

Wastewater Collection & Treatment Plant

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:

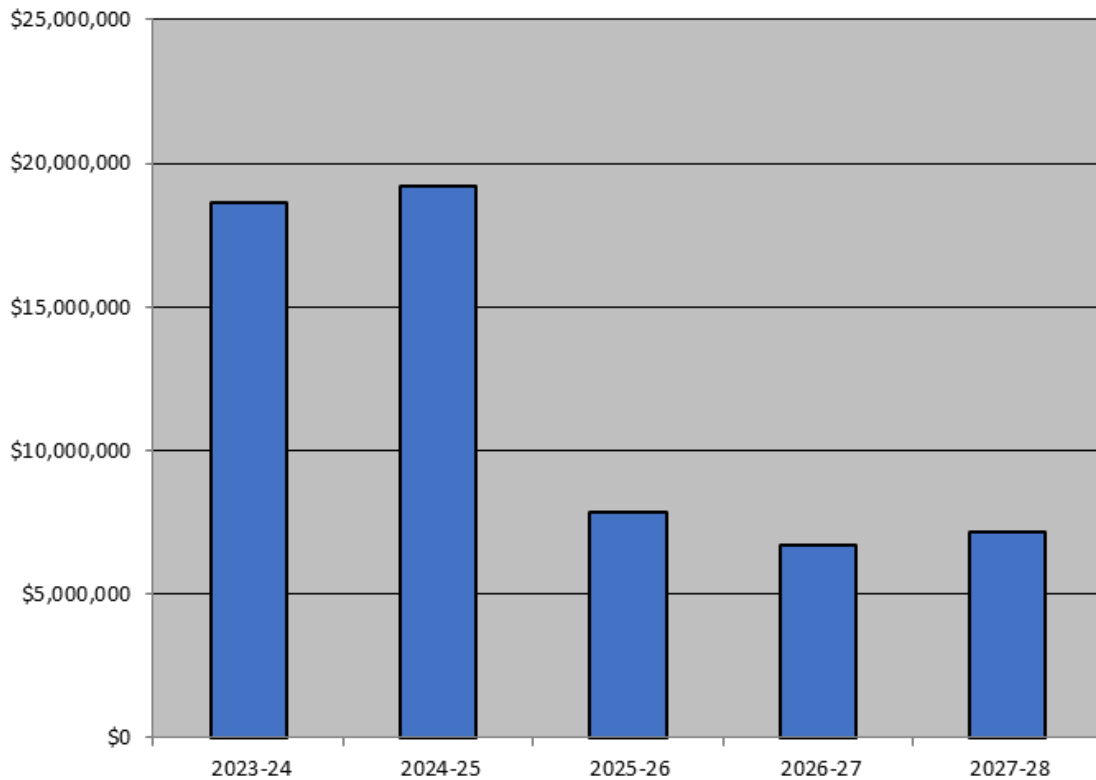
1. Unanticipated (#CIPWW00006) and planned (#CIPWW00007) repair and replacement projects for the collection system;
2. Unanticipated (#CIPWW00002) and planned (#CIPWW00005) repair and replacement projects for the treatment plant;
3. Collection system capacity increasing project #CIPWW00008 – East Basin Trunk Upgrade Phase III will provide for additional capacity in the Springwater area;
4. Nitrification improvements at the treatment plant (#CIPWW00025 – WWTP Outfall Diffuser Improvements), in addition to projects 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 (#CIPWW00028 – WWTP Gravity Belt Thickener Refurbishment, #CIPWW00047 – WWTP Belt Press Replacement), as well as, for system and processing improvements (#CIPWW00020 - WWTP FOG Screening

Improvements, #CIPWW00022 – WWTP Control System Improvements, #CIPWW00029 - WWTP Upper Plant Blower Addition, #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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total		
CIPWW00001	I & I Control Program	688,206	351,088	364,651	377,391	390,513	437,375	2,609,224		
CIPWW00002	WWTP Maintenance Project	690,421	483,276	502,607	522,711	543,619	608,853	3,351,487		
CIPWW00005	WWTP Asset Replacement and Refurbishment (R&R) Proj	2,913,017	478,630	1,017,775	1,058,486	1,100,825	1,232,924	7,801,657		
CIPWW00006	Collection System Asset Refurbishment and Replacement	948,910	1,221,095	744,891	767,238	790,255	885,086	5,357,475		
CIPWW00007	1950's Failing Pipe Rehabilitation/Maint. Program	1,497,722	557,530	1,097,048	1,134,159	1,172,384	1,313,070	6,771,913		
CIPWW00008	East Basin Trunk Upgrade Phase III	1,731,114	173,112	0	0	0	0	1,904,226		
CIPWW00013	Wastewater Mainline Extension	298,842	101,158	0	0	0	0	400,000		
CIPWW00018	WWTP Upper Plant Nitrification Improvements	756,800	2,577,586	5,675,190	0	0	0	9,009,576		
CIPWW00020	WWTP FOG Screening Improvements	1,098,967	0	0	0	0	0	1,098,967		
CIPWW00022	WWTP Control System Improvements	3,936,896	0	0	0	0	0	3,936,896		
CIPWW00023	Overhead Johnson Creek Crossing Seismic	927,919	1,610,000	0	0	0	0	2,537,919		
CIPWW00024	WWTP Organics Digestion Capacity Evaluation	1,005,095	0	0	0	0	0	1,005,095		
CIPWW00025	WWTP Outfall Diffuser Improvements	1,052,938	105,294	0	0	0	0	1,158,232		
CIPWW00026	Lower Kelly Creek Trunk Upgrade Phase 1	0	0	0	2,245,447	0	0	2,245,447		
CIPWW00027	Linneman Pump Station Parallel Force Main, Phase 2	0	0	0	0	600,000	2,500,000	3,100,000		
CIPWW00028	WWTP Gravity Belt Thickener Refurbishment	2,642,867	264,287	0	0	0	0	2,907,154		
CIPWW00030	WWTP Earthquake Resiliency Projects	273,267	134,984	140,383	145,998	151,838	170,059	1,016,529		
CIPWW00031	WWTP Secondary Digester Improvements	571,093	0	0	0	0	0	571,093		
CIPWW00035	CCTV Inspection of Collection System Large Diameter Pipe	100,000	114,000	0	0	0	0	214,000		
CIPWW00042	Lower Kelly Creek Trunk Upgrade Phase 2	0	0	0	100,000	1,955,278	0	2,055,278		
CIPWW00045	Upper Kelly Creek Trunk Upgrade	0	0	266,958	1,512,758	0	0	1,779,716		
CIPWW00046	WWTP Disinfection Improvements	256,500	1,482,000	0	0	0	0	1,738,500		
CIPWW00047	WWTP Belt Press Replacement	456,000	5,506,200	0	0	0	0	5,962,200		
CIPWW00049	WWTP Upper Plant Secondary Clarifier No. 5	700,000	2,243,000	9,394,056	0	0	0	12,337,056		
CIPWW00050	Nechacokee Creek Bank Stabilization	0	638,400	0	0	0	0	638,400		
CIPWW00051	185th St. Pump Station Improvements	0	581,400	0	0	0	0	581,400		
Grand Total		22,546,574	18,623,040	19,203,559	7,864,188	6,704,712	7,147,367	82,089,440		

Wastewater Funded Summary by Resource							
Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Other	1,656,800	4,820,586	9,772,614	0	0	0	16,250,000
Grant	734,827	0	0	0	0	0	734,827
Operating	6,670,308	10,712,155	638,513	2,834,216	1,519,990	607,434	22,982,616
Repair/Replacement Reserves	12,629,833	3,004,818	3,362,321	3,482,594	3,607,083	4,039,933	30,126,582
SDC	854,806	85,481	5,430,111	1,547,378	1,577,639	2,500,000	11,995,415
Grand Total	22,546,574	18,623,040	19,203,559	7,864,188	6,704,712	7,147,367	82,089,440

Wastewater Funded Resource Detail										
Project	Project Name	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total	
CIPWW00001	I & I Control Program	Operating	688,206	351,088	364,651	377,391	390,513	437,375	2,609,224	
CIPWW00001	Total		688,206	351,088	364,651	377,391	390,513	437,375	2,609,224	
CIPWW00002	WWTP Maintenance Project	Repair/Replace	690,421	483,276	502,607	522,711	543,619	608,853	3,351,487	
CIPWW00002	Total		690,421	483,276	502,607	522,711	543,619	608,853	3,351,487	
CIPWW00005	WWTP Asset Replacement and Refurbishment (R&R) P1	Repair/Replace	2,913,017	478,630	1,017,775	1,058,486	1,100,825	1,232,924	7,801,657	
CIPWW00005	Total		2,913,017	478,630	1,017,775	1,058,486	1,100,825	1,232,924	7,801,657	
CIPWW00006	Collection System Asset Refurbishment and Replacement	Repair/Replace	948,910	1,221,095	744,891	767,238	790,255	885,086	5,357,475	
CIPWW00006	Total		948,910	1,221,095	744,891	767,238	790,255	885,086	5,357,475	
CIPWW00007	1950's Failing Pipe Rehabilitation/Maint. Program	Repair/Replace	1,497,722	557,530	1,097,048	1,134,159	1,172,384	1,313,070	6,771,913	
CIPWW00007	Total		1,497,722	557,530	1,097,048	1,134,159	1,172,384	1,313,070	6,771,913	
CIPWW00008	East Basin Trunk Upgrade Phase III	Operating	876,308	87,631	0	0	0	0	963,939	
CIPWW00008	Total	SDC	876,308	87,631	0	0	0	0	963,939	
CIPWW00008	Total		854,806	85,481	0	0	0	0	940,287	
CIPWW00013	Wastewater Mainline Extension	Operating	1,731,114	173,112	0	0	0	0	1,904,226	
CIPWW00013	Total		298,842	101,158	0	0	0	0	400,000	
CIPWW00013	Total		298,842	101,158	0	0	0	0	400,000	
CIPWW00018	WWTP Upper Plant Nitrification Improvements	Operating	50,000	0	0	0	0	0	50,000	
CIPWW00018	Total	Other	706,800	2,577,586	4,715,614	0	0	0	8,000,000	
CIPWW00018	Total	SDC	0	0	959,576	0	0	0	959,576	
CIPWW00020	WWTP FOG Screening Improvements	Operating	756,800	2,577,586	5,675,190	0	0	0	9,009,576	
CIPWW00020	Total	Other	848,967	0	0	0	0	0	848,967	
CIPWW00020	Total		250,000	0	0	0	0	0	250,000	
CIPWW00020	Total		1,098,967	0	0	0	0	0	1,098,967	
CIPWW00022	WWTP Control System Improvements	Repair/Replace	3,936,896	0	0	0	0	0	3,936,896	
CIPWW00022	Total		3,936,896	0	0	0	0	0	3,936,896	
CIPWW00023	Overhead Johnson Creek Crossing Seismic	Grant	614,827	0	0	0	0	0	614,827	
CIPWW00023	Total	Operating	313,092	1,610,000	0	0	0	0	1,923,092	
CIPWW00023	Total		927,919	1,610,000	0	0	0	0	2,537,919	
CIPWW00024	WWTP Organics Digestion Capacity Evaluation	Grant	120,000	0	0	0	0	0	120,000	
CIPWW00024	Total	Operating	885,095	0	0	0	0	0	885,095	
CIPWW00024	Total		1,005,095	0	0	0	0	0	1,005,095	
CIPWW00025	WWTP Outfall Diffuser Improvements	Operating	1,052,938	105,294	0	0	0	0	1,158,232	
CIPWW00025	Total		1,052,938	105,294	0	0	0	0	1,158,232	
CIPWW00026	Lower Kelly Creek Trunk Upgrade Phase 1	Operating	0	0	0	1,504,448	0	0	1,504,448	
CIPWW00026	Total	SDC	0	0	0	740,999	0	0	740,999	
CIPWW00026	Total		0	0	0	2,245,447	0	0	2,245,447	
CIPWW00027	Linneman Pump Station Parallel Force Main, Phase 2	SDC	0	0	0	0	600,000	2,500,000	3,100,000	
CIPWW00027	Total		0	0	0	0	600,000	2,500,000	3,100,000	
CIPWW00028	WWTP Gravity Belt Thickener Refurbishment	Repair/Replace	2,642,867	264,287	0	0	0	0	2,907,154	
CIPWW00028	Total		2,642,867	264,287	0	0	0	0	2,907,154	
CIPWW00030	WWTP Earthquake Resiliency Projects	Operating	273,267	134,984	140,383	145,998	151,838	170,059	1,016,529	
CIPWW00030	Total		273,267	134,984	140,383	145,998	151,838	170,059	1,016,529	
CIPWW00030	Total		273,267	134,984	140,383	145,998	151,838	170,059	1,016,529	

Wastewater Funded Resource Detail										
Project	Project Name	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total	
CIPWW00031	WWTP Secondary Digester Improvements	Operating	571,093	0	0	0	0	0	571,093	
CIPWW00031 Total			571,093	0	0	0	0	0	571,093	
CIPWW00035	CCTV Inspection of Collection System Large Diameter P	Operating	100,000	114,000	0	0	0	0	214,000	
CIPWW00035 Total			100,000	114,000	0	0	0	0	214,000	
CIPWW00042	Lower Kelly Creek Trunk Upgrade Phase 2	Operating	0	0	0	50,000	977,639	0	1,027,639	
CIPWW00042 Total			0	0	0	50,000	977,639	0	1,027,639	
CIPWW00045	Upper Kelly Creek Trunk Upgrade	Operating	0	0	133,479	756,379	1,955,278	0	2,055,278	
CIPWW00045 Total			0	0	133,479	756,379	1,955,278	0	2,055,278	
CIPWW00046	WWTP Disinfection Improvements	Operating	256,500	1,482,000	0	0	0	0	1,738,500	
CIPWW00046 Total			256,500	1,482,000	0	0	0	0	1,738,500	
CIPWW00047	WWTP Belt Press Replacement	Operating	456,000	5,506,200	0	0	0	0	5,962,200	
CIPWW00047 Total			456,000	5,506,200	0	0	0	0	5,962,200	
CIPWW00049	WWTP Upper Plant Secondary Clarifier No. 5	Other	700,000	2,243,000	5,057,000	0	0	0	8,000,000	
CIPWW00049 Total			700,000	2,243,000	5,057,000	0	0	0	8,000,000	
CIPWW00050	Nechoke Creek Bank Stabilization	Operating	0	638,400	9,394,056	0	0	0	12,337,056	
CIPWW00050 Total			0	638,400	9,394,056	0	0	0	12,337,056	
CIPWW00051	185th St. Pump Station Improvements	Operating	0	581,400	0	0	0	0	638,400	
CIPWW00051 Total			0	581,400	0	0	0	0	638,400	
Grand Total			22,546,574	18,623,040	19,203,559	7,864,188	6,704,712	7,147,367	82,089,440	

FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	688,206	351,088	364,651	377,391	390,513	437,375	2,609,224
Resources Total		688,206	351,088	364,651	377,391	390,513	437,375	2,609,224
Expenses	Design/Const Admin	96,200	49,100	51,000	52,800	54,700	61,300	365,100
	Construction	507,506	258,888	268,851	278,291	287,813	322,375	1,923,724
	Admin (14%)	84,500	43,100	44,800	46,300	48,000	53,700	320,400
Expenses Total		688,206	351,088	364,651	377,391	390,513	437,375	2,609,224

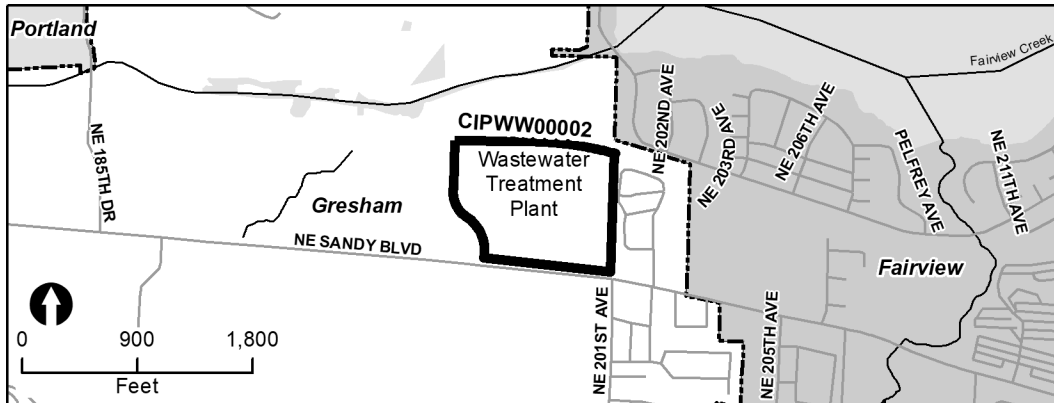
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Repair/Replacement Reserves	690,421	483,276	502,607	522,711	543,619	608,853	3,351,487
Resources Total		690,421	483,276	502,607	522,711	543,619	608,853	3,351,487
Expenses	Design/Const Admin	121,100	84,785	88,177	91,704	95,372	85,300	566,438
	Construction	484,521	339,141	352,707	366,815	381,487	448,753	2,373,424
	Admin (14%)	84,800	59,350	61,723	64,192	66,760	74,800	411,625
Expenses Total		690,421	483,276	502,607	522,711	543,619	608,853	3,351,487

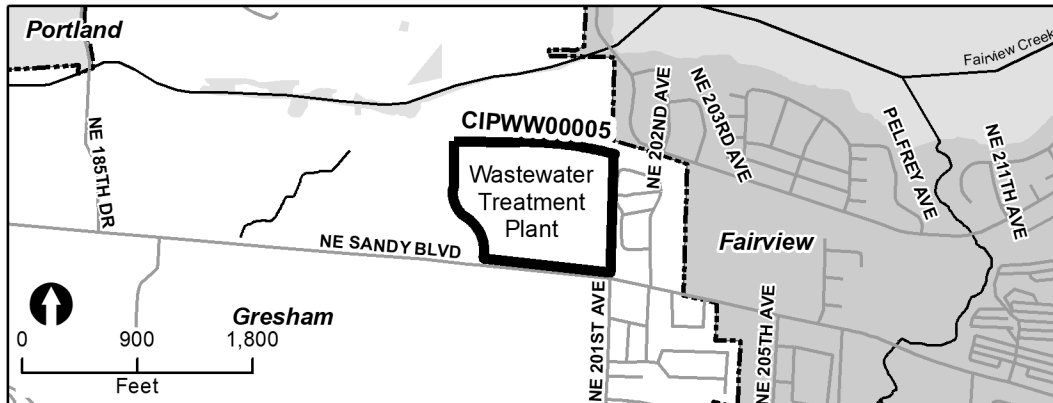
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Repair/Replacement Reserves	2,913,017	478,630	1,017,775	1,058,486	1,100,825	1,232,924	7,801,657
Resources Total		2,913,017	478,630	1,017,775	1,058,486	1,100,825	1,232,924	7,801,657
Expenses	Design/Const Admin	511,100	75,000	178,557	185,699	193,127	216,300	1,359,783
	Construction	2,044,217	344,830	714,228	742,797	772,509	865,224	5,483,805
	Admin (14%)	357,700	58,800	124,990	129,990	135,189	151,400	958,069
Expenses Total		2,913,017	478,630	1,017,775	1,058,486	1,100,825	1,232,924	7,801,657

FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00006: Collection System Asset Refurbishment and Replacement Project

Description: This project replaces operationally deficient and localized sections of the collection and conveyance system as needed in response to breakdowns. This localized repair or replacement strategy extends the useful life of pipeline assets that typically wouldn't be replaced until the expected (i.e.75 year) useful life of the asset has been reached. This project contributes eligible R&R funds to CIP CIPWW00007.

Justification: This CIP is used to repair areas where the system is on the verge of failure and the high condition score represents this situation. Repairs may be required if the location is included in the "Hitting the Streets" local street reconstruction program. If the projects repaired by this CIP are left, failures can lead to loss of service, backups and possibly spills. SSO's or sanitary sewer overflows, are prohibited by the DEQ and may result in a fine or penalty.

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



Estimated Dollars:

Funds	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Repair/Replacement Reserves	948,910	1,221,095	744,891	767,238	790,255	885,086	5,357,475
Resources Total		948,910	1,221,095	744,891	767,238	790,255	885,086	5,357,475
Expenses	Design/Const Admin	132,800	122,100	104,300	107,400	110,600	155,300	732,500
	Construction	699,610	948,995	549,091	565,638	582,655	621,086	3,967,075
	Admin (14%)	116,500	150,000	91,500	94,200	97,000	108,700	657,900
Expenses Total		948,910	1,221,095	744,891	767,238	790,255	885,086	5,357,475

FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00007: 1950’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 1950s) 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. (CIP 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 spills. Repairs may be required if the location is in the path of the “Hitting the Streets” local street repair program.

Type of Project: Repair and rehabilitation of pipeline facilities.



Estimated Dollars:

Funds	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Repair/Replacement Reserves	1,497,722	557,530	1,097,048	1,134,159	1,172,384	1,313,070	6,771,913
Resources Total		1,497,722	557,530	1,097,048	1,134,159	1,172,384	1,313,070	6,771,913
Expenses	Design/Const Admin	209,700	55,800	153,600	158,800	164,100	183,800	925,800
	Construction	1,104,122	433,230	808,748	836,059	864,284	967,970	5,014,413
	Admin (14%)	183,900	68,500	134,700	139,300	144,000	161,300	831,700
Expenses Total		1,497,722	557,530	1,097,048	1,134,159	1,172,384	1,313,070	6,771,913

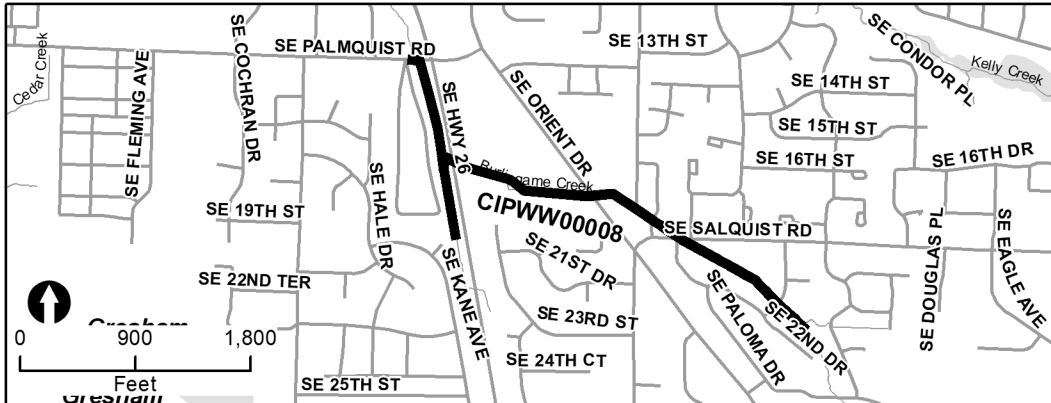
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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 and SDC project #6.

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	876,308	87,631	0	0	0	0	963,939
	SDC	854,806	85,481	0	0	0	0	940,287
Resources Total		1,731,114	173,112	0	0	0	0	1,904,226
Expenses	Design/Const Admin	242,100	25,000	0	0	0	0	267,100
	Construction	1,276,414	126,812	0	0	0	0	1,403,226
	Admin (14%)	212,600	21,300	0	0	0	0	233,900
Expenses Total		1,731,114	173,112	0	0	0	0	1,904,226

FUNDED PROJECT
Wastewater Collection and Treatment Plant

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 project is located at 120, 155, 160, 175, 215, 260 and 275 SW Towle Avenue. 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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	298,842	101,158	0	0	0	0	400,000
Resources Total		298,842	101,158	0	0	0	0	400,000
Expenses	Design/Const Admin	44,800	5,000	0	0	0	0	49,800
	Construction	217,342	83,758	0	0	0	0	301,100
	Admin (14%)	36,700	12,400	0	0	0	0	49,100
Expenses Total		298,842	101,158	0	0	0	0	400,000

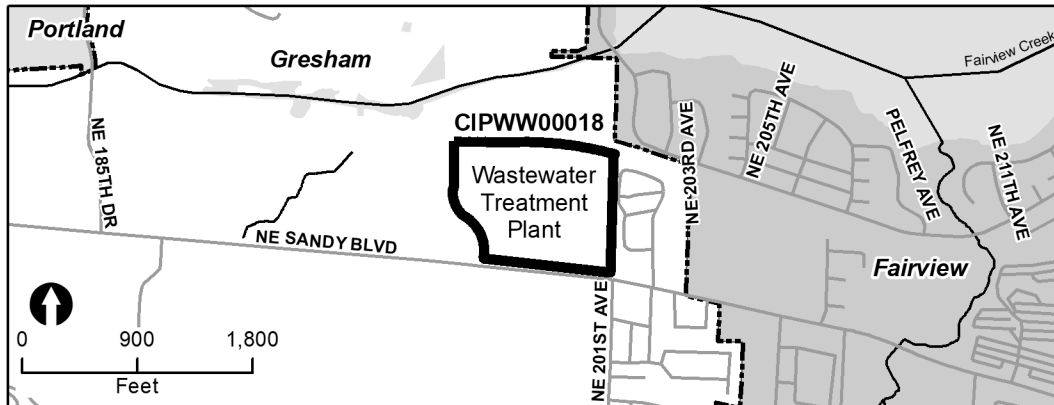
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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.

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Other	706,800	2,577,586	4,715,614	0	0	0	8,000,000
	Operating	50,000	0	0	0	0	0	50,000
	SDC	0	0	959,576	0	0	0	959,576
Resources Total		756,800	2,577,586	5,675,190	0	0	0	9,009,576
Expenses	Design/Const Admin	300,000	250,000	150,000	0	0	0	700,000
	Construction	363,900	2,011,086	4,828,190	0	0	0	7,203,176
	Admin (14%)	92,900	316,500	697,000	0	0	0	1,106,400
Expenses Total		756,800	2,577,586	5,675,190	0	0	0	9,009,576

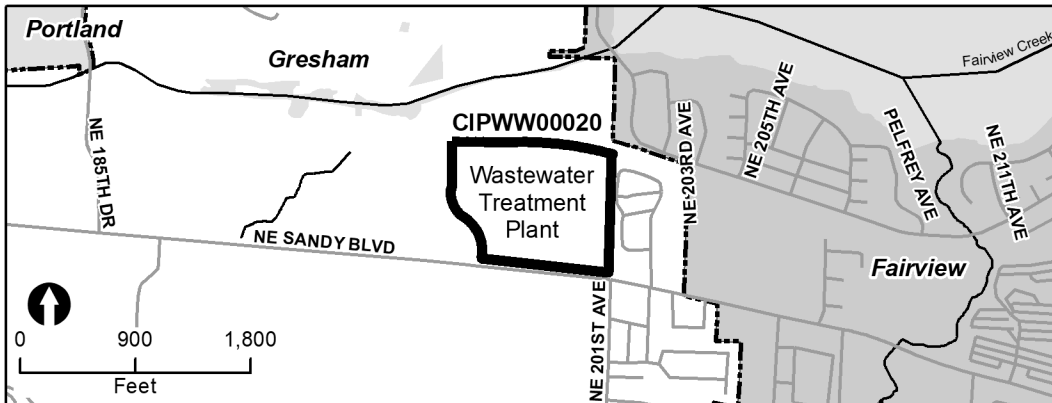
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00020: WWTP FOG Screening Improvements

Description: This project designs and constructs improvements to the fats, oils and grease (FOG) receiving station at the WWTP. The project will improve the screening ability of the system to remove trash and debris prior to entering the anaerobic digesters. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. The WWTP operator will contribute \$250,000 to the project.

Justification: This project will increase the ability of the FOG receiving station to screen and remove unwanted material from FOG deliveries at the WWTP. This improved removal rate will decrease the amount of maintenance and repair needed to keep the system functioning properly.

Type of project: Upgrade of existing facilities and utilities.



Estimated Dollars:

Funds	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Other	250,000	0	0	0	0	0	250,000
	Operating	848,967	0	0	0	0	0	848,967
Resources Total		1,098,967	0	0	0	0	0	1,098,967
Expenses	Design/Const Admin	192,800	0	0	0	0	0	192,800
	Construction	771,167	0	0	0	0	0	771,167
	Admin (14%)	135,000	0	0	0	0	0	135,000
Expenses Total		1,098,967	0	0	0	0	0	1,098,967

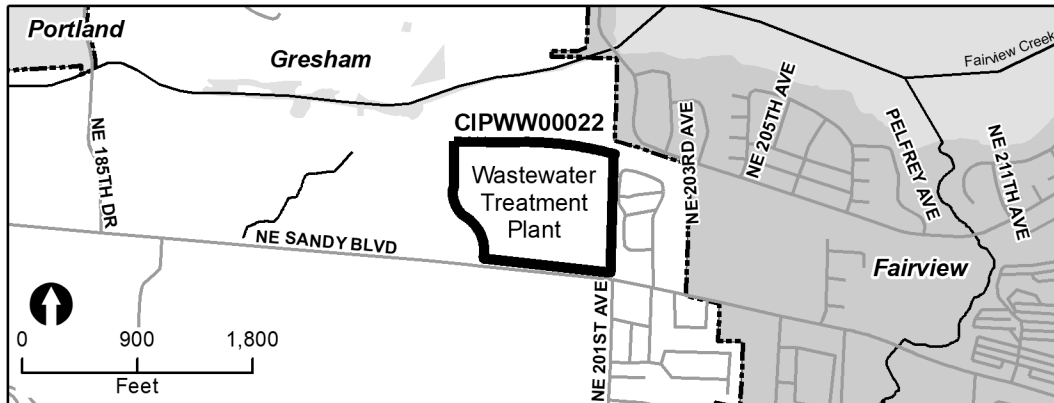
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Repair/Replacement Reserves	3,936,896	0	0	0	0	0	3,936,896
Resources Total		3,936,896	0	0	0	0	0	3,936,896
Expenses	Design/Const Admin	708,600	0	0	0	0	0	708,600
	Construction	2,744,796	0	0	0	0	0	2,744,796
	Admin (14%)	483,500	0	0	0	0	0	483,500
Expenses Total		3,936,896	0	0	0	0	0	3,936,896

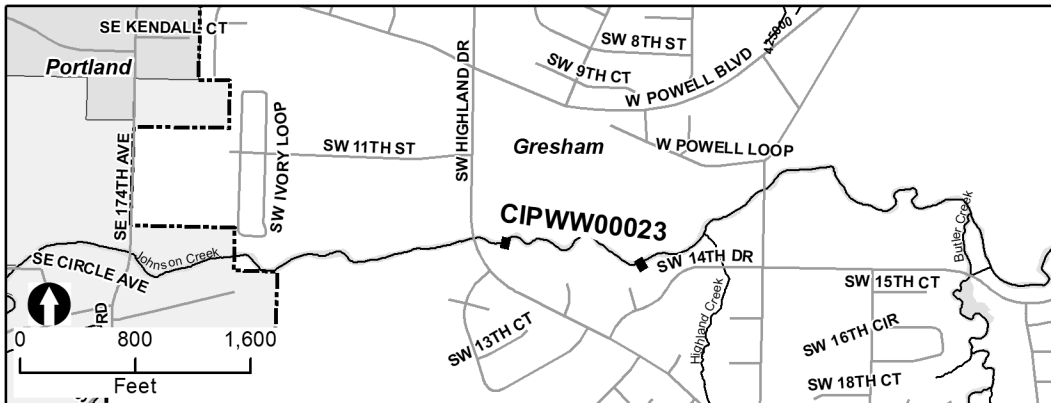
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Grant	614,827	0	0	0	0	0	614,827
	Operating	313,092	1,610,000	0	0	0	0	1,923,092
Resources Total		927,919	1,610,000	0	0	0	0	2,537,919
Expenses	Design/Const Admin	187,319	100,000	0	0	0	0	287,319
	Construction	495,000	1,312,300	0	0	0	0	1,807,300
	Property Acq	131,600	0	0	0	0	0	131,600
	Admin (14%)	114,000	197,700	0	0	0	0	311,700
Expenses Total		927,919	1,610,000	0	0	0	0	2,537,919

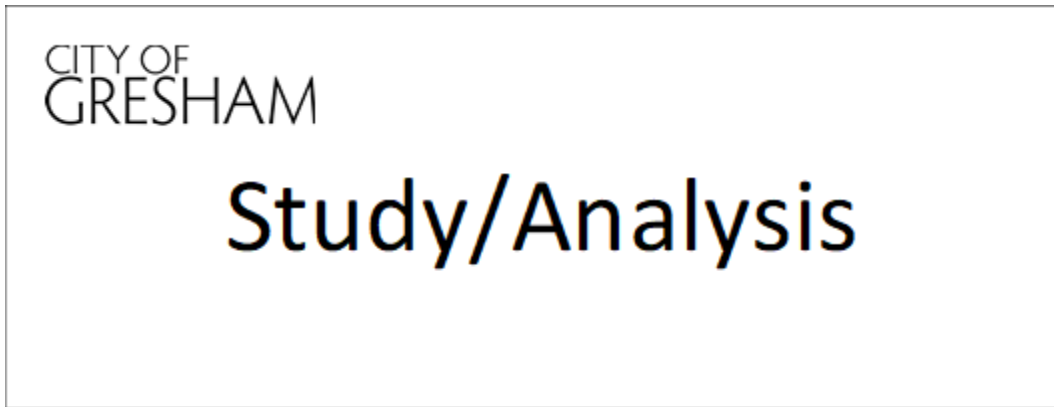
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Grant	120,000	0	0	0	0	0	120,000
	Operating	885,095	0	0	0	0	0	885,095
Resources Total		1,005,095	0	0	0	0	0	1,005,095
Expenses	Design/Const Admin	123,400	0	0	0	0	0	123,400
	Admin (14%)	881,695	0	0	0	0	0	881,695
Expenses Total		1,005,095	0	0	0	0	0	1,005,095

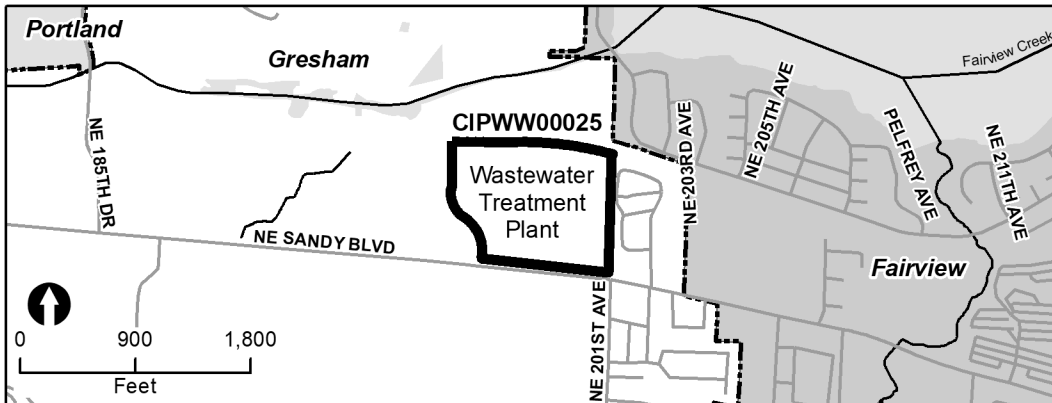
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00025: WWTP Outfall Diffuser Improvements

Description: This project will study, design and construct outfall diffuser improvements. The WWTP discharges approximately 13 million gallons per day of treated wastewater to the Columbia River by way of three outfall pipes and a 100 foot long diffuser buried in the bottom of the Columbia River near Interlachen Way and Marine Drive. The WWTP waste discharge permit, newly reissued by Oregon DEQ in 2021, requires improvement modifications to be made to the existing outfall diffuser to increase the mixing velocities in the river and ensure compliance with water quality criteria. 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 ensure that the WWTP is in compliance with its NPDES Waste Discharge Permit requirements.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

Funds	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	1,052,938	105,294	0	0	0	0	1,158,232
Resources Total		1,052,938	105,294	0	0	0	0	1,158,232
Expenses	Design/Const Admin	105,300	10,000	0	0	0	0	115,300
	Construction	818,338	82,394	0	0	0	0	900,732
	Admin (14%)	129,300	12,900	0	0	0	0	142,200
Expenses Total		1,052,938	105,294	0	0	0	0	1,158,232

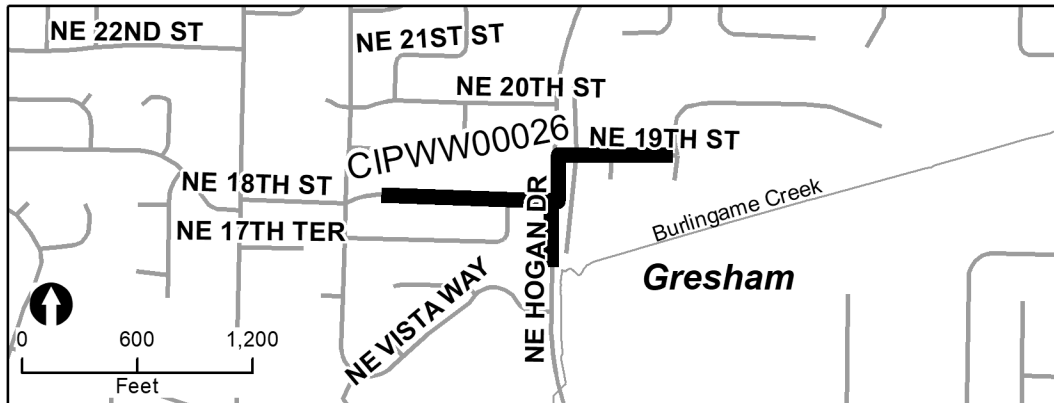
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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. SDC project #2.

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	0	0	0	1,504,448	0	0	1,504,448
	SDC	0	0	0	740,999	0	0	740,999
Resources Total		0	0	0	2,245,447	0	0	2,245,447
Expenses	Design/Const Admin	0	0	0	314,400	0	0	314,400
	Construction	0	0	0	1,655,247	0	0	1,655,247
	Admin (14%)	0	0	0	275,800	0	0	275,800
Expenses Total		0	0	0	2,245,447	0	0	2,245,447

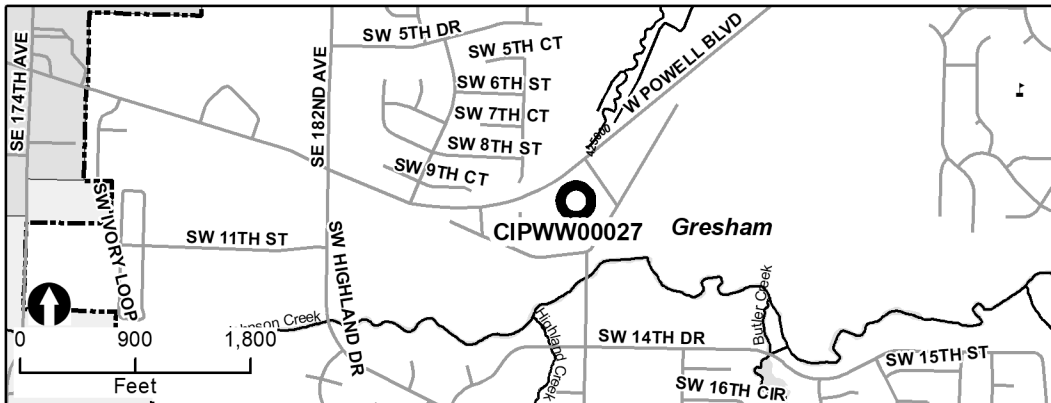
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	SDC	0	0	0	0	600,000	2,500,000	3,100,000
Resources Total		0	0	0	0	600,000	2,500,000	3,100,000
Expenses	Design/Const Admin	0	0	0	0	426,300	93,000	519,300
	Construction	0	0	0	0	100,000	2,100,000	2,200,000
	Admin (14%)	0	0	0	0	73,700	307,000	380,700
Expenses Total		0	0	0	0	600,000	2,500,000	3,100,000

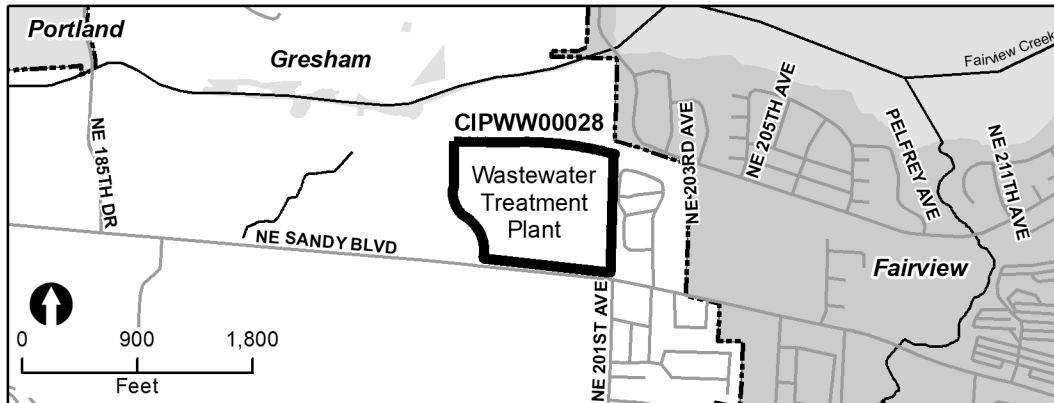
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00028: WWTP Gravity Belt Thickener Refurbishment

Description: This project designs and constructs the replacement of the Wastewater Treatment Plant Gravity Belt Thickeners 1, 2 and 3. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: The gravity belts were originally installed in 1987 and have exceeded their useful life. This project will replace and modernize the equipment.

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



Estimated Dollars:

Funds	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Repair/Replacement Reserves	2,642,867	264,287	0	0	0	0	2,907,154
Resources Total		2,642,867	264,287	0	0	0	0	2,907,154
Expenses	Design/Const Admin	463,700	10,000	0	0	0	0	473,700
	Construction	1,854,567	221,787	0	0	0	0	2,076,354
	Admin (14%)	324,600	32,500	0	0	0	0	357,100
Expenses Total		2,642,867	264,287	0	0	0	0	2,907,154

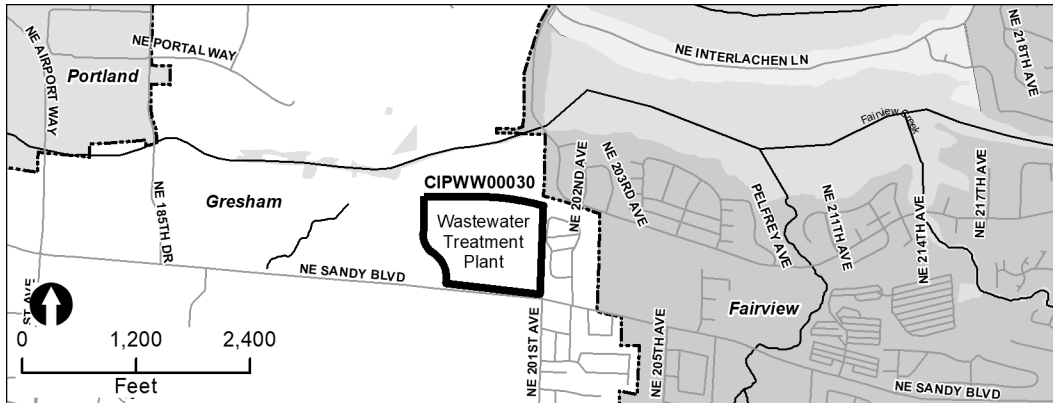
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	273,267	134,984	140,383	145,998	151,838	170,059	1,016,529
Resources Total		273,267	134,984	140,383	145,998	151,838	170,059	1,016,529
Expenses	Design/Const Admin	47,900	23,681	24,629	25,614	26,638	30,600	179,062
	Construction	191,767	94,725	98,514	102,454	106,553	118,559	712,572
	Admin (14%)	33,600	16,578	17,240	17,930	18,647	20,900	124,895
Expenses Total		273,267	134,984	140,383	145,998	151,838	170,059	1,016,529

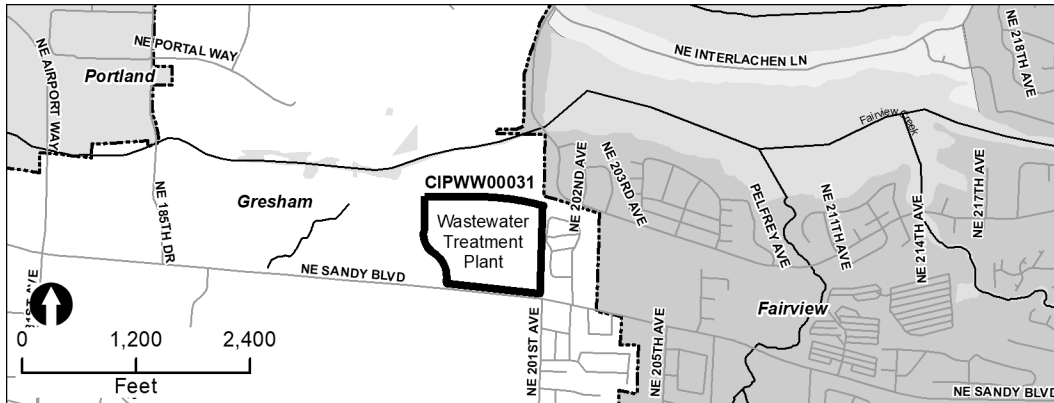
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00031: WWTP Secondary Digester Improvements

Description: This project will design and construct WWTP Secondary Digester Improvements. These improvements will include refurbishing the steel and concrete structures, cleaning and inspecting the digester interior and installing modern digester controls. The digester was originally installed in 1989. 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 improve the condition of the digester and ensure its long-term functionality.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

Funds	Description	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	571,093	0	0	0	0	0	571,093
Resources Total		571,093	0	0	0	0	0	571,093
Expenses	Design/Const Admin	100,200	0	0	0	0	0	100,200
	Construction	400,793	0	0	0	0	0	400,793
	Admin (14%)	70,100	0	0	0	0	0	70,100
Expenses Total		571,093	0	0	0	0	0	571,093

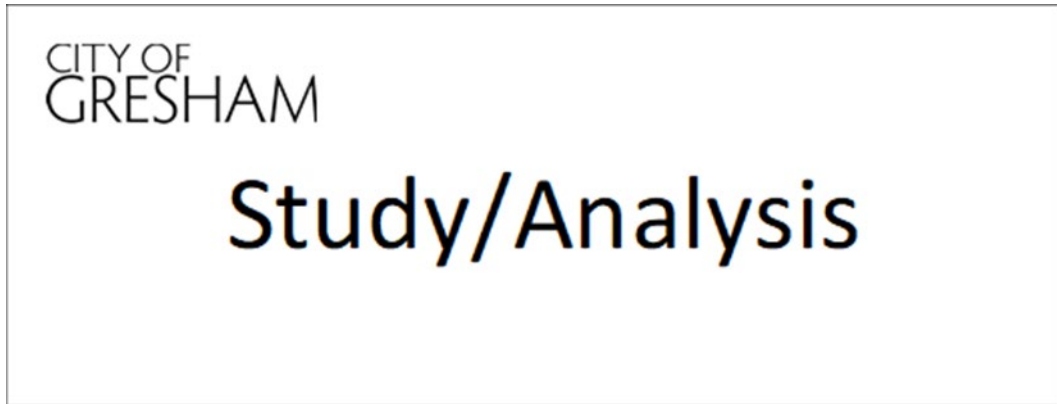
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	100,000	114,000	0	0	0	0	214,000
Resources Total		100,000	114,000	0	0	0	0	214,000
Expenses	Design/Const Admin	87,700	100,000	0	0	0	0	187,700
	Admin (14%)	12,300	14,000	0	0	0	0	26,300
Expenses Total		100,000	114,000	0	0	0	0	214,000

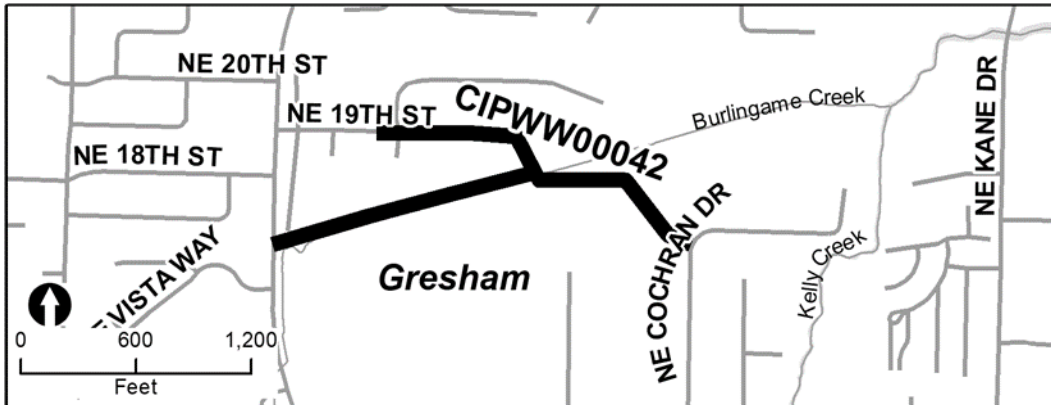
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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. SDC project #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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	0	0	0	50,000	977,639	0	1,027,639
	SDC	0	0	0	50,000	977,639	0	1,027,639
Resources Total		0	0	0	100,000	1,955,278	0	2,055,278
Expenses	Design/Const Admin	0	0	0	87,700	273,700	0	361,400
	Construction	0	0	0	0	1,441,478	0	1,441,478
	Admin (14%)	0	0	0	12,300	240,100	0	252,400
Expenses Total		0	0	0	100,000	1,955,278	0	2,055,278

FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00045: Upper Kelly Creek Trunk Upgrade

Description: This project would increase the capacity of the system in the problem area and reduce the amount of inflow entering the system. SDC project #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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	0	0	133,479	756,379	0	0	889,858
	SDC	0	0	133,479	756,379	0	0	889,858
Resources Total		0	0	266,958	1,512,758	0	0	1,779,716
Expenses	Design/Const Admin	0	0	100,000	100,000	0	0	200,000
	Construction	0	0	134,158	1,226,958	0	0	1,361,116
	Admin (14%)	0	0	32,800	185,800	0	0	218,600
Expenses Total		0	0	266,958	1,512,758	0	0	1,779,716

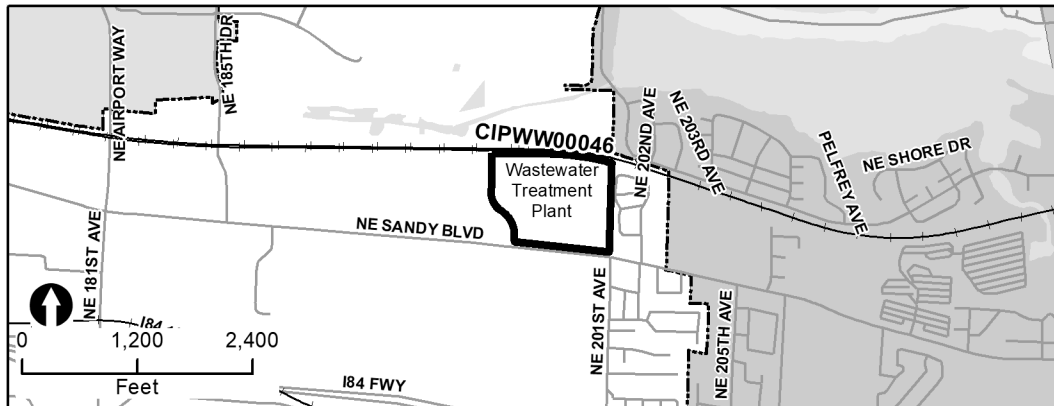
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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.

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	256,500	1,482,000	0	0	0	0	1,738,500
Resources Total		256,500	1,482,000	0	0	0	0	1,738,500
Expenses	Design/Const Admin	45,000	260,000	0	0	0	0	305,000
	Construction	180,000	1,040,000	0	0	0	0	1,220,000
	Admin (14%)	31,500	182,000	0	0	0	0	213,500
Expenses Total		256,500	1,482,000	0	0	0	0	1,738,500

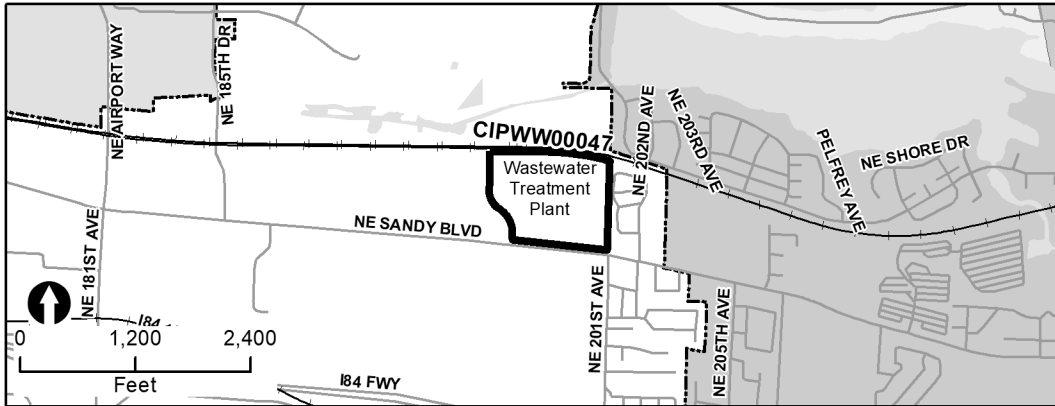
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	456,000	5,506,200	0	0	0	0	5,962,200
Resources Total		456,000	5,506,200	0	0	0	0	5,962,200
Expenses	Design/Const Admin	400,000	100,000	0	0	0	0	500,000
	Construction	0	4,730,000	0	0	0	0	4,730,000
	Admin (14%)	56,000	676,200	0	0	0	0	732,200
Expenses Total		456,000	5,506,200	0	0	0	0	5,962,200

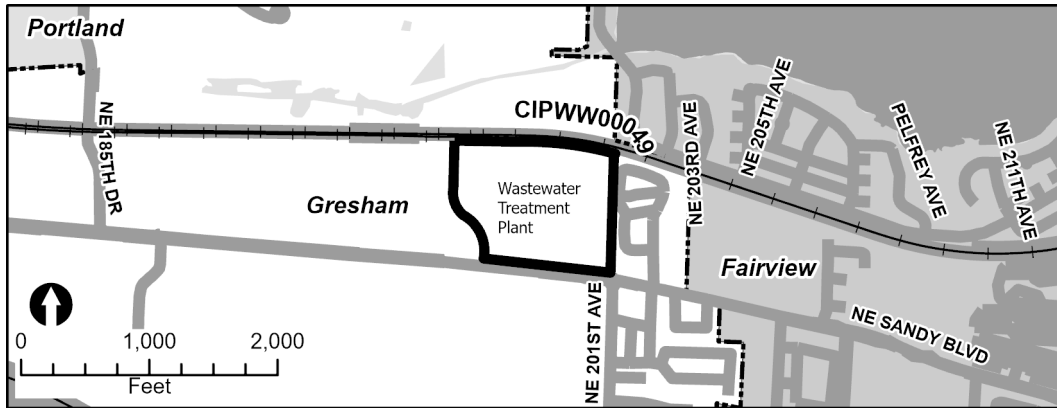
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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.

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Other	700,000	2,243,000	5,057,000	0	0	0	8,000,000
	SDC	0	0	4,337,056	0	0	0	4,337,056
Resources Total		700,000	2,243,000	9,394,056	0	0	0	12,337,056
Expenses	Design/Const Admin	200,000	1,267,500	8,040,356	0	0	0	9,507,856
	Construction	414,000	700,000	200,000	0	0	0	1,314,000
	Admin (14%)	86,000	275,500	1,153,700	0	0	0	1,515,200
Expenses Total		700,000	2,243,000	9,394,056	0	0	0	12,337,056

FUNDED PROJECT
Wastewater Collection and Treatment Plant

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	0	638,400	0	0	0	0	638,400
Resources Total		0	638,400	0	0	0	0	638,400
Expenses	Design/Const Admin	0	89,400	0	0	0	0	89,400
	Construction	0	470,600	0	0	0	0	470,600
	Admin (14%)	0	78,400	0	0	0	0	78,400
Expenses Total		0	638,400	0	0	0	0	638,400

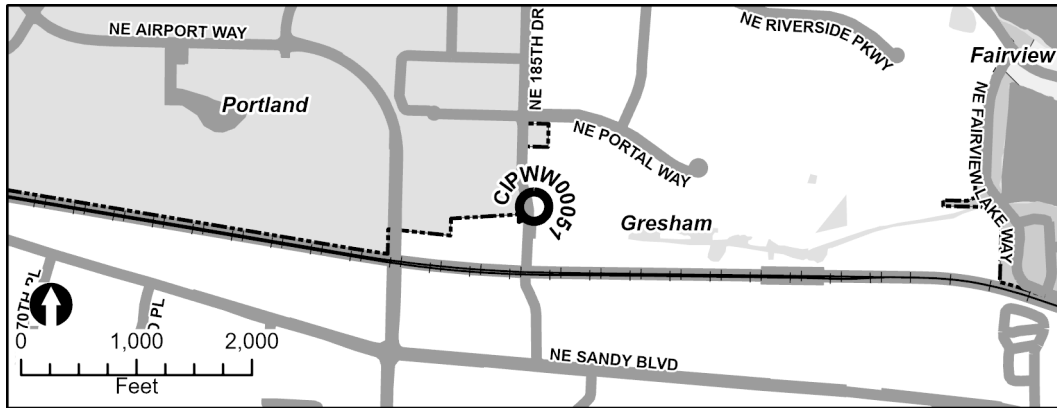
FUNDED PROJECT
Wastewater Collection and Treatment Plant

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.

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	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Resources	Operating	0	581,400	0	0	0	0	581,400
Resources Total		0	581,400	0	0	0	0	581,400
Expenses	Design/Const Admin	0	70,000	0	0	0	0	70,000
	Construction	0	440,000	0	0	0	0	440,000
	Admin (14%)	0	71,400	0	0	0	0	71,400
Expenses Total		0	581,400	0	0	0	0	581,400

Wastewater Unfunded and Future Summary								
Project	Project Name	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
314100	Johnson Creek - Springwater Trunk	0	0	0	0	0	0	1,344,322
314700	Upsize Johnson Creek Interceptor	0	0	0	0	0	0	210,221
316100	WWTP Anaerobic Digestion and Cogeneration Expansion	0	0	0	0	0	0	32,323,104
320200	Linneman Pump Station Capacity Upgrade	0	0	0	0	0	0	1,302,759
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	70,285,136
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	14,845,862
CIPWW00034	WWTP Columbia Slough Bridge Replacement	0	0	0	0	0	0	1,048,070
CIPWW00036	Collection System Seismic Resiliency Projects	0	0	0	0	0	0	1,500,000
CIPWW00037	Upper Johnson Creek Upgrade	0	0	0	0	0	0	3,156,978
CIPWW00038	Regner Rd Trunk	0	0	0	0	0	0	2,936,518
CIPWW00039	Stark Basin Line	0	0	0	0	0	0	803,852
CIPWW00040	East Basin Trunk Upgrade Phase 4	0	0	0	0	0	0	2,069,326
CIPWW00044	Tier 1 Seismic Upgrades	0	0	0	0	0	0	29,108,215
CIPWW00048	WWTP Biosolids Storage Facility Expansion	0	0	0	0	0	0	3,841,052
Grand Total		0	0	0	0	0	0	236,367,410

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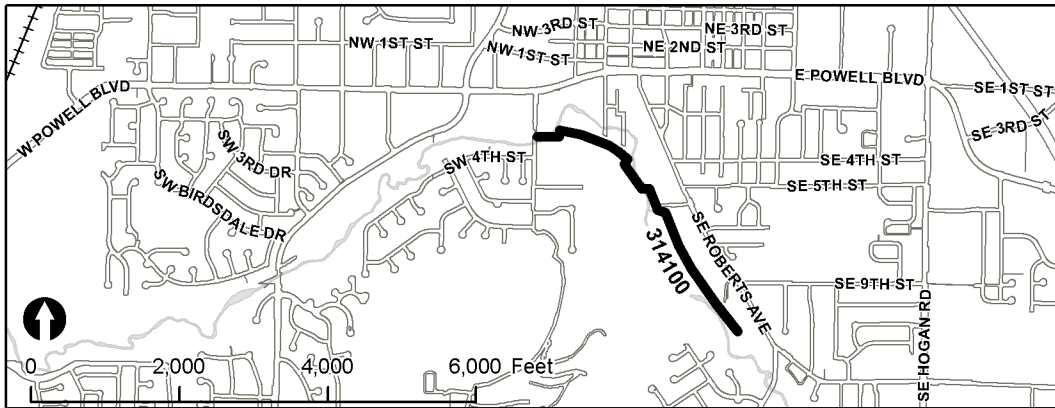
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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	672,161
	SDC	672,161
Resources Total		1,344,322
Expenses	Design/Const Admi	245,089
	Construction	934,215
	Admin (14%)	165,018
Expenses Total		1,344,322

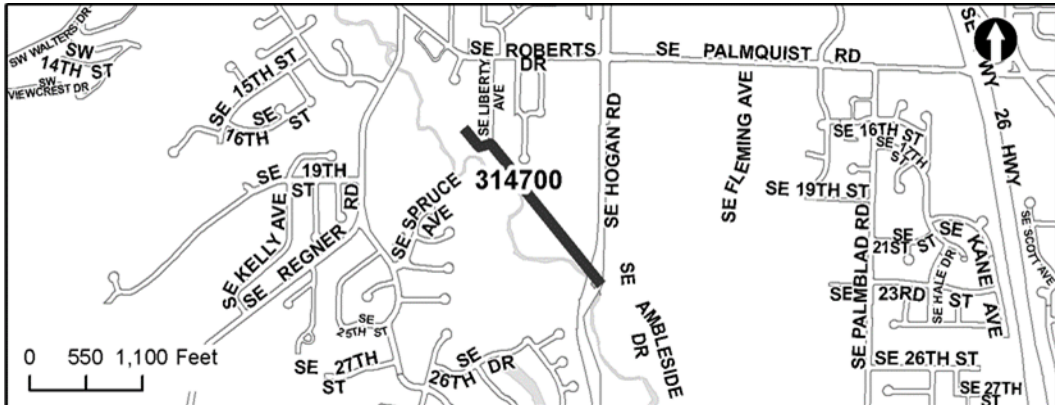
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

314700: Upsize Johnson Creek Interceptor

Description: This project will upsize approximately 2100 feet of the existing Johnson Creek interceptor from 15" to 21" diameter pipe. The pipe segment is located between Regner Rd. and Hogan Rd. This will provide necessary wastewater conveyance capacity to serve the proposed SE Gresham Urban Growth Boundary expansion.

Justification: This project is needed to ensure adequate wastewater conveyance capacity will be available to serve the proposed SE Gresham Urban Growth Boundary expansion.

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



Estimated Dollars:	Funds	Description	Total
	Resources		Operating
Resources Total			210,221
Expenses		Design/Const Admi	52,633
		Construction	131,788
		Admin (14%)	25,800
Expenses Total			210,221

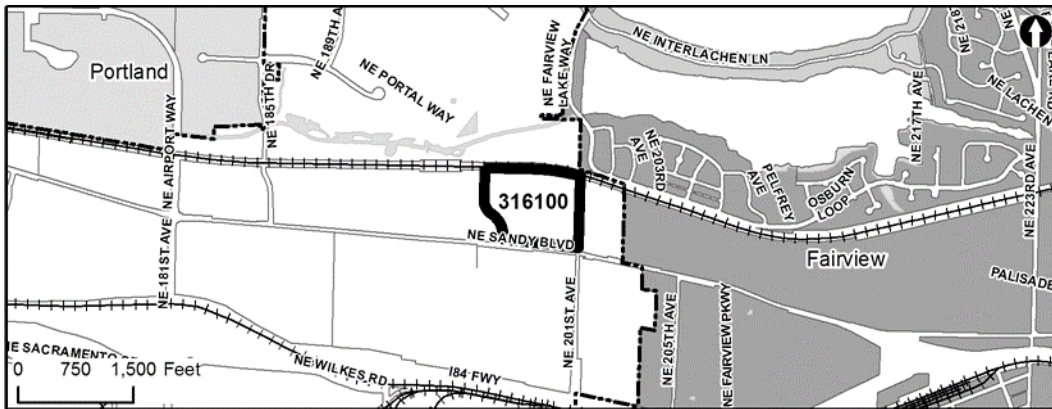
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

316100: WWTP Anaerobic Digestion and Cogeneration Expansion

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. The 2 existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The energy related revenues from this project will provide a 9-year payback on the investment. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. 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 on this project as detailed in the November, 2020 Feasibility Study of Expanding Liquid Organic Digestion Capacity at the Gresham WWTP.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	12,153,487
	SDC	20,169,617
Resources Total		32,323,104
Expenses	Design/Const Admi	5,670,720
	Construction	22,682,880
	Admin (14%)	3,969,504
Expenses Total		32,323,104

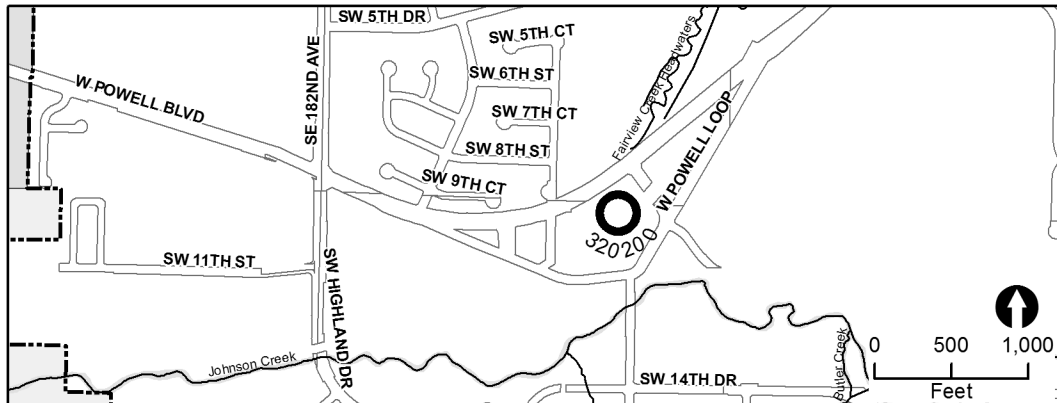
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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. Construction estimated to take place in 2029.

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	
Resources Total			1,302,759
Expenses		Design/Const Admi	228,554
		Construction	914,217
		Admin (14%)	159,988
Expenses Total			1,302,759

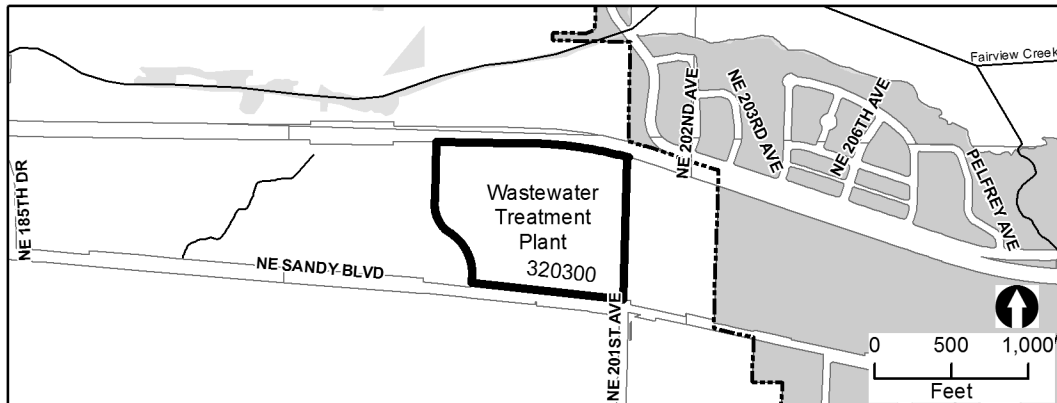
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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

**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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 spills.

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

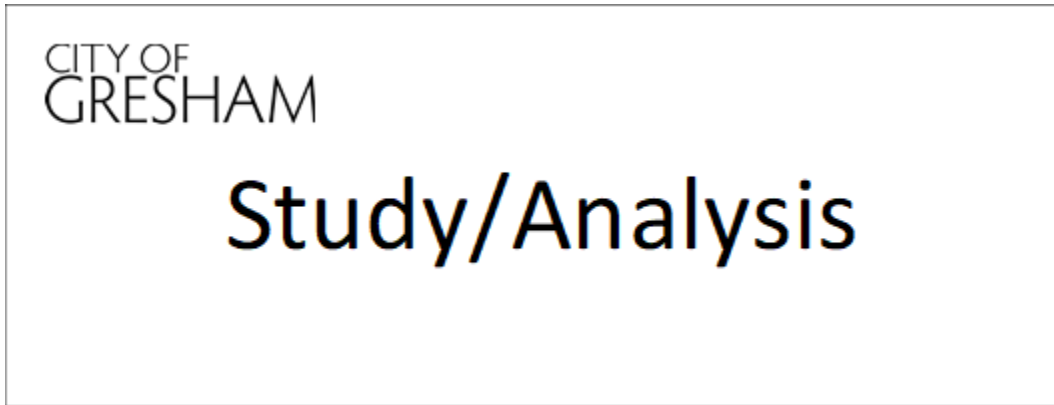
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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

**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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	59,868,879
		SDC	10,416,257
	Resources Total		70,285,136
	Expenses	Design/Const Admi	9,839,890
		Construction	51,813,689
		Admin (14%)	8,631,557
	Expenses Total		70,285,136

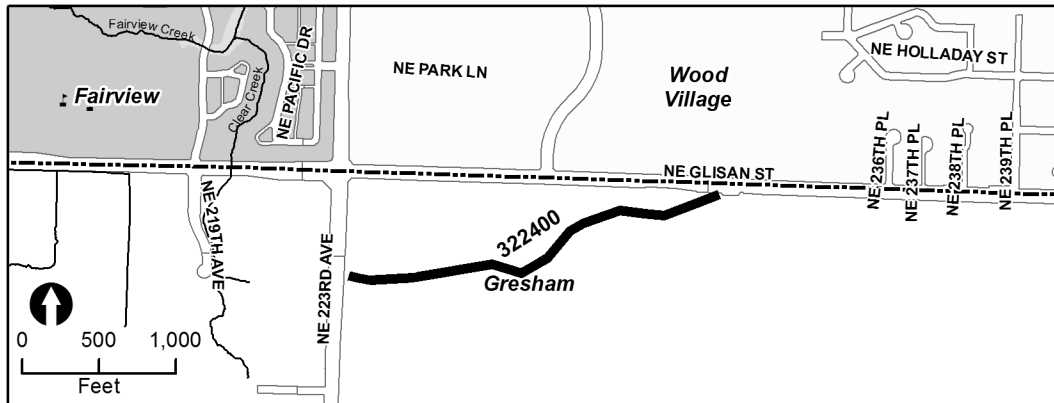
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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

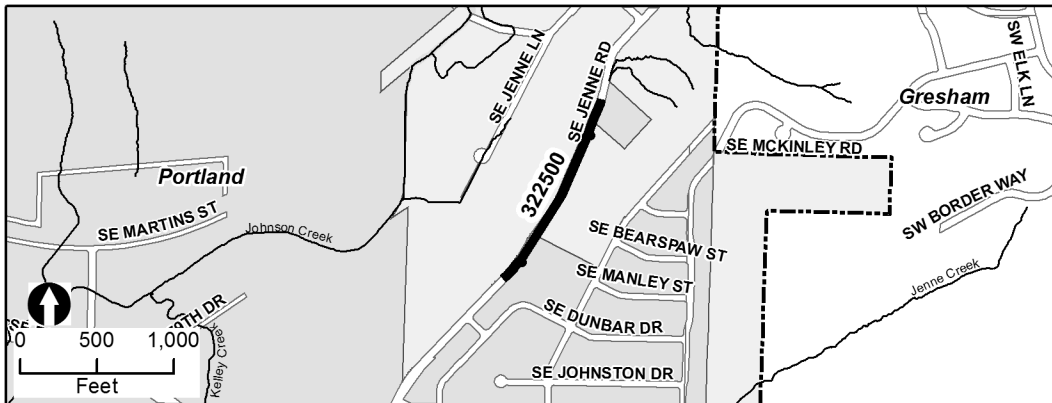
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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

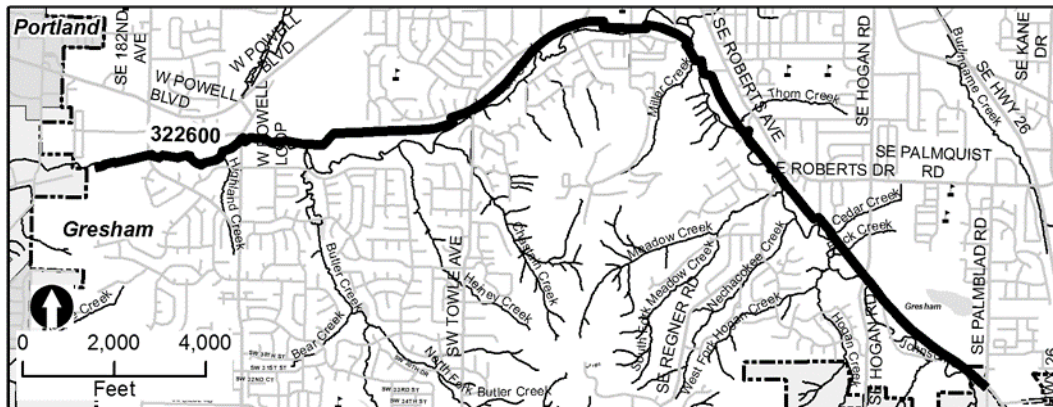
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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	12,645,705
	SDC	2,200,157
Resources Total		14,845,862
Expenses	Design/Const Admi	2,078,419
	Construction	10,944,259
	Admin (14%)	1,823,184
Expenses Total		14,845,862

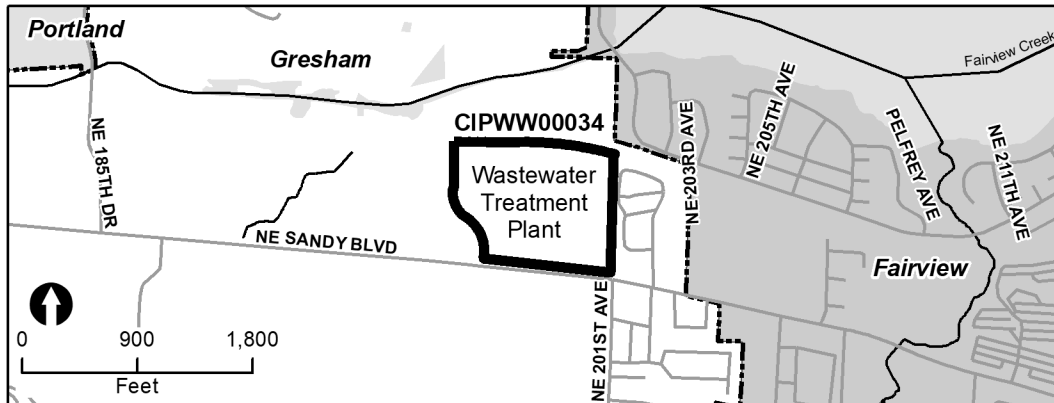
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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 install for temporary use by the drainage district.

Type of Project: Construction of new WWTP facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Repair/Replacemer	1,048,070
Resources Total		1,048,070
Expenses	Design/Const Admi	183,872
	Construction	735,488
	Admin (14%)	128,710
Expenses Total		1,048,070

**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

CIPWW00036: Collection System Seismic Resiliency Projects

Description: This project will fund the replacement and hardening of areas of the City’s gravity sewer system for earthquake resiliency. This project will be directed towards smaller projects that don't qualify for FEMA funding primarily because of the small size.

Justification: The project allows for the hardening of facilities that might be part of a larger project or other transportation and stormwater projects.

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



Estimated Dollars:

Funds	Description	Total
Resources	Operating	1,500,000
Resources Total		1,500,000
Expenses	Design/Const Admi	210,000
	Construction	1,105,800
	Admin (14%)	184,200
Expenses Total		1,500,000

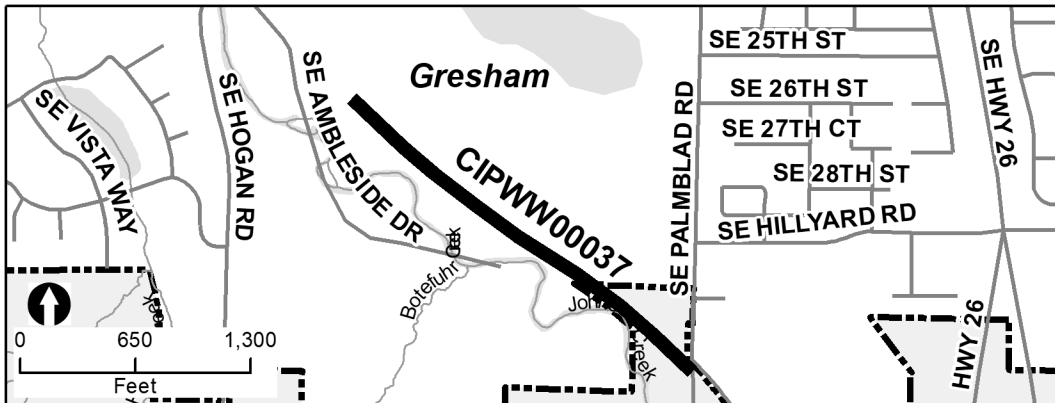
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

CIPWW00037: Upper Johnson Creek Upgrade

Description: This project will upsized an existing 12" sanitary sewer line to a 24" diameter line to meet increased flow demands as identified in the Wastewater Masterplan. 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	1,578,489
		SDC	1,578,489
	Resources Total		3,156,978
	Expenses	Design/Const Admi	251,753
		Construction	2,517,526
		Admin (14%)	387,699
	Expenses Total		3,156,978

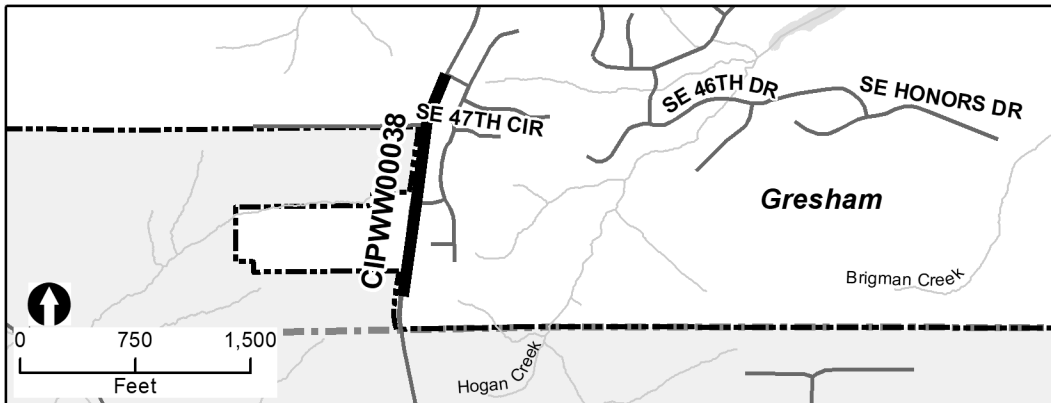
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

CIPWW00038: Regner Rd Trunk

Description: This project extends the wastewater system south in Regner Rd. to serve properties not presently served. 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	SDC	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

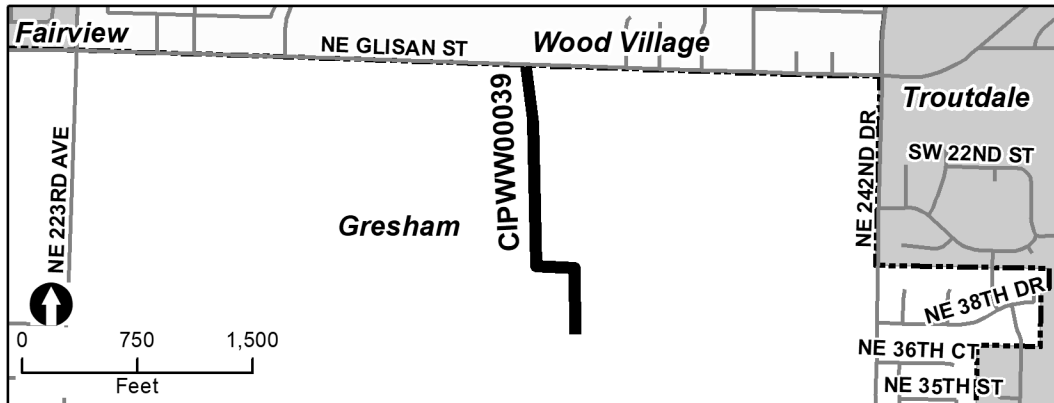
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

CIPWW00039: Stark Basin Line

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. 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	803,852
Resources Total		803,852
Expenses	Design/Const Admi	64,101
	Construction	641,036
	Admin (14%)	98,715
Expenses Total		803,852

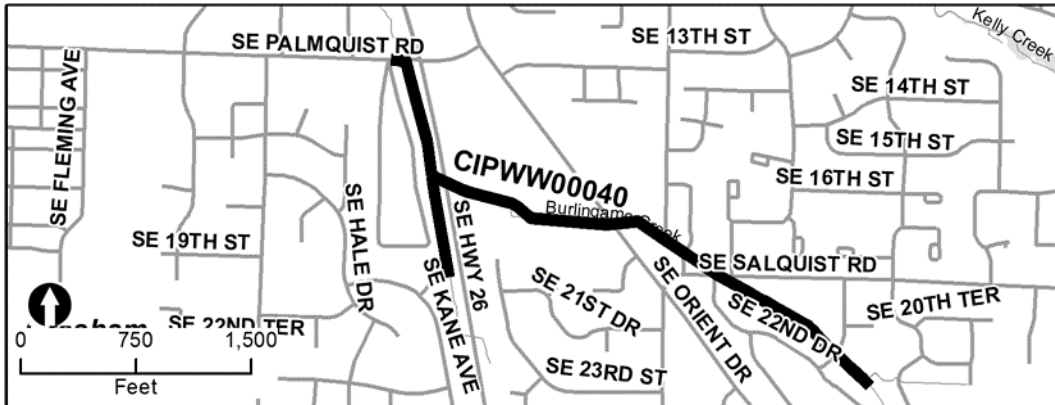
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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. SDC project #6.

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	1,034,663
	SDC	1,034,663
Resources Total		2,069,326
Expenses	Design/Const Admi	374,154
	Construction	1,441,010
	Admin (14%)	254,162
Expenses Total		2,069,326

**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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	24,794,377
		SDC	4,313,838
	Resources Total		29,108,215
	Expenses	Design/Const Admi	4,075,096
		Construction	21,458,378
		Admin (14%)	3,574,741
	Expenses Total		29,108,215

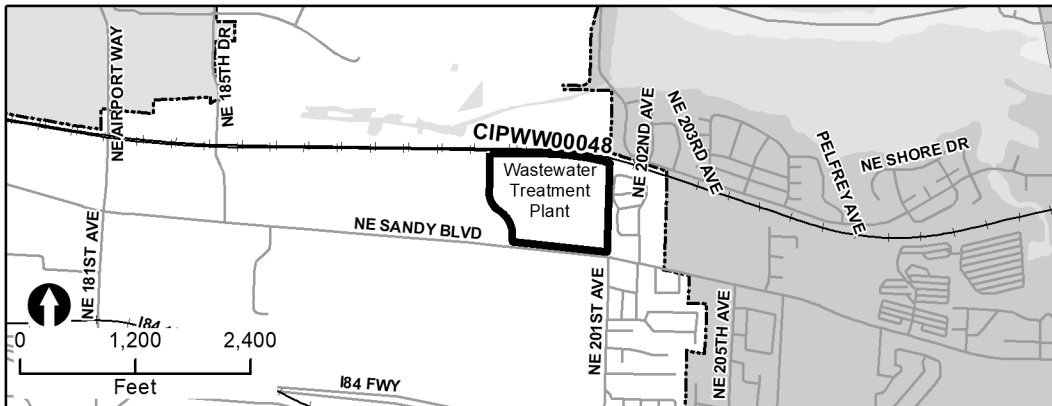
**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

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 2027.

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	3,841,052
	Resources Total		3,841,052
	Expenses	Design/Const Admi	673,869
		Construction	2,695,474
		Admin (14%)	471,709
	Expenses Total		3,841,052

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