DATE: July 17, 2023

TO: Honorable Mayor and Council Members

FROM: Brendan Byrd, Public Works Director/City Engineer

SUBJECT: Public Works/Engineering Department Monthly Report

STAFF RECOMMENDATION:

Receive report as an informational item.

EXECUTIVE SUMMARY:

Public Works Director/City Engineer

Police Facility Remodel Project

Over the past month the contractor has continued with interior framing, HVAC, and plumbing within the existing building footprint. To date, most of this work has been completed, and the contractor will be transitioning to building the portion of the building addition located nearest the public parking lot along Newburg Road.

In preparation for the new addition work, PG&E will be doing some work onsite in early July to establish a temporary power service for construction. As mentioned in a previous report, during construction it was found that the existing gas and electric service lines were in conflict with the new building addition footprint, and they'd require temporary location before the work on the addition could begin. This issue should be fully resolved in July, and fortunately due to the speed to PG&E's response to the issue the project schedule was not impacted.

In June staff conducted field meetings with AT&T staff to plan for the new fiber optic connection into the building.

Lastly, no new or substantial change orders requiring use of the construction contingency were executed in June. Rather, staff worked with the Contractor to economize certain aspects of the project, keeping the overall quality of the finished products the same but saving some on costs. Several small deductive change orders were ultimately executed. Staff are anticipated a number of change orders in the coming months, including hopefully some additional building painting, work on new utility connections, and solar panels.

Rohner Park Basketball Court Project

In June, the City's contractor completed installing the basketball hoops and the fencing. Beginning July 17th, the specialized court coating and striping contractor will be mobilizing to finish preparing the asphalt surface, and to install the acrylic surfacing and striping. Staff are anticipating that the project will be completed by the end of July.

During the last month, staff received input from some community members regarding interest for pickle ball, and ultimately decided to execute a small change order to add two pickle ball courts into the striping, one on each of the full-basketball courts. The cost of the additional striping was very reasonable, and would be much cheaper to do now then if it was decided to add it in the future.

Corp Yard Roofing Project

The project is substantially complete, awaiting only a few minor items prior to recording the notice of completion. Overall the project is anticipated to come in approximately \$10,000 under budget.

Water Tank Coating Project

As noted in the Chief Plant operator's staff report, tank coating at Hillside tank was completed in early July and the tank is back operational. The contractor will mobilize their equipment to Campton tank on July 12th, and the work on that tank is anticipated to take 4-6 weeks. Overall the project has gone smooth and the contractor has been very good in their work, all of which has passed quality standards inspections by the City's resident coating inspector.

12th Street Stormwater LID Project

The project has been going for approximately 6-weeks now, and is approximately 60% complete. The final major items of work for the project will include the construction of the raingardens at the intersection of 12th and K and J Streets, and the final landscaping. Overall the project has gone well, and no major issues with underground utilities have been encountered.

During some of the water system shut-offs that have been required for portions of the work, staff have discovered some water system valves that require replacement. Currently staff have repaired those necessary to keep the project moving, but a larger maintenance and replacement project will be necessary in the downtown area to take care of all issues identified during the shut-offs. Staff are currently working on plans for those efforts.

Lastly, there have been questions from many community members regarding the high school parking lot and its use for AutoXpo. Staff have been working with the City's contractor and they are aware of the event and of the dates, and the plan is to have the parking lot fully cleaned and swept, with only a small footprint in the back taken up by the contractor.

Utilities Division- Utility Lead

Service Call Summary

- In the month of June the utilities division completed 109 service calls by operators. Figure 1 below shows the distribution of service calls by type.
- Underground Service Alert (USA) has changed their format and the utilities crew can no longer track how many mark and locates have been completed. There were zero miss-marked line, resulting in zero broken utilities.



Figure 1. Utility division service calls by type in June.

Water Distribution System

- Read water meters and completed meter worksheet.
- The utilities team installed two new services to the system in the month of June.
- In the month of June the utilities team changed out 26 dead water meters.
- Continued to check service lines for lead.
- In June there was one water leak. As a result of this there was an estimated water loss of 43,200 gallons. The leak location was 114 12th Street.
- Replaced one broken angle valve on 10th Street.
- Utilities crew did a scheduled shut down on 12th Street and downtown locations for the contractor to relocate a water line as part of the 12th Street Stormwater project. In the process, several old vales in the system broke in the off position, and therefore turning the water back on took some additional time. The utilities crew stayed out for 15 hours and replaced valves until every resident had water restored, completing the work just before midnight. The utilities crew returned the next morning to clean up and flush hydrants.
- Spent one day prepping 12th Street for a new eight inch valve install. Spent the following day installing the new inline valve.

Date	Location	Pipe Information	Estimated Leak Rate (Gallons per Minute)	Leak Duration	Total Estimate Leak Volume (Gallons)
6/9/2023	114 12 th Street	1'' saddle	10	3 Days	43,200

Table 1. Water leak rate and water loss estimates for June 2023.

Wastewater Collections System

- Utilities cleaned 14,000 feet of sewer main.
- Utilities had two sewer plugs in June with no spills, however one backed up into a resident on Newell Drive.
- Repaired a broken sewer lateral at 1336 Main Street. This also required repair of a medium sized sink hole that occurred because of the break.
- Repaired a root plug in a clean out at 1954 Newell. As a result of this plug sewer backed up into the house.
- Televised the sewer main on Ronald Avenue to help a plumber locate a sewer lateral.

Miscellaneous Tasks

• The utilities division performed monthly maintenance on the division's heavy equipment, including greasing and checking all fluids.

Water Treatment/Wastewater Division- Chief Plant Operator

Wastewater Treatment

Table 2. June wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Year	2019	2020	2021	2022	2023
Total Monthly Flow, MG	31.204	30.095	25.380	27.853	25.880
Maximum Daily Flow, MGD	1.390	1.240	1.000	1.350	1.140
Average Monthly Flow, MGD	1.040	1.003	0.846	0.928	0.863



Figure 2. June wastewater plant effluent flows for the past five years in Million Gallons (MG) and Million Gallons per Day (MGD).

Wastewater Events & Maintenance Tasks Completed:

- Staff conducted a successful giveaway of Class A Exceptional Quality compost this month. Approximately 263 cubic yards of the nutrient-rich material were loaded into multiple
 - trucks and trailers for the betterment of gardens and yards across the community.
- Staff rehabilitated the Headworks biofilter at the wastewater treatment plant (see photo inset right). This unit filters the air from the front of the plant, which also mitigates its corrosiveness on plant infrastructure. The unit requires replacement of its media on a routine basis. Staff mixed fir wood chips, finished compost, and crushed oyster shells and then



placed this mixture into windrows atop the filter blower discharge vents.

• The State Water Resources Control Board regulator for the City visited the plant for a routine inspection. He walked through the plant grounds, checked paperwork, and took pictures. He also informed staff of upcoming regulations.

Water Treatment

Table 3. June potable water production for the past five years in Million Gallons (MG).

Year	2019	2020	2021	2022	2023
Total Production, MG	40.184	42.266	42.583	34.341	35.860
Maximum Daily, MG	1.810	1.838	1.931	1.464	2.061
Average Daily, MG	1.339	1.409	1.419	1.145	1.195



Figure 3. June potable water production for the past five years in Million Gallons (MG).

Table 4. Average June depth-to-groundwater static levels in the City's active wells for the past five years in feet.

Year	2019	2020	2021	2022	2023
Well #1	23.2	28.2	29.8	28.5	27.9

Well #2	19.8	25.2	26.9	25.3	25.2
Well #4	26.4	30.7	31.8	31.0	30.6
Well #5	26.1	32.6	35.1	32.9	32.3

Water Events & Maintenance Tasks Completed:

- Staff worked on rehabilitating some of the infrastructure at the Corrosion Control Facility on Eel River Drive. For example, staff replaced the radiator hose and water pump on the emergency generator there. Staff also rebuilt one of the well pump's air relief valves. Finally, staff switched electrical soft-starters from one booster pump to another due to an equipment problem on the first pump.
- Staff spent significant time setting up five, plastic, 10,000-gallon temporary tanks and manifold piping, valves, and fittings at the Campton Heights tank site (see photo inset right). Staff will place these tanks in service once the coating contractors begin their work on the 1-million-gallon, steel tank there in July.
- The coating contractors finished re-coating Hillside tank in late June. After cleaning and disinfection, staff will fill the tank and sample for bacteriological analysis. Once results pass all required parameters, staff will place this tank in service and then move the three, plastic, 10,000gallon temporary tanks at Hillside over to the Campton Heights tank site to add to the temporary storage there.



• Staff worked with multiple contractors at the Drake Hill hydropneumatic pump station, finalizing the connection and testing of the new, grant-funded emergency generator there. Testing confirmed that further troubleshooting is necessary before activation of this unit.

General Services and Streets - General Services Superintendent

The following is a list of scheduled assignments completed by the General Services staff in June:

- Staff applied hot asphalt emulsion in cracks on various roadways caused by the earthquake in December of 2022.
- Staff raised sanitary sewer lids and water valve clusters after the completion of the paving task on Smith Lane.
- Staff potholed utilities on Twelfth Street for the storm drain culvert project.
- Staff replaced damaged traffic signs on School Street from an impaired driver.
- Staff repaired water fixtures in the men's lavatory of City Hall and Police Station.



- Staff removed the failing fence at the arena and replaced with recycled milling of asphalt from recent paving projects. Staff removed asphalt to avoid a trip for the new fence. Fortuna Rodeo Association installed a new fence (see photo inset right).
- Staff prepared traffic control for July 3rd Fortuna Fire Works Festival.
- Staff continues to mow and weed eat various ditches, along street right a-ways, and Dog Park.

In addition to the special tasks noted above, staff also engaged in the following regular routine maintenance activities including USA's, street sweeping, recycling and trash management, collect batteries at City Hall, road maintenance, Dog Park maintenance, vegetation management including sniping of curbs, and safety training and inspections. Staff is available for questions, requests, and emergency responses to the community.

RECOMMENDED COUNCIL ACTION:

Receive Public Works Department Monthly Report. Consent Agenda vote.