

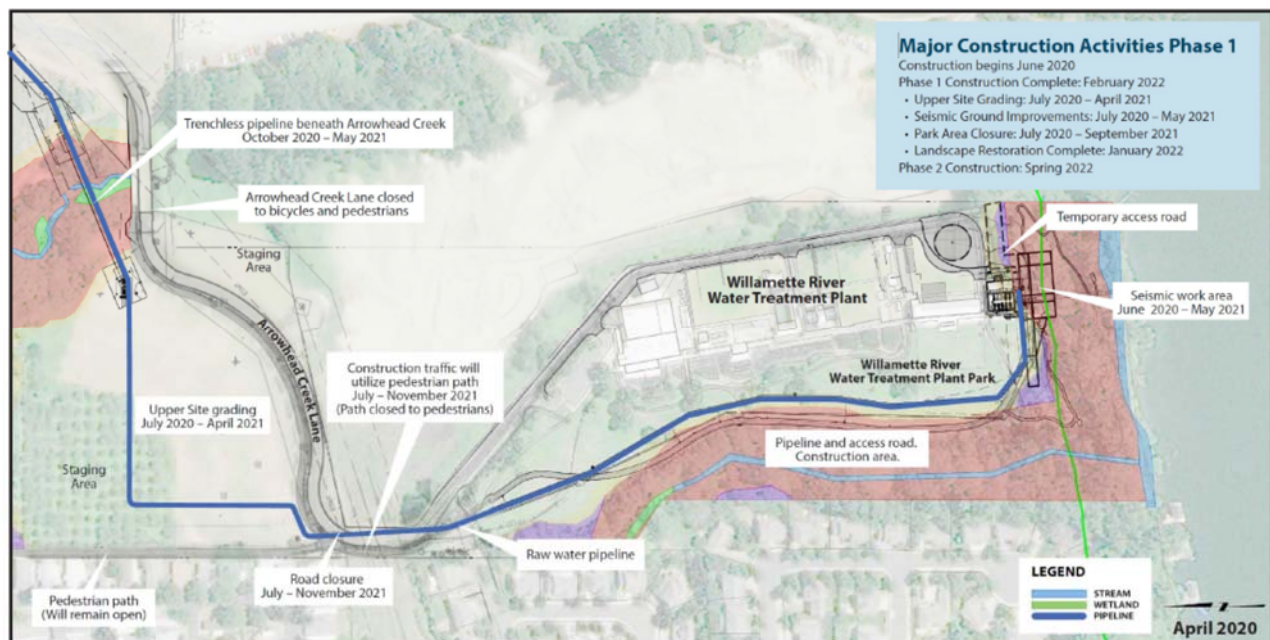
From The Director's Office:

Construction of the Raw Water Facility project (RWF_1.0) at the Willamette River Water Treatment Plant (WRWTP) started this month. The project improvements include:

- **Improved pump station** that will increase pumping capacity and supply water to the new Willamette Water Supply System (WWSS) water treatment plant near Sherwood.
- **Seismically reinforce the Willamette River bank** to prevent slope failure to preserve the intake structure and help maintain operations after a large earthquake.
- **Increased intake capacity** through new fish screens to allow additional water to be withdrawn from the Willamette River to accommodate planned growth.
- **New electrical building and standby power** (north of existing WRWTP) to add reliability in case of outages and provide power to pump water to the WWSS water treatment plant near Sherwood.
- **New raw water pipeline** will be constructed through the WRWTP Park to the new WWSS water treatment plant near Sherwood.

This is a four year project which will be constructed in two phases. Phase 1 is primarily underground and in-water related work. Phase 2 will include building construction and equipment installations.

For additional information on this project see the June 2020 Construction Update from the Willamette Water Supply Program which is included at the end of the Public Works Monthly Report.



Best Regards, Delora Kerber—Public Works Director

Facilities

Put Your (Sneeze) Guard Up

In June there was a rush on the completion of a variety of projects by the Facilities team. The most critical was the result of the phase one opening of City Hall. Crews scrambled to retro-fit many of the public interaction points in the public buildings. The primary areas of focus were the front counter space both upstairs and downstairs at City Hall. Staff hired a local metal fabricator to build custom frames to support ¼" Polycarbonate sneeze guards. Facilities Technician, Javid Yamin and Supervisor, Matt Baker, worked through a Saturday to fasten the frames to the walls and counter tops, measured, cut and installed the polycarbonate sheets into the frames. This clear divider will provide front counter staff additional physical distancing from customers.

Concurrently, Facilities Technician Ivan Crumrine built six custom sneeze guards out of 2" X 2" cedar and 1/8" polycarbonate. The cedar was then coated with two coats of shellac varnish for ease of cleaning. These portable sneeze guards will be placed throughout the Library as needed.

In addition, Facility Maintenance Specialist, Robert Todd assisted the Facility Technicians in the distribution of additional splash guards, stanchions, disinfection stations, and floor markings to several of the City's Facilities.



Installation of sneeze guard at City Hall front counter



Custom built portal sneeze guards for use at the Library building



Double checking the completed guard installation

Facilities

We are running out of time—Davit!

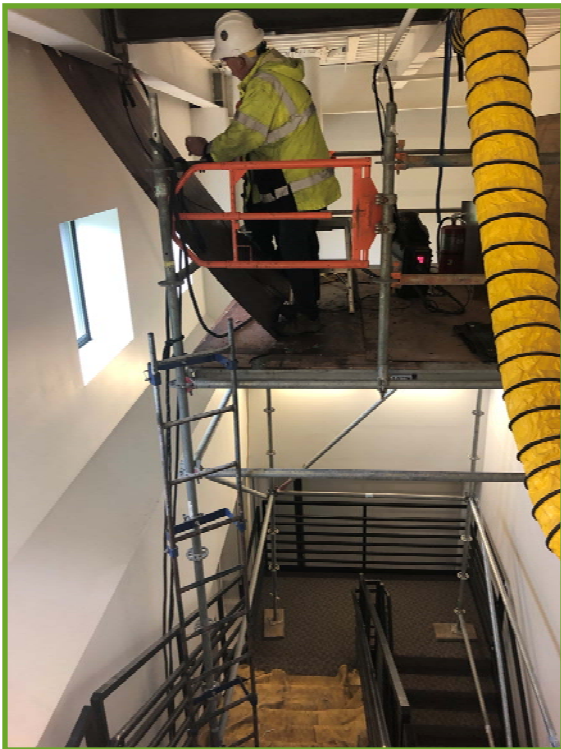
With much of the Facilities division's time being devoted to Covid-19 response, the staff found themselves up against a short time line to finish some of their capital improvement projects.

One such project was the installation of a Davit Arm to the roof top of City Hall. This project required many pieces to fit into place including engineered I-Beam drawings, certified welding fabrication, installation of staircase scaffolding, and staff cutting holes in the roof. Then there was the installation of the mounting bracket, the special welding inspection and waterproofing of the mounting bracket to keep everything water tight.

This project will allow staff to work more safely on and around the roof. The Davit Arm can be used to haul equipment from the ground up to the roof using a pully-system



Installation of waterproofing around the Davit Arm mounting bracket



Special inspection of the welding the Davit Arm support to the building structure



Finished Davit Arm System

Facilities

T- House and Gazebo Fall Victim to Rot

It was determined Tauchman House (aka T-House) and the Gazebo in Boones Ferry Park had so much dry rot the structures were no longer safe. Once Facility Crews were notified of the condition of the two structures, they quickly shut down access to the deck and after deciding that the gazebo was beyond repair, crews quickly began the removal process of the gazebo.

It was decided that the safest way to get the weakened Gazebo structure to the ground was to remove the built-in bench seating, un-bolt all six of the post from their anchors, remove two of the side posts, and attach two ropes high on the front post to allow the crews to stand a safe distance away as the structure was slowly toppled to the ground. Crews then made quick work of the downed structure using a chainsaw to cut the cedar shake roof into manageable pieces.



Rotted out supports on Gazebo



Removing the side posts from the Gazebo



Carefully pulling down the Gazebo



After complete removal and cleaning of the area where the Gazebo once stood

Facilities

T- House and Gazebo Fall Victim to Rot, continued

Next crews attacked the T-house deck where rot was found in some of the decking that is exposed to weather, back railings and all three sets of the stair case stringers. The deck should be back in full use by mid-July.



Rotted out stair support



Removing floor decking



Checking the integrity of the floor joists



Removing stair treads

Utilities

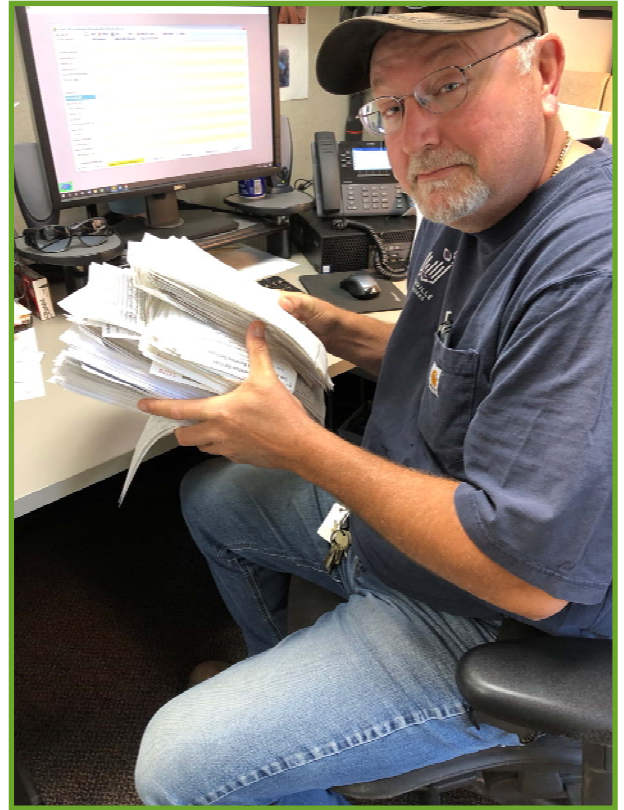
Taming of the Backflow Program Paperwork

With a due date of June 30 for all residential backflow assemblies to be tested, this month is by far the busiest time of year for the backflow program. Staff field hundreds of calls and emails from residents and backflow testers seeking information.

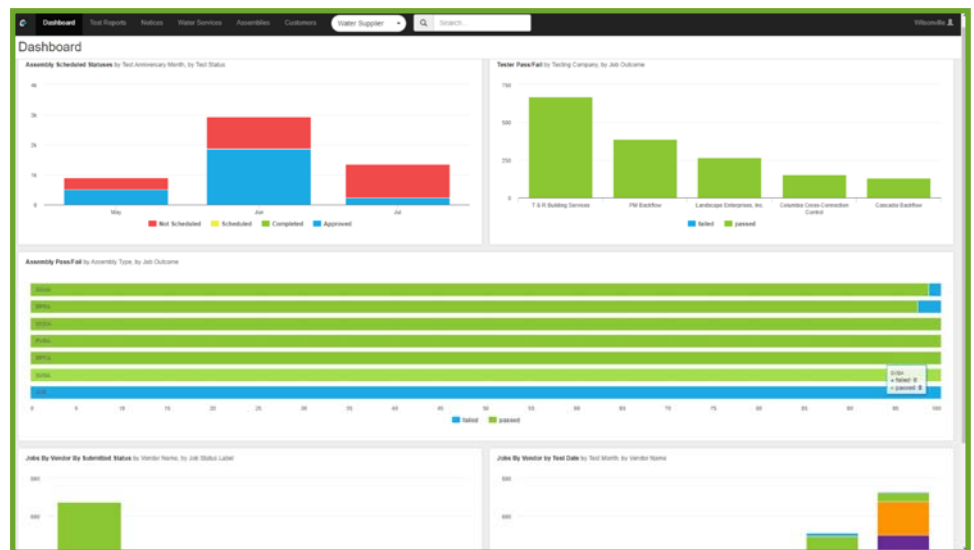
This year the backflow program has implemented a new software application called EcosConnect, which is saving staff a great deal of time. Prior to EcosConnect, staff were required to print and mail all of the test notices, field the phone calls and emails, and then manually enter each individual test report into a database as the City received them. Manually entering over 5500 test reports was a tedious process, which consumed hundreds of hours of staff time and created an unorganized backlog of information.

EcosConnect is a software application which allows backflow testers to electronically submit test reports to the City, eliminating the need to manually enter the reports. As of March 1, 2020, the City only accepts electronic test reports from testers. Now with the click of a button, the City has live data about how many assemblies have been tested. In addition to the time savings from no longer having to manually enter test reports, EcosConnect prints and mails the backflow test notices which saves administrative time.

The implementation of the EcosConnect software has been a huge benefit during the COVID-19 pandemic. It has eliminated the need to physically handle over 5500 pieces of paper and testers no longer have a reason to visit City Hall or Public Works to drop off paperwork. If staff happen to receive a backflow inquiry while working in the field, EcosConnect is a web based application, so the information can be accessed from an iPad, eliminating an unnecessary trip into the Public Works building.



Previously backflow reports were manually entered



EcosConnect Program Dashboard showing status of backflow assembly testing

Utilities

Your Favorite Channel on Close Circuit Television (CCTV)

In addition to regular cleaning and maintenance of the Wilsonville sewer system, this month the wastewater collection crew has been working with CCTV contractor, Aims, to video inspect the underground sewer pipes. Using a robotic camera system we are able to obtain a clear view inside the live wastewater system. This video is used to pinpoint the location of many defects that range from small bellies to fractures and holes in the public sewer mains. These defects have the potential to cause a blockage and sewer spill that could result in damage to the environment or personal property. Using the reports generated from these inspections, repairs are prioritized and the best method is selected to safely restore the system. The inspection reports are stored in Cartegraph asset management software creating a detailed history for assets and allowing us to forecast needed repairs in the future.



Close Circuit Television (CCTV) Truck



CCTV Operator viewing live video



Root intrusion into sewer pipe



Crack on side of sewer pipe

Storm Water

Increasing the quality of a Water Quality Swale

Stormwater and Roads staff teamed up to rebuild the water quality swale on the west side of Canyon Creek Road from Vlahos Drive to just south of Day Break Street. The intent of this project is to try different types of vegetation, irrigation system and catch basins to meet various goals. Goals for the vegetation is to provide filtration of water runoff from the road while not overgrowing onto the sidewalk or into the bike lane. Also, the vegetation should not hinder sight distance for cars or pedestrians. For the irrigation the goal is an installation that will provide the needed moisture while being easy to repair. Along the newly rebuilt swale three different types of catch basins were installed at the inlets. The goals for the catch basins is for it to collect and trap larger pieces of sedimentation while would help minimize the build up of sediment in the swale and thereby extend the useful life of the facility. Throughout the design and construction of the swale, Public Works staff worked with Natural Resources staff to develop new standards for water quality swales in the City.



Installation of catch basin



Newly replanted water quality swale

Storm Water

Now you feel it, Now you don't

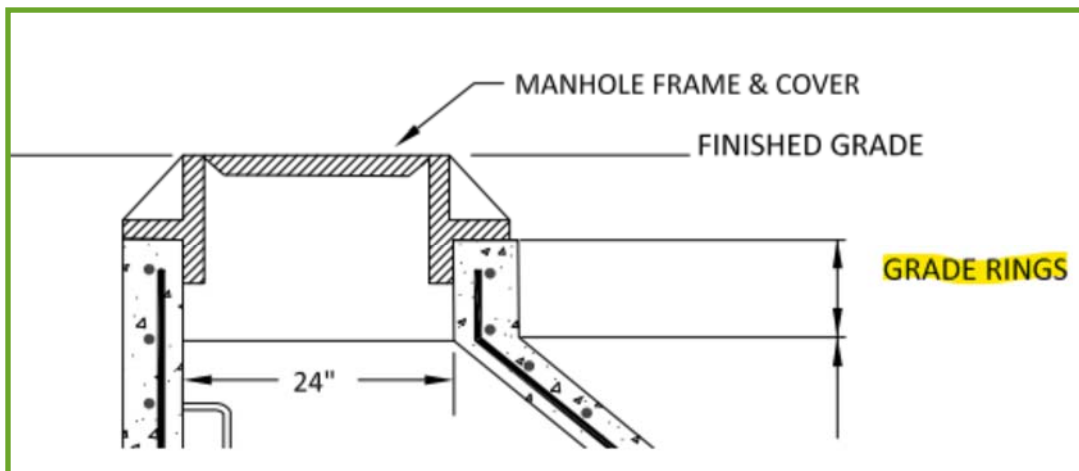
Have you ever driven over a manhole and feel a big bump? That is because the manhole riser (grade) ring has collapsed which causes the settlement of the area around the manhole and eventual deterioration of the surrounding asphalt. To fix this issue staff needs to dig out the asphalt and broken riser ring install a new ring to match the surrounding grade then repave the area. If done correctly, travelers are not aware they have just passed over a manhole.



Staff digging out the asphalt and manhole riser ring



Finished project with new asphalt



Standard Drawing for a manhole with riser (grade) rings

June 2020 Construction Update

This is the first monthly construction update for the Raw Water Facilities. In preparation for construction you may notice some pre-construction activities near the Willamette River Water Treatment Plant Park in the next few weeks. Read more about the project below.

Do you have questions? Please contact:

Marlys Mock, Communications Supervisor
marlys@tvwd.org 503-941-4563
www.ourreliablewater.org

Pre-construction activities:

June

- Construction of temporary connection to PGE power
- Installation of erosion control fencing

Early July

- Installation of construction fencing
- Tree removal

Mid July

- Grading of Upper Site

Raw Water Facilities Overview

In coordination with the City of Wilsonville, the Willamette Water Supply Program team plans to begin building improvements in and around the Willamette River Water Treatment Plant in Wilsonville in June 2020. Construction is expected to take four years. Improvements include an improved pump station, a seismically reinforced Willamette Riverbank, increased water intake capacity, a new electrical building, and a new raw water pipeline. Following is a description of the projects that will be built at the Park, Riverbank, and Upper Site.



Raw Water Facilities Layout

Upper Site

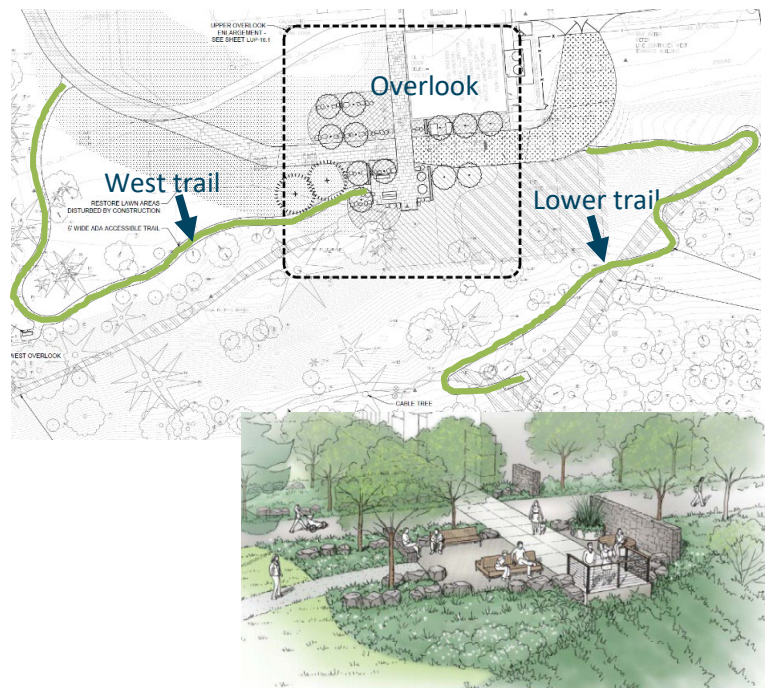
- The path along the western edge of the Upper Site to Morey Lane will remain open and lighting will be added.
- A new electrical building will be built on the upper site.



Upper Site Electrical Building

Willamette Riverbank

- The existing path through the Park will be restored and widened after construction. The path will connect to an enhanced pedestrian overlook and new trails (the west trail and lower trail) near the riverbank.
- The new overlook will be 34 feet wide overall and an average of 19 feet deep, with a 31-foot-wide viewing area along the south edge—about eight feet closer to the riverbank than the existing overlook.
- Riverbank stabilization will protect the new and existing water facilities from damage during an earthquake.



Pedestrian Overlook

Construction

Most of the Willamette River Water Treatment Plant Park will be closed to the public during construction to protect the public and allow construction to be completed more quickly, returning the Park to normal operations sooner.

- A few protected areas of the Park will remain open to the public during most of the construction, including the water feature that runs along the west side of the water treatment plant and the community room.
- The Park will be restored after construction. A landscape plan is being developed in collaboration with the City of Wilsonville staff.



New Pedestrian Trail