WILSONVILLE PUBLIC WORKS

JULY 2020 MONTHLY REPORT

From The Director's Office:

Construction of the Raw Water Facility project (RWF_1.0) at the Willamette Water Treatment Plant is underway. The safety of workers and the public is a high priority for the project team. Thus the first order of business was the installation of construction fencing around the work site and installation of construction signage.

Safety actions for the RWF_1.0 project includes reviewing and implementing the Top 5 Life Changing Categories. If these categories are not followed it could detrimentally change a person's life. All workers and site visitors are required to: Know the Categories. Know the Safeguards

RAW WATER FACILITIES

Top 5 Life Changing Categories

- Human-Equipment Interface—Upper Site and Access Road Haul Off
- Human-Equipment Interface—Affecting Public/Exposing Publics to Hazards
- Working at Heights– Fall Protection Needs Proper Planning
- Confined Spaces
- Excavation– Working around open holes

Additional safety measures include controlling vehicle entry into the site via construction staff (flagger) stationed at the intersection of Industrial Way and Arrowhead Creek Lane to ensure there is minimal conflict between vehicles and construction equipment.

To ensure pedestrian safety, construction staff is present when work occurs near pedestrian paths from the Morey's Landing neighborhood, on the Jobsey Lane trail, or within the Arrowhead Creek Park.

The Safety Culture for the project is reiterated at each morning tail gate meeting and at every coordination meeting to reinforce the importance of having a safe work site.

Best Regards,
Delora Kerber, PE
Public Works Director

Construction fencing around the work area

Raw Water Facility Project

Signage along park pedestrian path

Signage at the intersection of Jobsey Lane trail

Signage at the entrance to the park from Morey's Landing

Controlling pedestrian traffic during construction

Storm Water

Let It Flow!

The water runoff from roads that enter our stormwater collections system carries a large amount of debris and pollutants. Stormwater catch basins require regular maintenance or cleanouts due to the amount of debris that can build up in the basin. Each basin has a sump that is a designed volume of space to hold the debris and still allow the stormwater water component to discharge downstream. Once that sump volume is consumed the debris can obstruct the discharge pipe and cause road flooding or even residential flooding issues. The images below depict the typical stormwater catch basin clean-out process.

Before—no pipe in sight

During—can start to see pipe

Cleaning catch basin

Storm Water and Roads

Don't Leave It to Beaver!

Last year the Department installed a flood control and habitat device referred to as the "Beaver Deceiver". Its intent is to allow for habitat creation for beavers while minimizing the risk for road or residential flooding associated with beaver dams. The Beaver Deceiver does require routine maintenance to strike the careful balance between habitat and flood control. The images below depict staff clearing the bypass pipe required to allow the device to properly function.

BEFORE– built up debris pile

AFTER—water flowing again

Mowing the Bowl

Rough mowing is performed in the Boones Ferry-Boeckman Bowl (inside of the ramp from Boones Ferry Rd. to Boeckman Rd.) to mow the tall grass. Cutting the lawn assures proper sight distance for vehicles when pulling onto Boeckman or Boones Ferry Road. It is also needed in order to reduce the fire hazard, minimize rodent and weed infestations.

BEFORE—tall grass

AFTER—trimmed lawn

Roads

Fill a pothole here and a pothole there

Pothole repair on Day Road are an ongoing issue due to the high daily truck traffic. The repair helps ensure a safe and smooth driving surface and minimize the risk of accidents and damage to vehicles. Minor potholes can simply be filled with either cold or hot asphalt. This isn't ideal but is typically done when a larger road treatment is planned in the future. Larger potholes require a patch which is a larger cut out with defined edges to prevent the pothole from spreading further.

Patched

Newly filled pothole

Can See the Crosswalk More Clearly Now

The typical crosswalk markers seen within the City are composed of a material referred to as thermoplastic. Thermoplastic provides for better surface traction, longer life span and increased visibility over the traditional paint alternative. Recently several sections of “thermo” crosswalks were replaced along Boones Bend Road in Charbonneau. The process is fairly simple for a trained road specialist with the right equipment.

Crosswalk—Before

Crosswalk—After

Facilities

Summer Fun at the T House

As time allowed, the Facilities team continued whittling away at the Tauchman House deck repairs. Crews worked to reestablish the railing system and stair cases as they prepare the entire deck for a fresh coat of paint.

Facility Maintenance Specialist Robert Todd, loads the lumber for the deck railings on the trailer for transport

Facilities Supervisor Matt Baker and Technician Javid Yamin, put the final rail pickets in place

Seek and Find Assets

Summer time is here and the dry weather provides the opportune time to implement the Facility department's annual storm asset maintenance program. Earlier in the year, Facilities Maintenance Specialist Robert Todd, used a combination of as-built drawings and good old-fashion brush beating to locate and enter all of the Facility storm assets into Cartegraph. In the end, there was found to be 108 storm assets that were split into a rotating biennial maintenance schedule leaving crews with slightly more than 50 storm assets to clean each year.

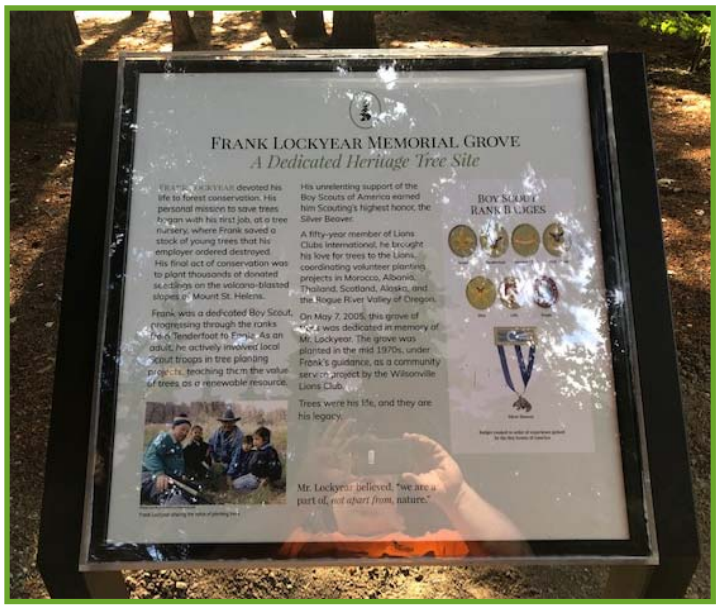
Stormwater Facility at Charbonneau Well Site Before & After

Facilities

A Sign of the Times

Facility Maintenance Specialist Daniel Morena and Technician Ivan Crumrine, Installed a new Frank Lockyear interruptive sign at the Library outdoor sitting area. The crews poured a new footing and anchor bolts before assembling and installing the sign. Additionally, staff modified the sign by placing a plexi-glass cover over the sign for added protection from vandals.

Old Lockyear sign damaged by vandals



New Lockyear sign with plexi-glass cover

New sign sits upon a the new footing

Utilities

Wheel of Valves

The water crew has been hard at work replacing old blow off valves that are at the end of their life span. The valves that are being targeted are a “wheel valve” style, which over time corrode and become prone to failure when they are operated. The valves are being replaced with a standard gate valve, which is a far more robust style of valve. In addition to replacing blow off valves, the crew has been performing some full fire hydrant replacements. The crew is targeting the old Dresser brand fire hydrants in the system, which no longer have readily available repair parts.

Using the vacuum truck to excavate trench

Installation of blow off valve

Utilities

Can you dig it?

This month the wastewater crew has used the information gathered from the video inspections of the public sewer mains to identify several sections of underground pipe that are in need of repair.

The first repair the crew tackled was a 12 foot deep section of pipe that was nearly half blocked with concrete. The concrete had settled and become attached to the inside of the sewer main. If left unchecked this obstruction could possibly collect debris until the pipe was completely blocked, causing a sewer overflow at the nearest upstream manhole.

In order to prevent this from occurring, the wastewater crew excavated a trench 3 feet wide by 9 feet long and 12 feet deep. The trench was shored with hydraulic rams, allowing a crew member to safely enter the excavation. The section of concrete pipe that contained the blockage was removed and replaced with 4 feet of new PVC pipe. Once repaired, the trench was back filled, compacted and the asphalt was patched. This is the first time a sewer main repair has been executed completely in house without contracting out any work. The crew was able to finish the entire repair in a single day with very minimal impact to the surrounding businesses.

Removing Asphalt

Loading up

Cutting Concrete

Working in the trench