



SEPTEMBER 2020 MONTHLY REPORT

From The Director's Office:

September is designated as Emergency Preparedness month and astoundingly the City was faced with both a major wind storm and a threat of wildfires last month.

Fortunately Public Works personnel believe, live, and practice being ready for any disaster at any time.

During the period of dangerously poor air quality, a rotation of public works staff— one of the supervisors and one worker from each of the three divisions: facilities, utilities, and road – reported to work each day to complete critical job duties.

As emergency first responders, on-site staff completed essential functions including adjusting facility's HVAC systems or distributing box fans with filters to help improvement air quality for the workers reporting to work, removal of downed trees and debris from public right of way caused by the Labor Day wind storm, performing fire watch around the City, replacing downed or broken traffic signs and ensuring a functioning water system.

The wind and fire events last month reconfirmed the importance of emergency preparedness.



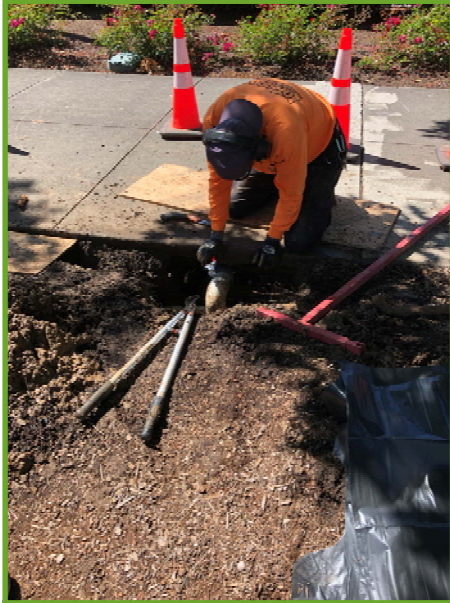
Thanks to the Public Works staff for helping to ensure a safe and livability community.

Best Regards,
Delora Kerber, PE
Public Works Director

Facilities

Picnic Basket and Ants not included

It was a busy month for the Facilities Department. Maintenance staff completed scheduled landscape projects, repaired a break in a main irrigation line, and replaced rotten, damaged boards on the picnic tables near the Wilsonville Public Library.



Repairing irrigation line



Finished picnic table

Learning and Practicing the Art of BAS

Staff attended an in-house training from Delta Controls to better understand the City's Building Automation system (BAS). Trainees followed schematic diagrams to connect wiring to fans and heating elements, creating a simulation of components in the City's existing HVAC equipment. Using a test server, staff had an opportunity to explore different functions and practice programs from their laptops. It provided valuable hands-on experience without affecting HVAC system operations.



Facilities Technicians Javid Yamin and Ivan Crumrine in training

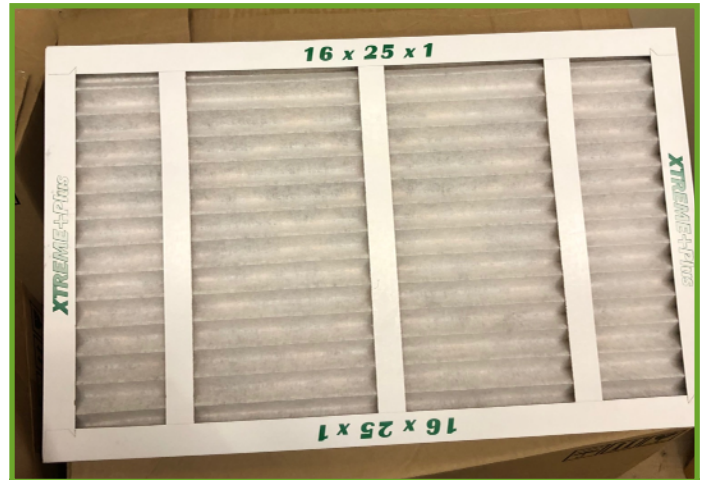
Facilities

We can all breathe easier...

The wildfires in September impacted the quality of life for our community and our staff. Facility Supervisor Matt Baker's home was under Level 3 evacuation, but the Facilities team stayed focused under Operations Manager Martin Montalvo's leadership. City Facilities HVAC systems had to be upgraded to meet COVID best practices standards. The upgrade also reduced the amount of hazardous air particles brought into the building. Additionally, improvised "air scrubbers" made from box fans and HVAC filters, helped reduce the amount of smoke damage to the buildings.



Old filter - discolored by smoke



New filter - what a difference!

Fires Inside Too

In addition to all of the efforts address air quality concerns due to the wildfire smoke, the Facilities crew responded to a small fire started in the WES Transit restroom. The fire triggered the alarm and fortunately no one was injured.



Just a small indoor fire...

Storm Water

Teamwork! Stormwater & Parks

The Stormwater crew assisted Parks Maintenance staff in repairing the trail at the Park at Merryfield. New stormwater drainage pipes were installed under the trail, allowing water to drain in to the adjacent creek. This upgrade will prevent the trail from getting saturated or eroding away, making it safer for year-round use.



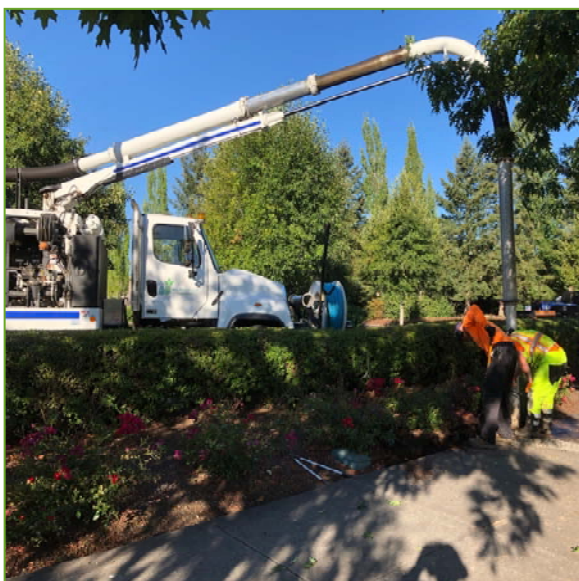
Digging by hand



Using an excavator to move dirt

Teamwork! Stormwater and Facilities

Using a hydro excavation technique, Stormwater staff teamed up with Facilities personnel to tackle an irrigation repair at City Hall. Hydro excavation uses high pressure water to a targeted area, which makes it easier and cleaner to remove soil rather than digging the area by hand. This excavation method also helps reduce the possibility of disturbing utility lines and nearby vegetation.



Minimizing impact



Precision work

Roads

Brush and Dead Trees— Be Gone

The Roads crew cleaned up the Boeckman Dip area, on Boeckman Road just east of Canyon Creek Road. Trees and dense brush were beginning to overtake the sidewalk, potentially restricting pedestrian access. Trimming back the brush discourages animals from nesting in the area and possibly running out into the road. Dead trees that could present a falling risk to drivers and pedestrians were preemptively removed.

The project required traffic control with two flaggers on each end of the work site to safely accommodate the necessary equipment. The crew used a chipper and chipper box so the debris could be cleared quickly and safely, minimizing the interruption to vehicle and pedestrian traffic on Boeckman Road.



Clearing potential hazards

Protecting the Railroad Crossing Guard Arm

Railroad signals are protected by metal guardrails, preventing a collision which could disable the signal and in turn potentially fail to warn vehicle traffic that a train is approaching the intersection. The damage at this location required the entire steel guardrail to be replacement. The rail was bent into the desired shape, and bolted on to new footings and posts.



Damaged guardrail



Completed repairs

Utilities—Water

Respect Your Mother

Mother Nature kept the Water crew very busy in September. The night of the wind storm, Water Tech Sam Kinnaman began receiving emergency calls on the after-hours Utilities pager due to power outages at many of the water facilities. After he ensured all generators and pumps were operating properly, Sam started to clear a tree that had fallen into Town Center Loop E, near the crosswalk between City Hall and the Public Works building. When additional staff arrived to clear the tree, Sam stuck around late into the night to help clear other trees that had fallen on roadways.

When the wildfire smoke began to roll in and the poor air quality forced the City to close its doors, the Utilities division had a staff member present to ensure all water quality sampling was performed on schedule, utility locates were completed and to ensure that all water infrastructure was secure and operating properly.



Tree removal at Public Works

What's in the Bag?

In addition to all of the emergency response, the Water crew performed routine maintenance, completed Utility Billing work orders, and replaced large meters at the Wilsonville High School and The Springs at Wilsonville Senior Living Facility.



Water Technician Jerry Anderson bagging hydrant

Utilities—Wastewater

Protecting Natural Area while Cleaning the Boeckman Creek Easement Sewer Line

The Wastewater crew has been taking advantage of the last remaining days in the dry season to maintain a remote section of sewer main in the Boeckman Creek Riparian Corridor. This narrow strip of environmentally sensitive land is adjacent to the creek, extending from farmland north of Frog Pond through the Wilsonville Meadows housing development to the Willamette River. Although it serves as a habitat for native plants and wildlife, the area contains nearly 40 sewer manholes and over 7,000 feet of sewer mainlines to convey over 100,000 gallons of raw sewage per day.

To minimize our impact to the natural area, the crew utilized their easement machine, a small hydraulic powered cart that traverses rough terrain and narrow paths to bring the high pressure hose closer to where crews need access. The easement machine was driven into the natural area near the bottom of the Boeckman Dip, where the crew located their first manhole for service.

Once the machine is set up at an access point, another high pressure water hose was brought down from the hydro cleaning truck parked on the street. This second hose was moved by hand— around houses, through yards and down to the easement machine. These two pieces of equipment work together to clean these hard to reach sewer mains. After the service is complete, the hose is uncoupled and the easement machine continues to the next manhole where the process is repeated.



Paul Walker operating easement machine



Easement machine

Raw Water Facility Project (RWF_1.0)

Phase 1 Underway

Large equipment needed to construct various elements of the RWF_1.0 project continues to arrive and be installed at the upper and lower work sites.



*Drill rig on lower site
on top bank of the river*



*Mixing plant to create slurry for the deep soil
mixing along the Willamette River bank*



*Drill rig and crane on upper site for trenchless
crossing under Arrowhead Creek*



*Yet another crane and drill rig for the RWF_1.0
work*

Raw Water Facilities Construction Update

In coordination with the City of Wilsonville, the Willamette Water Supply Program team is building improvements in and around the Willamette River Water Treatment Plant in Wilsonville. Construction is underway and 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. The park will be restored after construction.

Lower Site (Park Area)

- **Construction of lower access road is anticipated to begin the week of August 24.** Dump trucks will be traveling on Arrowhead Creek Lane every five to 10 minutes in a one-way loop south through the water treatment plant roadway around the south end of the plant, then north through the construction area in the park. A flagger/guard will be present at the SW Brockway Drive and Arrowhead Creek Lane to manage construction traffic. This work is anticipated to be complete by October.
- **Work to stabilize the riverbank begins Thursday, August 20,** with large equipment arriving mid-September. Bringing the large equipment on site may require access through the SW Brockway Avenue fire gate. The project team will work directly with the City and neighbors on this short-term access if it is necessary.
- **Tree protection work on the riverbank is anticipated to begin Thursday, August 20.** The work involves sheet pile driving to protect roots. This work will be noisy and may cause vibration. This work is anticipated to be complete by Wednesday, August 25.

Upper site (Brockway Drive to Arrowhead Creek)

- **Grading and earthwork of the upper site are nearly complete.** The next steps include installing erosion control fencing and hydroseeding the area to stabilize the soil.
- **Electrical building foundation pile installation and testing are anticipated to occur in late October.** A pile is a large post that is driven vertically into the ground to support the building foundation. Piles are tested by dropping a heavy weight on them. This work will be noisy and may cause vibration.
- **PGE Brockway Drive excavation and installation of electrical connection** to the WWSP construction trailers. This work is ongoing through early September.
- **Preparations for boring the pipeline beneath Arrowhead Creek is anticipated to begin in early September or October.** Large equipment will be brought to the site. This work will be noisy and may cause vibration.



Caution – Please!

- ***Arrowhead Creek Lane is closed to bicycles and pedestrians.***
- ***Use extreme caution as you enter the Park from SW Brockway Drive through the fire gate.***

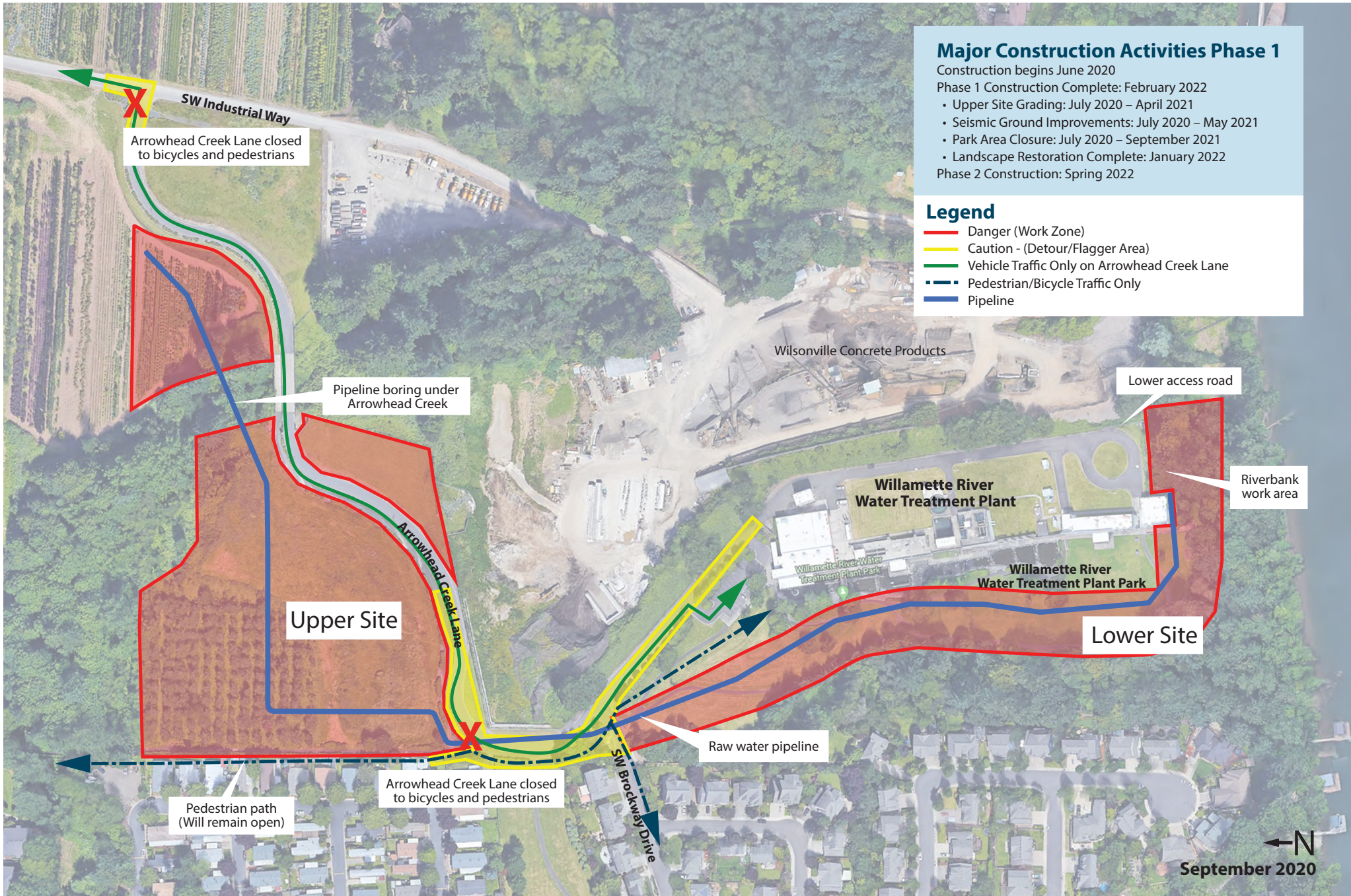
Do you have questions?

Please contact:

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Raw Water Facilities



Major Construction Activities Phase 1

Construction begins June 2020

Phase 1 Construction Complete: February 2022

- Upper Site Grading: July 2020 – April 2021
 - Seismic Ground Improvements: July 2020 – May 2021
 - Park Area Closure: July 2020 – September 2021
 - Landscape Restoration Complete: January 2022
- Phase 2 Construction: Spring 2022

Legend

- Danger (Work Zone)
- Caution - (Detour/Flagger Area)
- Vehicle Traffic Only on Arrowhead Creek Lane
- - - Pedestrian/Bicycle Traffic Only
- Pipeline

Arrowhead Creek Lane closed to bicycles and pedestrians

Pipeline boring under Arrowhead Creek

Wilsonville Concrete Products

Lower access road

Willamette River Water Treatment Plant

Riverbank work area

Upper Site

Lower Site

Raw water pipeline

Pedestrian path (Will remain open)

Arrowhead Creek Lane closed to bicycles and pedestrians

SW Brockley Drive



September 2020