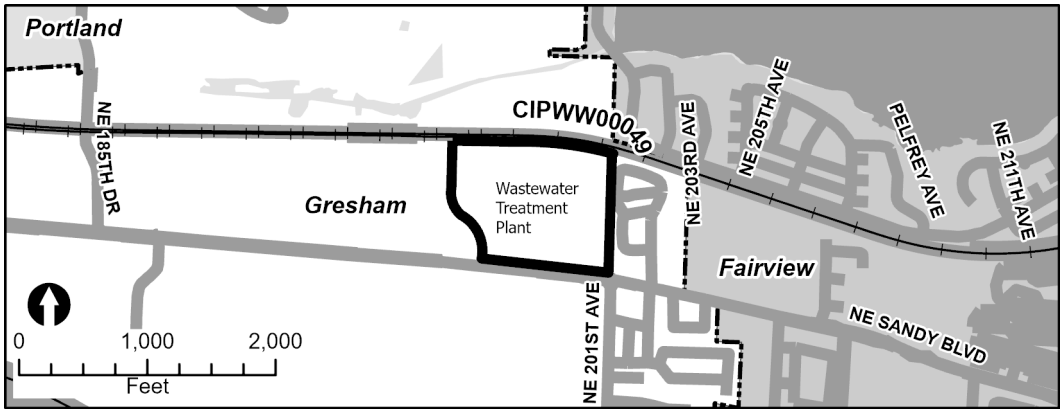
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	5,939,400	890,910	0	0	0	0	6,830,310
Resources Total		**5,939,400**	**890,910**	**0**	**0**	**0**	**0**	**6,830,310**
Expenses	Design/Const Admin	500,000	25,000	0	0	0	0	525,000
	Construction	4,710,000	756,510	0	0	0	0	5,466,510
	Admin (14%)	729,400	109,400	0	0	0	0	838,800
Expenses Total		**5,939,400**	**890,910**	**0**	**0**	**0**	**0**	**6,830,310**

CIPWW00049: WWTP Upper Plant Secondary Clarifier No. 5

Description: This project will design & construct a new secondary clarifier No. 5 at the WWTP. As identified in the October 2017 WWTP Master Plan Update following construction, this project would provide increased WWTP capacity and redundancy as needed for projected growth and increased flows to the WWTP. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. SDC project #WWTP 1 and #WWTP 4.

Justification: The project would provide increased WWTP capacity to provide treatment for projected growth and increased flows to the WWTP. In addition, the project is needed to provide a redundant secondary clarifier to the existing clarifier No. 4. Currently, failure of secondary No. 4 would result in not meeting NPDES permit requirements.

Type of project: Design and construction of facilities for growth.



Estimated Dollars:

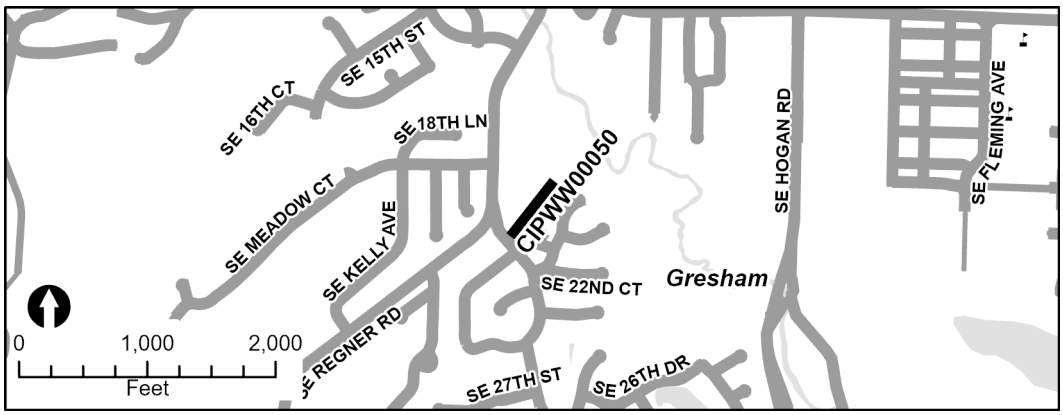
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Other	2,928,964	5,057,000	0	0	0	0	7,985,964
	Operating	0	7,039,056	0	0	0	0	7,039,056
	SDC	0	2,200,000	0	0	0	0	2,200,000
Resources Total		**2,928,964**	**14,296,056**	**0**	**0**	**0**	**0**	**17,225,020**
Expenses	Design/Const Admin	350,000	300,000	0	0	0	0	650,000
	Construction	2,219,264	12,240,356	0	0	0	0	14,459,620
	Admin (14%)	359,700	1,755,700	0	0	0	0	2,115,400
Expenses Total		**2,928,964**	**14,296,056**	**0**	**0**	**0**	**0**	**17,225,020**

CIPWW00050: Nechacokee Creek Bank Stabilization

Description: This project will design & construct stream bank stabilization improvements where previously installed wastewater collection pipes are exposed or nearing exposure from excessive streambank erosion.

Justification: The project would provide stream bank stabilization improvements which will significantly decrease the risks of wastewater collection pipe failure and potential wastewater discharge to the environment from pipe failure.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

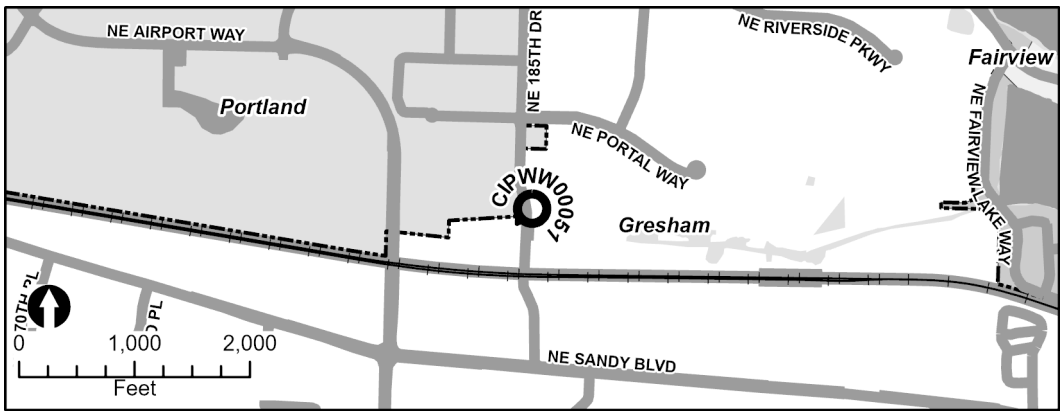
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	638,400	0	0	0	0	0	638,400
Resources Total		**638,400**	**0**	**0**	**0**	**0**	**0**	**638,400**
Expenses	Design/Const Admin	89,400	0	0	0	0	0	89,400
	Construction	470,600	0	0	0	0	0	470,600
	Admin (14%)	78,400	0	0	0	0	0	78,400
Expenses Total		**638,400**	**0**	**0**	**0**	**0**	**0**	**638,400**

CIPWW00051: 185th St. Pump Station Improvements

Description: This project will design & construct wet well improvements to the 185th street wastewater pump station. These improvements include new wastewater wet well mixing equipment and the associated ancillary equipment needed to properly control grease buildup at the pump station. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: The project would install wet well mixing equipment that will decrease the frequency of staff cleaning required due to ongoing grease buildup. It is expected that a significant decrease in operation and maintenance costs will result from this project.

Type of project: Upgrade of existing facilities and utilities.



Estimated Dollars:

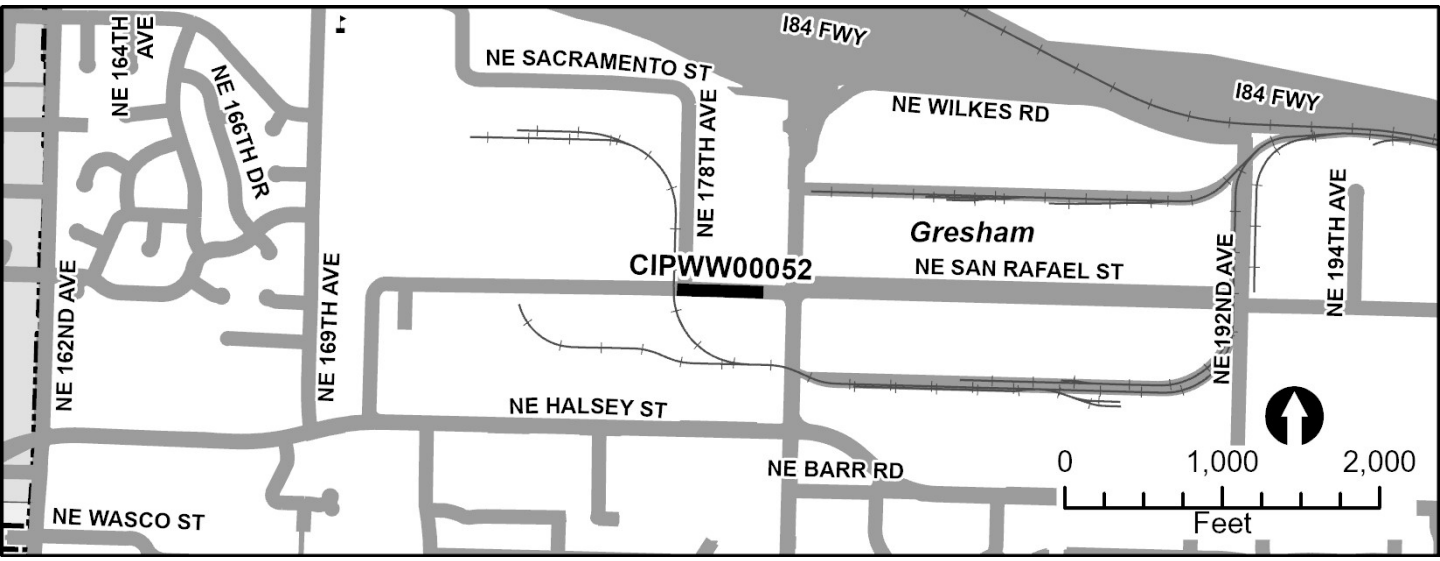
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	581,400	114,000	0	0	0	0	695,400
Resources Total		**581,400**	**114,000**	**0**	**0**	**0**	**0**	**695,400**
Expenses	Design/Const Admin	70,000	10,000	0	0	0	0	80,000
	Construction	440,000	90,000	0	0	0	0	530,000
	Admin (14%)	71,400	14,000	0	0	0	0	85,400
Expenses Total		**581,400**	**114,000**	**0**	**0**	**0**	**0**	**695,400**

CIPWW00052: San Rafael Sewer Main Replacement

Description: This project will design & construct main line and lateral replacement near 181st and San Rafael where system deficiencies have been verified.

Justification: The project will replace pipes that have failed and bring them back to their original function and capacity.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

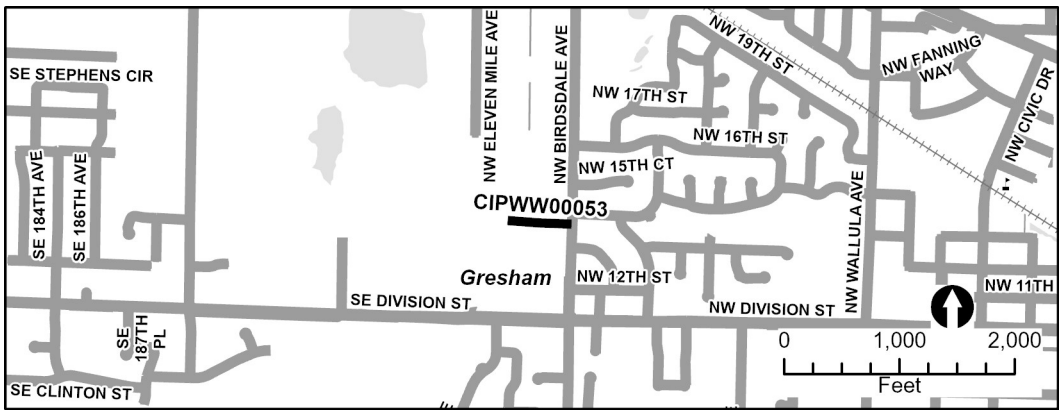
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	0	747,593	0	0	0	0	747,593
Resources Total		**0**	**747,593**	**0**	**0**	**0**	**0**	**747,593**
Expenses	Design/Const Admin	0	50,000	0	0	0	0	50,000
	Construction	0	605,793	0	0	0	0	605,793
	Admin (14%)	0	91,800	0	0	0	0	91,800
Expenses Total		**0**	**747,593**	**0**	**0**	**0**	**0**	**747,593**

CIPWW00053: Birdsdale Sewer Main Replacement

Description: This project will design & construct main line and lateral replacement near Division street and Birdsdale where system deficiencies have been verified.

Justification: The project will replace pipes that have failed and bring them back to their original function and capacity.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

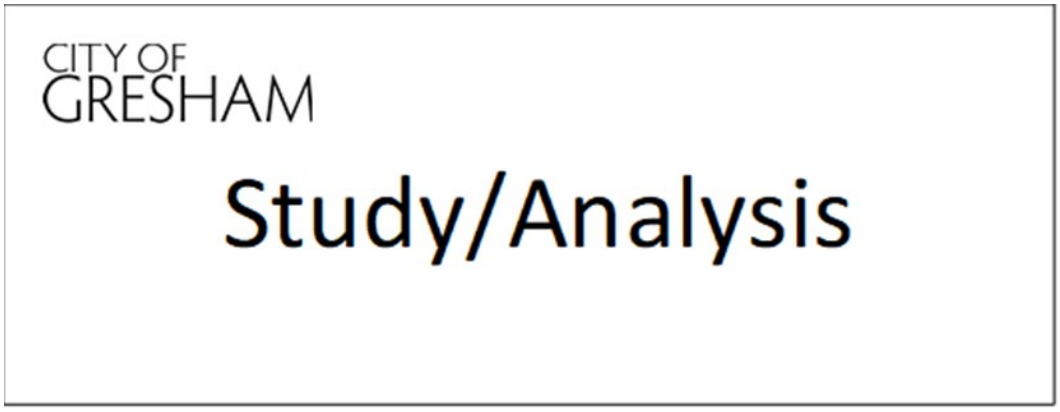
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Repair/Replacement Reserves	0	754,382	0	0	0	0	754,382
Resources Total		**0**	**754,382**	**0**	**0**	**0**	**0**	**754,382**
Expenses	Design/Const Admin	0	50,000	0	0	0	0	50,000
	Construction	0	611,782	0	0	0	0	611,782
	Admin (14%)	0	92,600	0	0	0	0	92,600
Expenses Total		**0**	**754,382**	**0**	**0**	**0**	**0**	**754,382**

CIPWW00054: WWTP Master Plan Update

Description: This project will provide a Plan for the ongoing capital improvements needed at the WWTP to comply with NPDES Permit requirements and ensure the WWTP can treat the wastewater current and projected flows while meeting water quality criteria in the Columbia River.

Justification: The project is needed to meet Oregon DEQ requirements for planning for ongoing WWTP NPDES Permit compliance.

Type of project: Study.



Estimated Dollars:

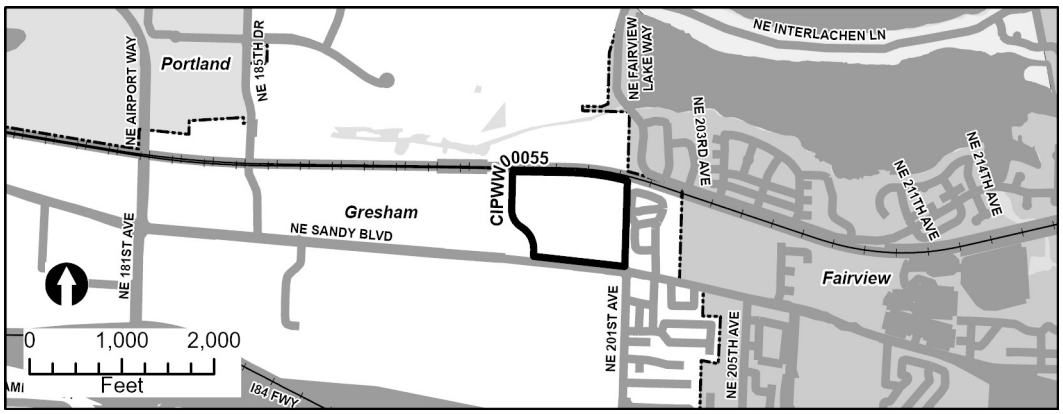
Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	0	0	0	0	0	228,000	228,000
Resources Total		**0**	**0**	**0**	**0**	**0**	**228,000**	**228,000**
Expenses	Design/Const Admin	0	0	0	0	0	200,000	200,000
	Admin (14%)	0	0	0	0	0	28,000	28,000
Expenses Total		**0**	**0**	**0**	**0**	**0**	**228,000**	**228,000**

CIPWW00055: WWTP Lower Plant Aeration Piping Improvements

Description: This project will design and construct the lower blower building aeration piping replacement.

Justification: The project is needed to repair ongoing aeration piping leaks between the lower blower building and the aeration basins.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Resources	Operating	0	0	364,800	0	0	0	364,800
Resources Total		**0**	**0**	**364,800**	**0**	**0**	**0**	**364,800**
Expenses	Design/Const Admin	0	0	25,000	0	0	0	25,000
	Construction	0	0	295,000	0	0	0	295,000
	Admin (14%)	0	0	44,800	0	0	0	44,800
Expenses Total		**0**	**0**	**364,800**	**0**	**0**	**0**	**364,800**

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Wastewater Unfunded and Future Summary								
Project	Project Name	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	Total
314100	Johnson Creek - Springwater Trunk	0	0	0	0	0	0	1,399,960
316100	WWTP Anaerobic Digestion and Cogeneration Expansion,	0	0	0	0	0	0	16,826,400
320200	Linneman Pump Station Capacity Upgrade	0	0	0	0	0	0	2,052,000
320300	WWTP Asset Replacement and Refurbishment (R&R) Proj	0	0	0	0	0	0	22,922,441
320400	1960's Pipe Rehabilitation/Maint. Program	0	0	0	0	0	0	42,428,554
320500	Collection System Trunk Assessment	0	0	0	0	0	0	2,066,000
322300	Tier 2 Seismic Upgrades	0	0	0	0	0	0	71,576,570
322400	Glisan St Bank Stabilization Seismic	0	0	0	0	0	0	675,000
322500	Jenne Rd. Major Bank Stabilization Seismic	0	0	0	0	0	0	3,500,000
322600	Johnson Creek Large Diameter Mains	0	0	0	0	0	0	15,231,855
CIPWW00034	WWTP Columbia Slough Bridge Replacement	0	0	0	0	0	0	719,924
CIPWW00036	Bridge Crossing at NE 185th Street	0	0	0	0	0	0	234,633
CIPWW00037	Upper Johnson Creek Upgrade	0	0	0	0	0	0	3,287,638
CIPWW00038	Upper Regner Rd Trunk	0	0	0	0	0	0	2,936,518
CIPWW00039	Stark Basin Improvement	0	0	0	0	0	0	837,122
CIPWW00040	East Basin Trunk Upgrade Phase 4	0	0	0	0	0	0	1,852,037
CIPWW00042	Lower Kelly Creek Trunk Upgrade Phase 2	0	0	0	0	0	0	2,108,716
CIPWW00044	Tier 1 Seismic Upgrades	0	0	0	0	0	0	29,865,029
CIPWW00048	WWTP Biosolids Storage Facility Expansion	0	0	0	0	0	0	3,581,062
CIPWW00056	Upper Kelly Creek Basin Trunk Improvement, Phase 2	0	0	0	0	0	0	167,619
CIPWW00057	Anaerobic Digestion and Cogeneration Expansion, Phase	0	0	0	0	0	0	12,200,000
CIPWW00058	Anaerobic Digestion and Cogeneration Expansion, Phase	0	0	0	0	0	0	10,200,000
CIPWW00059	Anaerobic Digestion and Cogeneration Expansion, Phase	0	0	0	0	0	0	27,800,000
Grand Total		**0**	**0**	**0**	**0**	**0**	**0**	**274,469,078**

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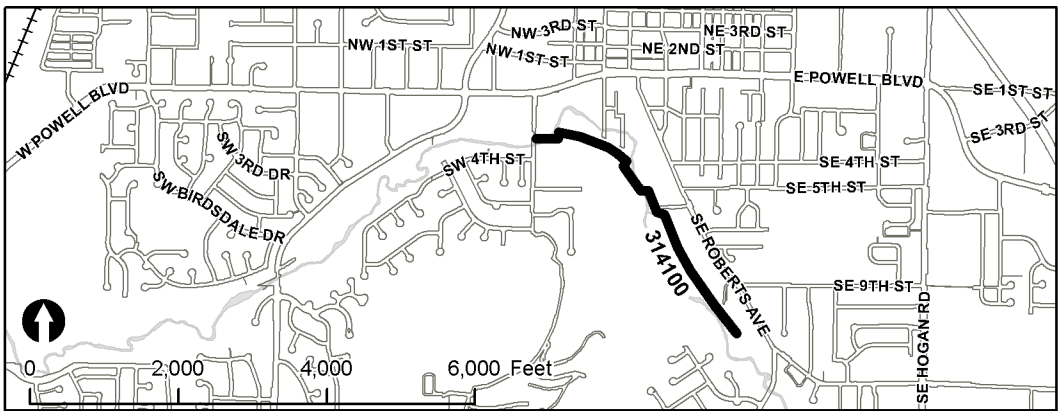
314100: Johnson Creek - Springwater Trunk

Description: This project will upsize an existing 12" sanitary sewer line to a 24" diameter line to meet increased flow demands as identified in the Wastewater Masterplan. SDC project #3.

Justification: This project is needed to provide adequate wastewater conveyance capacity for growth.

Type of Project: Design and construction of facilities and utilities for growth.



Estimated Dollars:

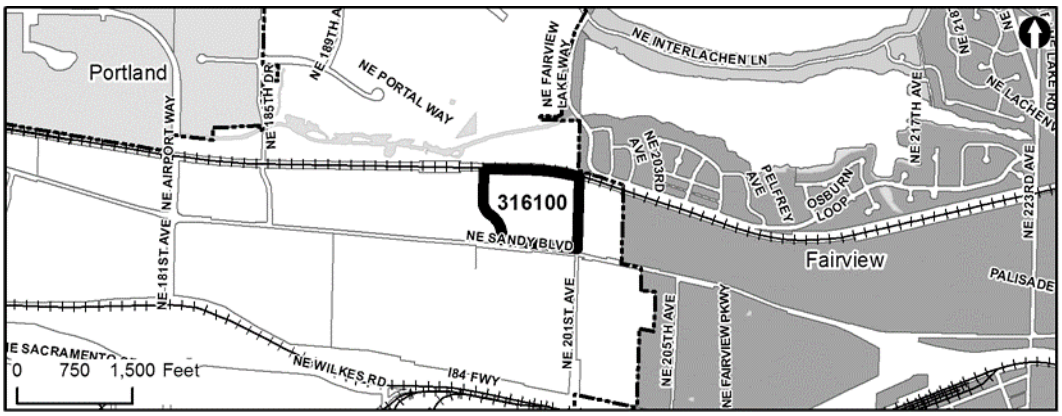
Funds	Description	Total
Resources	Operating	909,974
	SDC	489,986
Resources Total		**1,399,960**
Expenses	Design/Const Admi	167,956
	Construction	1,060,046
	Admin (14%)	171,958
Expenses Total		**1,399,960**

316100: WWTP Anaerobic Digestion and Cogeneration Expansion, Phase 1

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 1 of the project will design and construct a third thermophilic anaerobic digester and associated support systems as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 6.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

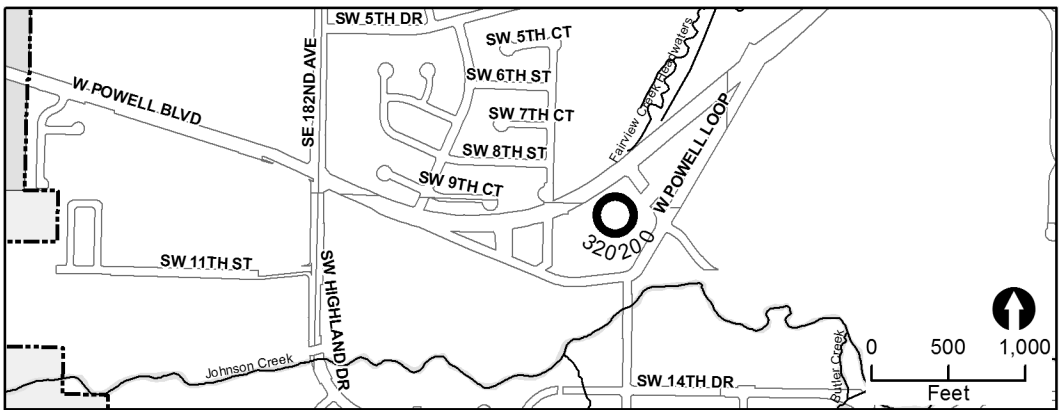
Funds	Description	Total
Resources	SDC	16,826,400
Resources Total		**16,826,400**
Expenses	Design/Const Admi	2,019,168
	Construction	12,740,868
	Admin (14%)	2,066,364
Expenses Total		**16,826,400**

320200: Linneman Pump Station Capacity Upgrade

Description: This project constructs additional capacity at the Linneman Pump Station as identified in the 2005 Linneman Pump Station Master Plan. The project consists of adding additional pumps at the pump station. SDC project #WWTP 3.

Justification: This project will provide the needed capacity for additional growth in the Johnson Creek Basin, including the Pleasant Valley and Springwater areas.

Type of Project: Construction of new facilities.



Estimated Dollars:

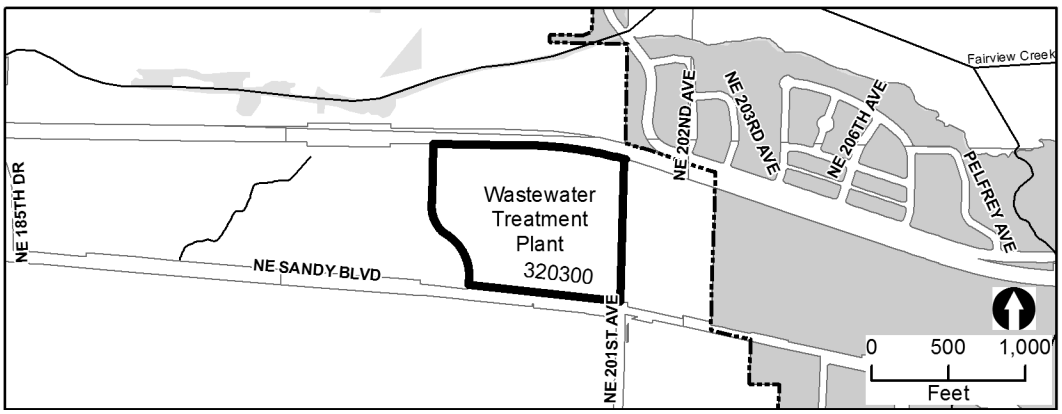
Funds	Description	Total
Resources	SDC	2,052,000
Resources Total		**2,052,000**
Expenses	Design/Const Admi	246,240
	Construction	1,553,774
	Admin (14%)	251,986
Expenses Total		**2,052,000**

320300: WWTP Asset Replacement and Refurbishment (R&R) Project (Yrs 6-20)

Description: This is an ongoing project that designs and constructs the R&R of assets at the WWTP and WW pumping stations that are scheduled per the asset management plan. Wastewater's newly completed Asset Management Program has developed a comprehensive asset inventory, asset condition and long range asset replacement planning methodology. This methodology will ensure that the City is appropriately planning, evaluating and replacing Assets to ensure the lowest life cycle cost at an appropriate level of service with adequate long range funding for the projects. This project is funded at $800,000 in year 6 escalated 3% per year thru year 20.

Justification: This project provides the needed funding for anticipated asset replacement and refurbishment as identified in the long range WWTP Asset Replacement Plan.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	Total
Resources	Repair/Replacemer	22,922,441
Resources Total		**22,922,441**
Expenses	Design/Const Admi	4,021,481
	Construction	16,085,924
	Admin (14%)	2,815,036
Expenses Total		**22,922,441**

320400: 1960's Pipe Rehabilitation/Maint. Program

Description: This ongoing project completes systematic pipeline rehabilitation and maintenance projects as identified from the Sanitary Sewer Evaluation Study project, or subsequently as determined from ongoing collection system condition assessment. It addresses operational ongoing and anticipated operational concerns, primarily with the oldest sanitary sewer lines (circa 1960s) around downtown Gresham, reducing long term operational and maintenance costs. The majority of this work will likely implement a combination of open trench, pipe bursting, and "cure-in-place" pipe lining methods. (CIPWW00006 is in response to already deficient and localized sections of conveyance system).

Justification: These assets have all passed their industry standard lifespan. The assets also have developed visually confirmed physical failures. The failure of these assets can lead to loss of service, backups and possibly overflows.

Type of Project: Repair and rehabilitation of pipeline facilities.

Estimated Dollars:

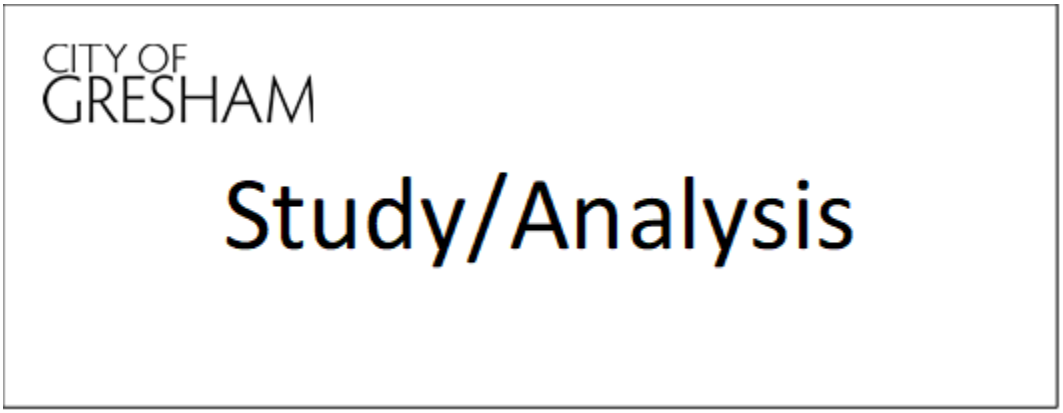
Funds	Description	Total
Resources	Operating	42,428,554
Resources Total		**42,428,554**
Expenses	Design/Const Admi	5,582,700
	Construction	31,635,354
	Admin (14%)	5,210,500
Expenses Total		**42,428,554**

320500: Collection System Trunk Assessment

Description: This program will provide assessment of the large trunk lines of the sanitary sewer collection system. These lines (generally larger than 30 inch diameters) cannot be inspected with the City's standard CCTV inspection program. The program will provide laser and sonar as well as CCTV inspection to provide a thorough condition assessment of the City's large trunk lines.

Justification: This program will provide the City the condition of the uninspected large trunk lines. The data from this inspection will be used by asset management software to prioritize the replacement/repair of the sanitary trunk sewer system.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	2,066,000
Resources Total		**2,066,000**
Expenses	Design/Const Admi	1,812,300
	Admin (14%)	253,700
Expenses Total		**2,066,000**

322300: Tier 2 Seismic Upgrades

Description: This project hardens the existing large diameter pipe to resist seismic events. The use of cured in place pipe using woven fiberglass that uses the host pipe will meet seismic standards. SDC project #29.

Justification: These backbone systems are vital to the continued service of our major piping network to insure the safe functioning of our city in the event of a seismic event.

Type of Project: Design and construction of WW facilities.

Estimated Dollars:

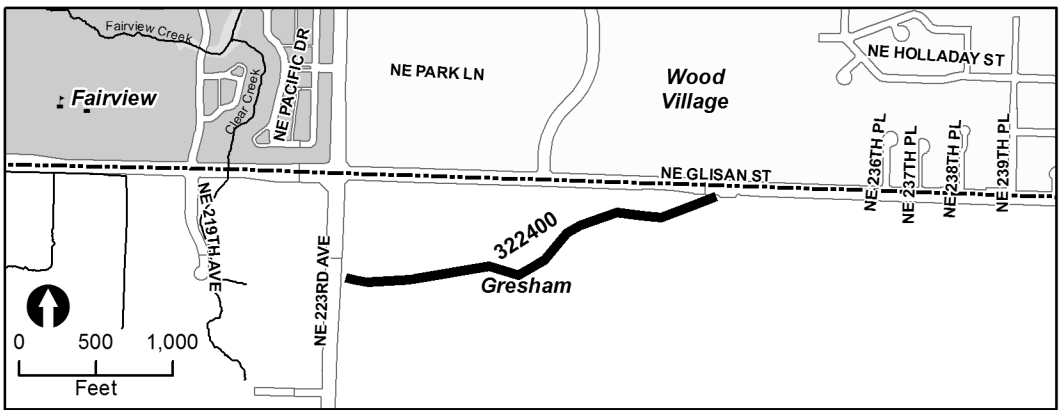
Funds	Description	Total
Resources	Operating	60,968,922
	SDC	10,607,648
Resources Total		**71,576,570**
Expenses	Design/Const Admi	8,589,159
	Construction	54,197,259
	Admin (14%)	8,790,152
Expenses Total		**71,576,570**

322400: Glisan St Bank Stabilization Seismic

Description: This project designs and constructs the stabilization of the sewerline in Glisan St. This section of the roadway is listed as a landslide hazard area.

Justification: Securing this section of the system is necessary to insure the continued service to the large commercial area.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

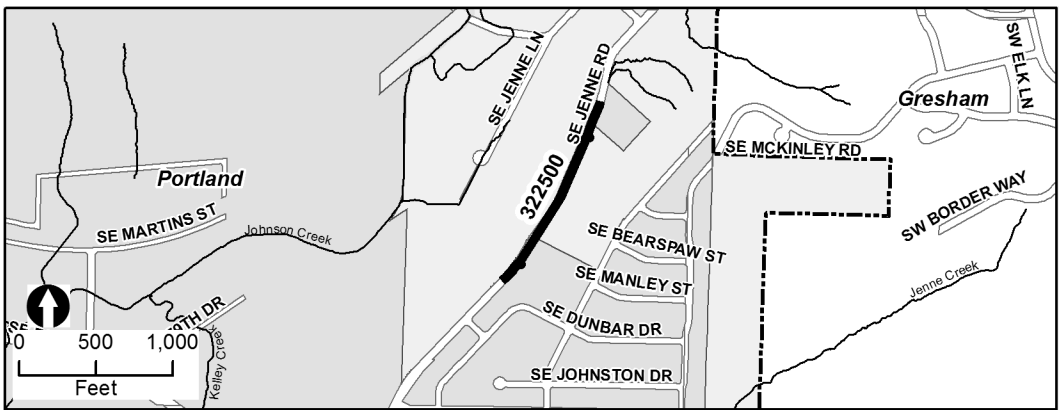
Funds	Description	Total
Resources	Grant	506,250
	Operating	168,750
Resources Total		**675,000**
Expenses	Design/Const Admi	88,800
	Construction	503,300
	Admin (14%)	82,900
Expenses Total		**675,000**

322500: Jenne Rd. Major Bank Stabilization Seismic

Description: This project designs and constructs a roadway stabilization project for over 1,500 feet of Jenne Road to protect a 24 inch wastewater line. The roadway is benched into the steep hillside with a narrow roadway and steep slopes on the downhill side of the road.

Justification: This area has been identified as a severe landslide area with potential damage to numerous utilities, the roadway and nearby structures.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

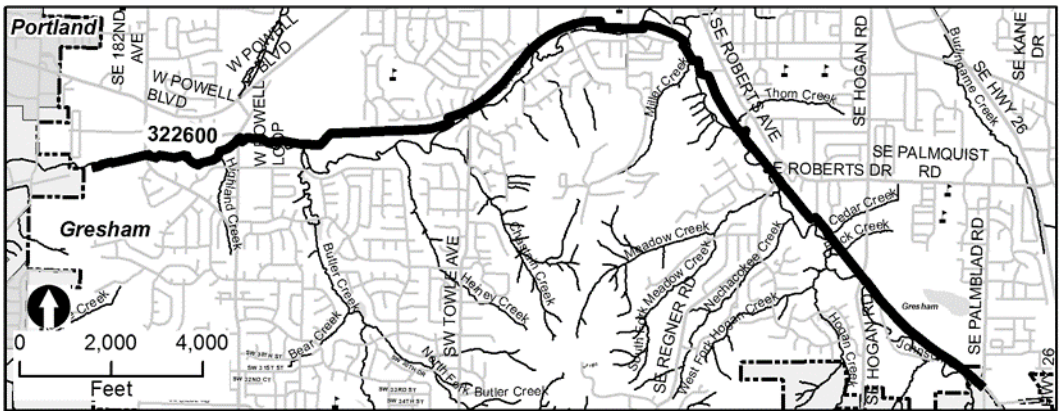
Funds	Description	Total
Resources	Grant	2,625,000
	Operating	875,000
Resources Total		**3,500,000**
Expenses	Design/Const Admi	460,500
	Construction	2,609,700
	Admin (14%)	429,800
Expenses Total		**3,500,000**

322600: Johnson Creek Large Diameter Mains

Description: This multi-year seismic project designs and constructs an effort to stabilize banks along Johnson Creek that hold a sewer line and have a moderate threat of landslide that would threaten the alignment of the sewer line. Destruction of the sewer line would result in sewage flowing directly into the creek. The budget reflects the first year of a multi-year seismic project anticipated to cost $13 million and contingent upon grant funding.

Justification: Stabilizing the creek bank will ensure that the existing utilities in the vicinity will function properly and not spill into the creek.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

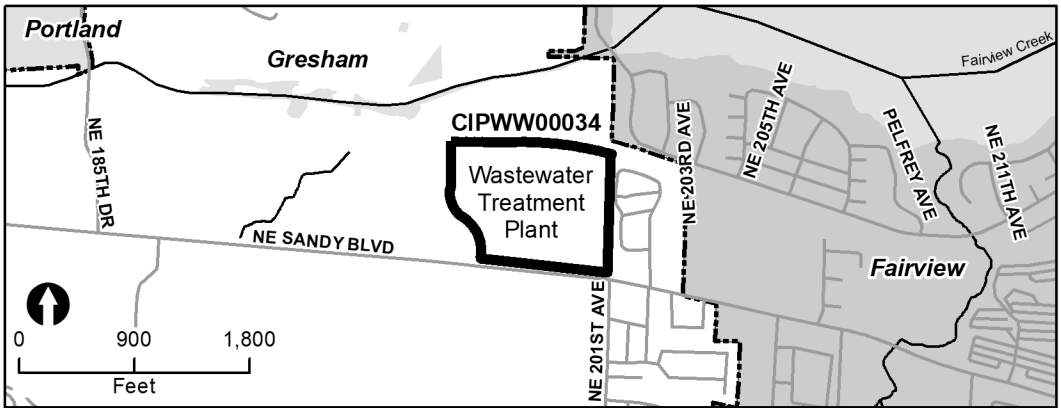
Funds	Description	Total
Resources	Operating	15,005,974
	SDC	225,881
Resources Total		**15,231,855**
Expenses	Design/Const Admi	1,827,819
	Construction	11,533,433
	Admin (14%)	1,870,603
Expenses Total		**15,231,855**

CIPWW00034: WWTP Columbia Slough Bridge Replacement

Description: This project constructs a replacement Columbia Slough Access Bridge to the WWTP property as identified in the October, 2017 WWTP Master Plan Update currently estimated to begin in 2030.

Justification: The project is needed to replace an antiquated bridge that was installed for temporary use by the Multnomah County Drainage District.

Type of Project: Construction of new WWTP facilities.



Estimated Dollars:

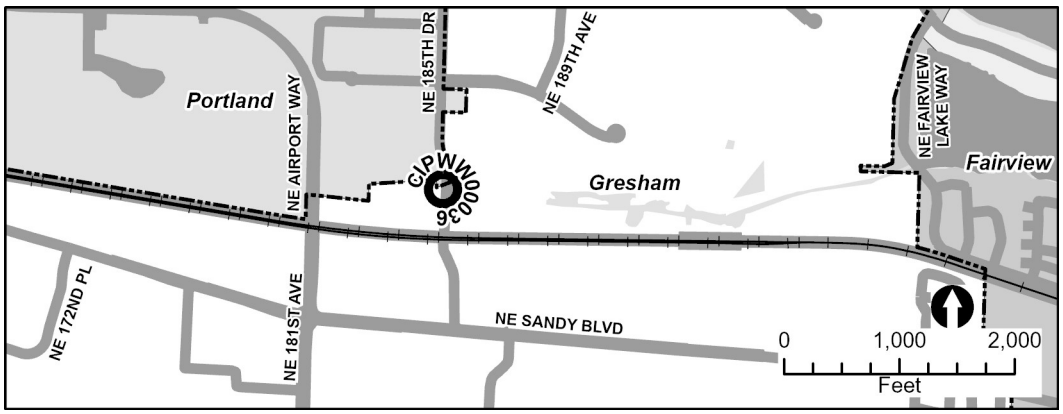
Funds	Description	Total
Resources	SDC	719,924
Resources Total		**719,924**
Expenses	Design/Const Admi	86,389
	Construction	545,094
	Admin (14%)	88,441
Expenses Total		**719,924**

CIPWW00036: Bridge Crossing at NE 185th Street

Description: This project hardens the existing pipe spanning the NE 185th street bridge to better resist seismic events. This is the 2020 master Plan project C-13 and SDC project #28.

Justification: These critical backbone piping systems are vital to the continued service of our major piping network to insure the safe functioning of our city in the event of a seismic event.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

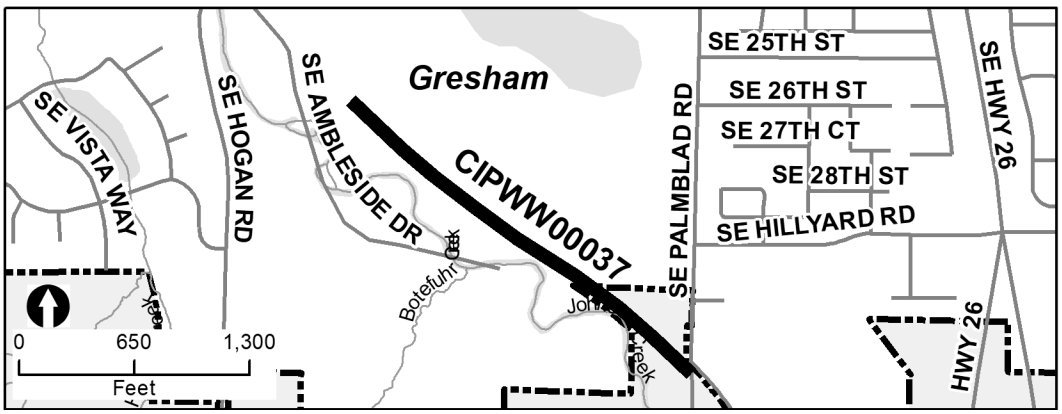
Funds	Description	Total
Resources	Operating	199,861
	SDC	34,772
Resources Total		**234,633**
Expenses	Design/Const Admi	28,112
	Construction	177,690
	Admin (14%)	28,831
Expenses Total		**234,633**

CIPWW00037: Upper Johnson Creek Upgrade

Description: This project will upsize an existing 12" sanitary sewer line to a 24" diameter line to meet increased flow demands as identified in the Wastewater Masterplan. 2020 Collection Master plan project JC4 (near term) and SDC project #22.

Justification: This project is needed to provide adequate wastewater conveyance capacity for growth.

Type of Project: Design and construction of facilities and utilities for growth.



Estimated Dollars:

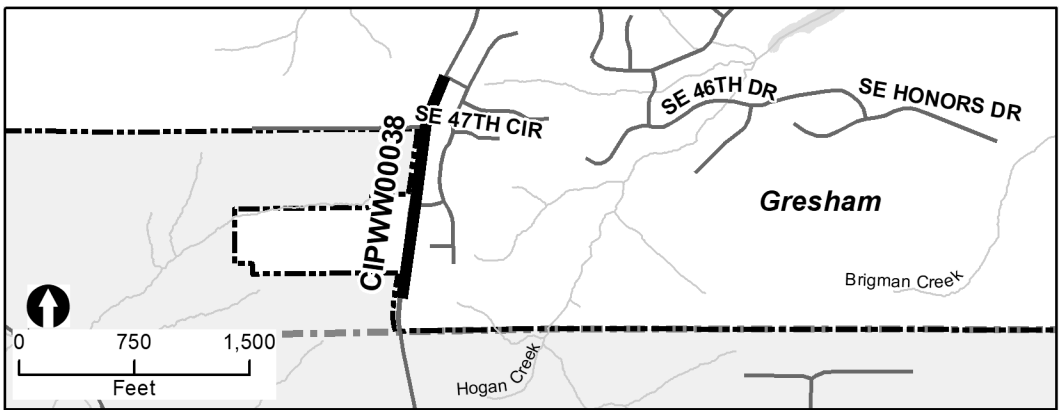
Funds	Description	Total
Resources	Operating	2,695,863
	SDC	591,775
Resources Total		**3,287,638**
Expenses	Design/Const Admi	394,497
	Construction	2,489,410
	Admin (14%)	403,731
Expenses Total		**3,287,638**

CIPWW00038: Upper Regner Rd Trunk

Description: This project extends the wastewater system south in Regner Rd. to serve properties not presently served. This is Collection Master Plan project JC3 (medium term) and SDC project #23.

Justification: Wastewater collection system extension required for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

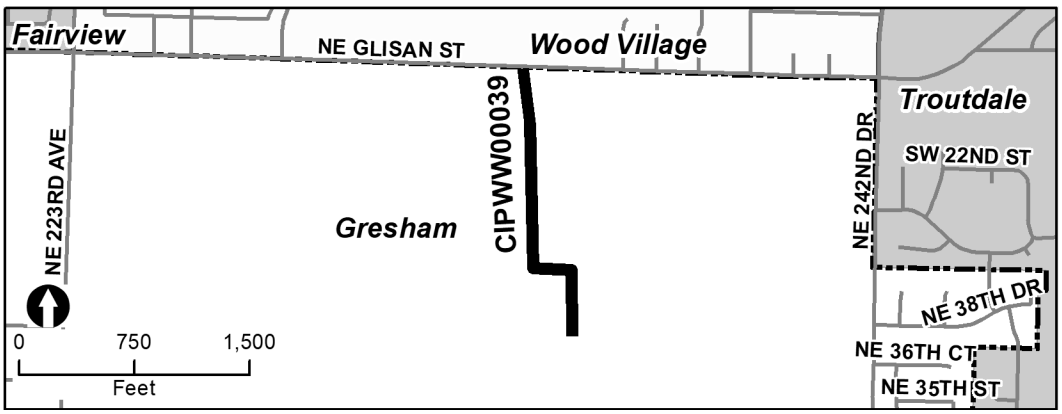
Funds	Description	Total
Resources	Operating	2,936,518
Resources Total		**2,936,518**
Expenses	Design/Const Admi	234,172
	Construction	2,341,721
	Admin (14%)	360,625
Expenses Total		**2,936,518**

CIPWW00039: Stark Basin Improvement

Description: This project will install approximately 2,022-feet of 12-inch sewer main using open trench excavation methods. This project will extend wastewater service into the Gresham Vista Business area. This is Collection Master Plan project SB1 (long term) and SDC project #25.

Justification: Wastewater collection system extension required for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

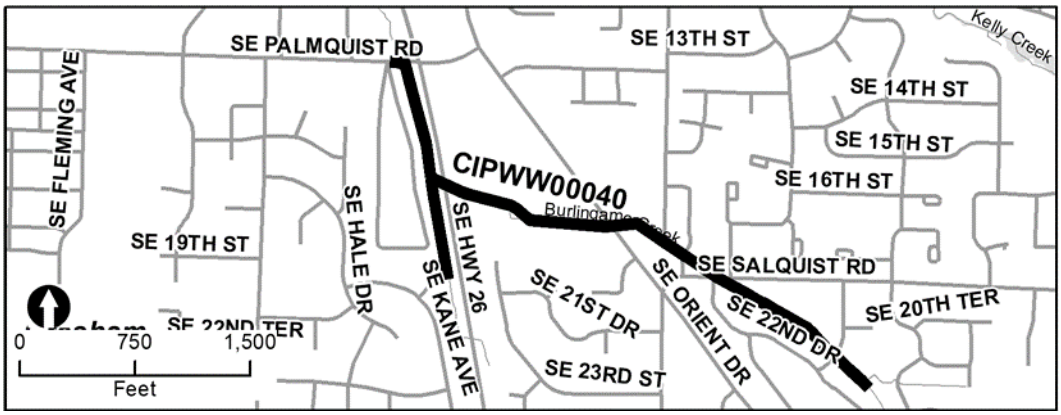
Funds	Description	Total
Resources	SDC	837,122
Resources Total		**837,122**
Expenses	Design/Const Admi	100,445
	Construction	633,872
	Admin (14%)	102,805
Expenses Total		**837,122**

CIPWW00040: East Basin Trunk Upgrade Phase 4

Description: This project will install approximately 4,784-feet of 12-, 14-, and 20-inch sewer main using pipe bursting in several phases; this is phase 4 of 5. This project will correct surcharged areas of the sanitary sewer system. This is Collection Master Plan project E1(medium term) and SDC project #6.4.

Justification: Wastewater collection system extension required for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

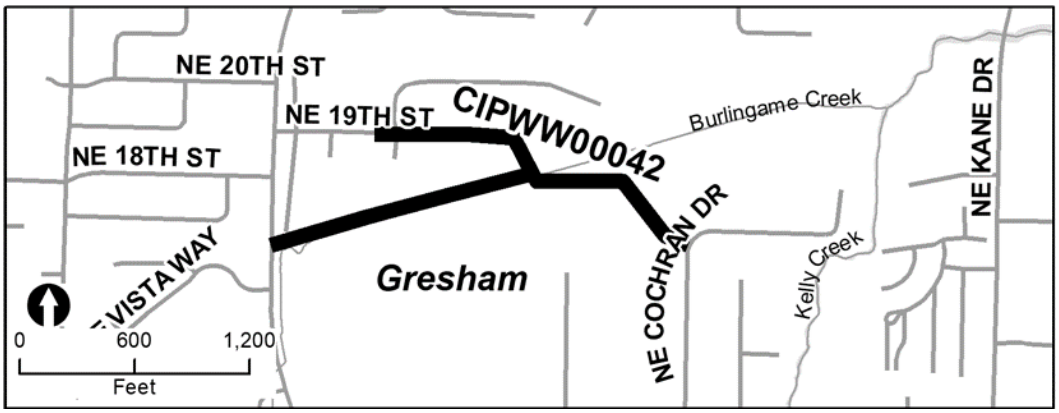
Funds	Description	Total
Resources	SDC	1,852,037
Resources Total		**1,852,037**
Expenses	Design/Const Admi	222,232
	Construction	1,402,341
	Admin (14%)	227,464
Expenses Total		**1,852,037**

CIPWW00042: Lower Kelly Creek Trunk Upgrade Phase 2

Description: This project will increase the capacity of the system in problem areas and reduce the amount of inflow entering the system. This sewer line is located in a low lying area within the Gresham Golf Course. The construction of the project is time sensitive because of the impact on the golf course and the creek in the area. This phase will replace the pipe in the golf course. 2020 Collection Master Plan project KC2 (Medium Term) and SDC project #2.2.

Justification: This project provides sewerage system capabilities for transmitting current and projected sewerage flows. The potential addition of the flows from Barlow High School into this basin add to the justification for construction of this project.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	1,054,358
	SDC	1,054,358
Resources Total		**2,108,716**
Expenses	Design/Const Admi	370,796
	Construction	1,478,957
	Admin (14%)	258,963
Expenses Total		**2,108,716**

CIPWW00044: Tier 1 Seismic Upgrades

Description: The Tier 1 upgrades include trunk sewers serving hospitals, City Hall and the Police Station (Emergency Response Center) within the City. These pipe segments generally consist of concrete sewer piping susceptible to joint separation and manhole damage during a seismic event. The anticipated repair method is likely structural CIPP lining or pipe bursting.

Justification: These backbone systems are vital to the continued service of our major piping network to insure the safe functioning of our city in the event of a seismic event.

Type of Project: Design and construction of WW facilities.

Estimated Dollars:

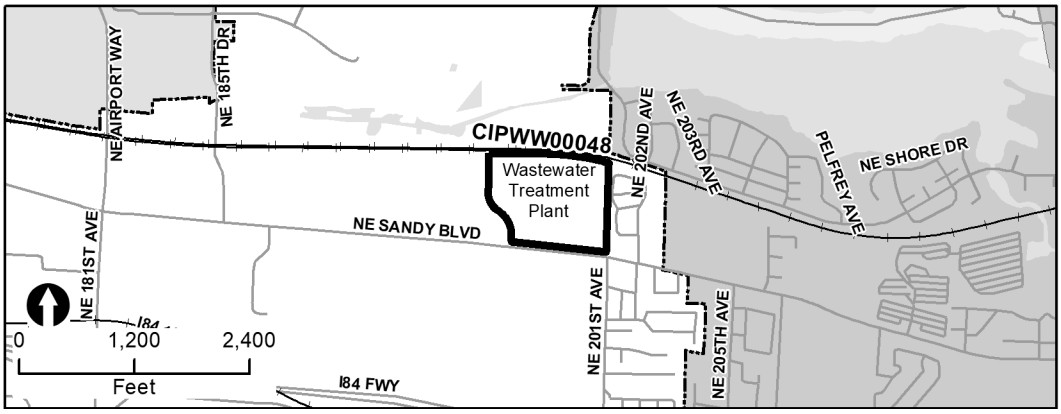
Funds	Description	Total
Resources	Operating	25,439,032
	SDC	4,425,997
Resources Total		**29,865,029**
Expenses	Design/Const Admi	3,583,818
	Construction	22,613,570
	Admin (14%)	3,667,641
Expenses Total		**29,865,029**

CIPWW00048: WWTP Biosolids Storage Facility Expansion

Description: This project constructs additional biosolids storage bays to meet the need for increased biosolids storage capacity as identified in the October, 2017 WWTP Master Plan Update currently estimated to begin in 2030.

Justification: Additional storage capacity will be needed to maintain the 60-day storage requirement for biosolids.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

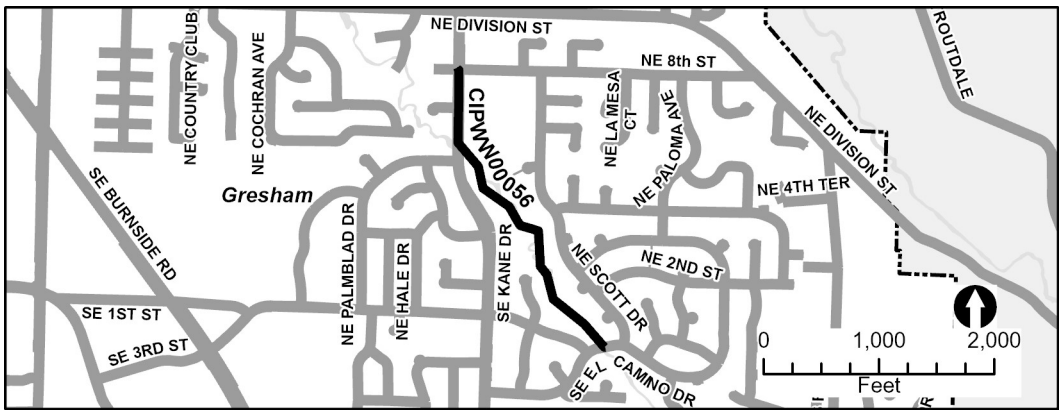
Funds	Description	Total
Resources	SDC	3,581,062
Resources Total		**3,581,062**
Expenses	Design/Const Admi	429,689
	Construction	2,711,631
	Admin (14%)	439,742
Expenses Total		**3,581,062**

CIPWW00056: Upper Kelly Creek Trunk Improvements, Phase 2

Description: This project upsizes a total of 2,000 linear feet of pipe from North of SE El Camino Dr. to NE 8th St. Installation by bursting and open trench excavation of pipe with from 15" to a diameter of 21' to 27". 2020 Collection Master Plan Project KC1 (medium-term) and SDC project 1.2.

Justification: Capacity for future growth, seismic resiliency of backbone infrastructure serving critical customers and reduction of inflow and infiltration.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

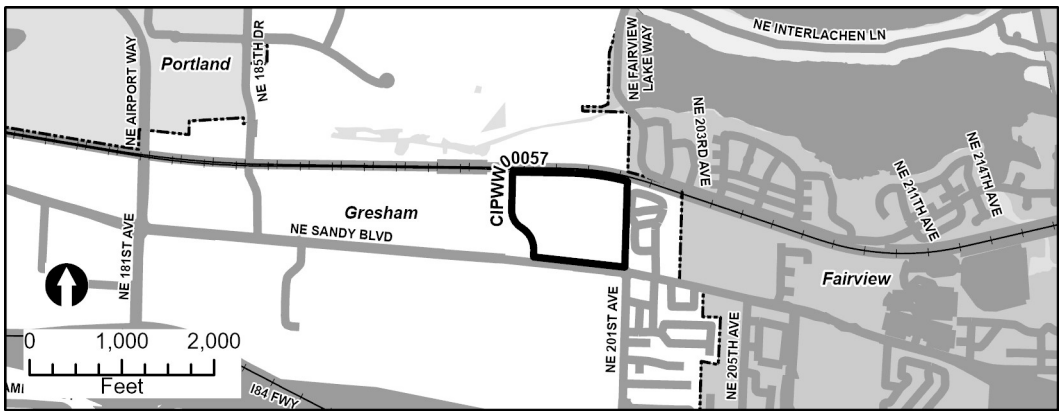
Funds	Description	Total
Resources	Operating	122,362
	SDC	45,257
Resources Total		**167,619**
Expenses	Design/Const Admi	20,110
	Construction	126,886
	Admin (14%)	20,623
Expenses Total		**167,619**

CIPWW00057: Anaerobic Digestion and Cogeneration Expansion, Phase 2

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 2 of the project will design and construct existing Digester 1 and 2 improvements, and a new biogas storage facility as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 6.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

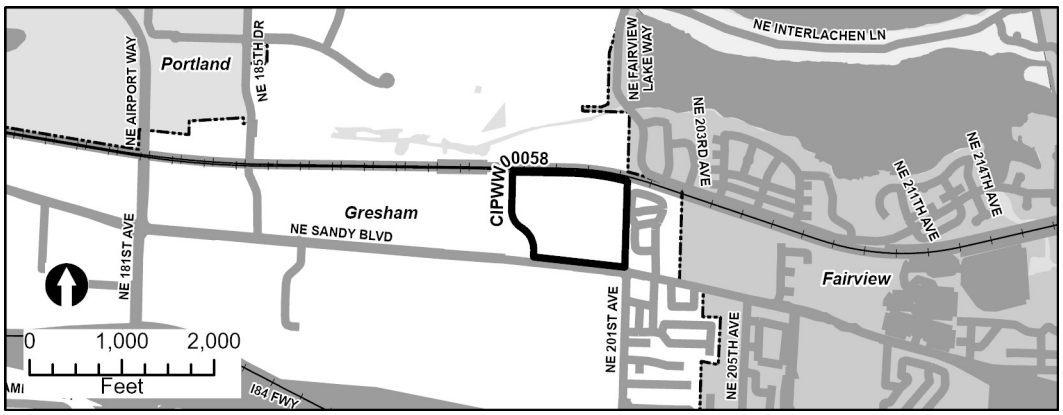
Funds	Description	Total
Resources	Operating	12,200,000
Resources Total		**12,200,000**
Expenses	Design/Const Admi	1,464,000
	Construction	9,237,800
	Admin (14%)	1,498,200
Expenses Total		**12,200,000**

CIPWW00058: Anaerobic Digestion and Cogeneration Expansion, Phase 3

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 3 of the project will design and construct expanded high strength organic waste receiving facilities as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 6.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

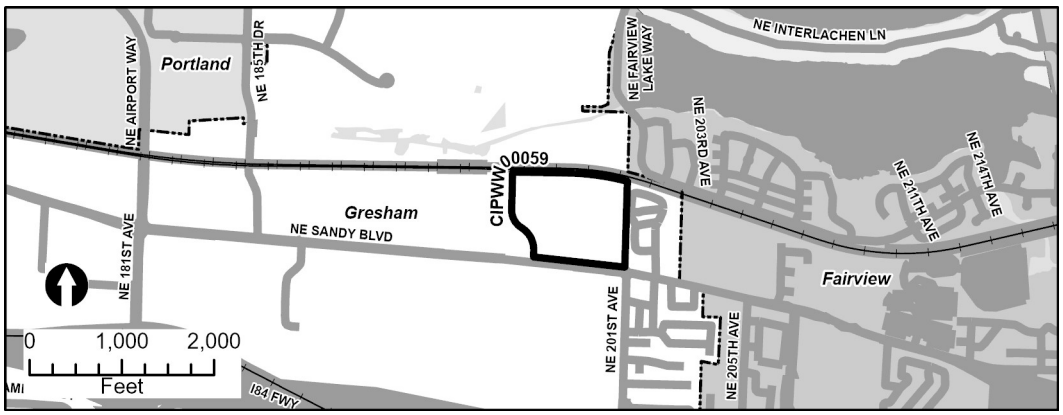
Funds	Description	Total
Resources	Operating	10,200,000
Resources Total		**10,200,000**
Expenses	Design/Const Admi	1,224,000
	Construction	7,723,400
	Admin (14%)	1,252,600
Expenses Total		**10,200,000**

CIPWW00059: Anaerobic Digestion and Cogeneration Expansion, Phase 4

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 4 (the inal phase of the project) of the project will design and construct a new cogeneration facility and a new RNG treatment facility as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 6.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	27,800,000
Resources Total		**27,800,000**
Expenses	Design/Const Admi	3,336,000
	Construction	21,050,000
	Admin (14%)	3,414,000
Expenses Total		**27,800,000**

CITY OF
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