

November 2018 Monthly Report

BJCJSTP Rehabilitation and Restoration Project

The following projects are either nearing completion, in construction, or in the planning stage.

Contract No.	Description	Status
Contract No. 1	Compost Facility Demolition	Complete
Contract No. 2	FEMA Mechanical	Complete
Contract No. 3	BAF Facility Demolition	Complete
Contract No. 4	MCC HH Emergency Replacement	Complete
Contract No. 5	BAF Restoration and Rehabilitation Civil Contract	Projected Phase 1 Substantial Completion August 31, 2019. Projected Phase 2 Substantial Completion January 2020.
Contract No. 6	BAF Electrical	Projected Phase 1 Substantial Completion August 31, 2019. Projected Phase 2 Substantial Completion January 2020.
Contract No. 7	BAF HVAC	Projected Phase 1 Substantial Completion August 31, 2019. Projected Phase 2 Substantial Completion January 2020.
Contract No. 8	BAF Plumbing	Projected Phase 1 Substantial Completion August 31, 2019. Projected Phase 2 Substantial Completion January 2020.
Contract No. 9	Secant Pile Contract	Complete
Contract No. 10	Solids Handling Renovation Civil Contract	Substantial Completion #1 – June 30, 2020; Substantial Completion #2 – June 30, 2020; Substantial Completion #3 – June 30, 2020; Final Completion - August 30, 2020.
Contract No. 11	Solids Handling Electrical	See Contract #10 Completion Dates
Contract No. 12	Solids Handling HVAC	See Contract #10 Completion Dates
Contract No. 13	Solids Handling Plumbing	See Contract #10 Completion Dates
Floodwall	Floodwall and New Diversion Structure	Currently in Construction. Anticipated Completion Date January 2019.

Contract Descriptions

Contract No. 1 - Compost Facility Demolition

Demolition of the upper portion of the compost facility was performed to accommodate the construction of the new Administration Building to house the plant staff as well as provide the new control room to operate the new facilities. Demolition of the lower portion of the Compost Building cleared the way for the construction of a new maintenance facility.

Contract Status: 100% Complete - Contract Closed

Contract No. 2 - FEMA Mechanical

The FEMA Mechanical Project replaces valves, equipment and other miscellaneous items damaged in the 2011 flood. It includes equipment in both the East and West Primary Sludge Pumping Stations, valves and equipment located in the Head House, and equipment associated with Sludge Thickener Pumping Station Nos. 1 and 2. The cost of the work associated with this contract is being reimbursed by FEMA due to the flood of 2011.

Status: Blue Heron has completed all of the work not deleted by change. The elutriate pumps were deleted from the scope of work and will be performed under Contract #5.

Contract Status: 100% Complete - Contract Closed

Contract No. 3 - BAF Facility Demolition

The BAF Demolition Contract removed the existing structures and utilities that conflict with the new construction work included in the BAF Rehabilitation and Restoration Project. Demolition efforts included selective demolition in the existing process tanks (C-Filters, N-Filters, and DN-Filters), buildings, mechanical equipment, and piping to ready the site for new construction.

Contract Status: 100% Complete - Contract Closed

Contract No. 4 - MCC - HH Emergency Replacement

Contract No. 4 replaced the original existing Motor Control Center (MCC) in the Head House (HH). The MCC is 50 years old and is identified as MCC-HH. The contract was bid as an emergency contract because the electrical system in the Head House was both critical to keeping the BJCJSTP in service, and because the original MCC was extremely unreliable due to the age and deteriorated condition of the gear. MCC HH Emergency replacement also replaced the existing raw sewage pump drives of the existing 50 year old equipment including new electrical feeders from the HH to the Johnson City Grit House No. 1, a new feeder from the HH to the Thickened Sludge Pump Station No. 1, and various other panel boards. The emergency work also included replacement of the existing raw sewage variable frequency drives that were located in the existing MCC HH. The

new drives installed are more reliable, more efficient, and will provide better performance of the existing raw sewage pumps.

Status: All work on the MCC- HH project has been completed.

Contract Status: 100% Complete

Contract No. 5 - BAF Restoration and Rehabilitation Civil Contract

When combined with the other BAF contracts (Nos. 6, 7 & 8), Contract No. 5, the General Civil Contract, is intended to provide a functioning automated plant using a BIOSTYR system that can be modified to fit current plant configurations. It is also intended to provide functioning automated headworks and primary clarification processes upstream of the BIOSTYR system and solid handling processes downstream of the BIOSTYR system.

Major components of the work under Contract No. 5 include new coarse screens and ancillary equipment, new piping and valves for the influent pumps, new metering equipment, new fine screens and grit removal with ancillary equipment, a new primary distribution box, new mechanical equipment for primary clarifiers 1-10, new chemical equipment for primary treatment, new chemical storage building, modification of the primary clarifier structural components to replace the aged and deteriorated mechanical equipment, new secondary influent pumps for the new BAF system, a new BAF backwash tank, new CN-BAF and DN-BAF facilities, a new methanol system that will feed the DN-BAF cells, new Ultra Violet Light disinfection system to replace the existing chlorine disinfection system, new sludge thickening equipment and systems, a new administration building, new odor control equipment, two new 2MW electric generators, and a new plant outfall to the river.

Status: In November, PC only placed about 1090 CY of concrete. Their progress was impacted by several days of inclement weather. PC is reporting that they have approximately 3300 CY to complete the concrete work. Their subcontractor has stated that they only have about 2200 CY of concrete remaining. PC's subcontractor is reporting that they should be able to complete the concrete work for the CN Cells 1-8, DN Cells, by the end of December 2018. While we are skeptical, if PC supplies sufficient manpower, this is achievable. PC has stated that they have placed approximately 12,700 CY of concrete since November 2017, which is an average of about 1100 CY per month.

PC completed the concrete work for the trench walls between Headworks and the Primary Distribution Box No. 1 in November but have not yet completed backfill in the area. PC is still working on the yard piping west of the Headworks Building, and will not complete the work before the end of the first week in December. PC has provided insufficient manpower to complete this work before now, and they are holding up Matco from installing the underground ductbank west of the Headworks. They have finally dried in the headworks so that the other trades can set expensive equipment without the equipment being damaged. PC finally completed water vapor barrier for the roof, and are proceeding with installation of the permanent roof membrane for the Headworks. They are tarping the roof area so that they can keep the temperature at an appropriate level for installing the roof membranes. PC lost more than a month due to the delayed delivery of

the precast hollow core roof planks for the Headworks. The structure is now heated and process equipment installation is ongoing in both the upper and lower levels of the Headworks. The electrical work and plumbing are also proceeding as well.

Masonry block work for the BAF Backwash Treatment Facility is complete, but the brick work has not started yet. The brick work must be completed on the south side of the building to allow Matco to install the electrical feed from the courtyard gear to the BAF Treatment Facility. PC is now scheduled to do the brick work at the BAF Backwash Treatment Facility in December. The roof has now been sealed, and Matco is installing the electrical equipment in the BAF Backwash Treatment Facility.

PC completed rebar work dowel placement for the interior walls at Primary Distribution Box #1 to accommodate the wider walls required for the primary distribution box slide gates. The dowels had to be placed to accommodate the wider wall for the gates. PC agreed to do the dowel and wider walls at no additional cost to the Owner if the Owner would allow PC to salvage the slab for the Primary Distribution Box #1. PC continued installing the Primary Influent Pipes to the PST's. PC completed installing the 54 inch primary influent pipe between Distribution Box #1 and #2, but they have not hydrostatically and leak tested the pipe. This pipe is nearing the critical path as it has delayed Matco from installing the electrical duct bank that runs between the Generator Building and the West Primary Sludge Pump Station. This duct bank provides the power to operate PST 7-10, DN Cells, West Primary Sludge Pump Station, Methanol, and UV. We are very concerned that the delays by PC may push the electrical feed to the west facilities to the critical path.

Work on CN Cells 1-8 is being advanced. PC completed concrete work on the upper walls for Cells 2, 4, 6, & 8. PC began epoxy injection in the existing walls in Cells 2 and 6. They have also begun epoxy injection in the leaks between the divider walls for Cell 4 and Cell 8, as well as the gallery walls on the south side of the CN Gallery. PC continued to place concrete for the north cells upper walls in Cells 1, 3, 5, & 7. PC is also working on crack injection on the existing walls in the north cells in November. Crack injection must be completed before the leak test for the cells and before the coating is installed inside the interior of the tanks. They have placed the west wall of the existing CN Electrical Room. M line at CN Cells 2 has an excessive amount of imperfections in the concrete, and we are sending PC a rejection letter for them to remove and correct the defective work. PC has had several nozzle decks that had to be recast by Kruger because they left out some of the access hatches in the CN and DN cells. These nozzle decks are scheduled for delivery in the middle of December.

PC continued installing stainless steel air pipe and backwash drain pipe in the CN 1-8 gallery and DN gallery this month. PC completed removing the defective field welds on the stainless steel pipe, and has submitted a revised welding procedure that has been reviewed and approved by GHD. PC is proceeding under protest for rotating the based upon their position that the valve actuator would require an additional support to accommodate the rotated actuator. We believe that this is ultimately a contractor caused delay, and may affect start-up of the BAF Facilities. PC failed to execute this work efficiently and has caused delays to the CN 1-8 cells and the utility corridor west of CN 1-8. PC is still experiencing leakage in the cells at the construction joint between the CN half walls and the existing wall above. They continued prepping the walls for CN Cells 1, 3, 5, & 7. PC's

subcontractor has reported that they should now finish the concrete work for the CN Cells 1-8 by the end of December.

CN Cells 9-14 walls are also being advanced. PC has completed the supports and formwork for the concrete decks over the gallery at CN 9-14 and the northwest utility corridor. PC has been focused on concrete for the walls and roof slab in south corridor. The reinforcing steel is installed in the south deck, and the deck is ready for placement of concrete. They finally started installing the shoring for the form work for the concrete deck. PC continued working on the backwash header in the CN Cells 9-14. PC is nearing completion on the cells for the cells on the south side of the structure and has completed all of the benching in the lower level of the cells except one cell on the north side. PC has begun forming the beams for nozzle decks in CN Cells PC's subcontractor has reported that they should complete the concrete work for CN Cells 9-14 by the end of December. We remain skeptical.

PC is continuing to place the concrete walls in the DN Cells 1 and 2 this month. They are complete with the beams for the nozzle decks in DN cells 1, 2, & 3. They should complete the final cell nozzle deck beams in early December. PC still needs to complete the east most wall of the DN area and the tops of the divider walls between the cells.

PC has installed the precast hollow core roof planks. This has opened up a significant amount of work in the DN area for the other multi-primers. Mechanical and electrical trades are working in the DN Gallery. PC continued installing the stainless steel pipe and have completed the plenum box walls. They are working on the plenum box roof decks, and should complete them in December. PC is projecting that they should finish the concrete work for DN Cells by the middle of December. We remain skeptical. Electrical equipment such as the variable frequency drives have been installed, which has allowed Matco to put substantial resources in the gallery and building. They are installing the conduit in the gallery, and in the DN Blower Building.

Duperon installed the remedial support in the compactor, but it has not completely eliminated the performance problems with the compactor. We believe that this may be a latent defect that was causing the compactor to plug more than it should. PC continued installing the roof for the coarse screen room. Many of the leaks at the walls and other areas in the building have been resolved. PC has installed the odor control fans at the Screen House. This has allowed J&K to install ductwork for controlling the environment during the winter months.

The reconstruction of Primary Setting Tanks 7-10 is nearly complete. No significant work performed on PST 7-10 this month. The concrete coating applications are complete and PC is repairing some blemishes in the coatings. PC still has to do the leak test and also repair the expansion joints. There is a unit price item to replace the failed expansion joints. We issued a request for proposal to PC in August 2017 to replace the gates to drain the basins. They did not procure the gates timely, and the installation of these gates may have to be postponed to a future day when it is possible to take down on of PST 7-10 one tank at a time. PC has alleged that the delivery of the gates is now on the critical path. The equipment is ready for start-up and testing, as soon as Matco can complete the electrical feed to the area, and PC completes the expansion joint repairs. It will likely be several months before the Headworks are complete. PC's installation of the 54-inch pipe between Primary Distribution Box No. 1 and Primary Distribution Box No. 2

prevented Matco from installing the duct bank to the West Primary Sludge Pump Station this summer as planned. This duct bank is essential to complete the electrical power feed to the PST's 7-10

Brick work in the area of the new UV Treatment Facility and the PW Pump Station is complete. PC completed installing the UV equipment and leak tested the gates for the UV channels. Roof membrane is now complete on both the UV building and the plant water pump station. Matco is completing the conduit in the UV building. The east channel wall is still not complete and is holding up the electrical installation to the UV system.

PC continued installing the large diameter piping in the corridor between the Headworks/BAF Treatment area and PST 1-6 this month. The pipe work for the 54-inch 6" primary influent pipe between Distribution Box No. 1 and Distribution Box No. 2 is complete with the exception of the hydrostatic and leak test. The installation of the 54-inch pipe held up the duct bank that runs between the new Generator Building and the West Primary Sludge Pump Station. PC will continue installing miscellaneous yard piping in the area of the Headworks and also in the area adjacent to the floodwall on the south side of the site this month.

Construction of the new Chemical Building is nearing completion, but no significant activity has been done in this building for months. The building is ready for testing, which will be several months ahead of the need for the building. Work in the East Odor Control Building is nearing completion. All work by PC has been completed, and they are requesting a partial substantial completion for the building.

Brick work for the Blower Building continued last month. They completed the south side and have now moved to the north side of the building. PC has completed the roof membrane on the roof panels to dry the building in for the other trades work. Matco continued conduit and cable tray installation in the Blower Building in November. PC continued their process pipe installation for air and backwash pipe in the CN gallery this month, and completed installing their structural steel and grating in the CN Cells 1-8 gallery. The conflict between the structural steel and the process piping has been resolved. Matco continued work in the CN 1-8 Gallery. PC has completed the concrete work for the SIPS area, and has completed the block work for the SIPS Electrical Room. The roof vapor barrier has been installed on the Electrical Room, which has allowed Matco to begin work there.

PC continued working in the Methanol containment structure this month. No significant work in the area. They have set the canopy structural steel and should install the sheet metal roof material in November. The electrical, piping, and ancillary work is ongoing in the Methanol Control Building. Pumps have been set, and PC continued installing the pipework within the building. PC completed concrete work for the methanol unloading station. They have installed the structural steel for the unloading area.

The electrical feed from the new generators to the medium voltage switchgear is progressing. Matco has completed the conduit work and has been pulling the wire to various locations in the building. PC finally completed the lintels on the west end of the Generator Building. This will allow the masonry work to progress after the backfill is completed outside the west side of the

building. They are continuing to make wire terminations for the generators. Startup of the generators cannot complete until the exhausts are complete and the louvers have been installed in the north wall of the Generator Building.

Kruger equipment submittals are complete. Much of the Kruger supplied equipment is being installed at Kruger's direction. PC figured out that they were short nozzle decks that contain the access hatches at the CN and DN cells. Most of the preliminary Operations and Maintenance manuals as well as the startup and testing plan from Kruger are complete. PC requested a variance for leak testing the cells. Their request to be allowed to install the coatings in the lower level of the cells before the leak test is performed has been rejected by GHD. PC began cleaning the walls for testing and coating.

No significant change at the new Administration Building this month. The work on the upper floor of the Administration Building is complete. The final punch list and Fire Protection System testing is complete. Miscellaneous punch list items are being resolved by PC and the other trades on a regular basis. The exhaust fans are complete and the final test and balance of the HVAC system is also complete. The HVAC system is now in the automatic mode.

Brick work on the east side of the Solids Handling Building was completed in October. Backfill is complete. PC has to install their storm drain. PC has not completed the storm drain installation; therefore, PC will not install the asphalt for the parking lot until next spring. The City decided to increase the width of the parking lot to meet Vestal Code. The parking lot will now be 60 feet wide from North to South. The asbestos containing material in the existing duct bank along the south edge of the parking lot has been abated. The material was removed via change order. PC is no longer making an effort to complete the parking lot before the asphalt plants shut down for the winter.

Contract Status: 79% Complete

Contract No. 6 - BAF Electrical

The BAF Electrical Contract supports the BAF General Civil Contract and includes all electrical and instrumentation associated with the BAF contracts. The components include installation of the new UV disinfection system, installation of the new generators, installation of the electrical feed throughout the plant, as well as installation of the instrumentation and SCADA System throughout the plant.

Status: Matco is nearing completion with the Courtyard switchgear installation. We have stressed the necessity with Matco to get this gear complete to avoid holding up construction of the various facilities fed from the Courtyard gear. Matco is energized the gear at the end of November. They are scheduled to have the existing courtyard switch gear decommissioned the first week in December. Matco connected the first electrical feed from courtyard gear to MCC HH before the end of November, and will have the second feeder connected to MCC HH early in the first week of December. We will be removing the temporary generator from the site in early December. GHD has issued a revised drainage drawing to address issues with the drainage of the courtyard area as well as the area north of the Generator Building.

Installation of the major conduits for the generators are complete. MATCO is nearing completion of the wiring between the generators, the ancillary gear, and the existing plant switchgear. They are projecting completing the new generators in late December, due to PC not completing the restoration of the west wall of the Generator Building until the first week in December. In addition to the west wall of the Generator, PC needs to complete backfill on the west end of the Generator Building to allow J&K to install footings for their generator exhaust systems, and for Matco to install the underground ductbank between the Courtyard gear and the West Primary Sludge Pump Station. This ductbank feeds the power to the PST 7-10, the West Primary Sludge Pump Station, the UV reactors, and the plant Water Pump Station. Matco is being delayed by PC in feeding power to all of these areas because of PC's failure to get their yard piping and backfill done in the area west of the Headworks. PC demanded that Matco wait to install their ductbank DB Ex1 until after they completed installing their buried pipe because the pipe was below the ductbank.

MATCO continued work in the West Primary Sludge Building, the East Odor Control Building, the lower level of the Administration Building, the CN 1-8 Gallery, DN Gallery, and the Methanol Building. Matco also continued installing conduits and equipment in both the upper level and the lower level of the Headworks, and the BAF Backwash Treatment Facility. PC has eliminated the leaks in the roof and provided the temporary heat for these buildings. The new Blower Building has been dried in as well, and Matco is actively working in that building.

We continue to look at options for the installation of the conduit and electrical equipment in other locations to advance the electrical work. This is important to meet the DEC Consent Order as well as to avoid overly congested work areas at the end of construction. We keep pushing PC to open up additional areas for MATCO work, most specifically the SIPS area and the utility corridor between CN Cells 1-8 and CN Cells 9-14. MATCO has been making good progress in the Methanol Building, Blower Building, West Primary Sludge Pump Station, BAF Backwash Treatment Facility, and the Headworks.

Contract Status: 76% Complete

Contract No. 7 - BAF HVAC

The BAF HVAC Contract supports the BAF General Civil Contract and includes installation of all HVAC Systems in all STP facilities as well as revisions to the odor control systems throughout the plant. The odor control improvements are intended to alleviate the odors that have been prevalent in the past in and around the plant.

Status: The contractor continued working on ductwork installation in various locations around the site. They are actively working in the Generator Building installing the boiler and pipe work to heat the Generator Building, Headworks and pipe gallery. J&K is ready to do their work in the SIPS area, now that PC has removed their shoring system. J&K is also actively working in the Headworks, Blower Building, and BAF Backwash Treatment Facility, which were all made available to them in October. J&K has provided supporting information for the development of the CPM Schedule. They are coordinating with PC Construction and the other prime contractors.

Contract Status: 82% Complete

Contract No. 8 - BAF Plumbing

The BAF Plumbing Contract supports the BAF General Civil Contract and includes installation of plumbing systems for the new and existing facilities included in Contract No. 5.

Status: Danforth is working in various buildings around the site such as the Headworks and BAF Backwash Treatment Facility. They are also preparing for their work in the CN Cells 1-8. They are also supporting the effort by the BJCJSTP to have the sludge pipe in the existing Digester Control Building. They are coordinating with PC Construction and the other prime contractors and they have confirmed that they can meet the required milestones of the Consent Order.

Contract Status: 83% Complete

Contract No. 9 - Secant Pile Contract

The Secant Pile Contract includes installation of the secant piles that support the excavation for the new BAF Backwash tank as well as supporting the new CN Cells 9-14. Construction also includes excavation to the final grade for the BAF backwash tank. This project was bid separately from Contracts 5-8. In doing so, a minimum of four months on the critical path schedule was saved.

Status: The installation of the secant pile wall is complete. Close out documents have been prepared and are being submitted to close out this project.

Contract Status: 100% Complete - Contract Closed

Contract No. 10 -Solids Handling Renovation Civil

Contract No. 10 is intended to renovate and improve the solids handling systems including the existing Digester Control Building, existing digesters, solids dewatering systems, and all ancillary equipment. As part of the improvement to the solids handling process the following components will be constructed or installed. The new structures include a new Solids Handling Building, a new Gas Conditioning Building, and a new Sludge Loading Facility. The new equipment being installed includes new centrifuges, new mechanical thickeners, new gas processing equipment, new microturbines, and new scum screening equipment. The scope was further developed during the design processes to include sludge blend tanks. Additionally, the contract renovates the existing laboratory facilities at the STP. The contract was bid as a multi-prime contract consistent with New York State Construction Contract Requirements.

Status: Brick work for the new Solids Handling Building is now complete. Concrete work for the Gas Conditioning Equipment Building was completed several months ago. Renovation for the Lab at the Headhouse is ongoing. Quandel has about one month to go.

Quandel is actively installing the mechanical systems in the Solids Handling Building now that they have installed the precast hollow core roof planks. The roof drains are installed, and Quandel is actively working to complete the concrete coating inside the concrete tanks. They were not making any progress on the removal and recertification of the gas conditioning equipment, so we

were forced to remove the work from their scope of work and the City is procuring the equipment on a sole source contract. They are alleging that they are not responsible for reconditioning the equipment. Quandel declined to quote a cost proposal to recoat the inside of digesters 1 & 2, which are the two smaller digesters. Quandel has dropped their dispute for furnishing of 7 flow meters that they allege were not included in the contract. Quandel continued installing the coatings inside the new sludge tanks under protest. We are working hard to get Quandel to complete the digester start-up, but it will not happen until the digester gas equipment and the digester mixing equipment is completed by the City in early 2019.

Quandel continued to work in the Sludge Thickener Pump Stations and will be able to complete the sludge grinders in the Digester Complex in December, now that the sludge piping is cleaned. We will complete work on cleaning the Digester Gas Pipe in the Digester Building in December. When we started the cleaning process for the digester gas pipe it was discovered that the pipe between the flare and the Digester Control Building was full of water. This was likely from the 2011 flood. We have developed and implemented a plan to save the City in excess of \$400K from the price quoted by the Contractors to do this work.

Contract Status: 84% Complete

Contract No. 11 - Solids Handling - Electrical

The Solids Handling Electrical Contract supports the Solids Handling General Civil Contract and includes installation of electrical for the new and existing facilities included in Contract No. 10.

Status: The electrical contractor is MATCO, as it is on the BAF Contract No. 6. MATCO continues to support the General Civil Contractor's schedule. Matco is working throughout the site for the Solids handling Contract.

Contract Status: 36% Complete

Contract No. 12 - Solids Handling - HVAC

The Solids Handling HVAC Contract supports the Solids Handling General Civil Contract and includes installation of HVAC systems for the new and existing facilities included in Contract No. 10.

Status: The HVAC contractor is J&K Plumbing, as it is on the BAF Contract No. 7. J&K continues to install the boiler and associated piping in the Digester Control Building, and began installing the HVAC equipment in the Solids Handling Building. They are also supporting the General Civil Contractor's schedule.

Contract Status: 74% Complete

Contract No. 13 - Solids Handling - Plumbing

The Solids Handling Plumbing Contract supports the Solids Handling General Civil Contract and includes installation of plumbing systems for the new and existing facilities included in Contract No. 10.

Status: The plumbing contractor is JW Danforth, as it is on the BAF Contract No. 8. Danforth is making good progress installing the plumbing in the Solids Handling Building and also the Digester Control Building. Danforth continues to support the General Civil Contractor's schedule. Danforth is also supporting on the cleaning of the Sludge and Digester Gas Piping in the Digester Control Building.

Contract Status: 78% Complete

Floodwall

The new floodwall being constructed at the STP is intended to protect the plant to an elevation 1.5 feet above the 2011 flood level. The floodwall includes concrete walls on the east and north sides of the STP. The project also includes two new pump stations to pump up stream out of the plant during the storm events. The new floodwall system works in conjunction with new floodwall features included in Contract No.5 BAF General Civil Construction. The floodwall systems are being funded by a FEMA recovery grant.

Status: The concrete floodwall under Streeter's contract has been completed. Startup and testing of the two storm water pump stations is complete. The access platform for the valves at the two storm drain pump stations are complete. Streeter has completed installing the 54" gate in MH#3. They have installed the remaining section of precast manhole onto the structure and have completed backfill around the structure. The only remaining function with the 54" gate at MH #3 would be leak testing the gate. We have discussed this issue with the contractor, the STP Staff, and the Design Engineer and we are not convinced that there is a practical option for testing the leakage. The Design Engineer stated in an answer to an RFI addressing the leakage of the gate that the intent of the leakage rate was intended for manufacturing only. They would like to know if the gate is leak tight in the installed position, but do not have a very practical plan to test the leakage.

Streeter is in the process of developing a plan to test the closing speed of the gate in MH #3, and installing the 54" gate in the sampling manhole inside the floodwall. Streeter should complete the 54" gate installation in the Sampling Manhole by the end of the year. The elevation of the sewage in the 54" Binghamton line is at or above the midpoint of the pipe due to the set point elevation for the Binghamton Pumps in the influent flume in the Headhouse. Streeter has removed the upper portion of the Sampling Manhole. The structure is different than shown on the drawings. Streeter cast a special concrete transition piece to adapt the smaller than anticipated existing lower concrete manhole to the precast concrete manhole that we already have.

Streeter has delayed any repair work of the coatings in Digesters #1 and #2, and we are not sure that we will be able coat the upper level of the 2 digesters before they have to be completed by Quandel. We are not convinced that the Owner has the funding available for recoating Digester No.

1 and No. 2. If funding is available, we will prepare a scope to recoat the two remaining digesters in 2019. These two digesters are not required to start up the BAF and other systems.

Contract Status: 96% Complete

NOTES:

1. SWPPP measures continue to be maintained by all contracts. Any deficiencies noted during daily or weekly inspections are promptly remedied. Additional truck trap entrances have been installed at the new entrances. We are pushing PC to get the new Administration Building parking lot completed before the end of November. It appears that they will not be installing the parking lot until spring of next year.
2. We received a Notice of Violation from NYDEC dated November 28, 12018. This is from their inspection several weeks earlier, and all of the items addressed in their NOV were addressed within a few days of the walk through with the DEC inspector. DEC was notified at the next discussion with them that the issues had already been resolved.
3. The WWTP Staff issued a PO to Drain Brain to clean the existing Digester Gas Pipe and Sludge Pipe. We are nearing completion of this effort. The original quote from the Contractor was in excess of \$450K for just the cleaning of both sets of lines. We anticipate the final cost being about \$53.6K, and for the work to be complete by the 15 December 2018.
4. The City has issued a purchase order to JDV to provide the Digester Mixing Equipment for \$278,620. This equipment was in need of rehabilitation and replacement, but it was not included in any contract. The cost to rehabilitate equipment that can be rehabilitated and the cost to replace the other equipment, the quote of \$572,915 we received from Quandel was excessively high, and it was in the best interest of the City to purchase and rehabilitate the equipment separately. By performing this equipment purchase separately, we were also able to accelerate the delivery and installation of the equipment in advance of what Quandel was quoting.
5. The City has also issued an agreement with Koester to provide replacement equipment for the digester gas safety equipment and to include installation. The agreement was issued for \$639,086, and Quandel's quote was for \$1,110,668. We will be seeking some recovery from Quandel for some of the \$639K for the portion of the work that is included in their scope of work.
6. We have prepared a letter to the City to request an extension of time for the FEMA covered work. All except about \$200K of work covered under the FEMA grant will be completed before the end of the year. About \$100K of that work is being moved from the Floodwall contract to the WQIP contract to allow the WQIP contractor better access to the work area in the river.
7. Weekly meetings are held for each contract to discuss the progress of the work and identify and resolve issues and problems. Meetings between contractors on the various contracts are held as necessary to facilitate any concerns and coordinate work between all contracts.

Background

The Binghamton-Johnson City Joint Sewage Treatment Plant (BJCJSTP) processes 18 million gallons per day with the capability of processing up to 60 million gallons per day (MGD) of wet weather flow. This plant is jointly owned by the City of Binghamton and the Village of Johnson City and managed by the Binghamton-Johnson City Joint Sewage Board (BJCJSB).

The BJCJSTP has suffered several catastrophic events since 2006. In 2006, the BJCJSTP was flooded by a 500 year flood that affected many of the processes in operation. In May of 2011, a concrete structure suffered structural failure, and in September 2011, the BJCJSTP suffered another 500 year flood that critically damaged equipment and rendered the secondary treatment fundamentally inoperable. The secondary process system is still largely inoperable today. A Consent Order was negotiated between the City of Binghamton, the Village of Johnson City, the BJCJSB and the NYSDEC to develop a plan to restore treatment operations at the BJCJSTP. The Consent Order requires the BJCJSTP to restore secondary treatment functionality and be able to fully treat 35 MGD of wet weather flow by *August 1, 2018*.* To achieve this level of treatment, the reconstruction and testing of the Secondary Treatment Process must be completed as necessary to achieve treatment of 35 MGD. To comply with the Consent Order, the Sewage Treatment Plant must then be fully operable by *May 1, 2019*,* including the remainder of the secondary treatment process. There are also several interim milestones included in the Consent Order. The Consent Order has been amended to extend several interim milestones, and DEC has been made aware of the likely finish of the Phase 1 Milestone after the *August 1, 2018*.*

The project is being constructed in accordance with Wicks Law, which requires that the project be bid as multiple prime contracts. More specifically, Wicks Law requires that the bulk of the construction work, consisting of the secondary treatment biological filtration filters (BAF), be divided into a General Civil Construction Contract, an Electrical Contract, an HVAC Contract and a Plumbing Contract.

*Dates are being revised

Contract FW – BICJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos



11 12 2018 11:35

Manhole 1 Redirection to Manhole 2

Contract FW – BICJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos



11.15.2018 09:46


Sampling Manhole Cover Being Cut to Access Below

Contract 5 – BJCJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos



11.07.2018 10.20

Headworks Facility – Skylight Walls Masonry Block Installation



Contract 5 – BJCJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos

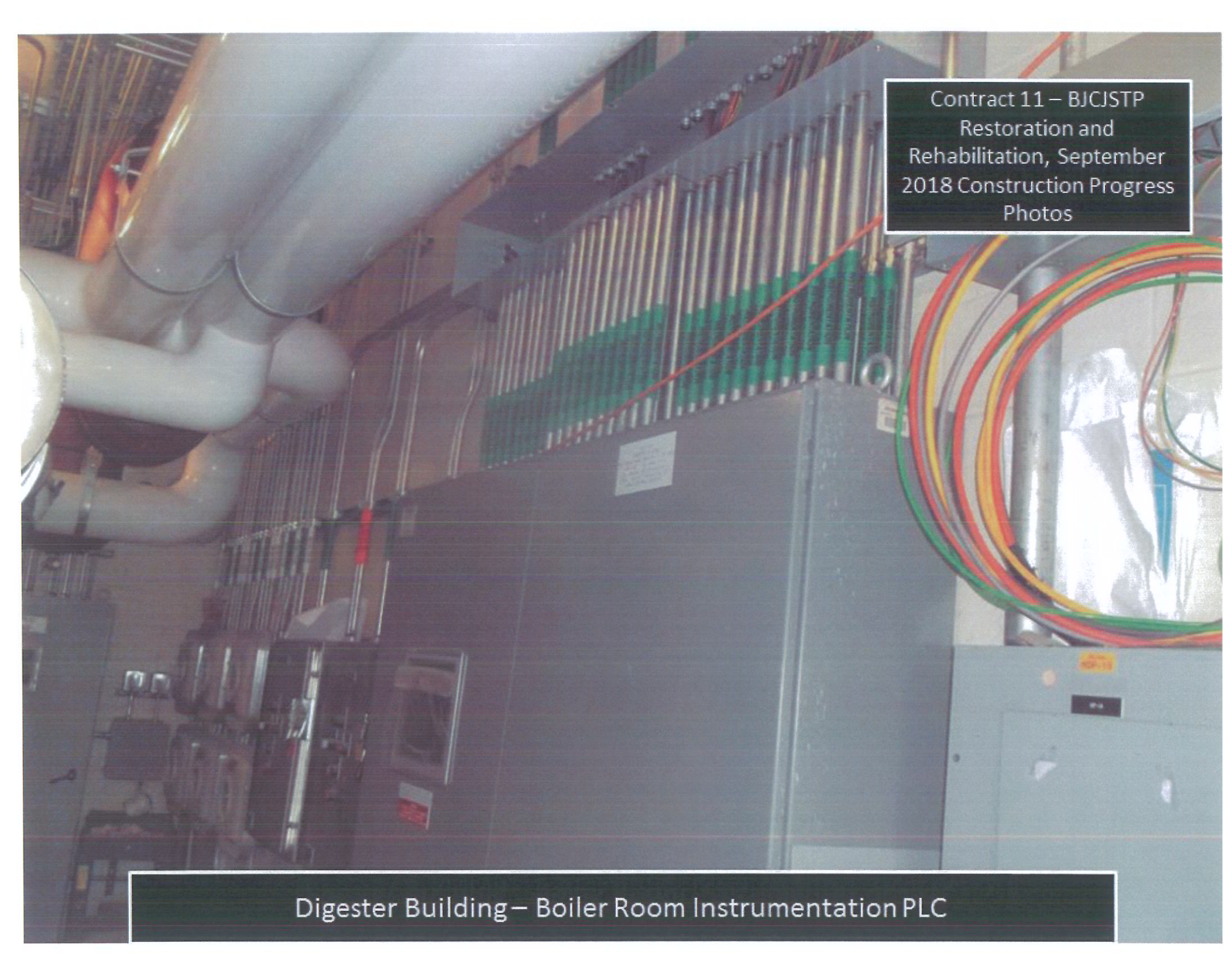
11.08.2018 13:59

UV Building – North Flood Cap Concrete Placement

Contract 7 – BICJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos



Blower Building – Duct Work Installation on Blower Units



Contract 11 – BJCJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos

Digester Building – Boiler Room Instrumentation PLC

Contract 10 – BJCJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos



Solids Handling & Gas Conditioning Room Process and Hot Water Lines
Installation



Contract 12 – BICJSTP
Restoration and
Rehabilitation, September
2018 Construction Progress
Photos

2018.11.30 10:41

Digester Building – West Boiler Room Pipe Insulation