

Owner: CITY OF GLENWOOD SPRINGS
Contractor: MOLTZ CONSTRUCTION, INC.
Engineer Team: SCHMUESER GORDON MEYER, INC.
TETRA TECH, INC.

OCTOBER/NOVEMBER 2011 PROGRESS REPORT



8-INCH WET TAP ON EXISTING 24-INCH RAW WATER LINE (at Lift Station)

This report summarizes work performed during October and November of 2011. As construction of the building portions of the main plant near completion, the focus now moves to making things work. Providing and controlling power has become a large focus and leads to the next phase of the contract which includes energizing this state of the art equipment and validating that it does work. In addition to the electrical items; the plumbers, HVAC installers, and painters keep moving forward.

At the Lift Station, the masons are nearing completion and should complete all of their work before Christmas. Items such as electrical conduit, HVAC and plumbing penetrations through masonry walls were performed and process pipe installation is ongoing.

Driven Piles Installed	2,707 vertical feet
Micropiles Installed	138 each
Cement Treated Soils	18,403 cubic yards
Concrete To Date	7,879 cubic yards
Concrete Reinforcing Steel	1,242,790 pounds
Masonry Walls Erected (Including Veneer)	59,176 square feet
Pre-cast concrete roof panels	40 each
Structural Steel Columns/Beams and Steel Joists	153 each
Metal Roofing Panels	16,405 square feet
Process/Yard Pipe Installed	14,478 linear feet

STATUS BY STRUCTURE



Influent Bypass Channel-Odor Control Ducts

HEADWORKS BUILDING

*Overall dimensions of building: 90L x 40W
Concrete Placed To Date: 627.5 cy
Masonry Walls Constructed: 3804 sf
Process Pipe Installed 99 lf*

With all items installed and electrical power at the building, the last push to perform clean-up and punch list items has begun. HVAC duct drops for the odor control system have been installed. Final detail work which will include final paint coatings (excluding exterior door) should be completed by the first of the new year.



BIOSOLIDS/DIGESTERS BUILDING

*Overall dimensions (in feet): 171L x 54W
Concrete Placed To Date: 1479 cubic yards
Masonry Walls Constructed: 10,457 square feet
Process Pipe Installed: 1059 linear feet*



Local Control Panels for the Polymer Feed System



Looking Inside the BioSolids PLC

The highest priority at the BioSolids/Digester building is extension of permanent power into the building and the many wire connections between equipment, local power and control panels, and the programmable logic controller (PLC). Having the controls system for each individual item and each system component is critical to the upcoming validation process.

OXIDATION DITCHES

Overall dimensions (in feet): 173L x 145W x 21H

Concrete Placed To Date: 2718 cy

Process Pipe Installed to date: 2038 lf

Because of the large open area of each oxidation ditch, ice buildup inside the tanks has been an issue that is not easily addressed. With the air distribution grids installed, protection of the grids from freezing and being damaged by ice is ongoing.

Other work performed on the O Ditches include, placement of non-shrink grout under the drum mixer bases, installation of access stairways up to the walkways over the ditches and the handrail related to that work, installation of air diffuser grids, and performance testing of the stainless steel air pipe.

CLARIFIERS

Dimensions (2 tanks) each 55 foot diameters by 18.75 feet tall

Concrete Placed To Date: 829 Cubic yards

Process Pipe Installed: 184 linear feet

Work performed on the Clarifiers during this period included application of the protective coatings in the effluent trough and the splitter box, installation of access stairs and handrail up to the walkway bridge over the Clarifiers, and clean-up work.

OPERATIONS AND ADMINISTRATIONS BUILDING

Concrete Placed to date: 799 CY

Pipe Installed: 859 LF

Masonry Walls Constructed: 15,013 SF

Masonry Veneer Walls: 6,884 SF

At the main plant, the Operations/Administrations building saw the greatest amount of work. Ongoing work to the equipment power and controls system is the most critical as this system will need to be completed prior to startup and validation of most equipment. The numerous



Operations - Power Panels & Transformers



Operations PLC & VFDs for RAS & WAS Pumps

systems controlled from this building will include the return and waste activated sludge pumps that deliver various stages of processed materials to their next treatment location; the blowers which push air to the oxidation ditches and to the digesters; the UV system which puts the kibosh on any remaining live organisms prior to sending the processed water to the river; and



PAVER TILES BETWEEN OPERATIONS AND CLARIFIERS



STAINLESS STEEL AIR DISTRIBUTION PIPING MANIFOLDS - BLOWER ROOM

the building environment equipment. Other items of work included plumbing, HVAC, office wall sheetrock placement, window glazing installation, installation of doors, fire protection system, installation of the elevator, and installation of blower pipe and manifold in the blower room.

YARD PIPE

Pipe Installed (to date): 8826 linear feet



INSULATING GROUND SOURCE HEAT PIPING

All yard pipe at the main plant has been installed and passed performance testing. The only remaining work here is trace wire continuity testing which will not be performed until all final grading and pavement placement are complete.

SITE WORK

Construction of the paved and gravel roads into and around the main facility will not be completed until next year. There was a strong push to finish this work but the weather won out this time. Grading and shaping work beyond the paved and gravel roads is nearly complete with the removal of excess earth materials and the placement of topsoil remaining.



SITE GRADING TO FINAL ELEVATIONS

THE LIFT STATION

Overall dimensions of building: 112L x 91W;

Concrete Placed: 952 cubic yards

Pipe Installed: 1337 LF

Masonry Walls Constructed: 9876 SF

Masonry Veneer Walls: 4520 SF



LIFT STATION - PIPE OPERATIONS ROOM



Lift Station-FM Discharge Pipe



LIFT STATION-NORTH PUMP ROOM

The Lift Station is the place where most of the noticeable work has taken place. Masonry wall construction began in October and will be completed before Christmas. The roof precast concrete panels were placed in November and the roof membrane should be mostly complete in December. Structural steel columns and beams were installed. These structural steel elements will aid the City with lifting and moving heavy objects when needed. Some electrical and plumbing work was performed, as were the connections to existing water lines and the extension of the new service lines beyond the Eighth Street limits.



LIFT STATION BRICK VENEER



COMPLETING 8-INCH TAP OF 24-INCH RAW WATER LINE