

## Bethel Lift Station

### Preliminary Lift of Lift Station and Electrical Upgrades

July 15, 2020

1. Replace deteriorated switch gear that controls 3 small 50hp 480v pumps, add VFD's to these 3 pumps.
2. Upgrade pumping to something that is not obsolete and is a non-clog style. Parts are getting harder to find for repairs and ragging is becoming more of an issue the past 5 years. We are pulling and/or backflushing pumps up there every few weeks and more often after rain events.
3. Add dewatering pump and controls to EQ tank #1
4. Remove aeration piping from existing EQ tanks
5. Modify/upgrade influent flow channel to include larger manual bar screen (current bar screen is 12"x16") and is quickly overtopped during rain events allowing rags and debris to pass through to the pumps and into the EQ basins.
6. Add automatic bar screen to influent channel
7. Replace 2 existing slide gates in EQ's, use existing AUMA actuators
8. Add slide gate, electric actuator and control wiring to rear EQ. This would allow us to divert some flow directly into the rear EQ during instead of taking all flow into the surcharged wet well during rain events which would relieve upstream pressure and eliminate some bypassing upstream. Possibly another manual bar screen here to catch debris.
9. Same as #7 if adding another EQ tank
10. Demo of blowers and electric if eliminating EQ piping
11. Add force main shut off valve in building