



CITY OF ASTORIA

Founded 1811 • Incorporated 1856

MEMORANDUM • PUBLIC WORKS DEPARTMENT

DATE: JANUARY 16, 2024
TO: MAYOR AND CITY COUNCIL
FROM: SCOTT SPENCE, CITY MANAGER
SUBJECT: PUBLIC WORKS STATUS UPDATE

Following are summaries of the status of Public Works major projects and activities:

WATERSHED

Watershed Road System

- Routine road maintenance – our Water Source Operator has been conducting routine road system maintenance.
- Cedar Creek Bridge Project
 - Staff and the City Forester, Ben Hayes, developed a concept plan for the replacement of the failing Cedar Creek road crossing within



the City watershed. The concept plan included a new bridge crossing along the existing road alignment. Updated estimates for the construction increased dramatically (\$500,000 +/-) due to inflation so this option has been taken off the table. The Oregon Department of Fish and Wildlife (ODFW) has also made a determination that the bridge project would not qualify for mitigation for the Spur 12 culvert project.

- The City Forester is working with the Oregon Department of Forestry and ODFW on a new option for meeting our mitigation obligation that will most likely include some form culvert replacement project in our watershed.
- Options for the road crossing and failing culvert problem are being investigated and may include a more cost-effective option of removing the creek crossing, restoring the streambed and developing a simpler crossing at another location.

2023 Timber Harvest Project (Snowbear)

- The 2023 Timber Harvest Project Invitation to Bid was issued on March 23, 2023, to complete a 50-acre thinning and variable retention harvest and was awarded to Hampton Tree Farms LLC on May 15, 2023.
- The harvest project was completed on October 31, 2023.
- The net proceeds to the Capital Improvement Fund totaled \$273,388.75 after a roadwork credit of \$35,000 was deducted.

WATER SYSTEM

16th Street Distribution Waterline Project (ARPA Grant Project)

- Grant agreement with Infrastructure Finance Authority (IFA) has been approved.
- HDR Engineering was awarded the engineering services contract and has begun work on the alternatives evaluation.
- The City is preparing an RFP for CMGC services for the project.
- Construction is anticipated during the summer of 2025.

Pipeline Road Waterline Resilience Project (ARPA Grant Project)

- Grant agreement with Infrastructure Finance Authority (IFA) has been approved.
- Tetra Tech was awarded the engineering services contract and is working on the preliminary design.
- Construction is anticipated during the summer of 2025.

Automated Water Meter Reading (AMR) System Project

- The Public Works Department has completed the installation and implementation of the new AMR system for downtown, large commercial customers, and a handful of new residential customers.
- Residential water meters that need replacement are being replaced with AMR meters to meet the future needs of our water system.
- Staff has submitted a Letter of Interest for the Safe Drinking Water Program Funding through the Infrastructure Finance Authority (IFA). Currently, the City can receive a loan for the project, which is 50% forgivable. In lieu of incurring debt for the project, staff is hopeful that stimulus funding may provide a full grant opportunity for the project in the future. **Staff has been informed that this funding source is currently unavailable.**
- Staff is investigating the possibility of hiring a new staff member to install residential AMR's and help with the backload of water meter-related utility work in the department. This may prove to be more cost effective than contracting out the installation in light of the loss of a grant opportunity.

Old Highway 30 – Emergency Waterline Relocation Project

- Department of Labor plans to complete landslide mitigation work immediately adjacent to a City-maintained waterline along Old Highway 30. The City needs to relocate the waterline pipe to accommodate their construction project and to minimize potential damage.
- Engineering staff has finalized waterline plans.
- We are working with the City Attorney to coordinate an agreement for relocation of the utility with the Department of Labor. The Department of Labor has indicated that the landslide mitigation work has been postponed due to funding. The City still plans to relocate the water line as soon as an agreement can be reached to do so.

Hamburg Ave. Waterline Project

- Construction for this project is completed and the new waterline is operational.
- Staff is working on project close-out tasks including as-built plans.

Bear Creek Dam Emergency Overflow (Oregon Water Resources Grant Project)

- After a favorable dam stability analysis that determined our dam is not subject to significant failure during a Cascadia Subduction Zone seismic event, the Oregon Water Resources Department (OWRD) concluded that our next step was to proceed with the development of an emergency spillway strategy and eventual construction.
- An option that includes utilizing enhanced downstream scour protection to accommodate dam overtopping in an emergency flood situation is being considered. Original options included significant earthwork, were very expensive and had significant environmental impacts.
- The next step was to complete a flood study referred to as a Probable Maximum Flood (PMF). This work is complete.
- Staff had worked with the OWRD to pursue grant funding for the next step, which is a hydraulics study and a design concept plan of the needed improvements to the existing dam to pass a probable maximum flood event. OWRD has obtained full funding and the study is underway. OWRD staff will be managing the project.
- OWRD has also notified us that they have grant funding for three additional studies in our watershed. The studies include a seismic evaluation of Middle Lake Dam, a seismic evaluation of Wickiup Lake Dam, and a conduit evaluation of all of the reservoirs. Conduit is a term used for the drainpipes that release water from the bottom of each reservoir to drop the reservoir level during an emergency. This work is currently underway.

Skyline Place Waterline Improvement Project

- *No status change since the last update.*
- This project will replace two 2” water lines that serve the Skyline Place neighborhood. It will also reroute several water services that are currently inaccessible in that area.
- The project is nearing final design but has been placed on hold due to other water improvement priorities.
- The City recently secured an easement with the adjacent property owner to accommodate the project.

SANITARY SEWER SYSTEM

COVID-19 Wastewater Monitoring

- Staff is still providing COVID-19 testing results from the City Wastewater Treatment Plant (WWTP) for the Oregon Health Authority (OHA) Program. OHA has launched a statewide COVID-19 wastewater-monitoring project to study the presence of the SARS-CoV-2 virus in more than 40 small- to medium-sized communities around the state. The project, which will include weekly wastewater testing over a 30-month period, will enable epidemiologists to better understand the circulation of COVID-19 in some of Oregon’s communities. It will serve as an “early warning” system to tell if COVID-19 is spreading silently in communities. Staff is now receiving feedback from the program. According to the wastewater monitoring data, the viral concentration rates at the WWTP have plateaued.

Industrial Pretreatment Program

- The City identified industrial user loads that were causing issues at the wastewater treatment plant and in the sewer collection system which necessitated the development of an Industrial Pretreatment Program.
- Pretreatment Ordinance No. 22-10 was adopted on May 16, 2022.
- Resolution No. 22-21 establishing conditions for the waste allocation to the fermentation beverage industry sector was adopted on June 20, 2022.
- The new sewer rate structure was approved by Council in June as part of the Sewer Resolution. It takes effect on January 1, 2024.
- Staff sent sewer rate change notification letters to approximately 200 impacted customers in the Commercial 2 and Commercial 3 categories.
- Original Industrial Discharge Permits were issued to Fort George Brewery (November 2020) and Buoy Beer Company (April 2021). Updated permits were issued on August 7, 2023, with the new sewer rate structure.
- Industrial Discharge Permits were issued to smaller fermentation beverage cluster businesses on November 7, 2023.

Wastewater Treatment Plant Improvements Project (ARPA Grant Project)

- Grant agreement for the ARPA funding for \$4,860,000 has been fully executed.
- 90% design documents are currently being prepared by the engineering consultant, Gibbs & Olson.
- Construction may begin as early as summer of 2024 with the majority of the construction activity anticipated in the summer of 2025.

Floral Ave. Sanitary Sewer Project

- The construction associated with this project is complete.
- Staff is working on project close-out documentation at this time.
- Staff will be coordinating with impacted residents to provide information and timelines associated with connection to the new sanitary sewer pipe.



Sewage Lift Stations Rehabilitation Project

- Three sewage lift stations have been maintained for approximately 50 years with uninterrupted use. Recent maintenance activity is exceeding normal levels due to the components being beyond their design life; therefore, a rehabilitation project is warranted.
- City staff submitted a funding application to DEQ Clean Water State Revolving Fund in September that will include a loan and potentially principal forgiveness component. A funding strategy for this project is anticipated to be presented to City Council in February 2024 with construction timeline being dependent on equipment procurement timelines.
- The City has been notified that we qualify for the requested loan/grant.

COMBINED SEWER OVERFLOW (CSO) SYSTEM

Next CSO Separation Project

- *No status change since the last update.*
- Staff is in the planning phase of the next CSO project.
- No construction will take place this year. Construction is not anticipated until 2025 or later.

TRANSPORTATION SYSTEM



Emergency Bank Stabilization Project

- As a result of king tides and a wind storm at the end of December 2022, the Columbia River bank adjacent to the River Trail experienced extensive erosion that requires immediate attention.
 - The City was notified that FEMA funding would not be available for the project.
 - Staff withdrew permits for the work due to projected approval timelines and restructured the project to avoid impacts on jurisdictional waters.
- Staff is working on preparation of construction documents for the most critical repairs using available funding.

OR202 Sidewalk Project: Dresden – 4th Street (ODOT Grant)

- Original project scope consisted of installing a new sidewalk from Dresden to the DMV and Astoria High School to 4th St as well as stormwater improvements.
- ODOT designed the project, including all permitting and right-of-way acquisition.
- Project has been bid twice without successful award of the construction contract due to bids being higher than the funding amount.
- ODOT team is currently revising the bid documents to reflect a reduced scope of work. Rebid is scheduled for March 2024. New reduced scope includes sidewalk on the north side of OR202 from the Astoria High School driveway to Hanover St. and ADA ramps at Denver St.
- Construction timeline to be determined after bid award.

23rd Street Rectangular Rapid Flashing Beacon (RRFB) Project (ODOT Grant)

- The City has selected Brown Contracting to complete construction of the project. Work is anticipated to begin in the next month. We are working with them to process pre-construction documents.
- City staff have requested an extension to the grant due to a number of project delays, including additional ODOT review time and the need to secure easements. We have also requested additional funding to account for increased construction costs. We anticipate bringing an IGA amendment for City Council consideration within the next month.

City and Hwy 30 Chairwall Issues

- *No status change since the last update.*
- The City of Astoria has a downtown where the roadways are supported by a wall system commonly referred to as a Chairwall system built in 1919 and 1922.
- US Hwy 30 through town is supported by the wall system between 5th Street and 17th Street.
- There are two locations where the wall system supporting Highway 30 is failing. The first location is on Marine Drive between 9th and 10th Streets and the second location is between 16th and 17th Streets.
- Staff has communicated with ODOT regarding the need to repair the failing wall segments supporting the highway. ODOT has informed staff that they will route oversized loads away from the wall segments through their oversized freight traffic permit process.



2023 Paving Project

- Staff is currently working on final payment and close-out documentation.

Trolley Trestle Repair Project

- Bergerson Construction has been awarded the construction contract for this project and notice-to-proceed has been issued.
- Construction is planned to start within a month and be completed by the end of March.

Trolley Infrastructure Maintenance Planning

- The City will be working with the RTA to update the operational agreement that guides their use of the tracks and associated infrastructure.
- The Riverfront Trolley Association (RTA) has worked very hard to repair a number of the track deficiencies identified by the Oregon Department of Transportation (ODOT) Rail Division during their track inspection. This has included the replacement of numerous deteriorated railroad ties. The City has

worked in partnership with the RTA to ensure that materials and equipment are available for the maintenance work. This has yielded very positive results. No issues identified will prohibit the Trolley from operation at this time.

STORM SYSTEM

Pre-Disaster Landslide Storm Drainage Project (FEMA & IFA Grant)

- Grant agreements with FEMA (through Oregon Emergency Management) and Infrastructure Finance Authority (IFA) have been approved.
- Staff will design this project in-house. Some consultant services such as surveying will still be required. Design will take place over the next 9 months.
- Construction is anticipated during fall of 2024. This project will be constructed during the driest time of the year to minimize the potential for land movement.

SANITATION

Landfill Post-Closure Activities

- Household Hazardous Waste Facility -staff will continue to work with County staff on DEQ gas monitoring requirements.
- Staff is continuing to work with the Oregon Department of Environmental Quality on post-closure activities consisting of gas monitoring and groundwater monitoring. A final permit has been issued and staff is currently working on the final document requirements for the site. Once all operation manuals are complete, staff will continue with annual reporting as required for the term of the post-closure period.
- During periodic utility inspections, it was determined that a critical stormwater pipe through the site was showing signs of failure. Staff is working on a plan to replace the pipe and will monitor its condition in the meantime. Funding is currently not identified for this project.
- **Public works staff is currently assisting the Astoria School District with an application for a grant from DEQ to study a settlement issue occurring at the concessions area of the site.**

FACILITIES

Public Works Truck Barn Roof and Siding

- The City selected Coastline Roofing and Construction to complete this project.
- We anticipate construction to be completed prior to June 2024.

LED lighting at City Hall

- *No status change since the last update.*
- Staff is working with the Energy Trust of Oregon and their contract electrician to develop a strategy for replacing all of the City Hall overhead lights with LED lighting. The project will involve both fixtures and simple bulb replacements.
- The work is budgeted for fiscal year 2023-24.

PUBLIC WORKS ENGINEERING

Development Review Workload

- In calendar year (CY) 2024, the Engineering Division expects a significant increase in the volume of development review-related tasks. We are working on ways to increase review efficiency and minimize impacts on Public Works priorities. However, the submittal volume is expected to have a substantial impact on staff resources available for capital improvement projects this year.
- Permit statistics for CY 2023:
 - Public Works permits:
 - Received: 352 (+3% 2022, +38% 2019)
 - Issued: 327 (+14% 2022, +86% 2019)
 - Temporary Street Use & Sound Amplification:
 - Received: 151
 - Issued: 147
- Currently, 68 Public Works permit applications are being processed; 5 projects include public infrastructure improvements. The details are as follows.
 - 40 applications need additional information from the applicant
 - 5 applications require further action from another City department or division prior to proceeding
 - 10 applications are assigned for review
 - 8 applications are on hold (requested by applicant or associated with code enforcement)
 - 10 applications are ready to issue, currently waiting for payment

Complaints

- Complaint statistics for CY 2023:
 - Engineering Division received 264 complaints and referred or resolved 225 complaints
 - Of these complaints:
 - 76% (Labor: \$26,958) were associated with private property
 - 18% (Labor: \$6,410) were associated with trees
 - 5% (Labor: \$1,916) were associated with sidewalks

GIS Updates

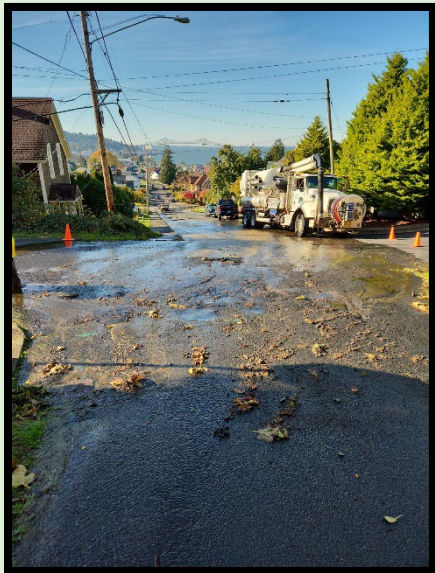
- Staff has continued to make progress on the development of the public works infrastructure system in GIS. We have also been working on our mobile application for both Staff and public use.
- Operations Staff have implemented tablets for use in the field making their access to GIS data more efficient and helpful. The use of the tablets has indicated that more tablets are needed to expand the beneficial use of the system by more operational field staff.
- The Engineering Division is currently working to fill the GIS Administrator role. We plan to have the position filled within the next month.

PUBLIC WORKS OPERATIONS

The following items highlight some of Operation's recent work:

Personnel and Training:

- Hired 1 new personnel; Aaron Bladen – Utility Maintenance Technician
- One utility worker resignation
- All Operations staff renewed First Aid/CPR, forklift, and flagger training
- Jason Miles attended SCADA training at Thunderbird Communications in California
- Jason Miles completed backflow tester certification class in Portland
- Jim Hatcher attended pesticide applicator refresher class
- Sander training
- Three workers completed CDL licensing – Jason Miles, Arthur Judd, Nate VanDyke



Water:

- Performed tunnel line inspection
- Rebuilt one pump at Skyline
- Overhead hoist repair at Headworks
- Replaced/upgraded 6 water services
- Completed routine watershed tasks include water quality testing, culvert cleaning, road maintenance, and boundary patrol
- Repaired several small water leaks
- Repaired large water main breaks at 7th and Klatskanine and at 35th and Grand
- Completed several water meter conversions to AMRs
- Total of 126 WOs completed
 - 92 preventative maintenance
 - 34 Reactive

Sewer:

- Began installation of new slide gate pedestals at PS 3
- Replace 13 ft. of 10 in. pipe at Alameda and Hull. Rodded rest of line and assisted customer clearing out afterwards
- TV inspected and cleaned several sewer lines
- Wastewater treatment plant sampling, testing, and flow monitoring
- Completed 16 WO
 - 1 preventative maintenance
 - 15 reactive

Stormwater:

- Completed inlet inspections several times at the beginning of the season
- Unplugged several inlets with vacuum truck
- Cleaned out catch basins

Transportation:

- Repaired sinkholes at 12th and Riverwalk and Parker Place
- Regular grounds maintenance and mowing
- Street sign installation, replacement, cleaning and maintenance
- Repair guardrail at Alameda and Rivington
- Completed 56 WOs – mostly sign installations

Shop and Yard:

- Completed lower barn rebuild – installed shelving and moved all portable pumping equipment to barn.
- Cleaned out truck barn in preparation for sheet metal re-skin
- Parking lot restriped
- Received three trucks that were ordered in FY 22/23
- Purchased one truck to replace a truck that was totaled in a wreck

GRANT FUNDING

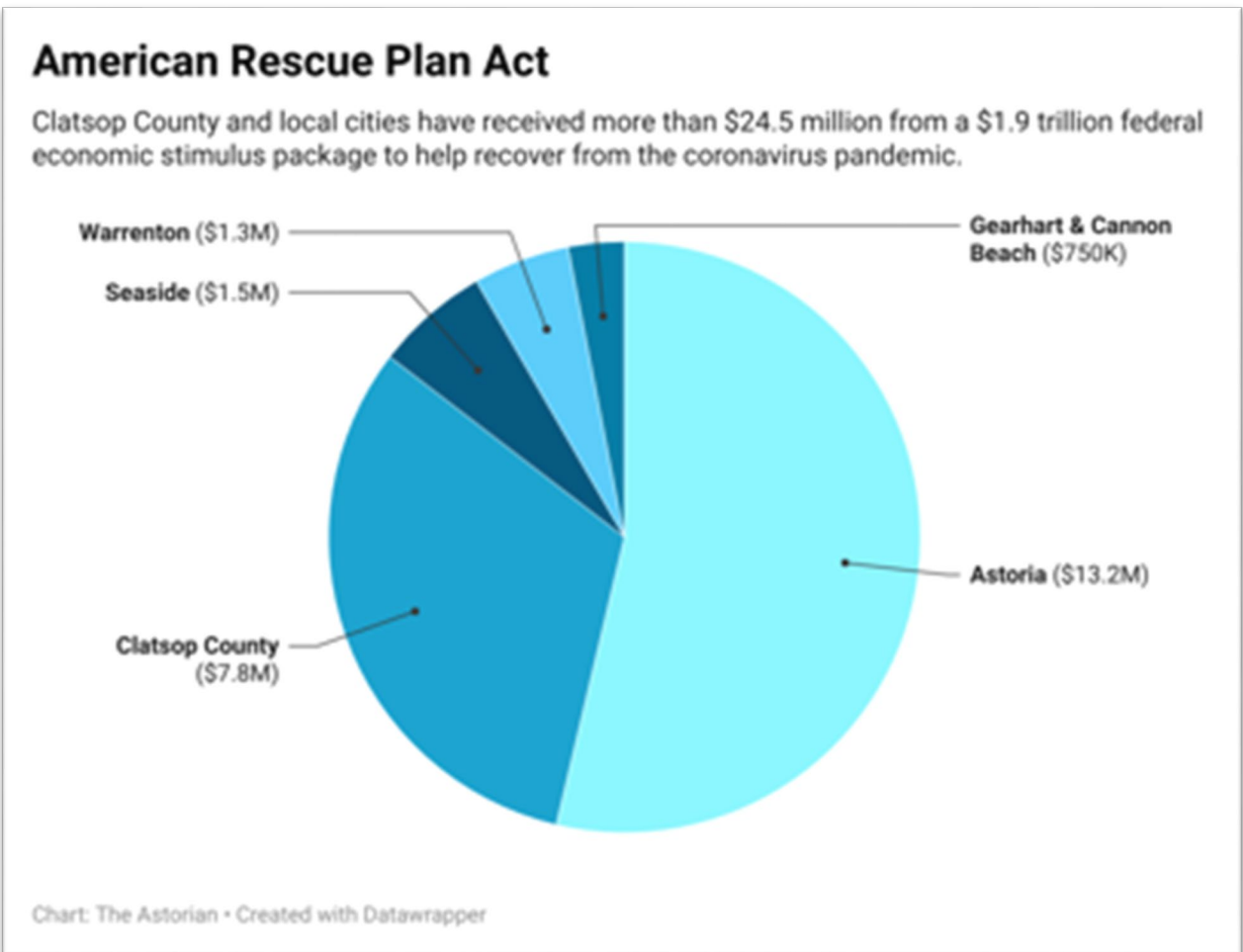
Staff has dedicated many hours of hard work in securing and administering grant funding for projects that would have otherwise been funded by incurring debt service and resulted in subsequent rate increases.

Through a proven track record, granting agencies are confident that our projects will be successful, completed on time and within budget. Developing this rapport has increased the likelihood of obtaining grant awards.

The Astorian published an article on December 26, 2023, titled “*Federal pandemic relief helped fill gaps on the North Coast*”, which included the graphic below. Of the \$24.5 million received by Clatsop County from the American Rescue Plan Act (ARPA), Astoria received 54%, totaling \$13.2 million; 97% of which has been allocated towards critical infrastructure improvement projects as outlined in the attached summary.

Upon award of ARPA funding, staff moved fast to secure design contracts before a shortage of consultants took place. Currently, 4 large ARPA-funded projects are about halfway through the design phase.

Since 2006, Public Works has secured or assisted with approximately \$50 million in grant funding to the City.



BY: JEFF HARRINGTON, PUBLIC WORKS DIRECTOR

SUMMARY OF INFRASTRUCTURE GRANTS AWARDED

**Funding source for the following projects: American Recovery Plan Act (ARPA) Discretionary Funds*

GRANT FUNDED OR202 Waterline Replacement Project - \$1,772,000

This project replaces an undersized older waterline that runs along the project limits of the upcoming OR202 Sidewalk Project. The pipe is required to be replaced before repaving the highway adjacent to the new sidewalk between the Short Stop Market and the Astoria High School. **[PROJECT COMPLETED]**

**Funding source for the following projects: State of Oregon Coronavirus State Fiscal Recovery Fund Grants administered through Infrastructure Finance Authority (IFA)*

GRANT FUNDED Wastewater Treatment Plant (WWTP) Improvements Project - \$4,860,000

The Wastewater Treatment Plant upgrades, which include flow measurement, screening, influent grit removal, and pond baffles, have been in the works for many years. This grant opportunity prevents rate increases that would be needed to pay the debt service on a loan for the full amount.

GRANT FUNDED Pipeline Road Waterline Resilience Project - \$2,930,000

This project includes re-aligning some of the most landslide-prone sections of our transmission main to more stable ground. This will be the start of many other project recommendations made in our Pipeline Road Transmission Main Resilience Study.

GRANT FUNDED 16th Street Distribution Waterline Project - \$2,790,000

This project is the first section of our water distribution piping leaving Reservoir 2 and feeding a large section of the City including downtown and the Port area. The pipe was constructed in 1895 and runs through a tunnel from Reservoir 2 to 16th and Jerome Street.

**Funding sources for the following projects: FEMA Oregon Legislative Pre-Disaster Mitigation (LPDM) Funds and Infrastructure Finance Authority (IFA)*

GRANT FUNDED Pre-Disaster Landslide Storm Drainage Project - \$902,487.50

(75% or \$676,875 FEMA grant funded with 25% or \$225,615 City match funded by IFA) This project includes two of six landslide areas identified for storm pipe replacement of pipe placed in the early 1950s after three very large landslides destroyed many homes along the north slopes of Astoria.

**Funding source for the following projects: Oregon Department of Transportation*

GRANT FUNDED OR 202 Sidewalk Project - \$4,172,000 (90% or \$3,743,450 grant funded with 10% or \$428,550 City match)

The construction of a new sidewalk and drainage infrastructure between the Short Stop Market and the Astoria High School will connect large neighborhood areas to the high school. This area is experiencing high pedestrian volumes where walkers and bicyclists have to navigate the highway shoulder around a curved roadway.

GRANT FUNDED Marine Drive and 23rd Street Crosswalk Enhancements Project - \$200,000

This project will provide a Rapid Flashing Rectangular Beacon and crosswalk enhancements at the request of the CO-OP and Columbia Memorial Hospital, both of which have resulted in increased pedestrian activity at the crossing.

**Funding source for the following project: Oregon Department of Water Resources*

GRANT FUNDED Bear Creek Dam Spillway Pre-design - \$140,000

The second phase of the spillway study will eventually result in meeting a requirement of the Oregon State Dam Safety Program that requires our High Hazard Dam to have the capability of passing a probable maximum flood event over the dam without causing damage to the dam and without reducing the dam's seismic stability.

PROJECT LIST FOR FUTURE GRANT/LOAN REQUESTS

AWAITING FUNDING AWARD Sewer Lift Stations Rehabilitation Project - \$2,129,000

The City has three sewage lift stations that convey sewage around Astoria starting on the Young's Bay side of town and to the wastewater treatment plant on the east side of town. Built in the early 1970s, these lift stations are in dire need of an overhaul with breakdowns occurring periodically and costly repairs burdening our budget. **Staff has applied for a DEQ loan for \$3,670,000. We anticipate that half of the loan (\$1,835,000) amount will be a forgivable loan (grant).**

AWAITING FUNDING AWARD Irving Avenue (20th - 28th St.) Waterline Resiliency Project - \$1,894,662

This project will upgrade 2800 LF old 6-inch cast-iron water pipe to new resilient 12" HDPE pipe from 20th Street to 28th Street along Irving Ave. and will provide a critical alternate route for over a mile of the City's 21-inch transmission main that connects Reservoirs 2 and 3 through several landslide susceptible areas. The existing pipe was installed in 1928 and 1970 and is aligned through several mapped landslide areas. **Staff has submitted this project under the Congressional Directed Spending process.**

AWAITING FUNDING AWARD Water System Automatic Meter Reading (AMR) System Project - \$1,902,384

The City has placed approximately 13 AMRs in our downtown area and we will need to eventually place approximately 4,000 AMRs in our residential areas. A letter of interest has been submitted to the State Safe Water Drinking Program for this project. Funding will likely consist of a low-interest loan of which up to half may be a forgivable loan or grant.

AWAITING FUNDING OPPORTUNITY Water System Clearwell Project - \$5,000,000

This project would improve operations at the water treatment facility and provide updated laboratory facilities. A study was completed in 2018 identifying the project's purpose, scope, cost and benefits.

AWAITING FUNDING OPPORTUNITY Phase 5 CSO Program Projects - \$18,000,000

Grant funding for the remaining CSO program projects would reduce the length and amount of future CSO surcharge rates to the ratepayer. While this amount of grant funding is not highly likely, we will continue to look for funding opportunities.

AWAITING FUNDING OPPORTUNITY Irving at 33rd Street Bridge - \$6,000,000

Public Works staff has applied for funding for our last of nine City-owned bridges twice and have not been awarded funding for this existing timber bridge built in 1951. Once federal stimulus funding works its way down to the Oregon Department of Transportation Local Bridge Program, it is our hope that the bridge replacement will be funded. Past bridge funding has consisted of 90% grant and 10% City match. **Staff will be submitting an application due October 16th, 2023, but our consultant who is assisting with the application anticipates that our project may not qualify for this round of funding.**

AWAITING FUNDING OPPORTUNITY Denver and Alameda Sidewalk Project - \$960,000

This project is a transportation safety project identified in the City Transportation System Plan (TSP) as a priority sidewalk project linking neighborhoods above Tapiola Park and the Astoria High School to the Hwy 202 sidewalk corridor.