

**December 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 December, PC only placed about 1000 CY of concrete. Their progress was impacted by some days of inclement weather as well as insufficient manpower in the rebar installation crews. PC reported in November that they had approximately 3300 CY of structural concrete remaining for both Phase 1 and Phase 2. Their subcontractor was reporting that they had about 1000 CY less structural concrete than PC reported to complete the concrete work. Their subcontractor is now reporting that they have approximately 2600 CY of structural concrete remaining after placing about 1000 CY in December. PC's subcontractor is now reporting that they should be able to complete the concrete work for the CN Cells 1-8, DN Cells, by the middle of January, 2019. While we are skeptical, if PC will supply sufficient manpower to install the rebar ahead of the concrete crews, we believe that the mid-January date is achievable. PC has stated that they have placed approximately 14,000 CY of concrete since November 2017, which is an average of about 1100 CY per month.

PC was largely inactive on the concrete work for the trenches between Headworks and the Primary Distribution Box No. 1 in December. They still have not yet backfilled the area, and have to cast the slab over these trenches before the trenches can be put into service. PC is still working on the yard piping west and north of the Headworks Building, and did not complete the yard pipe installation work before the end of December. PC cast the brick ledge for the headworks in December, but has not yet begun installing the brick for the Headworks. PC continues to provide



insufficient manpower to complete the pipe work and masonry work at the Headworks. They have completed the roof installation, but there are concerns about the concrete roof planks at the Headworks Building. PC's subcontractor damaged the edge of the planks to make them fit without getting approval from GHD. PC is no longer holding up Matco from installing the underground ductbank west of the Headworks, and they have finally dried in all areas of the Headworks sufficiently to allow all multi primes to work at will in the Headworks. PC finally completed the membrane roof for the Headworks.

Brick work for the BAF Backwash Treatment Facility is nearing completion. PC still needs to complete the aerial supports south of the BAF Backwash Treatment Facility to allow Matco to install the electrical feed from the courtyard gear to the BAF Treatment Facility and headworks. The roof has now been completed, and Matco is installing the electrical equipment in the BAF Backwash Treatment Facility. The sludge pipe in the basement of the BAF Treatment Facility is nearing completion, but it has been discovered that the plug valves were not properly installed and will have to be rotated to comply with the manufacturer's installation instructions. Stairs in the BAF Treatment Facility have been installed. PC has not properly protected the stair treads, and they will be required to replace any treads that have been damaged during construction.

PC is nearing completion of 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 leak tested the pipe. This pipe had an impact to the ductbank activities for DB EX-01 that runs between the Generator Building and the West Primary Sludge Pump Station. This duct bank provides the power to operate PST 7-10, West Primary Sludge Pump Station, Methanol, and UV. Matco is planning to begin the ductbank installation the first week in January. 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 all cells. The only remaining concrete work for CN Cells 1-8 is the concrete walls for the drop boxes to each cell and repair or replacement of the defective installation of concrete for M Line in Cell No. 2. PC is performing the epoxy injection of the existing cracks in the existing walls in Cells 1, 2, 3, 5, 6 and 7. They also continued 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. Crack injection must be completed before the leak test for the cells and before the coating is installed inside the interior of the tanks. GHD is reviewing options for repairing the new wall on M line at CN Cells 2. The wall has an excessive amount of imperfections in the concrete, and we sent 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. We believe that these nozzle decks were delivered 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 also installed stainless steel pipe in the Blower Building, Headworks, and BAF Treatment Facility. PC is proceeding under protest for rotating valves 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, but that it will not affect



start-up of the BAF Facilities. PC's subcontractor has reported that they should now finish the concrete work for the CN Cells 1-8 by the middle of January, 2019.

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, but have not installed the decking for the northwest utility corridor. PC has completed concrete work for several of the elevated decks above the galleries in CN 9-14, but they still have not placed the concrete for the corridor between CN Cell 8 and CN Cells 9-14. The concrete for the south deck is complete. 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 completed forming the beams for nozzle decks in CN Cells 9-14. PC's subcontractor has reported that they should complete the concrete work for CN Cells 9-14 by the middle of February. We remain skeptical.

PC completed placing the concrete walls in the DN Cells 1 and 2 this month. They are complete with the beams for the nozzle decks in the DN cells. PC still needs to complete the east most wall of the DN area and the tops of the divider walls between the eastern two cells. Matco has stated that PC is delaying them from installing the conduit to the UV Structure that goes on the east wall. PC has also not installed the stanchions between the DN building and UV building. These stanchions are required to allow Matco to install the power to UV. Without either power source, startup of the UV cannot be done.

PC has installed the precast hollow core roof planks and water vapor barrier on the DN Blower Building. 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 and in the DN buildings above the gallery. PC continued installing the stainless steel pipe and are nearing completion of the plenum boxes. PC's subcontractor is now projecting that they should finish the concrete work for DN Cells by the middle to end of January. 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. The STP staff reports that they are still having operational issues with the compactor plugging. The manufacturer has recommended dumping wood chips into the compactor to scour the grease buildup out of the compactor. 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 still needs to repair 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. Matco is working to install the ductbank EX-01 that provides the electrical feed to the area, and PC still needs to do the leak test and expansion joint repairs before we can do startup of the basins. It will likely be



several months before the Headworks are complete. We cannot take flow to the PST 7-10 until both the Headworks and SIPS is operational.

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. Vacri will not be installing yard pipe during the first two weeks of January, as they are offsite until January 14, 2019.

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 is nearing completion. They completed the north, east and south sides and have now moved to the west 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 last month. PC has completed the concrete work for the SIPS area, with the exception of the benching within the SIPS wet well. PC still needs to erect the metal SIPS Pump Building. 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 area this month, with the installation of the stainless steel piping. It has been determined that PC did not provide stainless steel fittings for the methanol pipe that comply with the American Iron and Steel (AIS) requirements of the contract. We have notified them that the fittings are not covered under the de minimis material. PC will either have to remove the fittings and replace them with fittings that comply with the AIS provisions of the contract or get a variance from the EPA and EFC.

The electrical feed from the new generators to the medium voltage switchgear is progressing. Matco has completed the conduit work and has pulled the wire to various locations in the building. PC finally completed the masonry work on the west end of the Generator Building. This allowed the backfill to be 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. PC has committed to a hard date of March 25, 2019 for delivery and installation of the filter media being provided by Kruger. Kruger has indicated if PC fails to meet the date that new media will have to be manufactured and that this could delay the filters by several months.

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 HVAC system is now in the automatic mode. We continue to chase leaks in the existing concrete for the structure in the maintenance portion of the building. The leaks are being injected with epoxy when they can be located during rain events.

Brick work on the Solids Handling Building is complete. Backfill is complete. PC has not completed the storm drain installation at the Solids Handling Building as well as for the parking lot for the Administration Building. ; 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: 81% 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 has completed the Courtyard switchgear installation, and has transferred the electrical feeds on the old courtyard switchgear to the new courtyard switchgear. They are in the process of removing the old courtyard switchgear. The temporary generator has been removed from the site. 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 and wire 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 January, due to PC not completing the restoration of the west wall of the Generator Building until December. In addition to the west wall of the Generator, PC has completed backfill on the west end of the Generator Building. This has allowed J&K to install footings for their generator exhaust systems, and for Matco to begin installing 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 Blower Building, Headworks, and the BAF Backwash Treatment Facility. PC has eliminated the leaks in the roof and provided the temporary heat for these buildings.

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: 79% 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, SIPS, Headworks, BAF Treatment, West Primary Sludge Pump Station, DN, and UV. 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: 84% 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: 87% 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. 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 also completed work on cleaning the Digester Gas Pipe in the Digester Building in December. A segment of buried digester gas pipe is leaking and will need to be repaired or replaced. We have asked GHD for their design. 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 developed and executed 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: 43% 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: 76% 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: 82% 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, and in the Sampling Structure. The only remaining function with the 54" gates would be leak testing the gates. 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 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: 97% Complete**

### **NOTES:**

1. SWPPP measures continue to be maintained by all contracts. Any deficiencies noted during daily or weekly inspections are promptly remedied. The City received a Notice of Violation from DEC for SWPPP issues. We have addressed all of the issues, including the paperwork that was not modified as required for the inclusion of Solids Handling. We are attempting to get the SWPPP closed out for Streeter, and will need to transfer responsibility for the SWPPP outside the floodwall to the new WQIP contractor.
2. 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 December 15, 2018.
3. 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.

4. 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.

5. 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.

6. 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.



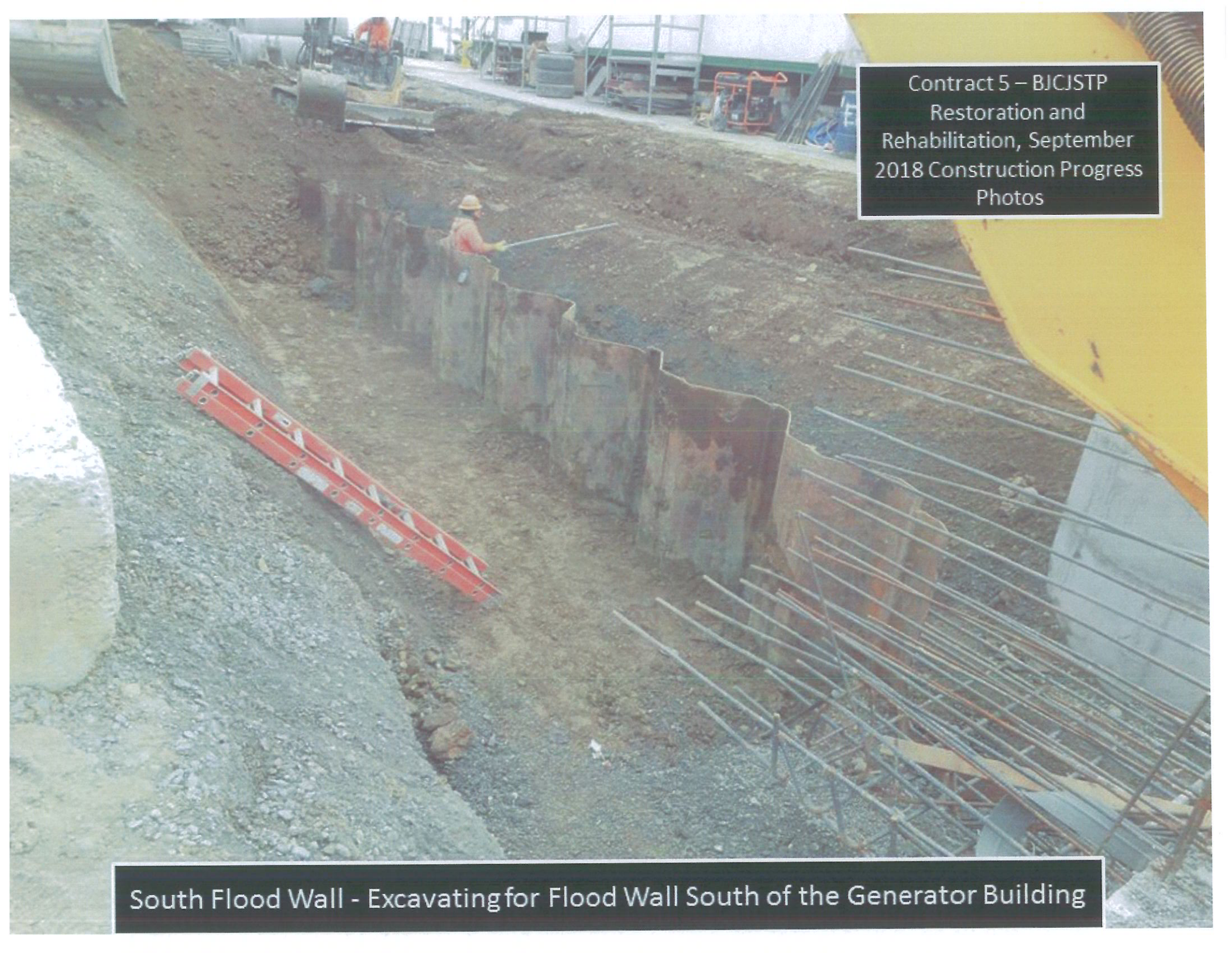
Contract FW – BJCJSTP  
Restoration and  
Rehabilitation, September  
2018 Construction Progress  
Photos

12.19.2018 11:03

Sampling Structure – Precast Riser Installation







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

South Flood Wall - Excavating for Flood Wall South of the Generator Building



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



South Flood Wall - Back Filling Around the Flood Wall Extension South of the Generator Building



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



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CN Cells 9-14 – Cell 14 Concrete Placement



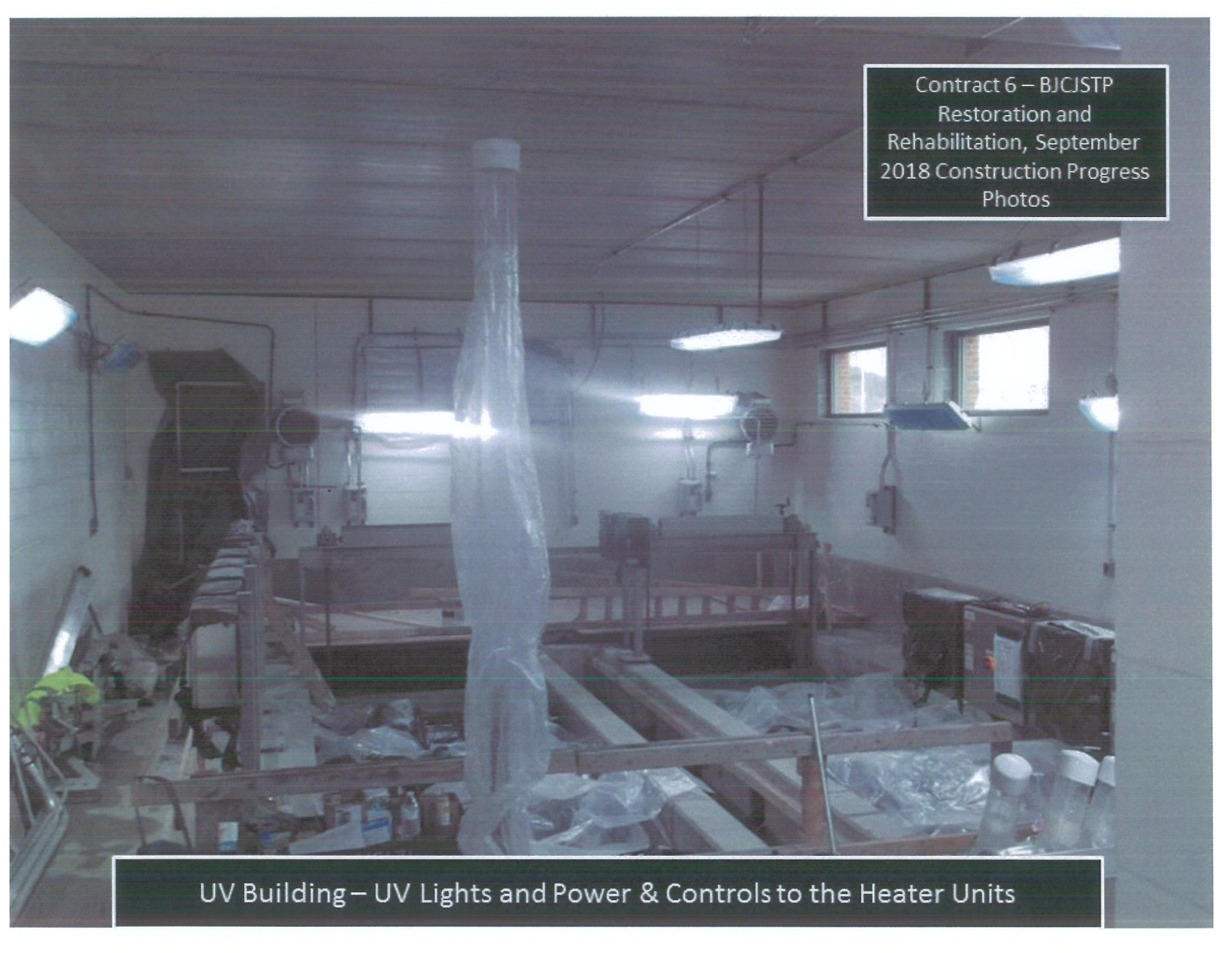
Contract 5 – BJCJSTP  
Restoration and  
Rehabilitation, September  
2018 Construction Progress  
Photos

2018/12/21 09:20

DN Filter Complex – Gallery Plenum Boxes Being Built



Contract 6 – BJCJSTP  
Restoration and  
Rehabilitation, September  
2018 Construction Progress  
Photos



UV Building – UV Lights and Power & Controls to the Heater Units



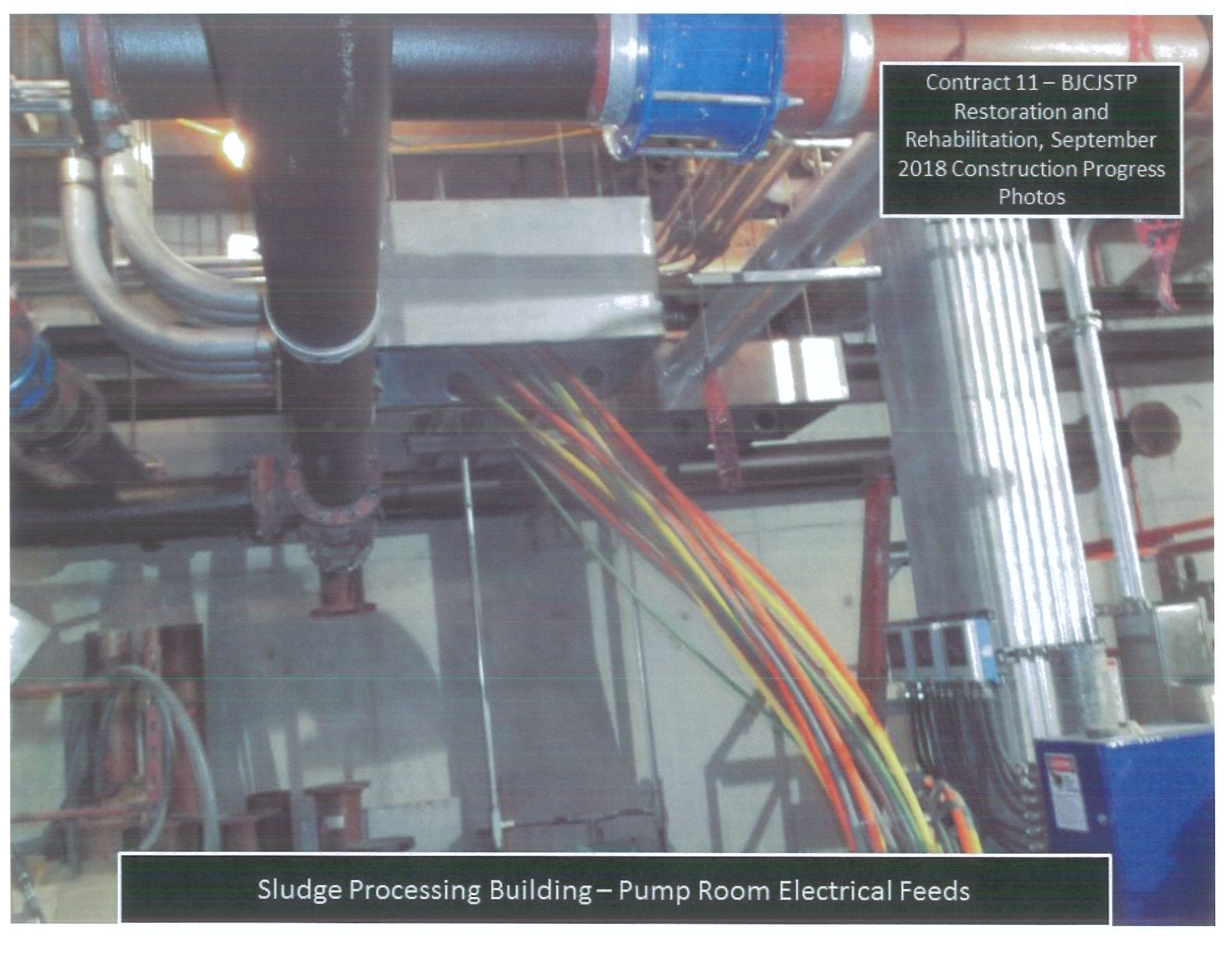
Contract 7 – BJCISTP  
Restoration and  
Rehabilitation, September  
2018 Construction Progress  
Photos

2018/12/27 11:30

Headworks Facility – Lower Level Copper Pipe to Unit Heater Installation







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

Sludge Processing Building – Pump Room Electrical Feeds