

# City of Marshall Wastewater Facility Upgrade September 2020



# Grit Classifier Replacement Completed



# Trickling Filters Rehab

**The West Trickling Filter media has been removed, interior walls and ceiling has been sand blasted and coated. New media and distributor are scheduled for placement in September. Once this is complete both Trickling Filters will be reroofed.**



# Trickling Filter Media Removal



# Intermediate Clarifier Replacement

**The Intermediate Clarifier is offline. A new scraper system and catwalk will be installed.**



# Activated Sludge Aeration Replacement

The Activated Sludge system is scheduled for mixing system to be replaced next spring.



# Aeration Basin Mix System



# Aeration Blowers Replacement





# Aeration Blower Replacement

- **New blowers are installed and are being wired and will be operational in late September.**



# Final Clarifier Pump Replacement

**These pumps are on site and are scheduled for installation in the spring of 2021.**



# Additional Final Clarifier

**The new clarifier is poured and is almost complete. Online this winter.**



# New Final Clarifier-Splitter Box Return Structure



# New Biosolids Storage Tank



# New Biosolids Storage Tank

- **Mixing pumps and catwalks are in place.**
- **Electrical cabinets are installed.**
- **Piping is scheduled for September.**



# New Biosolids Storage Tank

- **Mixing Systems are in place.**



# ATAD Jet Mix Pumps and Valves

- **ATAD Pumps and Valve replacement scheduled for January 2021.**





# Biosolids Mixer and Valves

- Biosolids piping and valve replacement in Long Term Storage Building scheduled for December.



# Post Aeration Replacement

**Aeration  
mixing  
system  
scheduled for  
November.**



# Summary To Date

- Final Completion is scheduled for August of 2021. \$14,074,300 PFA Low Interest loan.
- To date everything is going very well.
- Many of the replacement equipment timelines are staggered to allow treatment to continue during construction. This can be very challenging.
- Project completion and stored materials are about 70% complete.

# Questions?



**507-537-6776**