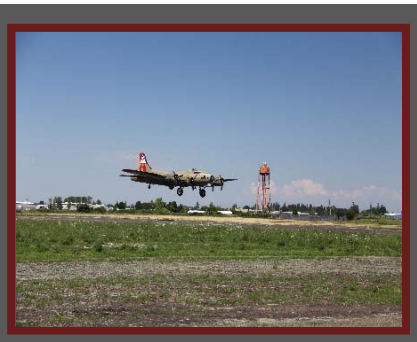

Adopted Capital Improvement Program

FY 2021-2025

CORVALLIS
ENHANCING COMMUNITY LIVABILITY

CITY OF CORVALLIS, OREGON

ADOPTED FY 2021-2025 Capital Improvement Program (CIP)

Biff Traber, Mayor

City Council

Jan Napack	Ward 1
Charles Maughan	Ward 2
Hyatt Lytle	Ward 3
Barbara Bull	Ward 4
Charlyn Ellis	Ward 5
Nancy Wyse	Ward 6
Paul Shaffer	Ward 7
Ed Junkins	Ward 8
Andrew Struthers	Ward 9

Mark W. Shepard, City Manager

Staff
Parks and Recreation Department
Public Works Department
Finance Department

"Enhancing Community Livability"

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Page			FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	5-Year
54		**Transportation**						
58	CP	Street Resurfacing - Harrison, Walnut Blvd, 9th and 36th Streets	$358,000	$1,542,000	$0	$0	$0	$1,900,000
59	ID	Marys River Pedestrian and Bicycle Crossing	$0	$412,500	$1,237,500	$0	$0	$1,650,000
60	CP	Traffic Signal Replacement - Kings/Buchanan	$0	$35,000	$315,000	$0	$0	$350,000
61	ID	Pedestrian Connection - Harrison to 35th	$0	$180,300	$914,000	$0	$0	$1,094,300
62	CE	Safe Routes to School	$0	$35,100	$316,000	$0	$0	$351,100
63	ID	Multi-Use Path - Tunison to Avery	$0	$467,300	$1,401,800	$0	$0	$1,869,100
64	ID	Pedestrian Crossing - 9th Street	$0	$66,500	$199,300	$0	$0	$265,800
65	CP	Street Resurfacing - Circle, 9th St, Van Buren Ave, and Technology Loop	$0	$760,000	$4,294,000	$0	$0	$5,054,000
66	CP	Street Resurfacing -Western, Kings, 5th, Forestgreen, Goodnight, Midvale	$0	$0	$920,000	$5,206,000	$0	$6,126,000
67	CP	Street Resurfacing - TBD	$0	$0	$0	$850,000	$4,850,000	$5,700,000
68	CP	Street Resurfacing - TBD	$0	$0	$0	$0	$850,000	$850,000
71		**Wastewater**						
75	CP	Wastewater Pipe Replacement – 2021	$51,400	$775,100	$0	$0	$0	$826,500
76	CP	Wastewater Plant Secondary Process Improvements Phase I	$125,000	$1,694,300	$0	$0	$0	$1,819,300
77	CP	South Corvallis Wastewater Capacity Improvements	$353,000	$1,269,000	$2,041,500	$0	$0	$3,663,500
78	CP	Wastewater Pipe Replacement – 2022	$0	$51,400	$799,900	$0	$0	$851,300
79	CP	Wastewater Pipe Replacement – 2023	$0	$0	$51,400	$866,700	$0	$918,100
80	CP	Wastewater Plant Secondary Process Improvements Phase II	$0	$0	$1,597,000	$1,597,000	$0	$3,194,000
81	CP	Wastewater Pipe Replacement – 2024	$0	$0	$0	$51,400	$877,700	$929,100
82	CP	Wastewater Pipe Replacement – 2025	$0	$0	$0	$0	$51,400	$51,400
84		**Water**						
88	CP	Water Pipe Replacement – Clarence Circle	$51,500	$515,000	$0	$0	$0	$566,500
89	CP	Water Pipe Replacement – Maser Drive	$0	$70,000	$800,000	$0	$0	$870,000
90	CP	Rock Creek Transmission Main Replacement	$0	$0	$735,700	$9,878,000	$9,878,000	$20,491,700
91	CP	Water Pipe Replacement – Hummingbird Drive	$0	$0	$36,100	$360,500	$0	$396,600
92	CP	Water Pipe Replacement – 10th Street/Birdie Drive	$0	$0	$0	$38,700	$347,800	$386,500
93	CP	Water Pipe Replacement – Linden Avenue	$0	$0	$0	$0	$41,700	$41,700
		Total	**$6,388,400**	**$12,659,900**	**$22,864,100**	**$19,435,400**	**$18,583,100**	**$79,930,900**
96		**Glossary of Terms**						

*** Explanation**

CP Community Preservation
ID Infrastructure Development
CE Community Enhancement

Introduction

The City's Capital Improvement Program (CIP) captures projects and investments needed to sustain the services the community expects and to be good stewards of City assets and infrastructure systems. This document reflects the City's plans for capital investments over the next five years.

Purpose of a CIP

The City has a goal, and a commitment to the community, to provide quality public services. To successfully accomplish this requires deliberate planning to move the organization and the community toward a desired future. This requires effective management of the infrastructure under significant forces of change. These forces include changing demographics, new state and federal regulations, fiscal constraints, changing economic conditions, effects of climate change, and emerging technologies.

The CIP is a tool to help the community identify and plan the capital investments to keep pace with changing needs. The CIP provides the City Council, community members and staff with a plan that will:

- Preserve existing City property and infrastructure;
- Adapt systems to the likely affects of climate fluctuation;
- Provide new facilities and infrastructure to accommodate an orderly, well planned expansion of the community; and
- Enhance livability within the community.

As long-term infrastructure system and facility needs are evaluated and the five-year forecast is developed, the CIP Plan identifies the current and future capital needs in each service area, prioritizes the proposed capital projects to focus efforts on the highest need, and attempts to match available financial resources to those capital needs.

CIP Plan Development

Development of the CIP begins over the summer months as the City solicits ideas and suggestions from the community. This input is reviewed and ideas that address capital improvement projects are referred to the appropriate City department.

Master plans, maintenance records, and staff's experience with the infrastructure are also consulted to identify projects to include within the five-year CIP Plan.

Review and adoption of a new plan each year allows the CIP to adapt to changing circumstances that require refinement of projects. For instance, a project related to development, like a new water storage reservoir, might be deferred for a few years if the development has not occurred as expected.

The identified project needs are then compared against available resources. Advisory Boards, such as the Parks, Natural Areas, and Recreation Advisory Board and the Bicycle and Pedestrian Advisory Board are included in a process to prioritize the potential projects. Those projects at the top of the priority list are refined in terms of scope, budget, and funding source, and included in a draft CIP Plan document.

The draft Plan is reviewed by the Budget Commission, providing Commissioners an opportunity to get a more refined understanding of the capital infrastructure condition, and to ask questions and/or make suggestions for revisions.

The final CIP document is a planning tool for the City Council, community and staff. The projects in the first year of the Plan are adopted in the City's fiscal year budget. Years two through five of the CIP are a forecast of the anticipated capital need, which is refined in subsequent years.

Funding for CIP Projects

It's important to recognize that there is not enough funding available to address all the capital needs the City has. In addition, many funding sources are restricted in what they can be used for. As an example, Water Fund revenues can only be spent on water infrastructure and cannot be used to make street improvements.

Most CIP projects are funded through operating revenues, System Development Charges, and grants. Operating revenues are funds the City receives from fees and charges to customers or taxes to property owners. Using ongoing revenues to support capital projects aligns with the Council's Financial Policies, which encourage a pay-as-you-go approach to large expenditures and discourage the accumulation of debt. The pay-as-you-go philosophy helps the City to live within its means and not create a burden for future generations.

System Development Charges (SDCs) are similarly restricted, but the limitations go a step further. SDCs are charges paid by property owners when they develop their property in a way that will result in additional demand on the water, wastewater, storm water, parks, and/or street infrastructure systems. The revenue from SDC fees only can be used to pay for projects that add capacity to provide more service in the infrastructure systems. For example, if future demand on the water system requires that an 8" line be upsized to a 12" line, the cost difference between installing an 8-inch and a 12-inch line is eligible for funding by SDCs.

Grants are one-time sources of money. The City actively looks to obtain grants where available. Grants typically require a percentage of the project be funded by a local source of money, called a 'match'. Funds from grants are restricted to the purpose that the grant was awarded for. To rely on grants as a main source for sustaining or improving the infrastructure is not the most prudent approach. The money may or may not be there when it is needed, there is often a competitive process to secure the funds, and the decisions are made outside the control of the Corvallis community.

Not all projects can be completed on a pay-as-you-go basis due to their cost or limits to available funding. In these situations, the City may use financing tools such as General Obligation bonds, revenue bonds, bank loans, or State Revolving Fund programs. It's important to remember that bonds and bank loans are not a source of revenue; they are only financing options. The sources of revenue to pay for the projects are the taxes or rates that secure the bonds or loan.

A General Obligation (GO) bond must be approved by a vote of the people before it can be issued. This is because GO bonds result in an additional property tax burden above and beyond the property tax otherwise paid. The bonds are repaid by the revenue from the tax and the tax lasts only for the life of the bonds, usually 15 to 20 years.

Revenue bonds are not backed by property taxes and are repaid out of specific operating revenues, such as wastewater rates for a wastewater revenue bond.

Projects can have funding from more than one source. For instance, a major upgrade to an arterial street could be funded by Street operating revenues for the reconstruction and Street SDCs for the addition of bike lanes and a left turn lane.

CIP Plan Document

The CIP document is broken down into sections for each of the major infrastructure services the City provides—airport, buildings, parks and recreation, storm water, transportation, wastewater, and water. Each section provides:

- A brief overview of the infrastructure system and a summary of the funding sources for the projects included in the Plan.
- A list of the projects scheduled by year.
- Pages for each project. These pages show the department that has responsibility for the project, the total estimated cost, a description of the work to be done, the fiscal year for design and/or construction, and the funding source or sources.
- A list of known projects, typically from a master plan, that are currently unfunded. This information helps to provide a more complete picture of the long-range CIP needs of the community.

On the project page, the driver for the project is identified in the Origination section. Examples of project drivers are master plans, system evaluations, asset management plans, advisory boards, community members or regulatory agencies. Category is assigned to provide a quick identifier for the City Council and the community about the benefit of the project. A project classified as Community Preservation is one that will maintain or improve existing levels of service. An Infrastructure Development project constructs new facilities or infrastructure to provide for the orderly development of the community over time, usually based on adopted master plans or in response to a State or federal mandate for increased levels of service. The Community Enhancement category captures projects that add to community livability. Community Preservation projects will tend to be of higher priority because of the City's emphasis on maintaining existing service levels to the community. Flexibility exists in the prioritization of Infrastructure Development and Community Enhancement projects depending on the pace of community expansion, available resources, and/or regulatory requirements.

The document ends with a glossary of terms commonly used when describing CIP projects and funding sources.

AIRPORT

AIRPORT

The Corvallis Municipal Airport and Industrial Park, located four miles south of the central business district, is an untapped resource for the Corvallis community. Beyond a facility for hobbyists, the airport has the capacity to provide a viable alternative for commerce and the movement of freight in the valley. The airport can accommodate business-sized jets and currently both FedEx and UPS use it daily for their commercial activities. To the north of the airport is approximately 300 acres of industrial park; the largest industrially zoned area in the Urban Growth Boundary. With water and wastewater trunk infrastructure already in place, the airport right next door, and rail service to the site, this land is indeed 'shovel-ready'. However, only 25-30% of the land is leased currently. Investments in the airport and the industrial park will increase the attractiveness to business interests and can have immediate and long-lasting benefits to the local economy.

The Public Works Department is responsible for the operation and maintenance of the 1,520-acre property which is located outside the city limits but within the Urban Growth Boundary.

The airport, encompassing approximately 1,300 acres, has one of the highest 'use' rates (landings/take-offs) of any non-towered airport in Oregon. The airfield has two runways: the primary runway (17-35) is 5,900 feet in length and the secondary runway (10-28) is 3,100 feet in length. The City owns five T-hangar buildings at the site that have a capacity to house 54 aircraft. Maintenance needed on airport buildings, hangars, grounds, taxiways, and runways is completed by City staff or contracted service providers. Numerous projects over the years have improved aircraft storage, lighting, navigational aids, runways, and taxiways. The airport has one fixed-base operator stationed in the Main Airport Hangar that provides fueling and aircraft maintenance services which are critical to airport operations.

In 2013, the City completed an Airport Master Plan that recommended capital projects at the airfield for a 20-year timeframe. Many of these are major construction projects eligible for Federal Aviation Administration (FAA) grants. These grants typically cover 90% of the total project costs and require only a 10% match from local sources.

City staff coordinate the development process at the Airport Industrial Park (AIP), recruiting tenants, negotiating leases, and working with leaseholders to enhance their lease experience. The Industrial Park Development Plan, last updated in 2015, evaluated the AIP goals for economic development, desired tenants, and general site layout. The Plan envisions more general industrial-oriented users, and encouraging additional commercial uses to support the surrounding industrial employment base and airport population.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIP budgets that are currently in process or that have been completed in the last year. Because the in-process projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

Completed. Runway 10/28 Overlay

Financial Challenges

Capital projects on the airport property are financed through two sources. The first is FAA grants that are secured for specific airfield improvements. The second is Airport Fund Operating Revenue generated from the rental of land and buildings at the site. Upgrades to the airport facilities are dependent on the availability of revenues generated through airport enterprise activities. Projects may be deferred if resources are not sufficient or if there are higher priority projects where the operating revenue is needed to match FAA grants.

The maintenance needs of the aging facilities now outpace the funding stream. Without increased activity at the airport and industrial park property generating more revenue, needed work is deferred, resulting in further deterioration of the infrastructure and higher project costs in future years. Also, grant opportunities that require a match from local sources cannot be pursued. The impacts of these fiscal constraints can be seen in the lack of projects in the out years of this CIP.

Funding Summary

The following table shows the total dollar amount projected for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Projected Cost Totals

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
General Fund Operating Revenue	$195,000					$195,000
Airport Operating Revenue	$7,500	$200,900	$270,000			$478,400
State COAR Grant	$22,500		$150,000			$172,500
FAA Grants	$2,255,000		$3,300,000			$5,555,000
GRAND TOTALS	**$2,480,000**	**$200,900**	**$3,720,000**	**$0**	**$0**	**$6,400,900**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year they are anticipated to begin.

Project Description	Project Total
Initiation Plan Year: 2020-2021	
Airfield Perimeter/Wildlife Exclusion Fence Construction	$2,150,000
Runway 17/35 Rehabilitation	$3,930,000
Initiation Plan Year: 2021-2022	
Main Airport Hangar West Wall Siding & Hangar Door Replacement	$200,900
Initiation Plan Year: 2022-2023	
Main Hangar North Wall Siding & Window Replacement	$120,000
Initiation Plan Year: 2023-2024	
	$0
Initiation Plan Year: 2024-2025	
	$0
Grand Total for Airport:	**$6,400,900**

FY 2020-21 AIRFIELD PERIMETER / WILDLIFE EXCLUSION FENCE

Department: Public Works **Category:** Infrastructure Development

Origination: Federal Aviation Administration (FAA) CIP, Airport Master Plan, Wildlife Hazard Site Visit, (WHSV)

Total Cost: $2,150,000

Project Description: The airfield perimeter/wildlife exclusion fence has been identified by the FAA, the Airport Master Plan and WHSV as an important element to site security, to protect the airfield against unauthorized access by individuals and wildlife. The FAA grant has already been secured.

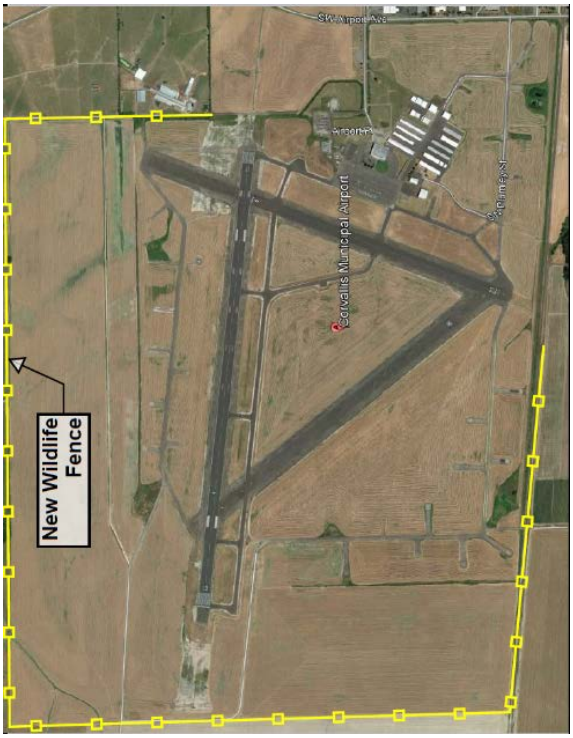
Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 20 years

Project Funding Source:

	FY 20-21
General Fund Operating Revenue	$ 195,000
FAA Grants	1,955,000
Total	$2,150,000



3/2/20

FY 2020-23 RUNWAY 17/35 REHABILITATION

Department: Public Works **Category:** Community Preservation

Origination: Federal Aviation Administration (FAA) CIP, Airport Master Plan

Total Cost: $3,930,000

Project Description: The FAA has scheduled grant funding in their 5-year CIP to rehabilitate runway 17/35, Corvallis Airport's primary runway. A 2018 inspection by the Oregon Department of Aviation revealed that the existing pavement has experienced significant degradation in recent years, which has resulted in it being identified as a priority project by the FAA. Design, permitting and construction of this pavement overlay project is expected to span three fiscal years.

Assumptions: Funding for this project is primarily from state and federal grants. The City will acquire the FAA grant already allocated to this project to cover the majority of costs associated with the work. Two State Critical Oregon Airport Relief (COAR) grants will be pursued for the match to the federal grant, one for the design work (FY 20-21) and one for the construction (FY 22-23).

Operating Budget Impacts: None

Estimated Useful Life: 20 years

Project Funding Source:

	FY 20-21	FY 21-22	FY 22-23
Airport Operating Revenue	$ 7,500		$ 150,000
State COAR Grant	$ 22,500		$ 150,000
FAA Grants	$300,000		$3,300,000
Total	$330,000		$3,600,000

3/2/20

FY 2021-22 MAIN AIRPORT HANGAR WEST WALL SIDING & HANGAR DOOR REPLACEMENT

Department: Public Works **Category:** Community Preservation

Origination: Building Maintenance Plan (Ongoing), Airport Master Plan and Maintenance Condition Assessments

Total Cost: $200,900

Project Description: The Main Airport Hangar was built in the 1940s. The siding on the west wall and the hangar door will be replaced, resulting in better energy efficiency with new double-paned glass windows. As a result of this work, the City will be providing a safer and more effective work environment for the fixed-base operator who provides aircraft maintenance services out of the building.

Operating Budget Impacts: None

Estimated Useful Life: 40 years

Project Funding Source:

	FY 21-22
Airport Operating Revenue	$ 200,900

4/21/20

FY 2022-23 MAIN AIRPORT HANGAR NORTH WALL SIDING AND WINDOW REPLACEMENT

Department: Public Works **Category:** Community Preservation

Origination: Building Maintenance Plan (Ongoing), Airport Master Plan and Maintenance Condition Assessments

Total Cost: $120,000

Project Description: This project will replace the north wall siding and windows. Energy efficiency will be improved with new double-paned windows and the work environment will be enhanced for the fixed-base operator who provides services out of the building.

Operating Budget Impacts: None

Estimated Useful Life: 40 years

Project Funding Source:

	FY 22-23
Airport Operating Revenue	$120,000

4/21/20

Unfunded Projects

The following projects have been identified as needed repairs and/or improvements to the City's infrastructure. In most cases, these projects are the result of a master plan process, which attempts to identify the needs for public infrastructure over a 10-20 year period. These projects are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year period this plan covers.

Airfield and Ground Facilities	**Projected Total**
Main Apron Reconstruction	$6,170,000
Apron Expansion (REACH area)	$400,000
Construct Eastside Taxilane	$480,000
Replace Airfield Signage	$520,000
Wetlands Delineation/Mitigation East of Runway 17 Threshold	$180,000
Acquire Runway 17 Runway Protection Zone Property (19 acres)	$230,000
Main Apron Public Expansion	$650,000
Upgrade Approach Lighting for Runway 17-35	$240,000
Install Runway End Identification Lights	$110,000
Environmental Documentation for Runway Extension	$250,000
Acquire Land for Runway 17-35 Extension (62 acres)	$740,000
Extend Runway/Taxiway 35 by 600-Feet	$1,390,000
Add Medium-Intensity Approach Lighting System	$2,000,000
Environmental Documentation for West Side Taxilane	$50,000
Connect West Side Taxilane	$110,000
Convert Center Taxilane to Airport Entrance Road	$210,000
Acquire Runway 27 Runway Protection Zone Property (11 acres)	$160,000
Reconstruct Taxiway A at Runway 27 Threshold	$500,000
Airport Drainage Improvements	$5,500,000
Total for Unfunded Airfield and Ground Facilities	**$19,422,000**

Airport Buildings	**Projected Total**
T-hangar 5600 & 5620 Rehabilitation	$575,000
Security Cameras	$20,000
Tenant Restroom	$120,000
Construct T-hangar Taxilane Stubs	$510,000
Construct Box Hangar Taxilane Stubs	$300,000
Public Apron for Box Hangars	$570,000
Box Hangar Pavement	$260,000
Hangar Parking/Through Road	$260,000
Rehabilitate T-hangar Door	$20,000

Wash Rack and Oil Separator	$80,000
Tenant Restroom Expansion	$120,000
General Aviation Terminal Building	$1,500,000
Total for Unfunded Airport Buildings	**$4,335,000**

Airport Street and Utilities Infrastructure	**Projected Total**
Piped Storm System Conveyance	$1,585,000
Sanitary System Collection System Expansion	$1,050,000
Water Distribution System Expansion	$1,770,000
Airport Avenue Improvements to Urban Standards	$3,100,000
Plumley Place Improvements to Urban Standards	$550,000
Ingalls Street Improvements to Urban Standards	$1,810,000
Convill Avenue Improvements to Urban Standards	$1,150,000
Hout Street Improvements to Urban Standards	$1,075,000
Total for Unfunded Airport Street and Utilities Infrastructure	**$12,090,000**

GRAND TOTAL FOR UNFUNDED AIRPORT	**$35,847,000**

BUILDINGS

BUILDINGS

The City provides a safe and effective environment for staff to work and for the public to access municipal services, as well as for the City Council and Council advisory groups to meet. We do this through a maintenance and rehabilitation program for our facilities. In the system, there are five buildings with a main focus of providing services to the public, such as the Library, Corvallis Community Center, and Aquatic Center, and there are 14 buildings that serve primarily as staff work areas, such as fire stations and City Hall.

Building assessments are conducted to identify asset performance and integrity, and to generate long-range plans for asset replacement or rehabilitation. These include building systems (HVAC) and structural components (roof). Extending the life of the facility, while enhancing the sustainability of building operations, is a key objective. Many types of regulations mandate facility maintenance activities, including Fire Code, Building Code, Occupational Safety and Health Administration regulations, and the Americans with Disabilities Act.

The City's 20-year building maintenance plans for each facility provide guidance in developing the capital improvement project list. Reviewed and updated annually, this plan allows for efficient scheduling and implementation of infrastructure improvements to ensure the community receives the best return on its investment in public buildings. In the summer of 2018, a team of consultants conducted an extensive condition assessment of most City buildings. The City now has a clearer picture of the scope of deferred maintenance and a prioritized list of projects for those buildings.

As City operations change over time, space requirements and facility designs need to be periodically reevaluated. A space needs study is included in the City's Strategic Operational Plan, the results of which will guide future capital projects.

Consistent with the Corvallis Climate Action Plan, facility capital improvement projects will be designed using LEED guidelines for energy and water efficiency.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIP budgets that are currently in process or that have been revised or completed. Because these and earlier continuing projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

In Progress. Library 2nd Floor Patio Enclosure
Construction is scheduled for the summer of 2020.

In Progress. Transit Maintenance Facility
Construction is scheduled for the summer of 2020. This project fulfills the maintenance portion of the former Transit Operations & Maintenance Facility project.

In Progress. Art Center Roof Replacement
Construction is scheduled for the spring of 2020.

Deferred. Seismic Upgrades to Madison Avenue Building
This project has been moved to the unfunded list.

Financial Challenges

The majority of the public facilities house services that are supported by property taxes, and the expenditures to maintain those facilities are paid from the same revenue stream. Property taxes are a constrained source of monies, and most often these dollars are focused on direct services to the community. This has lead to building maintenance work being deferred. A balance between these competing interests needs to be achieved and maintained because ignoring the maintenance needs of our public buildings will cost the City more in the long run. To that end, a building maintenance reserve was created in FY 16-17 to better position the City to address expected facility projects in the next 10 years to support safe, functional and well-maintained facilities. The outcome of the 2018 building assessment called for an investment of $4,000,000 to catch up on the deferred maintenance identified. A number of those projects are reflected in the CIP, though the majority will be completed through the operating budget.

Funding Summary

The following table shows the total dollar amount for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Each year, the estimated cost of the projects is brought up to current year costs by applying the change in the ENR construction cost index for Seattle.

Projected Cost Totals

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
General Operating Revenue	$110,000	$300,000	$0	$0	$1,000,000	$1,410,000
Street Operating Revenue	$0	$16,300	$25,500	$0	$0	$41,800
Water Operating Revenue	$0	$16,300	$25,500	$0	$0	$41,800
Wastewater Operating Revenue	$0	$16,300	$25,500	$0	$0	$41,800
Stormwater Operating Revenue	$0	$16,300	$25,500	$0	$0	$41,800
GRAND TOTALS	**$110,000**	**$365,200**	**$102,000**	**$0**	**$1,000,000**	**$1,577,200**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year they are anticipated to begin.

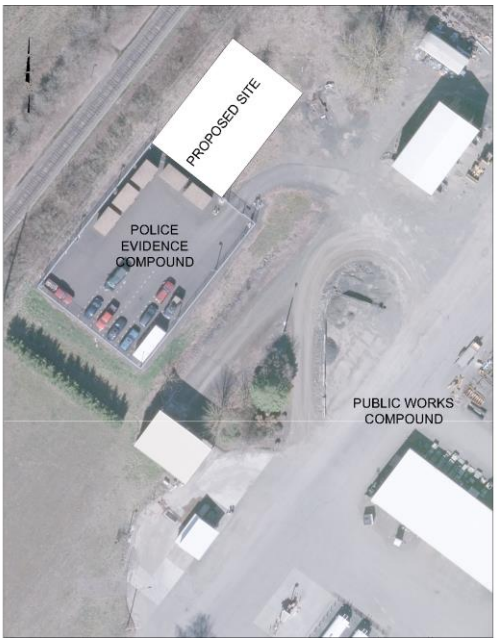
Project Description	Project Total
Initiation Plan Year: 2020-2021	
Police Evidence Building	$350,000
Fire Station 1 Exterior Staircase Repair	$60,000
Initiation Plan Year: 2021-2022	
Public Works Building 2 Roof Replacement	$65,200
Initiation Plan Year: 2022-2023	
Public Works Building 1 & 7 Roof Replacement	$102,000
Initiation Plan Year: 2023-2024	
	$0
Initiation Plan Year: 2024-2025	
Fire Station #4 Replacement	$5,500,000
Grand Total for Buildings:	**$6,077,200**

FY 2020-21 POLICE EVIDENCE BUILDING

Department: Police **Category:** Community Preservation

Origination: Police Department Accreditation Assessment

Total Cost: $350,000



Project Description: The Corvallis Police Department Property and Evidence Unit is responsible for maintaining the chain-of-custody on all items related to criminal cases for purposes of prosecution. This means that the evidence storage area must be completely secure (controlled access and alarmed). The current evidence room at the Law Enforcement Building is near capacity and there is currently no secure indoor storage location for larger items such as vehicles.

This evidence facility will add an additional 2,640 feet of secure storage for evidence items to the current allotted storage area. This would allow the department to comply will all state laws regarding retention of evidence as well as meet the stringent requirements of the Commission on Accreditation for Law Enforcement Agencies standards.

Assumptions: This project is dependent on sufficient capacity in the General Fund to accommodate projects beyond basic operations.

Operating Budget Impacts: Ongoing costs estimated at $2,000 annually for utilities.

Estimated Useful Life: 40 years

Project Funding Source:

	FY 20-21	FY 21-22
General Operating Revenue	$50,000	$300,000

3/2/20

FY 2020-21 FIRE STATION 1 EXTERIOR STAIRCASE REPAIR

Department: Public Works - Facilities **Category:** Community Preservation

Origination: Building Maintenance Plan

Total Cost: $60,000

Project Description: Fire Station 1 is the City's main fire station located in the downtown area. It was constructed in 1998. The building is two stories with approximately 25,000 square feet with nearly half dedicated to the second story for living, training and office spaces for fire station staff. The exterior stairwell is a primary egress for the second story. It is showing signs of deterioration and repair is recommended prior to failure.

Assumptions: Upgrades to facilities are dependent on the availability of funding from revenues generated through property taxes. Project may be deferred if resources are not sufficient or if there are higher priority projects.

Operating Budget Impacts: None

Estimated Useful Life: 30 years

Project Funding Source:

	FY 20-21
General Operating Revenue	$60,000

1/10/20

FY 2021-22 PUBLIC WORKS BUILDING 2 ROOF REPLACEMENT

Department: Public Works - Facilities **Category:** Community Preservation

Origination: Building Maintenance Plan

Total Cost: $65,200

Project Description: The Public Works Building 2 houses operational work areas and storage of fleet for water distribution, traffic signal and parking meter maintenance staff. The roof was last upgraded in 1990 and has reached the end of its useful life.

Assumptions: Upgrades to facilities are dependent on the availability of funding from revenues generated through Public Works activities. Projects may be deferred if resources are not sufficient or if there are higher priority projects.

Operating Budget Impacts: None

Estimated Useful Life: 30 years

Project Funding Source:

	FY 21-22
Street Operating Revenue	$16,300
Water Operating Revenue	16,300
Wastewater Operating Revenue	16,300
Stormwater Operating Revenue	16,300
Total	$65,200

4/21/20

FY 2022-23 PUBLIC WORKS BUILDING 1 & 7 ROOF REPLACEMENT

Department: Public Works - Facilities **Category:** Community Preservation

Origination: Building Maintenance Plan

Total Cost: $102,000

Project Description: Public Works Building 1 houses administrative and management staff. The mid-section of the roof (first picture) was last upgraded in 1988.

Building 7 (second picture) was constructed in 1990 and is used as a maintenance facility for fleet and a storage facility for large equipment, such as street sweepers and hydro-excavators.

The roofs on both these buildings have reached the end of their useful life.

Assumptions: Upgrades to facilities are dependent on the availability of funding from revenues generated through Public Works activities. Projects may be deferred if resources are not sufficient or if there are higher priority projects.

Operating Budget Impacts: None

Estimated Useful Life: 30 years

Project Funding Source:

	FY 22-23
Street Operating Revenue	$25,500
Water Operating Revenue	25,500
Wastewater Operating Revenue	25,500
Stormwater Operating Revenue	25,500
Total	$102,000

3/2/20

FY 2024-26 FIRE STATION #4 REPLACEMENT

Department: Fire **Category:** Infrastructure Development

Origination: Fire Department Strategic Operating Plan

Total Cost: $5,500,000

Project Description: This project will construct a new Fire Station #4, replacing the current station on Tunison Avenue. The current property does not have sufficient space to expand the building to meet the current and expected needs for housing staff and apparatus.

The new station will located closer to the southern City limits to better serve expected growth in South Corvallis. The property will have direct access to Highway 99, making egress from the station more efficient for response calls.

Assumptions: The project will span over two years for design, and construction. Financing will likely be secured for the project, such as bonds or loans.

Operating Budget Impacts: Expenses for utilities and building maintenance will increase over currently costs, due to the increase in the size of the facility.

Estimated Useful Life: 50 years

Project Funding Source:

	FY 24-25	FY 25-26
General Fund Operating Revenue	$1,000,000	$4,500,000

3/4/20

Unfunded Projects

The following projects have been identified as needed repairs and/or improvements to the City's infrastructure. In most cases, these projects are the result of a building assessment, which attempts to identify the needs for public infrastructure over the next 10-20 years. These projects are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year period this plan covers.

Buildings	**Projected Total**
City Hall Roof Replacement	$80,000
Fire Station #1 Roof Replacement	$55,000
City Hall Exterior Column and Handrail Replacement	$45,000
Madison Avenue Building Roof Replacement	$49,700
Madison Avenue Building Seismic Upgrade	$45,000
Municipal Court Building Carpet/Vinyl Replacement	$18,500
Municipal Court Building Parking Lot Repaving	$26,000
Municipal Court Building Electrical Equipment Replacement	$15,000
Osborn Aquatic Center Pool Boiler Replacement	$260,000
Osborn Aquatic Center Piping and Pump Replacement	$30,000
Osborn Aquatic Center Lobby Roof Replacement	$20,000
Parks and Recreation Administrative Office Roof Replacement	$30,000
Parks and Recreation Operations Buildings Replacement	$2,500,000
Public Works Bus Storage Area	$425,000
Public Works Offices Campus and Parking Lot Repaving	$34,500
Public Works Operations and Maintenance Complex	$15,000,000
Downtown Parking Garage	$3,000,000
Emergency Operations Center	$1,610,000
Rebuild Fire Station #2 or #3	$5,500,000
Library 2017 Facility Needs Assessment Implementation	$13,700,000
Downtown City Office Facility	$27,000,000
New Police Station	$18,000,000
New 911 Center	$15,000,000
Fiber Network Replacement	$1,600,000
Security System at City Facilities	$2,000,000
Total for Unfunded Buildings	**$106,043,700**

Seismic Evaluations & Resulting Projects	**Projected Total**
City Hall Annex	TBD
Corvallis Community Center	TBD
Public Works Compound Buildings	TBD

Public Works Rental Property	TBD
Parks and Recreation Administrative Offices	TBD
Parks Equipment and Storage Buildings	TBD
Total for Unfunded Seismic	**TBD**
GRAND TOTAL FOR BUILDINGS	**$106,043,700**

PARKS & RECREATION

Parks and Recreation

The Parks and Recreation Department is responsible for the operation and maintenance of close to 1,800 acres of developed parks, natural areas and trails. City parks, trails, and natural areas are located throughout the City limits, as well as within and outside of Urban Growth Boundary. Additionally, we manage the Senior & Community Center, Osborn Aquatic Center, Majestic Theatre and three (3) community rooms.

In 2015, the City completed a Park and Recreation Master Plan that includes recommended capital projects throughout the park system for a 10-year timeframe. Many of these are major construction projects that are eligible for state and federal grants, with that entity typically funding 50% of the total cost.

Parks and Recreation Staff has initiated an SDC Methodology Update. It is anticipated that SDC rates will change through this process. Projects listed in years 2-5 assume additional SDC income based on projected development. At this time, SDC income projections are low, therefore no projects are shown beyond plan year 22-23. This document will be updated annually with revised SDC projections.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIPs and budgets that are currently in process or that have been revised or completed. Because these and earlier continuing projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

Completed: Bruce Starker Arts Pond Reconstruction

Completed: Chintimini Park Improvements

Completed: Central Park Playground Improvements

Completed: Bruce Starker Arts Amphitheater Improvements

Completed: Dr. Martin Luther King Jr. Park Restroom

Completed: Willamette Park Restroom

Completed: Playground Surfacing Upgrades, Willamette, Peanut, Riverbend

In Process: Senior Center Expansion Construction

In Process: Eric Scott McKinley Skate Park Expansion

In Process: Lily Park Shelter

In Process: Chip Ross Circular Trail

In Process: Playground Surfacing – Village Green Park, Avery Park, Dinosaur Bones, Tunison Park

In Process: Majestic Theatre Seat Replacement

Deferred: ADA Circulation Pathways – Avery Park, Village Green Park

Deferred: Fenced Dog Park Lighting and Shelter

Deferred: Bicycle Park – Acquire Land

Funding Summary

The following table shows the total dollar amount projected for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Each year, the estimated cost of the projects is brought up to current year costs by applying the change in the Engineering News-Record construction cost index for Seattle.

Projected Total Costs

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
Parks SDC	$1,007,500	$1,454,900	$2,567,000	$0	$250,000	$5,279,400
Donations	$400,000	$2,130,000	$0	$0	$0	$2,530,000
Grants	$842,500	$309,900	$412,500	$0	$0	$1,564,900
General Fund	$220,000	$0	$0	$0	$0	$220,000
Other	$250,000	$0	$0	$0	$0	$250,000
GRAND TOTALS	**$2,725,000**	**$3,202,900**	**$2,979,500**	**$0**	**$250,000**	**$9,844,300**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year order they are planned to occur.

Project Description	Project Total
Initiation Plan Year: 2020-2021	
Cloverland Park Tennis Courts	$220,000
Lincoln Riverbend Sports Courts	$250,000
Marys River – Caldwell Trail	$650,000
Dr. MLK, Jr. Park Phased Improvements	$4,000,000
Initiation Plan Year: 2021-2022	
ADA Projects - Circulation Pathways	$40,000
Porter Park Improvements	$147,400
Bruce Starker Arts Park and Natural Area Phase IV - Restroom	$325,000
Bicycle Park Phases 1 & 2	$835,000
Village Green Park Improvements	$147,400
Initiation Plan Year: 2022-2023	
Trail Projects – Herbert Farms and Natural Area Trail	$154,500
Acquire and Develop Parkland in South and Northeast Corvallis	$2,000,000
Avery Park Playground	$500,000
Willamette Park Playground	$325,000
Initiation Plan Year: 2023-2024	
	$0
Initiation Plan Year: 2024-2025	
Fenced Dog Park Lighting and Shelter	$250,000
Grand Total for Parks and Recreation:	**$9,844,300**

FY 2020-21 CLOVERLAND PARK TENNIS COURTS

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $220,000

Project Description: This project will reconstruct the tennis courts at Cloverland Park. They have outlived their useful life span and need to be completely reconstructed including new surfacing, fencing, stripping, and nets.

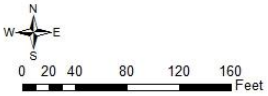
This project will improve the existing condition of the tennis courts and will not have an impact on the operating budget.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21
General Fund	$220,000

Cloverland Park Tennis Courts



4/21/20

FY 2020-21 LINCOLN RIVERBEND SPORTS COURTS

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $250,000

Project Description: This project will construct two courts at Riverbend Park. One court will be for tennis and the other for bicycle polo and other court sports. The courts will be fenced and lighted. This project is being done to replace the two Lincoln School Tennis Courts that will be removed to allow for the construction of a new school building.

This funds currently used to maintain the Lincoln School Tennis Courts will be used for the Riverbend Courts.

Estimated Useful Life: 25 years

Project Funding Source:

	FY 20-21
509J School District	$250,000

4/21/20

FY 2020-21 MARYS RIVER-CALDWELL TRAIL

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $650,000

Project Description: This project will extend the Marys River Natural Area across the Marys River via a pedestrian bridge to Caldwell Natural Area. This trail will provide a vital pedestrian link between southwest and south Corvallis, and will ultimately connect to the proposed south Corvallis trails shown in the Urban Renewal Plan and Transportation Plan.

Assumption: This project will be consistent with land use regulations as they apply to natural features, floodplains, and riparian zones.

Operating Budget Impacts: The addition of a bridge, boardwalk, and ADA trail will require additional maintenance to keep the new pathways clear of leaves and debris, minor repairs to the boardwalk and bridge, and monitoring and removal of hazards. The additional operating cost is estimated to be $2,000 annually.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21
Parks SDC	$407,500
Grant	$242,500
Total	$650,000

4/21/20

FY 2020-22 DR. MARTIN LUTHER KING, JR. PARK PHASED IMPROVEMENTS

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $4,000,000

Project Description: This project will prepare construction drawings and construct phased improvements to the Dr. MLK, Jr. Park based on the Dr. MLK, Jr. Master Plan. This is a large project that is expected to span several years. Phased improvements include trail and circulation improvements, a fenced dog park, a community gathering area, natural play area, restroom, community plaza, and other improvements to celebrate the life of Dr. Martin Luther King, Jr.

Assumption: This project will be consistent with land use regulations.

Operating Budget Impacts: The improvements to the park, particularly the entry plaza and formal dog park will increase operational cost. The estimated increase is $8,000 annually.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21	FY 21-22
Grant	$ 600,000	
Parks SDC	$ 600,000	$ 280,000
Donations	$ 400,000	$2,120,000
Total	$1,600,000	$2,400,000

4/21/20

FY 2021-22 ADA PROJECTS – CIRCULATION PATHWAYS

Department: Parks and Recreation

Category: Community Enhancement

Origination: ADA Assessment Plan/ADA Transition Plan

Total Cost: $40,000

Project Description: Provide accessible routes around parks with an emphasis on connecting playgrounds to parking areas, picnic shelters, and site amenities such as drinking fountains and picnic tables.

Assumption: ADA improvements will be prioritized based on need and current conditions.

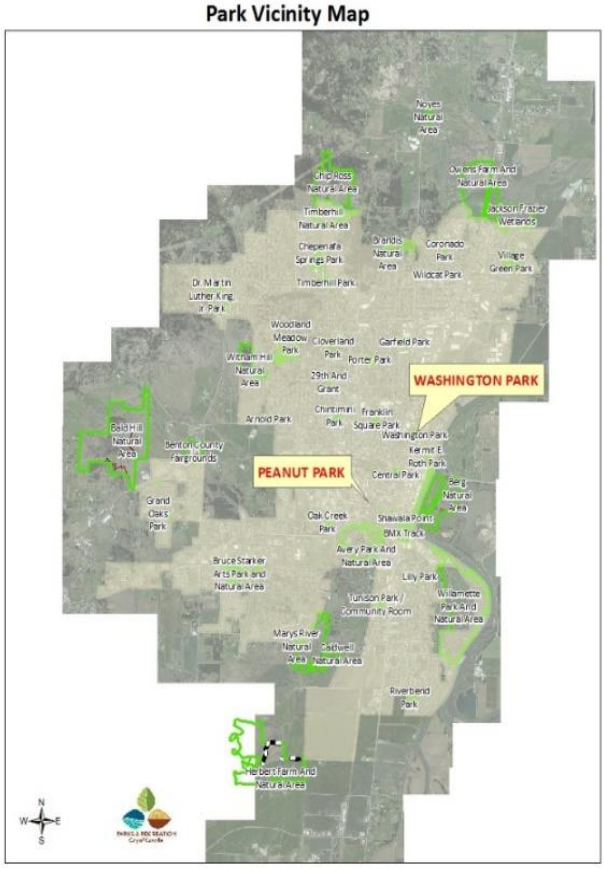
Operating Budget Impacts: The additional connection pathways will need to be maintained and cleared of debris such as leaves, but the total lineal feet of additional pathways is incidental to the leaf removal already occurring at Peanut and Washington Parks.

Estimated Useful Life: 20 years

Project Funding Source:

	FY 21-22
Parks SDC	$40,000

Park Vicinity Map



Location	Year	Project	Estimated Cost
Peanut Park	FY 21-22	Accessible routes to play fields, picnic tables	$18,000
Washington Park	FY 21-22	Accessible routes to playgrounds, picnic tables	$22,000

4/21/20

FY 2021-22 PORTER PARK IMPROVEMENTS

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $147,400

Project Description: Porter Park is a 6.4-acre park that abuts Dixon Creek. The park features a softball field that is used for programmed adult softball games. Other amenities in the park include walkways, connecting pathways, and a small playground.

The playground equipment and surfacing has outlived its useful lifespan and is in need of replacement. Walkways throughout the park need to be replaced and/or added for ADA purposes. The creek vegetation is overgrown and needs restoration and access from the adjacent pathways.

Assumption: Timing and budget are dependent on grant funding opportunities. This project will be consistent with land use regulations as they apply to natural features.

Operating Budget Impacts: None. The replacement playground will be similar in size and makeup to the existing playground.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 21-22
Parks SDC	$ 73,700
Grant	$ 73,700
Total	$147,400

4/21/20

FY 2021-22 BRUCE STARKER ARTS PARK AND NATURAL AREA PHASE IV IMPROVEMENTS - RESTROOM

Department: Parks and Recreation

Category: Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $325,000

Project Description: This project will add a permanent restroom to Bruce Starker Arts Park and Natural Area. The restroom will be located close to the amphitheater to best serve people attending events and visiting the pond and playground.

Assumption: This project will be consistent with land use regulations.

Operating Budget Impacts: The addition of a restroom will increase operational cost to provide daily sanitation visits, graffiti removal, and minor repairs. The total increase to operating budget is $7,000.

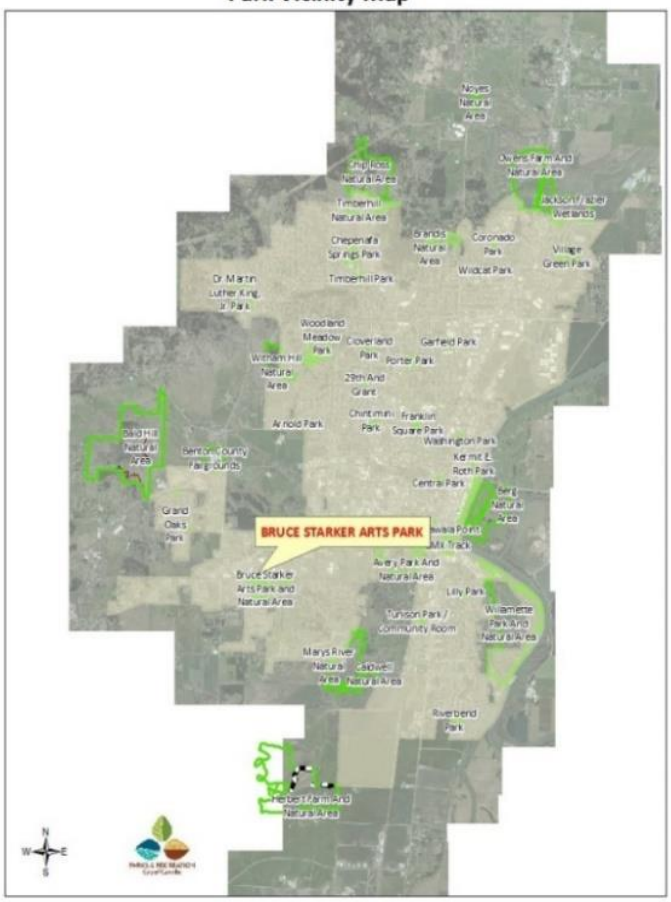
Estimated Useful Life: 80 years

Project Funding Source:

	FY 21-22
Parks SDC	$325,000

4/21/20

Park Vicinity Map



FY 2021-22 BICYCLE PARK

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $835,000

Project Description: This project is to acquire land for the purpose of a bicycle park to include such features as mountain bike trails, bicycle skills features, pump track, and a BMX course. This project is a partnership with Team Dirt.

Assumption: This project will be consistent with land use regulations as they apply to natural features.

Operating Budget Impacts: Team Dirt will provide maintenance prior to full development of the park. Once developed, the bicycle park will require additional operational cost to maintain trails and features associated with the park. The increased operational cost is estimated to be $7,000 annually.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 21-22
Parks SDC	$500,000

This portion of the project will construct the bicycle park features that may include obstacles, boardwalks, and a pump track.

	FY 21-22
Parks SDC	$162,500
Grants	$162,500
Donations	$ 10,000
Total	$335,000

4/21/20

FY 2021-22 VILLAGE GREEN PARK IMPROVEMENTS

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $147,400

Project Description: This project will rehabilitate Village Green Park. Improvements will include but not be limited to a picnic shelter, playground, irrigation, walkways, landscaping, and restroom. Most of the park features have outlived their useful lifespan and is in need a full rehabilitation project.

Assumption: This project will be consistent with land use regulations.

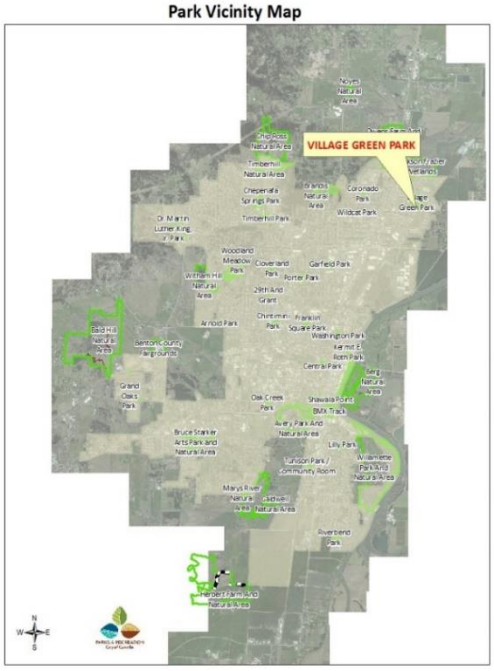
Operating Budget Impacts: The addition of a shelter will increase operational cost to provide removal of graffiti and provide minor repairs. The total increase to operating budget is $900.

Estimated Useful Life: 20 years

Project Funding Source:

	FY 21-22
Grant	$73,700
Parks SDC	$73,700
Total	$147,400

Park Vicinity Map



Village Green Park

4/21/20

FY 2022-23 TRAIL PROJECTS – HERBERT FARMS AND NATURAL AREA TRAIL

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Park and Recreation Master Plan Trails Section/Strategic Plan Survey

Total Cost: $154,500

Project Description: Provide a new trail section at Herbert Farms and Natural Area to provide an elevated boardwalk trail in a recently restored area. The trail will be approximately 2,640 linear feet.

Assumption: Trail design will be based on construction standards adopted in the 2015 Park and Recreation Master Plan. This project will be consistent with land use regulations as they apply to natural features.

Operating Budget Impacts: None

Estimated Useful Life: 20 years

Project Funding Source:

	FY 22-23
Parks SDC	$154,500

4/21/20

FY 2022-23 ACQUIRE AND DEVELOP PARKLAND IN SOUTH AND NORTHEAST CORVALLIS

Department: Parks and Recreation

Category: Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $2,000,000

Project Description: The Corvallis Buildable Lands Inventory shows a need for future housing in south and northeast Corvallis. Concurrent with development, the 2015 Park and Recreation Master Plan shows a need to acquire and develop neighborhood parks to support growth. Parkland acquisition and development will occur concurrent to development in these areas.

Assumption: This project will be consistent with land use regulations.

Operating Budget Impacts: The estimated annual operational cost for two neighborhood parks is $30,000 -$56,000. The range is dependent upon the type and level of park development and size of park.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 22-23
Parks SDC	$2,000,000

4/21/20

FY 2022-23 AVERY PARK PLAYGROUND

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $500,000

Project Description: Portions of the playground equipment at Avery Park has outlived its useful lifespan. The Avery Park playground is very popular due its location across from the Park and Recreation Administration Building and its proximity to several picnic shelters.

Assumption: Timing and budget are dependent on funding opportunities. This project will be a "showcase" for park projects due to its location across from the Park and Recreation Administration Building. This project will be consistent with land use regulations as they apply to natural features.

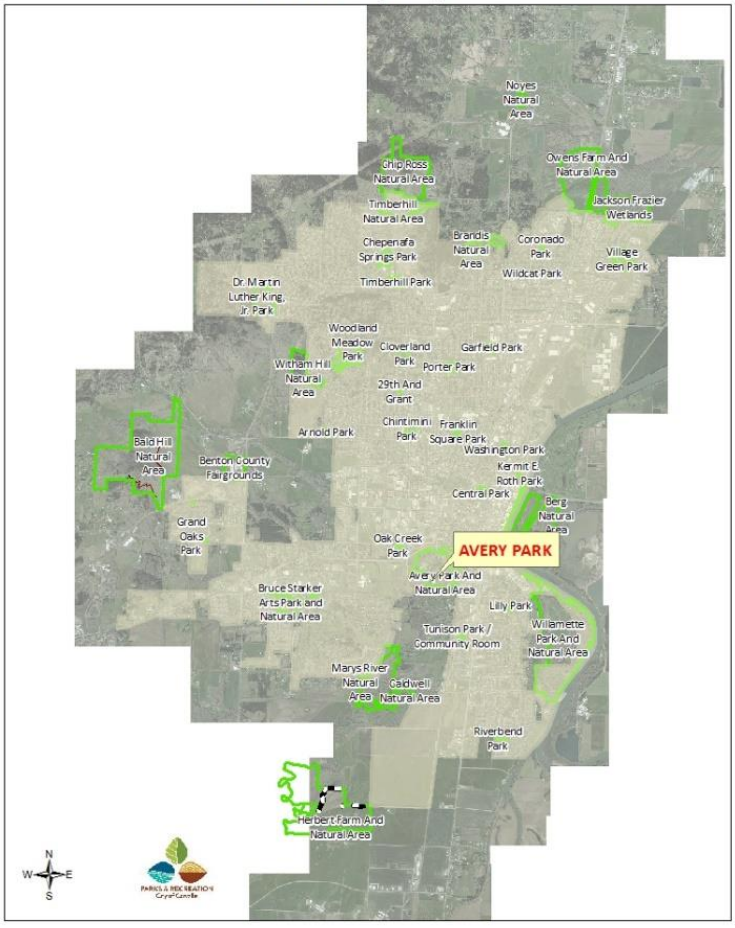
Operating Budget Impacts: The replacement playground will be larger in size and makeup adding $1,500 to the existing playground operation budget.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 22-23
Parks SDC	$250,000
Grant	$250,000
Total	$500,000

Park Vicinity Map



4/21/20

FY 2022-23 WILLAMETTE PARK PLAYGROUND

Department: Parks and Recreation **Category:** Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $325,000

Project Description: The playground equipment at Willamette Park has outlived its useful lifespan. Willamette Park is very popular due to the Rotary picnic Shelter and upcoming permanent restroom. This project will provide new playground equipment for Willamette Park.

Assumption: Timing and budget are dependent on grant funding opportunities. This project will be consistent with land use regulations as they apply to natural features.

Operating Budget Impacts: None

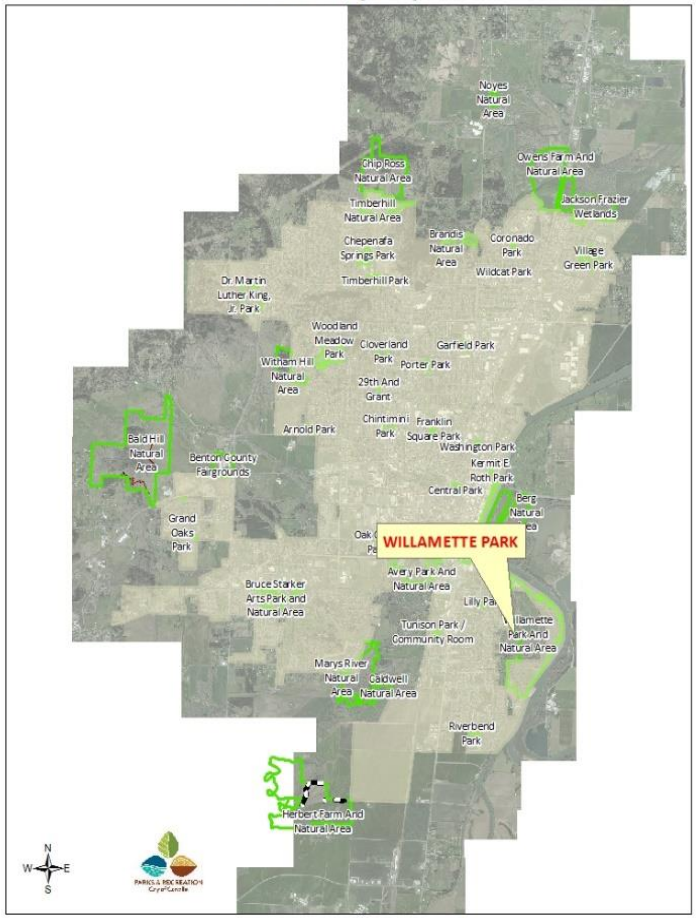
Estimated Useful Life: 80 years

Project Funding Source:

	FY 22-23
Parks SDC	$162,500
Grant	$162,500
Total	$325,000

4/21/20

Park Vicinity Map



FY 2024-25 FENCED DOG PARK LIGHTING AND SHELTER

Department: Parks and Recreation

Category: Community Enhancement

Origination: Parks and Recreation Master Plan

Total Cost: $250,000

Project Description: This project will add lights to the existing fenced dog park and provide a small picnic shelter. This will extend park use.

Assumption: This project will be consistent with land use regulations as they apply to natural features and historic district requirements.

Operating Budget Impacts: The addition of lights to the dog park would increase the utility cost. The addition of a shelter will increase operational cost to remove graffiti and provide minor repairs. The total increase to the operating budget is $1,300.

Estimated Useful Life: 80 years

Project Funding Source:

	FY 24-25
Parks SDC	$250,000

4/21/20

Unfunded Projects

The following projects have been identified as needed repairs and/or improvements to the City's infrastructure. In most cases, these projects are the result of a master plan process, which attempts to systematically look at the needs for public infrastructure and recreation over the next 10-20 years. These projects are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year window this plan covers.

Park Improvements	**Projected Total**
29th and Grant General Enhancements	$40,000
Avery Park	$3,235,000
Peanut Park Play Equipment and Pathways	$200,000
Washington Park Tot Lot and Pathways	$150,000
Irrigation Systems (TBD)	$350,000
North Riverfront Park	$3,200,000
Skate Park - Lighting	$400,000
Pioneer Park Improvements to Fitness Course	$80,000
Shelter Roof Projects	$225,000
Total for Unfunded Park Improvements	**$7,880,000**

Natural Area Improvements	**Projected Total**
Herbert Amenities (Walking Destination, Nature Play Area)	$780,000
Bald Hill Barn and Natural Area Restoration	$410,000
Woodland Meadow Natural Area	$425,000
Caldwell Natural Area	$380,000
Forest Dell Park	$130,000
Witham Hill Natural Area	$150,000
Total for Unfunded Natural Area Improvements	**$2,275,000**

Trails and Parking Improvements	**Projected Total**
Parking Lot Improvements System-Wide	$2,644,400
Trails System Network	$86,569,600
Bald Hill Natural Area Park Path Overlay	$200,000
Total for Unfunded Trails and Parking Improvements	**$89,414,000**

Special Use Projects	**Projected Total**
Lighted Sports Complex	$1,500,000
Owens Farmstead	$1,000,000
Sunnyside School House	$150,000

Riverfront Mechanical Room	$500,000
Gaylord Rehabilitation	$100,000
Osborn Aquatic Center (Facility Improvements, Filters, Bulkhead, Play Equipment)	$1,900,000
Majestic Theater	$2,500,000
Senior Center Phase II (Design & Construction)	$7,270,000
Walnut Community Room	$225,000
Willamette Park Boat Ramp	$250,000
Total for Unfunded Special Use Projects	**$15,395,000**

GRAND TOTAL FOR UNFUNDED PARKS	**$114,964,000**

STORM WATER

STORM WATER

We are fortunate in Corvallis to have a web of urban streams that weave through our community. These waterways enhance our livability by providing green space near many neighborhoods for us to enjoy, and for wildlife and aquatic life to use for habitat. But, these streams serve another very important function. They are, along with the manufactured infrastructure, part of our system to remove storm waters effectively and efficiently from our community after rain events. When the whole system is working properly, we can minimize street flooding and improve the safety for travel around the city during storms. The integrity of the piping system is important, as it keeps extraneous ground water from entering, and maintains the capacity in the pipe for the rainwater flow. To ensure we are able to reap these benefits, we must regularly upgrade and replace all of the 24,389 manufactured assets in the storm water system, such as pipes, outfalls, catch basins, and manholes. In addition, we need to plan for the future and install new infrastructure to meet the needs of the community as it grows. A robust and complete Capital Improvement Program (CIP) and project plan that is funded appropriately will keep us on track to achieve these objectives.

The storm water collection system in Corvallis consists of over 183 miles of pipes and over 20 miles of urban streams. System assets also include detention facilities that minimize erosion in the natural system and maintain capacity in the piping system during a rain event. These detention facilities also provide a level of treatment to the rainwater, contributing to better water quality. Regulatory agencies are expected to continue to emphasize water quality in the years to come, and more or different facilities to assist with quality are expected to be required. Currently, there are 34 detention ponds, 16 swales and four rain gardens in the city.

Proactively managing our assets will provide the longest possible service life for each element in the system, as well as safeguard the investment the community has made over time in the storm water infrastructure, which has a current estimated replacement value of $207,394,600.

The roadmap for capital improvement projects that construct new infrastructure or expand capacity in the current system is the Storm Water Master Plan, which was completed in 2002. This is the blueprint for how the utility will respond to expected growth in the community, respond to existing deficiencies, and comply with new or emerging federal and state regulations. The document provides for efficient planning and implementation of utility improvements to address these evolving challenges, as well as improvements to the natural habitat for fish and wildlife. Master plans typically are renewed every 10 to 15 years. A project to update the current plan is scheduled to begin in the next three to five years. An updated, detailed capital project list will be one of the outcomes of this work effort, and that information will be incorporated in future CIPs.

The driver for selecting capital improvement projects aimed at repair or replacing existing infrastructure is the City's Asset Management Plan (AMP). In FY 17-18, Public Works accomplished the last phase of the utility systems AMP development. The CIP process

benefits from the multi-year work effort to build the AMP, using the information to prioritize and schedule storm water pipe replacement projects for the five years of this CIP.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIP budgets that are currently in process or that have been revised or completed. Because these and earlier continuing projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

Completed. Storm Pipe Replacement: 54th Street from Cherry to Willow Avenue

Completed. Storm Water Master Plan: Sequoia Creek Conveyance Improvements 9th Street to Highway 99

In Process. Storm Water Master Plan: Sequoia North Bypass
Design and federal permitting are in process; construction is scheduled for FY 20-21.

Deferred. Dunawi Creek Fish Passage
Project deferred due to floodway impacts; moved to the unfunded list until the issue can be addressed.

Financial Challenges

Funding for operation and maintenance of the storm water system comes from the monthly storm water charge to customers on the City Services bill. Each year, staff reviews the financial status of the Storm Water Fund, and presents to the City Council the state of the utility and whether the revenue stream is sufficient to meet the obligations for proposed operations and capital projects.

The AMP indicates the expenditure for storm water asset maintenance and replacement should be $2.7 million annually to align with best management practices (BMP). This estimate does not include the costs to maintain the natural storm water system, only the manufactured assets. Currently, about $1.1 million is expended on an annual basis. Staff continues to refine the data to establish a clearer picture of the need, however to meet this preliminary level estimate would require the annual capital investment in our storm water system to increase by approximately 70%.

This presents a financial policy challenge to balance the impact on ratepayers from increased charges against the ability to achieve the desired outcome of a well-managed and maintained utility system. Navigating this balance will be an ongoing City Council level conversation.

Funding Summary

The following table shows the total dollar amount for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Each year, the estimated cost of the projects is brought up to current year costs by applying the change in the ENR construction cost index for Seattle.

Projected Cost Totals

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
Storm Water Operating Revenues	$126,500	$299,700	$356,400	$553,100	$436,400	$1,772,100
Storm Water SDC	$13,000	$26,000	$47,000	$34,000	$0	$120,000
GRAND TOTALS	**$139,500**	**$325,700**	**$403,400**	**$587,100**	**$436,400**	**$1,892,100**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year they are anticipated to begin.

Project Description	Project Total
Initiation Plan Year: 2020-2021	
Storm Pipe Replacement - 27th Street to Circle Place	$165,200
Storm Water Master Plan - Sequoia Conveyance 9th Street to Highland Drive	$465,000
Initiation Plan Year: 2021-2022	
Storm Water Master Plan - Dixon Creek Ponderosa to Glenridge	$465,000
Initiation Plan Year: 2022-2023	
Storm Pipe Replacement - 8th Street Monroe to Jackson Avenues	$322,100
Initiation Plan Year: 2023-2024	
Storm Pipe Replacement - SE Crystal Lake Drive, SE Vera Place	$436,500
Initiation Plan Year: 2024-2025	
Storm Pipe Replacement - NW Meadow Ridge Place	$300,100
Grand Total for Storm Water:	**$2,153,900**

FY 2020-22 STORM PIPE REPLACEMENT – 27TH STREET TO CIRCLE PLACE

Department: Public Works **Category:** Community Preservation

Origination: System Evaluations, Asset Management Program, and Resident Complaints

Total Cost: $165,200

Project Description: This project will replace existing pipe that has reached the end of its useful life with larger diameter pipe. The new pipe will mitigate the risk of street flooding by increasing the capacity of the pipe system to capture rainwater during heavy weather events.

Also, new catch basins designed to better capture pollutants and sedimentation will be installed, improving storm water quality.

The design of this project is scheduled for FY 20-21, with construction in FY 21-22. About 300 feet of new mainline pipe, along with lateral lines, catch basins, and manholes, will be installed.

This project supports the Corvallis Climate Action Plan objectives on adaptation for severe weather events.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21	FY 21-22
Storm Water Operating Revenue	$39,500	$125,700

3/2/20

FY 2020-23 STORM WATER MASTER PLAN – SEQUOIA CONVEYANCE 9TH STREET TO HIGHLAND DRIVE

Department: Public Works **Category:** Community Preservation

Origination: Storm Water Master Plan

Total Cost: $465,000

Project Description: This reach of Sequoia Creek has a history of nuisance flooding due to limited capacity in the stream. This results in system backups and street flooding during rain events.

The project will include sediment removal for approximately 200 feet, west of the 9th Street box culverts (picture), which will increase the capacity of the stream to take more flows.

Design will begin in FY 20-21, permitting in FY 21-22, and construction in FY 22-23.

This project supports the Corvallis Climate Action Plan objectives on adaptation for severe weather events.

Assumption: Timing and budget is dependent on permitting requirements of state and federal agencies. This project needs to be consistent with applicable land use regulations and approvals as they apply to protected natural features.

Operating Budget Impacts: None

Estimated Useful Life: 50 years

Project Funding Source:

	FY 20-21	FY 21-22	FY 22-23
Storm Water Operating Revenue	$ 87,000	$ 87,000	$231,000
Storm Water SDC	$ 13,000	$ 13,000	$ 34,000
Total	$100,000	$100,000	$265,000

3/2/20

FY 2021-24 STORM WATER MASTER PLAN – DIXON CREEK WEST BRANCH, PONDEROSA TO GLENRIDGE

Department: Public Works **Category:** Community Preservation

Origination: Storm Water Master Plan

Total Cost: $465,000

Project Description: This reach of Dixon Creek has a history of high flow velocities during heavy rainfall events which has resulted in creek bank scouring and sediment displacement.

The project will include bank stabilization efforts at the intersection of Ponderosa and Glenridge Streets and invasive vegetation removal along NW Glenridge Drive, for a total of 750 lineal feet. This project will improve natural stream conveyance and reduce the velocity of the water during heavy rain events.

Assumptions: Timing and budget is dependent on permitting requirements of state and federal agencies. This project needs to be consistent with applicable land use regulations and approvals as they apply to protected natural features.

Operating Budget Impacts: None

Estimated Useful Life: 50 Years

Project Funding Source:

	FY 21-22	FY 22-23	FY 23-24
Storm Water Operating Revenue	$ 87,000	$ 87,000	$231,000
Storm Water SDC	$ 13,000	$ 13,000	$ 34,000
Total	$100,000	$100,000	$265,000

1/27/20

FY 2022-24 STORM PIPE REPLACEMENT – 8TH STREET FROM MONROE TO JACKSON AVENUES

Department: Public Works **Category:** Community Preservation

Origination: System Evaluations, Asset Management Program, and Resident Complaints

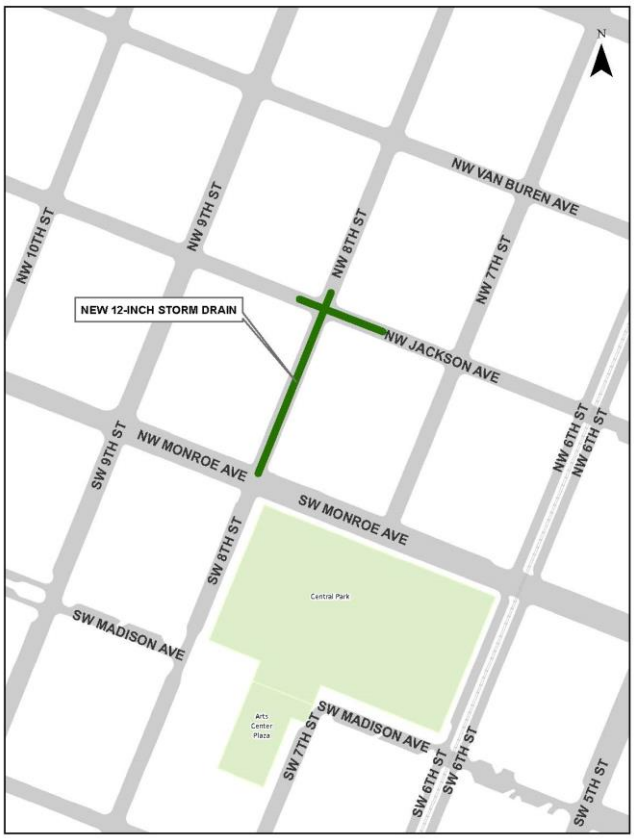
Total Cost: $322,100

Project Description: This project will replace storm water pipe in Jackson Avenue that has reached the end of its useful life.

It will also install a new pipeline in 8th Street that did not exist before. This will mitigate the risk of street flooding by increasing the capacity of the pipe system to capture rainwater during heavy weather events.

The design of this project is scheduled for FY 22-23 and construction in FY 23-24. Approximately 700 feet of new storm water mainline pipe, along with lateral lines, catch basins, and manholes, will be installed.

This project supports the Corvallis Climate Action Plan objectives on adaptation for severe weather events.



Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 22-23	FY 23-24
Storm Water Operating Revenue	$38,400	$283,700

4/21/20

FY 2023-25 STORM PIPE REPLACEMENT - SE CRYSTAL LAKE DRIVE, SE VERA PLACE

Department: Public Works **Category:** Community Preservation

Origination: System Evaluations, Asset Management Program, and Resident Complaints

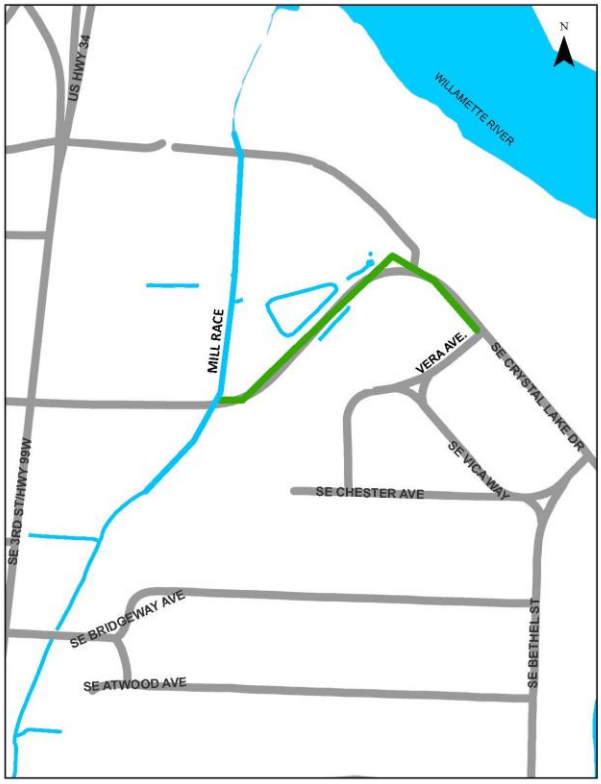
Total Cost: $436,500

Project Description: This project will replace storm water pipe that has deteriorated and reached the end of its useful life.

Also, new catch basins designed to better capture pollutants and sedimentation will be installed, improving storm water quality.

The design of this project is scheduled for FY 23-24 and construction in FY 24-25. Approximately 1,100 feet of new storm water mainline pipe will be replaced. This project will start at the intersection of SE Crystal Lake Drive and SE Vera Avenue and will continue north and west to the termination point of the Mill Race.

This project is in line with the Climate Action Plan objectives on adaptation for severe weather events.



Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 23-24	FY 24-25
Storm Water Operating Revenue	$38,400	$398,100

4/21/20

FY 2024-26 STORM PIPE REPLACEMENT – NW MEADOW RIDGE PLACE

Department: Public Works **Category:** Community Preservation

Origination: System Evaluations, Asset Management Program, and Resident Complaints

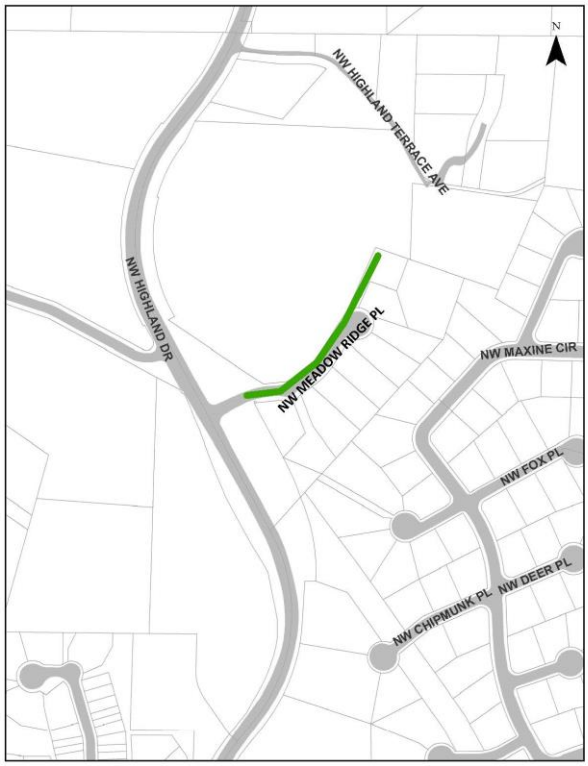
Total Cost: $300,100

Project Description: This project will replace storm water pipe that has deteriorated and reached the end of its useful life.

Also, new catch basins designed to better capture pollutants and sedimentation will be installed, improving storm water quality.

The design of this project is scheduled for FY 24-25 and construction in FY 25-26. Approximately 621 feet of new storm water mainline pipe will be replaced. This project will start at the intersection of NW Meadow Ridge Place and NW Highland Drive and will continue north and east.

This project is in line with the Climate Action Plan objectives on adaptation for severe weather events.



Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 24-25	FY 25-26
Storm Water Operating Revenue	$38,400	$261,700

4/21/20

Unfunded Projects

The following projects have been identified as needed repairs and/or improvements to the City's infrastructure. They are drawn from a master plan, which attempts to identify the needs for new or expanded public infrastructure over a 10-20 year period, and from the City's Asset Management Plan, which predicts the needs for replacement of existing infrastructure. The projects listed are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year period this plan covers.

Conveyance and Piping	**Projected Total**
Dixon Creek - Garfield to Kings	$252,800
Oak Creek - 35th Street to Harrison Boulevard	$56,000
Dixon Creek - Circle Boulevard to 29th Street	$192,000
Dixon Creek - Walnut Boulevard to Headwaters	$218,600
Dunawi Creek - Confluence with West Branch	$224,000
Sequoia Creek - Walnut Boulevard to Headwaters	$160,000
Dixon Creek - 29th Street to Walnut Boulevard	$34,900
Dunawi Creek - Technology Loop to 53rd Street	$163,200
Oak Creek - Western Boulevard to 35th Street	$193,600
Oak Creek - 35th Street to Cardwell Hill Drive	$166,400
Jackson/Frazier - Highland Drive	$44,800
Storm Water Pipe Asset Replacement	$3,290,300
Total for Unfunded Conveyance and Piping	**$4,996,600**

Stream Restoration	**Projected Total**
Dixon Creek - 9th Street to Buchanan	$67,200
Dunawi Creek Fish Passage	$685,000
Dunawi Creek - Reed Place to 35th Street	$34,600
Dunawi Creek - Marys River to Reed Place	$105,600
Oak Creek - Western Boulevard to 35th Street	$33,600
Oak Creek - Highway 20/34 to 35th Street	$44,800
Dixon Creek - Kings Boulevard to Circle Boulevard	$361,600
Dixon Creek - 3rd Street to Railroad Tracks	$96,000
Dixon Creek - Walnut Boulevard to Arrowood Circle	$96,000
Dunawi Creek - 35th Street to Country Club Place	$448,000
Oak Creek - Harrison Boulevard to Cardwell Hill Drive	$64,000
Mill Race - Highway 99 to Allen Street	$131,200
Dixon Creek - Garfield Avenue to 29th Street	$20,800
Dixon Creek - Walnut Boulevard to Headwaters	$313,600
Dixon Creek - Walnut Boulevard to Arrowood Circle	$960,000
Dunawi Creek - 53rd Street to Headwaters	$80,000

Jackson/Frazier - Crescent Valley to McDonald Forest	$35,200
Oak Creek - Highway 20/34 to Western Boulevard	$128,000
Marys River - East Basin	$40,000
Mill Race – Hollingsworth & Vose Culvert to Highway 99	$152,000
Total for Unfunded Stream Restoration	**$3,897,200**

Treatment	**Projected Total**
Dixon Creek - 160 Outfalls	$4,860,000
Dunawi Creek - 56 Outfalls	$1,700,000
Jackson/Frazier - 31 Outfalls	$945,000
Sequoia Creek - 79 Outfalls	$2,400,000
Sequoia Creek - Railroad Bridge Area Storm System	$80,000
Oak Creek - 31 Outfalls	$945,000
Marys River - 20 Outfalls	$608,000
Marys River - Pioneer Park Storm System	$40,000
Mill Race - 23 Outfalls	$700,000
Mill Race - Mayberry Avenue Storm System	$80,000
Willamette River - 4 Outfalls	$245,000
Total for Unfunded Treatment	**$12,603,000**

South Corvallis Area Plan	**Projected Total**
Construct Drainageway in Northwest Sector of Plan	$1,250,000
Construct Water Quality Ponds in Northwest Sector of Plan	$181,000
Construct Drainageway in South Sector of Plan	$670,000
Total for Unfunded South Corvallis	**$2,101,000**

GRAND TOTAL FOR UNFUNDED STORM WATER	**$23,597,800**

TRANSPORTATION

TRANSPORTATION

The streets, sidewalks, and multi-use paths in Corvallis are used every day by the residents of our community, as well as by visitors, commuters, and travelers passing through. This transportation network is vitally important for the movement of people and goods, and contributes greatly to the economic vitality of our community. System components of traffic signals, signage, pedestrian crossings and pavement markings facilitate mobility and safety for all modes of transportation and reduce conflicts between the modes. When all the infrastructure components are operating properly, and all users are obeying the rules, everyone's experience is enhanced. The alternative can be, quite literally, chaos. Our responsibility is to provide a transportation network that protects the safety of users while supporting the community's access to work, school, recreation, and commerce. To accomplish this, we must regularly maintain and upgrade our transportation assets. In addition, we need to plan for the future and install new infrastructure to meet the needs of the community as it grows over time. A robust and complete Capital Improvement Program (CIP) and project plan that is funded appropriately will keep us on track to fulfill our responsibility.

The transportation system in Corvallis consists of city, county and state infrastructure. The City is responsible for 369 miles of streets and 22 miles of multi-use paths. We also maintain 57 traffic signals, 338 miles of sidewalks, 55 street islands, over 7,000 signs, 28 bridges, 10 covered bike shelters, and numerous bike parking racks. Proactively managing assets will provide the longest possible service life for the infrastructure, as well as safeguard the community's investment in the entire transportation system.

The roadmap for capital improvement projects that construct new infrastructure or expand capacity is the Corvallis Transportation System Plan, which was updated in 2018. This is the blueprint for how the system will respond to expected growth in the community, existing deficiencies, and projected changes in travel modes or travel behavior. The document provides for efficient planning and implementation of infrastructure improvements to address these evolving challenges as well as the safety of the system users.

One driver for selecting capital improvement projects aimed at repair or replacing existing infrastructure is the Pavement Management System (PMS). On a set schedule, the condition of street surfaces is assessed and assigned as score on the pavement condition index (PCI) scale. All streets in the community that are under the City's jurisdiction have been assessed and we now have a comprehensive PMS that will guide future activities to protect and prolong the life of the street pavement. PMS information was used to prioritize street resurfacing projects identified in this CIP.

Street resurfacing projects rehabilitate asphalt streets by overlaying existing pavement with new asphalt. Streets are selected for resurfacing based on the PCI score and the functional classification of those streets. In general, major roadways (arterial and collector streets) are assigned the highest priority for resurfacing, with local or neighborhood streets addressed as budgets allow.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIPs that are currently in process or that have been revised or completed. Because these and earlier continuing projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

Completed. 9th Street Safety Improvements, Spruce Avenue to Circle Boulevard

Completed. Local Street Reconstruction: Oak Avenue

Completed. Street Resurfacing: Portions of Kings Boulevard and 9th Street

In Process. Street Resurfacing: Circle Boulevard
Design will be completed this fiscal year with construction in summer 2020.

In Process. Traffic Signal Safety Enhancements, FY 2019-20
Design will be completed this fiscal year with the retrofit completed in FY 2020-21.

In Process. Marys River – Crystal Lake Drive Shared-Use Path
Design is complete with construction scheduled for the summer/fall 2020.

In Process. 11th Street Pedestrian Crossing Improvement
Design is complete and construction is scheduled for summer 2020.

Modified. Pedestrian Connection – Harrison to 35th Street
This project has been combined with the Multi-Use Path – Harrison to Campus Way.

Removed. Traffic Signal Safety Enhancements, FY 2020-22
ODOT grant was not awarded.

Removed. Transit Operations and Maintenance Facility
Transit operations were successfully moved to existing space within the Public Works campus, along with maintenance of the bus fleet. These changes meet the current needs.

Removed. Multi-Use Path Wayfinding Signage
The project did not meet the criteria for the capital improvement program. The work will be completed through the Public Works Department operating budget.

Financial Challenges

Like every city, Corvallis is challenged to generate sufficient, consistent revenue to fund an adequate maintenance program for all the components of a healthy transportation system. The main source of funding for operating and maintaining the transportation system comes from the State Highway Fund, which is comprised of gas taxes (a surcharge on gasoline sold at the pump), vehicle registration fees, and weight mileage fees charged to freight haulers.

Consumer behavior plays a big role in how much revenue is generated from this source. If less gas is purchased because fuel prices increase or there are more fuel-efficient vehicles operating in Oregon, then fewer taxes are collected. Inconsistent levels of revenue present a challenge to achieving and sustaining an appropriate street asset management program into the future.

The second largest source of revenue is the Transportation Maintenance Fee (TMF). While State Highway Fund revenue can be used on any component of the transportation system, the revenue from the TMF, per the Municipal Code, can be used only to maintain street pavement assets. The City Council approved TMF increases that are expected to generate sufficient revenues to stabilize the City's pavement preservation program. A portion of the TMF revenues were set aside by Council to fund pedestrian or bicycle safety projects.

The City pursues State and federal grants for maintenance and reconstruction of arterial and collector streets, as well as for bicycle and pedestrian system improvements, but these grants are very competitive. The federal funding made available to the Corvallis Area Metropolitan Planning Organization is required to be shared with Benton County and other cities within the county, limiting the amount available to Corvallis for projects.

Funding Summary

The following table shows the total dollar amount for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Projected Cost Totals

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
General Fund		$37,500	$112,500			$150,000
Urban Renewal		$167,500	$502,500			$670,000
Grants		$918,100	$3,257,300			$4,175,400
Street Operating Revenue	$48,000	$842,600	$1,085,800	$690,000	$690,000	$3,356,400
Transportation Maintenance Fee	$310,000	$1,510,000	$3,770,000	$4,740,000	$5,010,000	$15,340,000
Street SDC		$21,600	$103,000			$124,600
State Surface Transportation Block Grant			$754,000	$626,000		$1,380,000
509J School District		$1,400	$12,500			$13,900
GRAND TOTALS	**$358,000**	**$3,498,700**	**$9,597,600**	**$6,056,000**	**$5,700,000**	**$25,210,300**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year they are anticipated to begin.

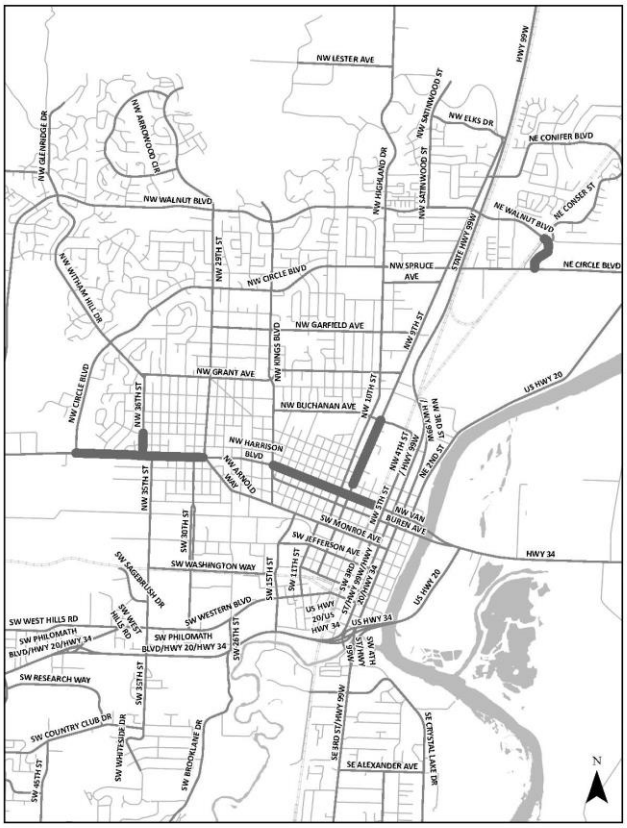
Project Description	Project Total
Initiation Plan Year: 2020-2021	
Street Resurfacing - Harrison, Walnut Blvd, 9th and 36th Streets	$1,900,000
Initiation Plan Year: 2021-2022	
Marys River Pedestrian and Bicycle Crossing	$1,650,000
Traffic Signal Replacement - Kings/Buchanan	$350,000
Pedestrian Connection - Harrison to 35th	$1,094,300
Safe Routes to School	$351,100
Multi-Use Path - Tunison to Avery	$1,869,100
Pedestrian Crossing - 9th Street	$265,800
Street Resurfacing - Circle, 9th St, Van Buren Ave, and Technology Loop	$5,054,000
Initiation Plan Year: 2022-2023	
Street Resurfacing -Western, Kings, 5th, Forestgreen, Goodnight, Midvale	$6,126,000
Initiation Plan Year: 2023-2024	
Street Resurfacing - TBD	$5,700,000
Initiation Plan Year: 2024-2025	
Street Resurfacing - TBD	$5,700,000
Grand Total for Transportation:	**$30,060,300**

FY 2020-22 STREET RESURFACING - HARRISON AND WALNUT BOULEVARD, AND 9TH AND 36TH STREET

Department: Public Works **Category:** Community Preservation

Origination: Pavement Management System

Total Cost: $1,900,000



Project Description: Consideration for this year's projects will include segments of the following streets: Harrison Boulevard between the Circle Boulevard extension and 29th Street; Harrison Boulevard between Kings Boulevard and 6th Street; 9th Street between Reiman Avenue and Tyler Avenue; Walnut Boulevard between Circle Boulevard and Seavy Avenue; and 36th Street between Polk Avenue and Harrison Boulevard.

Assumptions: The City Council approved an increase to the TMF during the development of the CIP. Staff is in the process of expanding the scope of this project to incorporate the additional maintenance made possible by the expected new revenues.

Operating Budget Impacts: None

Estimated Useful Life: 20+ years

Project Funding Sources:

	FY 20-21	FY 21-22
Street Operating Revenue	$ 48,000	$ 612,000
TMF	$ 310,000	$ 930,000
Total	$358,000	$1,542,000

3/2/20

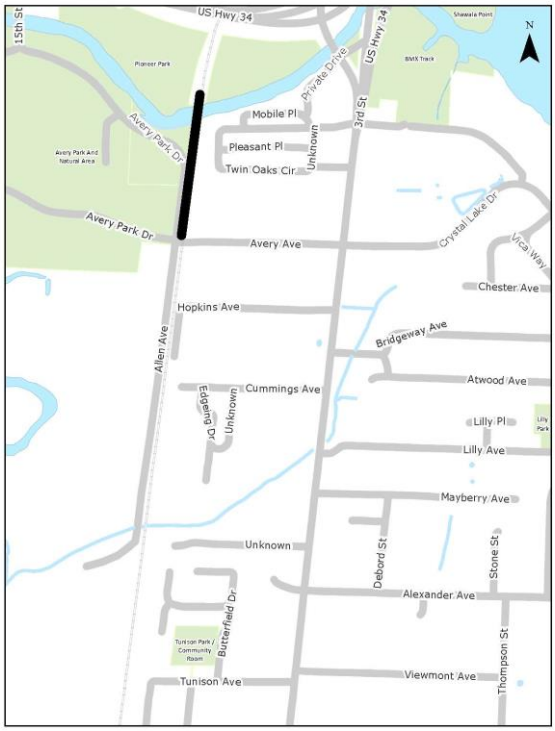
FY 2021-23 MARYS RIVER PEDESTRIAN AND BICYCLE CROSSING

Department: Public Works

Category: Infrastructure Development

Origination: Transportation System Plan

Total Cost: $1,650,000



Project Description: This project will construct a bicycle and pedestrian bridge across the Mary's River in the vicinity of the railroad trestle connecting the Pioneer Park trail network on the north side of the Marys to transportation facilities on the south side including the future South Corvallis Multiuse Path to be partially funded using urban renewal dollars.

Assumptions: Implementation of this project depends on acquisition of a State Grant.

Operating Budget Impacts: Annuitized maintenance costs estimated at $1,000 per year.

Estimated Useful Life: 50+ years

Project Funding Source:

	FY 21-22	FY 22-23
General Fund	$ 37,500	$ 112,500
State Grant	$375,000	$1,125,000
Total	$412,500	$1,237,500

3/10/20

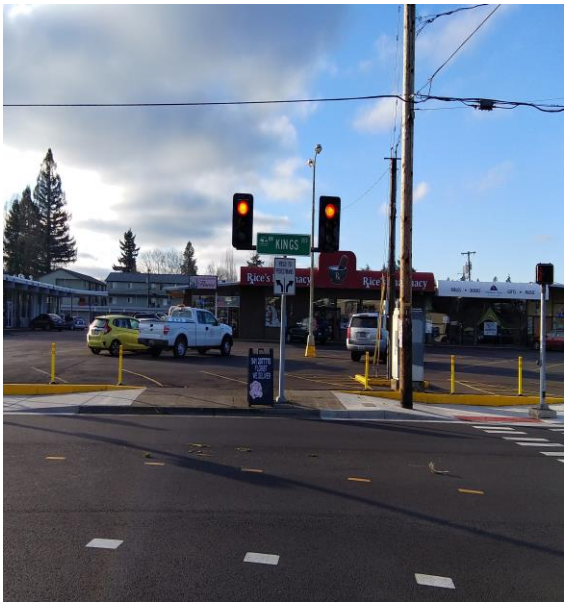
FY 2021-23 TRAFFIC SIGNAL REPLACEMENT –KINGS BOULEVARD AND BUCHANAN AVENUE

Department: Public Works **Category:** Community Preservation

Origination: Asset Maintenance Plan

Total Cost: $350,000

Project Description: The project replaces the traffic signal at Kings Boulevard and Buchanan Avenue. Installed 50 years ago, this is the oldest signal in the City's system and has exceed its useful service life by 20 years.



Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 30+ years

Project Funding Source:

	FY 21-22	FY 22-23
Street Operating Revenue	$35,000	$315,000

3/2/20

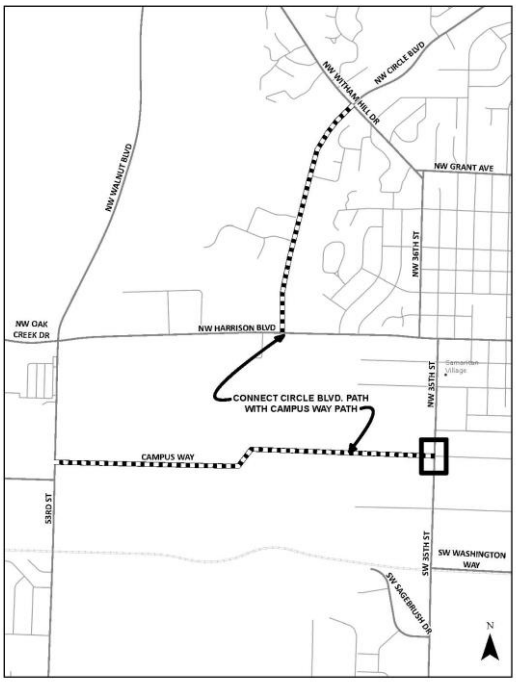
FY 2021-23 PEDESTRIAN CONNECTION - HARRISON TO 35TH STREET

Department: Public Works **Category:** Infrastructure Development

Origination: Transportation System Plan, Bicycle and Pedestrian Advisory Board, Community Requests

Total Cost: $1,094,300

Project Description: This project, identified in the 2018 Corvallis Transportation System Plan, will construct a separated asphalt multi-use path connecting Harrison Boulevard (Circle Boulevard path) and Campus Way. It will include a pedestrian crossing at the intersection of 35th Street and Campus Way. The alignment of the path has not been determined.



The project will be developed in coordination with OSU to select an alignment that is compatible with their use of this university property, and will include outreach to surrounding residents.

The project aligns with Corvallis Climate Action Plan objectives to reduce greenhouse gas emissions through less reliance on vehicles.

Assumptions: The ability to implement this project assumes the acquisition of grant funding from ODOT with the next funding cycle in 2021. The grant shown below has not been secured.

Operating Budget Impacts: Maintenance estimated at $1,000/year for sweeping and mowing.

Estimated Useful Life: 20 years

Project Funding Sources:

	FY 21-22	FY 22-23
Street Operating Revenue	$ 3,900	$ 11,500
Street SDC	$ 13,700	$ 79,400
ODOT Grant	$162,700	$823,100
Total	$180,300	$914,000

3/2/20

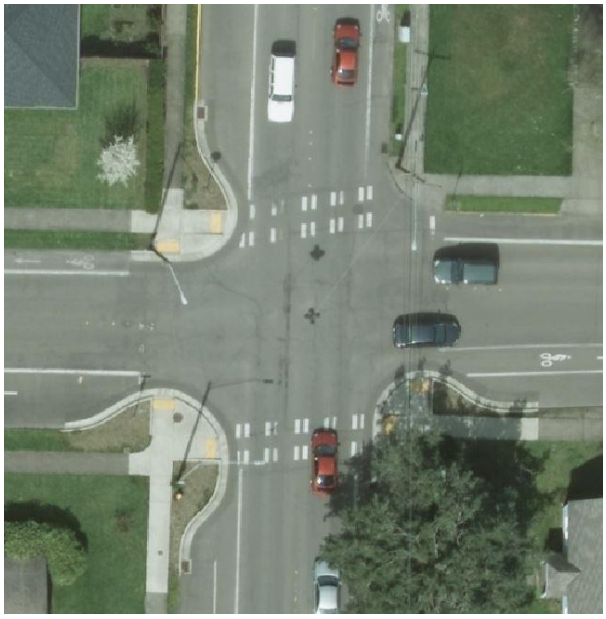
FY 2021-23 SAFE ROUTES TO SCHOOL

Department: Public Works **Category:** Community Enhancement

Origination: Safe Routes to School Team (School District, County Health Department, City Public Works Department) and Community Requests

Total Cost: $351,100

Project Description: This project will improve safety at Wilson Elementary by shortening and realigning street crossing distances, tightening the school exit driveway radius and upgrading sidewalk ramps. This will enhance safety for students walking and bicycling to school.



Example of Bulbed Intersection

Assumptions: This assumes award of a Safe Routes to School (SRTS) infrastructure grant, which the City will apply for in the fall of 2020. The SRTS grant requires a 20% local match. This project also assumes matching funds from the Corvallis School District for the radar speed feedback signs. If those funds are not provided, that portion of the project may not be completed.

Operating Budget Impacts: $200 per year for nominal repairs to radar speed feedback signs.

Estimated Useful Life: 20+ years

Project Funding Source

	FY 21-22	FY 22-23
SRTS Grant	$ 28,100	$252,800
Street Operating Revenue	$ 5,600	$ 50,700
School District	$ 1,400	$ 12,500
Total	$ 35,100	$316,000

3/2/20

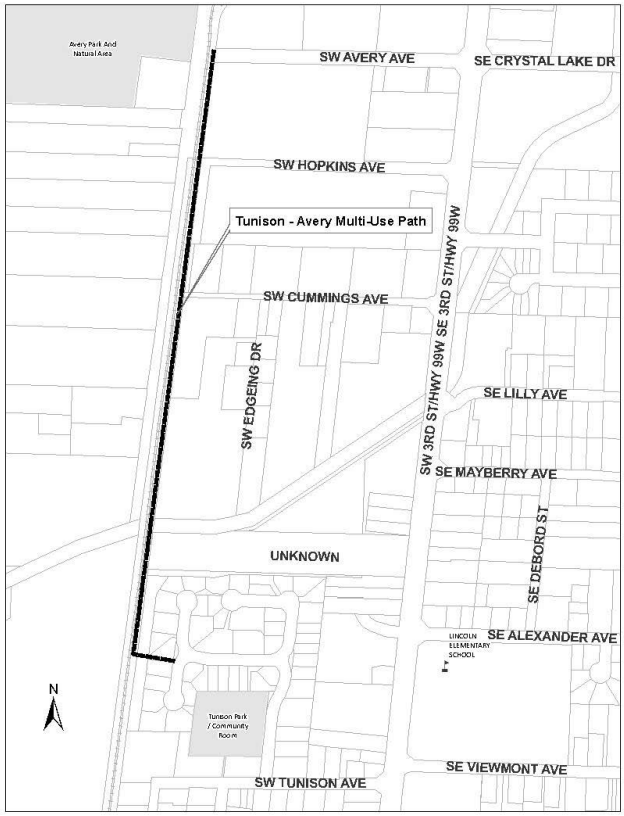
FY 2021-23 MULTI-USE PATH – TUNISON TO AVERY

Department: Public Works **Category:** Infrastructure Development

Origination: Transportation System Plan, South Corvallis Area Refinement Plan, Community Request

Total Cost: $1,869,100

Project Description: This project will construct a path connection between the Tunison neighborhood and Avery Park as an alternate route to Highway 99 for bicyclists and pedestrians. This facility is approximately ½ mile in length and is envisioned to be 12 feet in width except where physical or environmental restrictions require it to be narrower.



It is a segment of a much longer path between Airport Road and Avery Avenue identified by both the Transportation System Plan and the South Corvallis Area Refinement Plan.

The project aligns with Corvallis Climate Action Plan objectives to reduce greenhouse gas emissions through less reliance on vehicles.

Assumptions: The project is dependent upon obtaining grant funding, and the grant shown below has not been secured.

Operating Budget Impacts: $1,000 per year for sweeping and vegetation management.

Estimated Useful Life: 20 years

Project Funding Source:

	FY 21-22	FY 22-23
Street SDC	$ 7,900	$ 23,600
Urban Renewal	$ 167,500	$ 502,500
ODOT Grant	$ 291,900	$ 875,700
Total	$467,300	$1,401,800

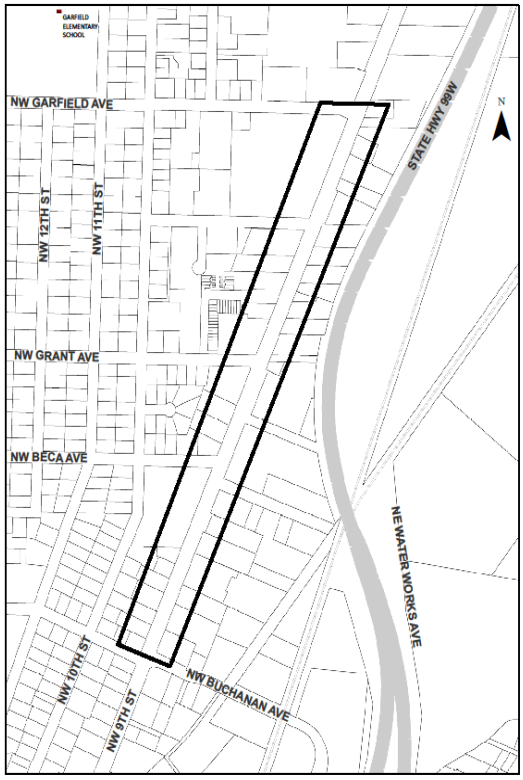
3/10/20

FY 2021-23 PEDESTRIAN CROSSINGS – 9TH STREET

Department: Public Works **Category:** Infrastructure Development

Origination: CAMPO 9th Street Improvement Plan, Bicycle and Pedestrian Advisory Board and Community Request

Total Cost: $265,800



Project Description: This project will construct two signalized pedestrian crossings: one between Buchanan and Grant Avenues and the other between Grant and Garfield Avenues.

The project aligns with Corvallis Climate Action Plan objectives to reduce greenhouse gas emissions through less reliance on vehicles.

Assumptions: Grant funding is needed to construct this project. The next available ODOT grant cycle is 2021. The grant shown below has not been secured.

Operating Budget Impacts: $200/year per island for curb painting and miscellaneous repairs.

Estimated Useful Life: 20+ years

Project Funding Sources:

	FY 21-22	FY 22-23
Street Operating Revenue	$ 6,200	$ 18,600
ODOT Grant	$60,300	$180,700
Total	$66,500	$199,300

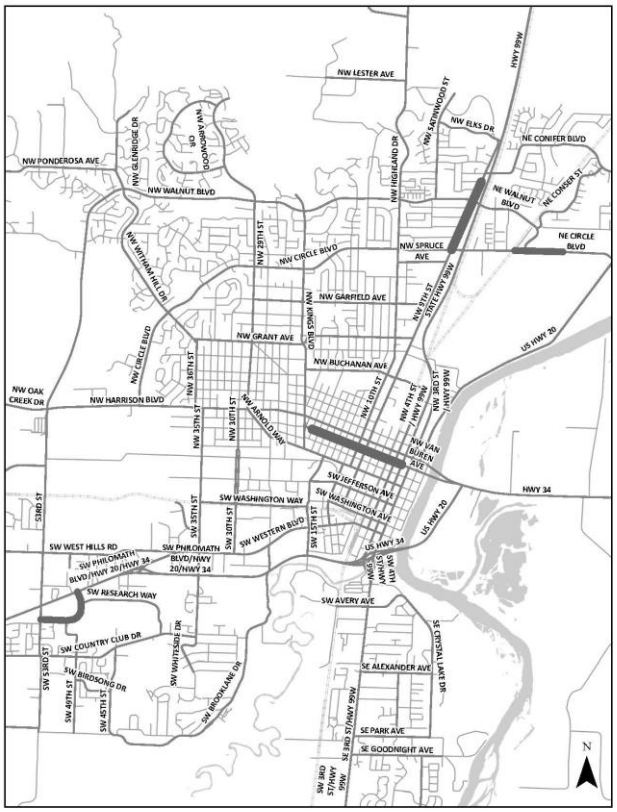
3/2/20

FY 2021-23 STREET RESURFACING – CIRCLE BOULEVARD, 9TH STREET, VAN BUREN AVENUE, AND TECHNOLOGY LOOP

Department: Public Works **Category:** Community Preservation

Origination: Pavement Management System

Total Cost: $5,054,000



Project Description: Consideration for this year's projects will include Circle Boulevard between Seavy Avenue and the eastern City limits; 9th Street between Ponderosa Avenue and Circle Boulevard; segments of Van Buren Avenue between 4th Street and 17th Street; and Technology Loop.

Surface Transportation Block Grant (STBG) program funds are federal funds distributed by the State to the Corvallis Area Metropolitan Planning Organization (CAMPO) for rehabilitation of collectors and arterials. This grant has been secured.

Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 20+ years

Project Funding Sources:

	FY 21-22	FY 22-23
Street Operating Revenue	$180,000	$ 510,000
TMF	$580,000	$3,030,000
STBG Program		$ 754,000
Total	$760,000	$4,294,000

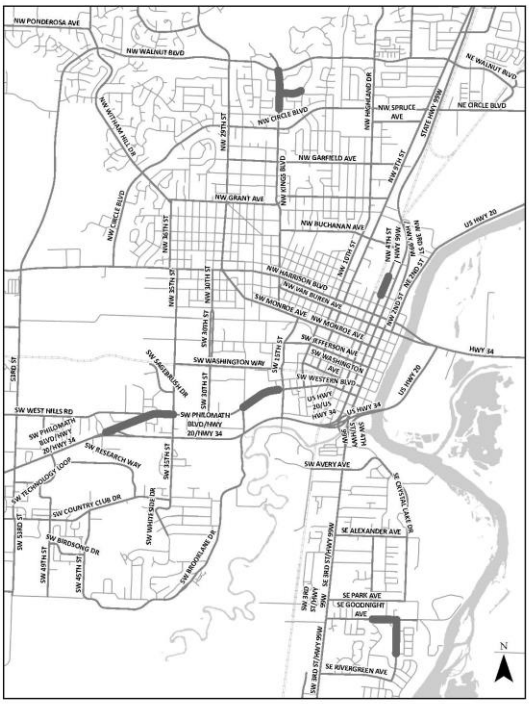
3/2/20

FY 2022-24 STREET RESURFACING - WESTERN, KINGS, 5TH, FORESTGREEN, GOODNIGHT AND MIDVALE

Department: Public Works **Category:** Community Preservation

Origination: Pavement Management System

Total Cost: $6,126,000



Project Description: Consideration for this year's projects will include segments of the following streets: Western Boulevard between Hwy 20/34 and 35th Street and between 16th and 26th Streets; Kings Boulevard between Walnut Boulevard and Larch Avenue; 5th Street between Polk and Fillmore Avenues; Forestgreen Avenue between Kings Boulevard and Rolling Green Drive; Goodnight Avenue between Summerfield and Midvale Drives; and Midvale Drive between Goodnight Avenue and Schooner Drive.

Surface Transportation Block Grant (STBG) program funds are federal funds distributed by the State to the Corvallis Area Metropolitan Planning Organization (CAMPO) for rehabilitation of collectors and arterials. This grant has been secured.

Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 20+ years

Project Funding Sources:

	FY 22-23	FY 23-24
Street Operating Revenue	$180,000	$ 510,000
TMF	$740,000	$4,070,000
STBG Program		$ 626,000
Total	$920,000	$5,206,000

1/14/20

FY 2023-25 STREET RESURFACING - TBD

Department: Public Works **Category:** Community Preservation

Origination: Pavement Management System

Total Cost: $5,700,000

Project Description: Locations under consideration for this year's projects are not yet identified and will be determined by the City's Pavement Management System in future years.

Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 20+ years

Project Funding Sources:

	FY 23-24	FY 24-25
Street Operating Revenue	$180,000	$ 510,000
TMF	$670,000	$4,340,000
Total	$850,000	$4,850,000

1/14/20

FY 2024-26 STREET RESURFACING - TBD

Department: Public Works **Category:** Community Preservation

Origination: Pavement Management System

Total Cost: $5,700,000

Project Description: Locations under consideration for this year's projects are not yet identified and will be determined by the City's Pavement Management System in future years.

Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 20+ years

Project Funding Sources:

	FY 24-25	FY 25-26
Street Operating Revenue	$180,000	$ 510,000
TMF	$670,000	$4,340,000
Total	$850,000	$4,850,000

1/14/20

Unfunded Projects

The following projects have been identified by the current Transportation System Plan (TSP) as high priority improvements to transportation infrastructure serving Corvallis. The plan's project identification numbers are provided as reference, and the TSP can be referred to for additional detail on each. For the most part, this is a list of new facilities and infrastructure. However, it also includes an umbrella project which represents the current $74M backlog of City street pavement rehabilitation and reconstruction work as identified by the Pavement Management System. The projects listed are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year period this plan covers.

Project ID	High Priority City Facilities	Projected Total
A47	9th Street Signal Coordination	$76,000
A49	Seismic Retrofit of Bridges	$1,250,000
A57	30th Street/Harrison Boulevard Improvements	$35,000
B18	Garfield Avenue Bike Lanes	$32,000
B38	Elmwood Drive Neighborhood Bikeway/Circle Boulevard Low-Stress Roadway	$155,000
B39	Tyler Avenue Neighborhood Bikeway	$125,000
B40	Alta Vista Drive/34th Street Neighborhood Bikeway	$70,000
B41	26th/27th Street Neighborhood Bikeway	$135,000
B42	16th/17th Street Neighborhood Bikeway	$135,000
B43	11th Street Neighborhood Bikeway	$210,000
B44	Beca Avenue/Lincoln Avenue Neighborhood Bikeway	$175,000
B46	Campus Way/Madison Avenue Neighborhood Bikeway	$135,000
B47	SE Corvallis Neighborhood Bikeway	$135,000
B48	Lancaster Street Neighborhood Bikeway	$85,000
B50	NE Corvallis Neighborhood Bikeway	$120,000
B51	5th Street Buffered Bike Lanes	$55,000
M3	West Hill Road Modernization (Western to 53rd)	$10,036,000
M144	West Hills Road Modernization (53rd to Reservoir)	$12,043,000
P1	35th Street Sidewalks	$125,000
P17	Harrison Boulevard and 29th Street Safety Improvements	$35,000
P22	Country Club Drive Sidewalks	$295,000
P27	Harrison Boulevard Sidewalks	$440,000
P33	Garfield Avenue and Kings Boulevard Pedestrian Crossings	$100,000
P34	Monroe Avenue and Kings Boulevard Pedestrian Safety	$35,000
P47	West Hills Road Sidewalks (Western to 53rd)	$495,000
PB4	Bicycle/Pedestrian RR Crossings	$550,000
PB19	17th Street Bridge	$355,000
PB25	SW Cummings Avenue Railroad Crossing	$500,000
PB29	OR 99W Multi-Use Path and Circle Boulevard	$275,000
PB34	OR 99W Multi-Use Path Downtown Extension	$330,000

PB49	Goodnight Avenue – Caldwell Multi-Use Path	$858,000
PB63	Bridge Connection between Wilamette River Trail and Wilamette Park Trail Extension	$355,000
PB75	Porter Park Multi-Use Path	$50,000
PB76	Coolidge Way Corridor Improvements	$130,000
PB78	Campus Way and 14th Street Intersection Improvements	$75,000
PB79	Low-stress Network Crossing	$25,000
PB80	Tyler Avenue and 3rd Street Crossing	$65,000
PB81	Tyler Avenue and 2nd Street Crossing	$25,000
PB84	33rd Street Multi-Use Path	$25,000
N/A	Street Pavement Rehabilitation and Reconstruction Backlog	$74,000,000
	Total for Unfunded High Priority City Facilities	**$104,150,000**

High Priority ODOT Facilities

A3	US 20-OR 34 Optimization	$910,000
A4	OR 99W/US 20-OR 34 Ramps	$24,219,000
A10	OR 99W/Goodnight Avenue Traffic Control	$8,379,000
A25a	US 20-OR 34 Capacity Enhancements (Preliminary	$9,488,500
A25b	US 20-OR 34 Capacity Enhancements (Construction)	$28,465,500
A32	OR 99W/9th Street/Samaritan Drive/ Elks Drive Realignment	$10,069,000
A48	Goodnight Avenue/3rd Street/OR 99W ROW	$370,000
A56	Circle Boulevard/OR 99W Improvements	$1,846,000
M47	15th Street/US 20-OR 34	$1,600,000
P51	Philomath Boulevard (US 20-OR 34)	$260,000
PB9	OR 99W Multi-Use Path – Circle to Conifer	$440,000
PB13	OR 99W Multi-Use Path – Conifer to Elks	$175,000
PB14	US 20-OR 34 Grade-Separated Crossing	$1,000,000
PB15	South Corvallis Multi-Use Path	$2,614,000
PB65	OR 99W Multi-Use Path Extension – Elks to Lewisburg	$1,535,000
PB86	3rd Street/OR 99W/Crystal Lake Drive/Avery Avenue	$861,600
	Total for Unfunded High Priority ODOT Facilities	**$92,232,600**
	GRAND TOTAL FOR TRANSPORTATION	**$196,382,600**

WASTEWATER

WASTEWATER

The wastewater system is vitally important for the protection of public and environmental health. While Nature has an amazing ability to cope with small amounts of water wastes and pollution, it would be overwhelmed if we didn't treat the millions of gallons of wastewater and sewage produced daily in our community before we return the water to the Willamette River. Our treatment process reduces the pollutants in wastewater to a level that Nature can handle. Effective collection and treatment of sanitary sewage is a matter of caring for the environment and for human health: good reasons why maintaining the wastewater infrastructure is an important priority. Efficient removal and treatment of sanitary sewage reduces the public's exposure to disease from the water supply or from disease-carrying insects. It also maintains the quality of the urban streams and Willamette River for wildlife habitat, aquatic life, and recreation. To ensure we are able to continue to protect public and environmental health, we must regularly upgrade and replace all of the 23,699 assets in the wastewater system, such as pipes, pumps, valves, manholes, tanks, monitors, instruments, and treatment process controls. In addition, we need to plan for the future and install new infrastructure to meet the needs of the community as it grows and as regulatory requirements change. A robust and complete Capital Improvement Program (CIP) and project plan that is funded appropriately will keep us on track to fulfill this responsibility.

The wastewater system in Corvallis has two components: treatment and collection. In the treatment component, our city has one plant that processes about 5.4 billion gallons of wastewater in a year in accordance with strict federal and state regulations. In the collection component, there are over 220 miles of underground pipe to carry the wastewater from homes, businesses, and service providers to the treatment plant, along with seven pumping stations to ensure the water continues to move through the gravity-fed pipe system. City staff maintain and/or replace the assets in the plants and in the field to minimize service disruptions and to protect the environment and the public from exposure to untreated sanitary sewage.

Proactively managing our assets will provide the longest possible service life for each element in the complex treatment and collection components, as well as safeguard the investment the community has made in the wastewater infrastructure, which has a current estimated replacement value of $303,415,600.

The roadmap for capital improvement projects that construct new infrastructure or expand capacity in the current system is the Wastewater Utility Master Plan, which was last updated in 1998. This is the blueprint for how the utility will respond to expected growth in the community, to existing deficiencies, and to new or emerging federal and state regulations. The document provides for efficient planning and implementation of utility improvements to address these evolving challenges as well as the ongoing protection of human health and the environment. Master plans are typically renewed every 10 to 15 years and a project to develop a new wastewater plan is scheduled to begin in the next two years. An updated, detailed capital project list will be one of the outcomes of this work effort, and that information will be incorporated in future CIPs.

The driver for selecting capital improvement projects aimed at repair or replacing existing infrastructure is the City's Asset Management Plan (AMP). In FY 17-18, Public Works accomplished the last phase of the utility systems AMP development with the completion of the asset inventory for the wastewater treatment plant. The CIP process benefits from the multi-year work effort to build the AMP, using the information to prioritize and schedule wastewater pipe replacement projects for the five years of this CIP.

Pipeline replacement projects also are prioritized using a condition assessment from video of the pipe interior. Cameras are run through the line and pick up information about the pipe structure, noting locations of cracks or broken/deformed sections of pipe. This information is entered into an industry-standard rating system, producing a condition score for each section of pipe. That information is used to determine when the pipe should be replaced.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIP budgets that are currently in process or that have been revised or completed. Because these 'in process' projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

Completed. Wastewater Pipe Replacement Phase I

In Process. Avery Park Lift Station Rehabilitation
Construction scheduled to be complete in FY 19-20.

In Process. Crescent Valley Lift Station Rehabilitation
Construction scheduled to be complete in FY 19-20.

Deferred. Wastewater Pipe Replacement: Harrison Street, 29th – 36th Streets
Asset management data indicated other pipe segments had a higher priority.

Financial Challenges

Funding for operation and maintenance of the wastewater system comes from the monthly wastewater charge to customers on the City Services bill. Each year, staff reviews the financial status of the Wastewater Fund, and presents to the City Council the state of the utility and whether the revenue stream is sufficient to meet the obligations for operations, maintenance, and capital projects.

The AMP indicates the expenditure for wastewater asset maintenance and replacement should be $6.75 million annually to align with best management practices (BMP). Currently, approximately $4.6 million is expended on an annual basis. Staff continues to refine the data to establish a clearer picture of the need, however, to meet this preliminary

level estimate would require the annual capital investment in our wastewater system to increase by approximately 20%.

This presents a financial policy challenge to balance the impact on ratepayers from increased charges against the ability to achieve the desired outcome of a well-managed and maintained utility system. Navigating this balance will be an ongoing City Council level conversation.

Funding Summary

The following table shows the total dollar amount for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Each year, the estimated cost of the projects is brought up to current year costs by applying the change in the ENR construction cost index for Seattle.

Projected Cost Totals

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
Wastewater Operating Revenue	$176,400	$1,275,500	$1,524,800	$918,100	$929,100	$4,823,900
Wastewater SDC	$353,000	$2,514,300	$2,965,000	$1,597,000		$7,429,300
GRAND TOTALS	**$529,400**	**$3,789,800**	**$4,489,800**	**$2,515,100**	**$929,100**	**$12,253,200**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year they are anticipated to begin.

Project Description	Project Total
Initiation Plan Year: 2020-2021	
Wastewater Pipe Replacement - 2021	$826,500
Wastewater Plant Secondary Process Improvements, Phase I	$1,819,300
South Corvallis Wastewater Capacity Improvements	$3,663,500
Initation Plan Year: 2021-2022	
Wastewater Pipe Replacement - 2022	$851,300
Initiation Plan Year: 2022-2023	
Wastewater Pipe Replacement - 2023	$918,100
Wastewater Plant Secondary Process Improvements, Phase II	$3,194,000
Initiation Plan Year: 2023-2024	
Wastewater Pipe Replacement - 2024	$929,100
Initiation Plan Year: 2024-2025	
Wastewater Pipe Replacement - 2025	$957,000
Grand Total for Wastewater:	**$13,158,800**

FY 2020-22 WASTEWATER PIPE REPLACEMENT – 2021

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan, Asset Management Program

Total Cost: $826,500

Project Description: This project will replace approximately 1,700 feet of mainline pipe, manholes, and sewer laterals in easements and alleys in the area bordered by 27th Street, Monroe Avenue, 13th Street, and Harrison Boulevard that have reached the end of their useful life.

Design will be completed in FY 20-21 with construction in FY 21-22.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21	FY 21-22
Wastewater Operating Revenue	$51,400	$775,100

4/21/20

FY 2020-22 WASTEWATER PLANT SECONDARY PROCESS IMPROVEMENTS, PHASE I

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan

Total Cost: $1,819,300

Project Description: This project will ensure compliance with Environmental Protection Agency (EPA) permit requirements for wastewater treatment. The purpose of this project is to increase the electrical efficiency and capacity of the existing secondary treatment system. This will be accomplished by using a phased approach to the construction of a new secondary clarifier. The improvements to the secondary treatment process will accommodate increased flows due to community growth.

EPA permit conditions mandate stringent requirements for treatment of wastewater. Violations of permit requirements can result in substantial fines and penalties. Treatment equipment of adequate capacity and maintained in good operating condition will help ensure discharge permit requirements are met and the useful life of plant equipment is extended as much as possible.

The construction of the secondary clarifier will be accomplished using a phased approach. The first phase is to construct the electrical improvements, second is the mechanical and pumping system for the existing clarifiers, and third will be the new clarifier.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 50 years

Project Funding Source:

	FY 20-21	FY 21-22
Wastewater SDC	$125,000	$1,694,300

4/21/20

FY 2020-23 SOUTH CORVALLIS WASTEWATER CAPACITY IMPROVEMENTS

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan, Asset Management Program

Total Cost: $3,663,500

Project Description: This project will install 2,500 lineal feet of 36" PVC piping. The project scope is from the Marys River lift station to SE Mayberry Avenue.

The existing collection system is near maximum capacity. This project will increase piping system capacity to meet the needs of projected development in South Corvallis.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21	FY 21-22	FY 22-23
Wastewater Operating Revenue	$125,000	$449,000	$ 673,500
SDC Wastewater Revenue	$228,000	$820,000	$1,368,000
Total	$353,000	$1,269,000	$2,041,500

4/21/20

FY 2021-23 WASTEWATER PIPE REPLACEMENT – 2022

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan, Asset Management Program

Total Cost: $851,300

Project Description: This project will replace approximately 1,700 feet of mainline pipe, manholes, and sewer laterals in 27th and 28th Streets, and near 20th Street that have reached the end of their useful life.

Design will be completed in FY 21-22 with construction in FY 22-23.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 21-22	FY 22-23
Wastewater Operating Revenue	$51,400	$799,900

4/21/20

FY 2022-24 WASTEWATER PIPE REPLACEMENT – 2023

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan, Asset Management Program

Total Cost: $918,100

Project Description: This year, approximately 1,900 feet of mainline pipe, manholes, and sewer laterals will be replaced in alleys and easements near 8th Street, 15th Street, and Kings Boulevard that have reached the end of their useful life.

Design will be completed in FY 22-23 with construction in FY 23-24.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 22-23	FY 23-24
Wastewater Operating Revenue	$51,400	$866,700

4/21/20

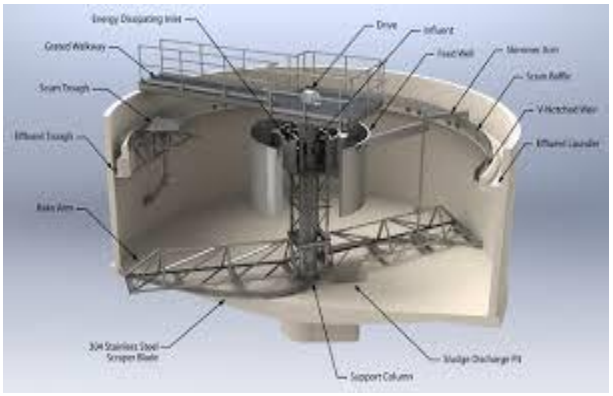
FY 2022-24 WASTEWATER PLANT SECONDARY PROCESS IMPROVEMENTS, PHASE II

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan

Total Cost: $3,194,000

Project Description: This is the second phase of the project to construct an additional clarifier and will ensure compliance with EPA permit requirements. The main purpose of the improvements are to increase capacity and operational efficiency of the existing secondary treatment system. This will be done by replacing both clarifier sludge pumping and clarifier mechanical systems. The improvements to the secondary treatment process will accommodate increased flows due to community growth.



EPA permit conditions mandate stringent requirements for treatment of wastewater. Violations of permit requirements can result in substantial fines and penalties. Treatment equipment of adequate capacity and maintained in good operating condition will help ensure discharge permit requirements are met and the useful life of plant equipment is extended as much as possible.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 50 years

Project Funding Source:

	FY 22-23	FY 23-24
Wastewater SDC	$1,597,000	$1,597,000

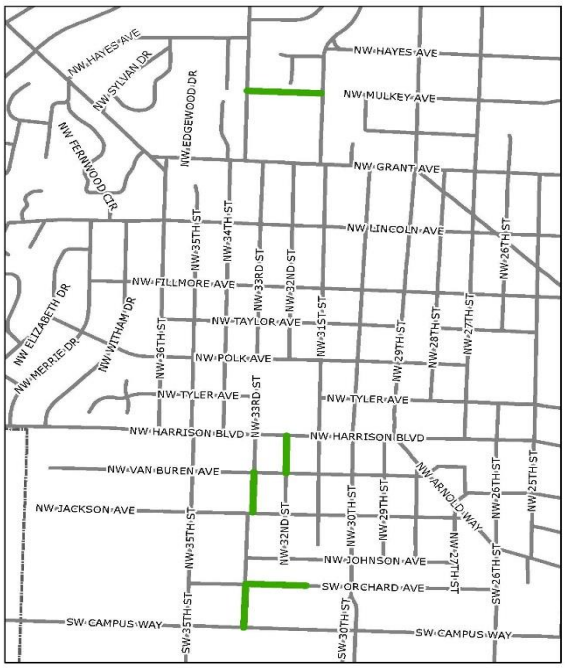
4/21/20

FY 2023-25 WASTEWATER PIPE REPLACEMENT – 2024

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan, Asset Management Program

Total Cost: $929,100



Project Description: This year, approximately 1,900 feet of mainline pipe, manholes, and sewer laterals will be replaced in the area bordered by 33rd Street, 32nd Street, Orchard Avenue, and Mulkey Avenue that have reached the end of their useful life.

Design will be completed in FY 23-24 with construction in FY 24-25.

Assumption: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 23-24	FY 24-25
Wastewater Operating Revenue	$51,400	$877,700

4/21/20

FY 2024-26 WASTEWATER PIPE REPLACEMENT – 2025

Department: Public Works **Category:** Community Preservation

Origination: Wastewater Utility Master Plan, Asset Management Program

Total Cost: $957,000

Project Description: This year, approximately 1,550 feet of mainline pipe, manholes, and sewer laterals will be replaced in the area of 26th Street bordered by NW Tyler, and NW Coolidge Avenues that have reached the end of their useful life.

Design will be completed in FY 24-25 with construction in FY 25-26.

Assumptions: None

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 24-25	FY 25-26
Wastewater Operating Revenue	$51,400	$905,600

4/21/20

Unfunded Projects

The following projects have been identified as needed repairs and/or improvements to the City's infrastructure. They are drawn from a master plan, which attempts to identify the needs for new or expanded public infrastructure over a 10-20 year period, and from the City's Asset Management Plan, which predicts the needs for replacement of existing infrastructure. The projects listed are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year period this plan covers.

Collection System	**Projected Total**
Marys River Pump Station	$1,300,000
Brooklane Pump Station	$750,000
South Corvallis Parallel Interceptor Pipe Line	$19,000,000
Country Club Trunk	$1,250,000
Garfield Parallel Pipe Line	$640,000
Crescent Valley Interceptor	$3,500,000
Wastewater Pipe Asset Replacement	$2,797,000
Total for Unfunded Collection System	**$29,237,000**

Wastewater Plant	**Projected Total**
Secondary Clarifier Phase 3	$3,236,300
Sludge Gravity Thickener Screen	$300,000
Influent Pump Station Expansion	$4,721,000
Aeration and Trickling Filter Expansion	$8,174,300
Filtration Addition and Chlorine Contact Basin Expansion	$19,665,900
Effluent Pumping Station Expansion	$3,441,800
Sludge Thickening, Stabilization, and Biosolids Management	$15,306,900
Odor Control	$2,026,700
Laboratory and Building Non Process Facilities Expansion	$1,064,400
Backup Power Generation	$3,000,000
Wastewater Plant Asset Replacement	$11,683,200
Primary Clarifier	$6,000,000
Temperature Total Maximum Daily Load Solution	TBD
Total for Unfunded Wastewater Plant	**$78,620,500**

GRAND TOTAL FOR WASTEWATER	**$108,157,500**

WATER

WATER

Potable water is the very foundation of a healthy life. The unfettered access our community has to a potable water supply that meets all drinking water regulations is something we could take for granted. How often do we stop to think what the picture would look like without an adequate supply of clean, safe water with which to drink, cook, clean, and grow food? And how much less often do we think about what it takes in people, equipment, and infrastructure to secure that water supply, treat it to the highest standards, and deliver it to our faucet? Our community is fortunate to have a water treatment and delivery system that was well planned and maintained by our predecessors. Our obligation to the future is to ensure that the same level of access we enjoy today is preserved for those that come after us to experience. To fulfill this obligation, we must regularly upgrade and replace all of the 50,647 assets in the water system, such as pipes, pumps, valves, meters, hydrants, basins, monitors, instruments, and treatment process controls. In addition, we need to plan for the future and install new infrastructure to meet the needs of the community as it grows over time and as regulatory requirements change. A robust and complete Capital Improvement Program (CIP) and project plan that is funded appropriately will keep us on track to fulfill our responsibility to future generations.

The water system in Corvallis has two components: treatment and distribution. In the treatment component, our city has two plants that process about 2.8 billion gallons of water in a year in accordance with strict federal and State regulations. In the distribution component, there are over 253 miles of underground pipe to carry the treated water to homes, businesses, and service providers, along with 10 pumping stations to lift the water to the higher elevations in our community and nine water reservoirs with a combined storage capacity of 22 million gallons. City staff maintain and/or replace the assets in the plants and in the field to ensure an uninterrupted supply of high-quality water for domestic, commercial and fire-fighting purposes.

Proactively managing our assets will provide the longest possible service life for each part of the infrastructure in the complex treatment and distribution components, as well as safeguard the investment the community has made in the water infrastructure, which has a current estimated replacement value of $347,024,300. Replacing pipes before they fail helps ensure uninterrupted service to our customers.

The roadmaps for capital improvement projects that construct new infrastructure or expand capacity in the current system are the Water Distribution System Facility Plan, the Taylor Treatment Plant Master Plan and the Rock Creek Treatment Plant Master Plan, which were last updated in the late 1990s. These are the blueprints for how the utility will respond to expected growth in the community, to existing deficiencies, and to new or emerging federal and state regulations. The documents provide for efficient planning and implementation of utility improvements to address these evolving challenges. Master plans typically are renewed every 10 to 15 years and a project to develop a new comprehensive water system plan began in FY 18-19. An updated, detailed capital project list will be one of the outcomes of this work effort, and that information will be incorporated in future CIPs.

The driver for selecting capital improvement projects aimed at repair or replacing existing infrastructure is the City's Asset Management Plan (AMP). In FY 17-18, Public Works accomplished the last phase of the utility systems AMP development with the completion of the asset inventory for the water treatment plants. The CIP process benefits from the multi-year work effort to build the AMP, using the information to prioritize and schedule water pipe replacement projects for the five years of this CIP.

Accomplishments in FY 19-20 and Ongoing Projects

The following list shows projects funded in prior CIP budgets that are currently in process or that have been revised or completed. Because these 'in process' projects have been authorized and funded, they no longer appear in the detail pages of the CIP.

Completed. Water Pipe Replacement: Viewmont Avenue and Norwood Place

In Process. Ridgecrest Pump Station
Design will be complete this fiscal year. Construction will be coordinated with the developers schedule.

In Process. Marys River Water Main Crossings
Construction began in summer 2019 and will conclude in the summer of 2020.

In Process. Water Pipe Replacement: 36th Street
Design is complete and construction is scheduled for summer 2020.

In Process. Water Pipe Replacement: 53rd Street
Design is complete and construction is scheduled for summer 2020.

Deferred. Taylor Water Treatment Plant Improvements
Project delayed pending update of the Water Master Plan.

Financial Challenges

Funding for operation and maintenance of the water system comes from the monthly water charge to customers on the City Services bill. Each year, staff reviews the financial status of the Water Fund, and presents to the City Council the state of the utility and whether the revenue stream is sufficient to meet the obligations for operations, maintenance and capital projects.

The AMP indicates the expenditure for water asset maintenance and replacement should be $7.2 million annually to align with best management practices (BMP). Currently, approximately $4.3 million is expended on an annual basis. Staff continues to refine the data to establish a clearer picture of the needs, however, to meet this preliminary level

estimate would require the annual capital investment in our water system to increase by approximately 30%.

This presents a financial policy challenge to balance the impact on ratepayers from increased charges against the ability to achieve the desired outcome of a well-managed and maintained utility system. Navigating this balance will be an ongoing City Council level conversation.

Funding Summary

The following table shows the total dollar amount for projects scheduled in each of the five years of this CIP, broken down by the source of the funding.

Each year, the estimated cost of the projects is brought up to current year costs by applying the change in the ENR construction cost index for Seattle.

FUNDING SOURCE	20-21	21-22	22-23	23-24	24-25	TOTAL
Water Operating Revenues	$51,500	$585,000	$1,351,100	$7,313,800	$7,304,100	$16,605,500
Water SDC	$0	$0	$220,700	$2,963,400	$2,963,400	$6,147,500
GRAND TOTALS	**$51,500**	**$585,000**	**$1,571,800**	**$10,277,200**	**$10,267,500**	**$22,753,000**

Funded Projects Summary & Detail

The following projects have been identified for inclusion in this five-year Capital Improvement Program.

Each project shown below is explained in detail on the pages that follow. Projects are listed in the fiscal year they are anticipated to begin.

Project Description	Project Total
Initiation Plan Year: 2020-2021	
Water Pipe Replacement - Clarence Circle	$566,500
Initiation Plan Year: 2021-2022	
Water Pipe Replacement - Maser Drive	$870,000
Initiation Plan Year: 2022-2023	
Rock Creek Transmission Main Replacement	$20,491,700
Water Pipe Replacement - Hummingbird Drive	$396,600
Initiation Plan Year: 2023-2024	
Water Pipe Replacement - 10th Street/Birdie Drive	$386,500
Initiation Plan Year: 2024-2025	
Water Pipe Replacement - Linden Avenue	$417,600
Grand Total for Water:	**$23,128,900**

FY 2020-21 WATER PIPE REPLACEMENT – CLARENCE CIRCLE

Department: Public Works

Category: Community Preservation

Origination: Asset Management Program

Total Cost: $566,500

Project Description: This project provides for the design and replacement of an anticipated 1,510 feet of 6-inch cast iron pipe.

The project will be designed in FY 20-21 and constructed in FY 21-22.

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 20-21	FY 21-22
Water Operating Revenue	$51,500	$515,000

2/5/19

FY 2021-23 WATER PIPE REPLACEMENT – MASER DRIVE

Department: Public Works **Category:** Community Preservation

Origination: Asset Management Program

Total Cost: $870,000

Project Description: This project provides for the design and replacement of an anticipated 1,200 feet of 8-inch ductile iron pipe.

The project will be designed in FY 21-22 and constructed in FY 22-23.

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 21-22	FY 22-23
Water Operating Revenue	$70,000	$800,000

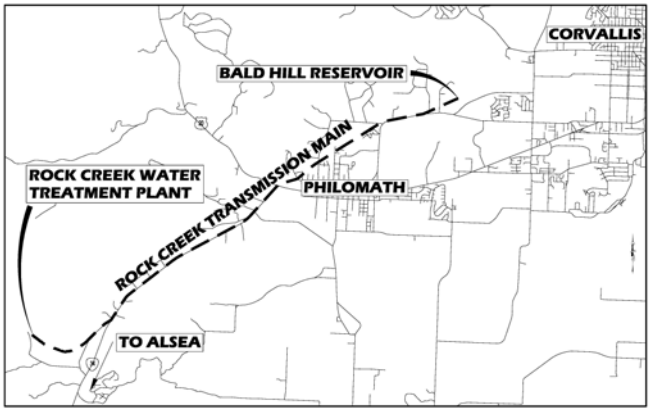
3/17/20

FY 2022-25 ROCK CREEK TRANSMISSION MAIN REPLACEMENT

Department: Public Works **Category:** Community Preservation

Origination: Rock Creek Water Treatment Plant Facility Plan

Total Cost: $20,491,700



Project Description: The Rock Creek Water Treatment Plant is one of two water treatment facilities that provide drinking water to the community. The plant is located southwest of Philomath, on Marys Peak. Finished water from the plant flows by gravity approximately 15 miles through a 1930s cast iron main to the Bald Hill water reservoir.

Replacing the main with a larger diameter pipe will provide capacity for a greater amount of finished water to come from the Rock Creek plant in the event of a shutdown of the Taylor Water Treatment Plant or a water quality event in the Willamette River.

This project will be designed in FY 22-23 and constructed in FY 23-24 and FY 24-25.

Assumption: The proposed budget is based on the current main location. A review of the current main's easement and property agreements, along with special permits, will be evaluated for possible refinement of construction costs in future CIPs. In addition to the listed funding sources, the City will pursue grant, loan and/or bonding opportunities.

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Sources:

	FY 22-23	FY 23-24	FY 24-25
Water Operating Revenue	$515,000	$6,914,600	$6,914,600
Water SDC	$220,700	$2,963,400	$2,963,400
Total	$735,700	$9,878,000	$9,878,000

11/22/19

FY 2022-24 WATER PIPE REPLACEMENT – HUMMINGBIRD DRIVE

Department: Public Works

Category: Community Preservation

Origination: Asset Management Program

Total Cost: $396,600

Project Description:
This project provides for the design and replacement of an anticipated 1,050 feet of 12-inch ductile iron pipe.

The project will be designed in FY 22-23 and constructed in FY 23-24.

Operating Budget Impacts: None

Estimated Useful Life: 80+ years

Project Funding Source:

	FY 22-23	FY 23-24
Water Operating Revenue	$36,100	$360,500

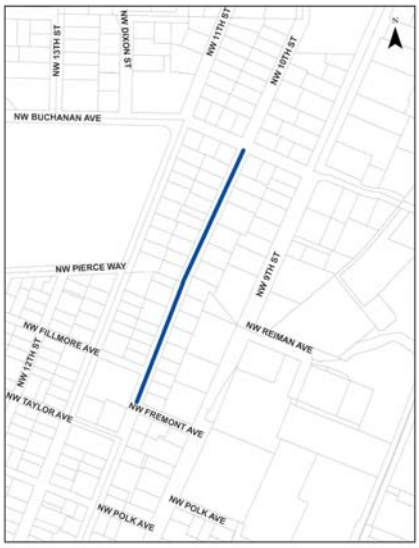
4/21/20

FY 2023-25 WATER PIPE REPLACEMENT – 10TH STREET/BIRDIE DRIVE

Department: Public Works **Category:** Community Preservation

Origination: Asset Management Program

Total Cost: $386,500



Project Description:
This project provides for the design and replacement of an anticipated 1,050 feet of 6-inch cast iron pipe on 10th Street from Fremont Avenue to Buchanan Avenue and 130 feet of 6-inch ductile iron pipe on SW Birdie Drive. These pipes have significant corrosion issues causing pipe deterioration with five pipe breaks in recent years.

The project will be designed in FY 23-24 and constructed in FY 24-25.

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 23-24	FY 24-25
Water Operating Revenue	$38,700	$347,800

4/21/20

FY 2024-26 WATER PIPE REPLACEMENT – LINDEN AVENUE

Department: Public Works

Category: Community Preservation

Origination: Asset Management Program

Total Cost: $417,600

Project Description:
This project provides for the design and replacement of an anticipated 1,275 feet of 8-inch cast iron pipe on Linden Avenue from 9th Street to Fairlawn Avenue. This pipe has significant corrosion issues causing pipe deterioration, resulting in four pipe breaks in recent years.

The project will be designed in FY 24-25 and constructed in FY 25-26.

Operating Budget Impacts: None

Estimated Useful Life: 80 years

Project Funding Source:

	FY 24-25	FY 25-26
Water Operating Revenue	$41,700	$375,900

1/15/20

Unfunded Projects

The following projects have been identified as needed repairs and/or improvements to the City's infrastructure. They are drawn from a master plan, which attempts to identify the needs for new or expanded public infrastructure over a 10-20 year period, and from the City's Asset Management Plan, which predicts the needs for replacement of existing infrastructure. The projects listed are considered "unfunded" because either a source of funding has not been made available, or they will not be implemented within the five-year period this plan covers.

Distribution System	**Projected Total**
Souza Place	$180,000
Seneca Place	$235,000
Grant Avenue, Kings Boulevard to 29th Street	$748,100
Garfield Avenue, Highland Drive to 17th Street	$851,000
Winding Way	$2,160,000
Bald Hill Park Area	$1,285,000
Conifer Boulevard	$949,000
NE Highway 99	$2,150,000
9th Street	$256,000
Hewlett Packard Campus	$454,000
Seavey Avenue	$209,000
Jackson Creek Area	$1,773,000
SE Highway 99	$328,000
Lester Avenue	$112,000
Timberhill Area	$1,255,000
North Hills Reservoir Area	$1,415,000
Ponderosa Avenue	$539,000
53rd Street	$843,000
Country Club Drive	$213,000
Southwest Reservoir Area	$106,000
Wake Robin Avenue	$503,000
Nash Avenue	$485,000
West Hills Road	$538,000
Reservoir Avenue	$594,000
Philomath Boulevard	$86,000
Water Pipe Line Asset Replacement	$11,631,000
Booster Station Asset Replacement	$8,545,000
Total for Unfunded Distribution System	**$38,443,100**

Taylor Plant	
Backup Power Generators	$2,700,000
Instrumentation and Control Improvements	$150,000
Electricity Metering	$183,000
Ultraviolet/Ozone Disinfection and Controls	$3,500,000
Pump Conversions	$550,000
Production Control Automation	$575,000
Flocculation Basin, Sedimentation Basin, Filters	$4,000,000
Raw Water Intake	$5,500,000
Backwash Lagoon and Solids Handling	$750,000
Taylor Plant Asset Replacement	$4,214,000
Total for Unfunded Taylor Plant	**$22,122,000**

Rock Creek Plant	**Projected Total**
Dechlorination Building and Feed System	$300,000
Ultraviolet Disinfection System	$550,000
Reservoir Raw Water Supply Pipe	$4,752,000
Solids Handling and Drying Beds	$750,000
Rock Creek Plant Asset Replacement	$1,234,000
Total for Unfunded Rock Creek	**$7,586,000**

GRAND TOTAL FOR WATER	**$87,583,100**

Glossary

Glossary of Terms

ADA - Americans with Disabilities Act.

AMP – Asset Management Plan

Assessments - An amount levied against a property for improvements specifically benefitting that property.

BMP – Best Management Practices

Bonds - A written promise to pay a sum of money (principal or face value) at a future date (maturity date) along with periodic interest paid at a specified percentage of the principal (interest rate). Bonds are typically used to finance long-term capital improvements.

Budget - A plan of financial operation, embodying an estimate of proposed expenditures for a given period (typically a fiscal year) and the proposed means of financing them (revenue estimates). Upon approval by City Council, the budget appropriation resolution is the legal basis for expenditures in the budget year.

BPAB - Bike and Pedestrian Advisory Board.

CCTV – Closed Circuit Television

CIP - Capital Improvement Program which is a plan for capital expenditures to be incurred each year over a fixed period of several future years, setting forth each capital project, identifying the expected beginning and ending date for each project, the amount to be expended in each year, and the method of financing those expenditures.

DEQ - Department of Environmental Quality.

ENR – Engineering News-Record

EPA - Environmental Protection Agency.

FAA - Federal Aviation Administration.

FEMA - Federal Emergency Management Agency.

FTA - Federal Transit Administration.

Fund - An independent fiscal and accounting entity with a self-balancing set of accounts, recording cash and/or resources together with all related liabilities, obligations, reserves, and equities, which are segregated for the purpose of carrying on specific activities or attaining certain objectives.

GO Bonds - When a government pledges its full faith and credit to the repayment of the bonds it issues, then those bonds are general obligation (GO) bonds. Sometimes the term is also used to refer to bonds which are to be repaid from taxes and other general revenues.

Grant - A contribution of funds from one entity to another. Grants are generally designated for a specific expenditure.

HDPE – High Density Polyethylene

HVAC - Heating/ventilation/air conditioning.

LDC - Land Development Code.

Master Plan - A comprehensive plan, normally covering a 5-10 year period, developed to guide delivery of specific services, identify future needs and challenges, and identify future infrastructure needs.

MGD – Million Gallons per Day.

NASSCO – National Association of Sewer Service Companies

NEPA – National Environmental Policy act.

OAC - Osborn Aquatic Center.

ODOT - Oregon Department of Transportation.

Operating Budget - The appropriated budget supporting current operations.

Operating Revenue - Monies received or anticipated by a local government from either tax or nontax sources.

OSU - Oregon State University.

PCI – Pavement Management Index

PNARAB - Parks, Natural Areas and Recreation Advisory Board.

PVC – Polyvinyl Chloride

PW - Public Works.

ROW - Right-of-way.

SDC - System Development Charge that is levied on new construction to help pay for

additional expenses created by this growth or to compensate for already existing capacity in key facilities and systems already in place which support the new development.

STP - Surface Transportation Program which is administered by the State and allows local agencies to exchange federal funds for state funds.

SWMP - Storm Water Master Plan.

TBD - To be determined.

TMDL – Total Maximum Daily Load. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

TMF – Transportation Maintenance Fee.

USRC – U.S. Resiliency Council

WTP – Water Treatment Plant.

WWRP - Wastewater Reclamation Plant.