



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

August 26, 2020





Drone Site Map: Aug 14, 2020





Construction Progress – Intake Pump Station (IPS)

- Continue the 108" bridge piping installation
- Continue installing under bridge conduit





Drone Map of IPS: Aug 14, 2020

Continue the 108" bridge piping installation



Final Pump Can Placement





Construction Progress – Site Electrical

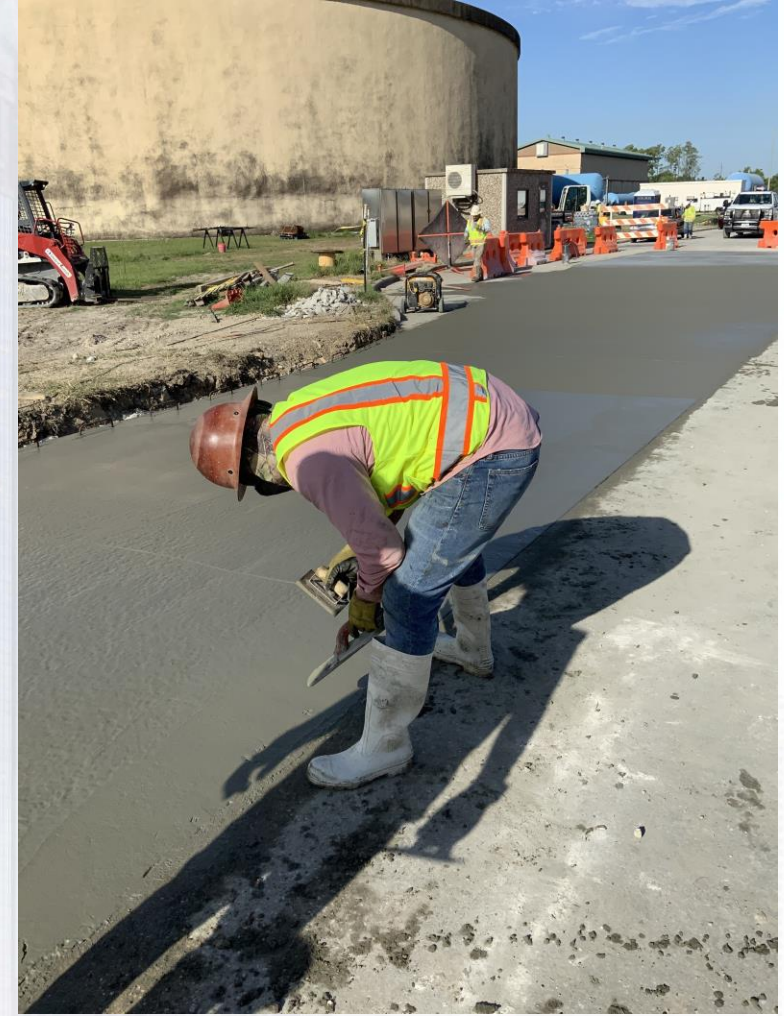
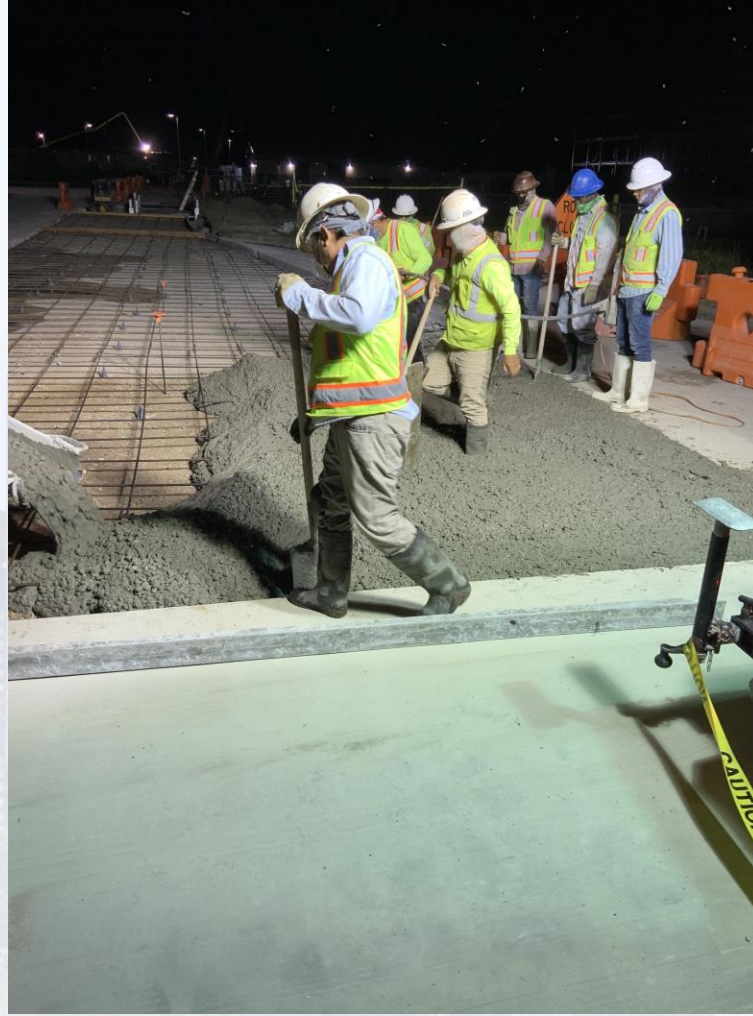
- MDB520 Duct Bank Excavation & MDB111A Duct Bank Installation
- Existing Plant Road Resurface (Zone 2)
- Switchgear Arrival & Placement In 111



MDB520 Duct Bank Excavation & MDB111A Duct Bank Installation




Existing Plant Road Resurface (Zone 2)



Switchgear Arrival & Placement In 111





Construction Progress – Substation Facility 102

- **Installing stairs for transformers**
- **Continue Installation of insulated switches and grounding steel**
- **Installation of Roof Panels**



Installing stairs for transformers



Continue installation of insulated switches and grounding steel



Installation of Roof Panels

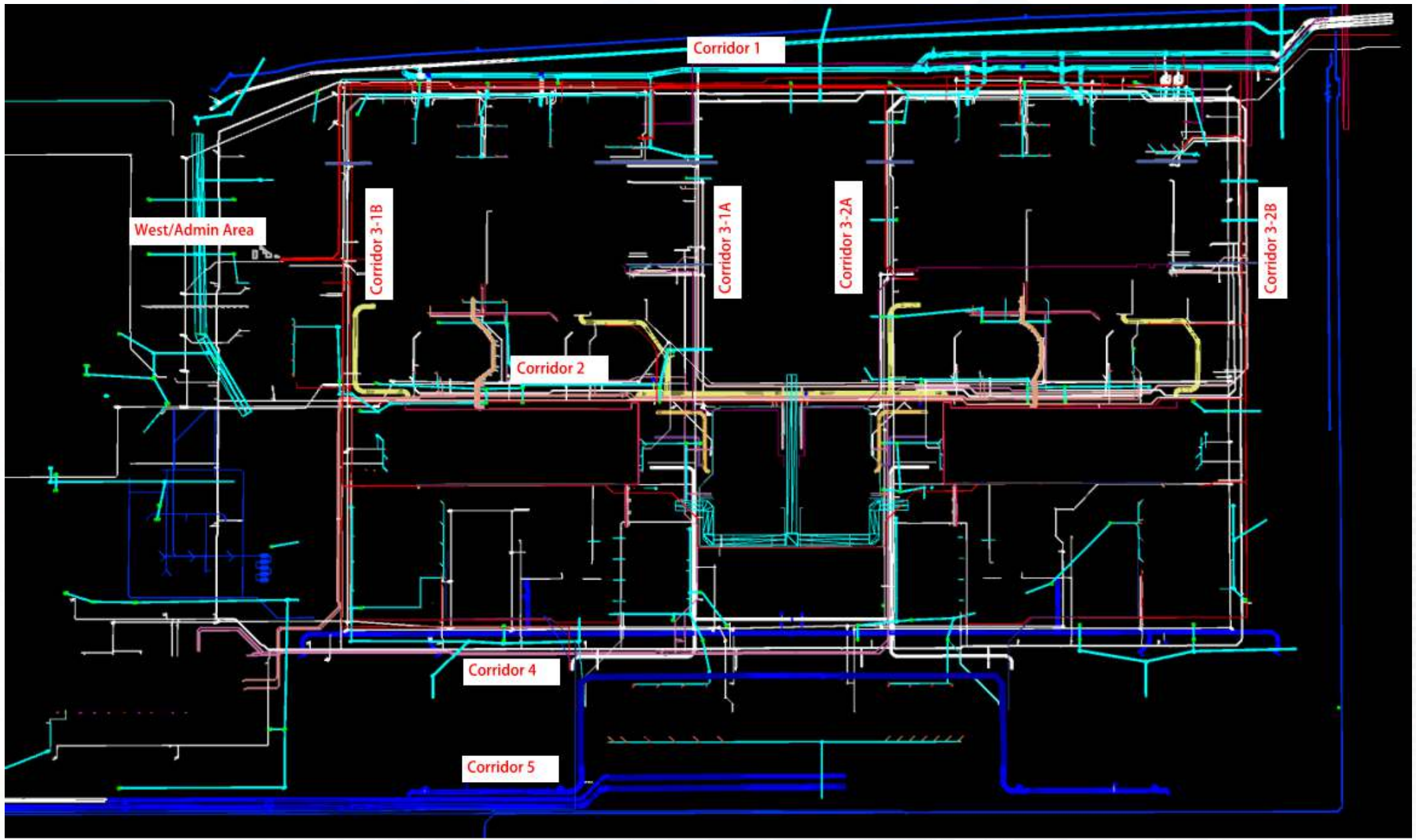




Construction Progress – Yard Piping

- **Installing 108” RW pipe and valve support in Corridor 1**
- **Welding and grouting joints of 108” RW pipe in Corridor 1**
- **Setting the 108” KGV on the RW line in Corridor 1**
- **Installing 12” PW in Corridor 3-1A**
- **Installing 6”, 12”, and 24” PW pipe and valves in Corridor 4**
- **Installing Storm Sewer RCP, inlets, and manholes in Corridor 4**
- **Laying 96” FW pipe and poured 96” BFV support in Corridor 4**
- **Setting 78” BFVs on FW header in Corridor 5**
- **Laying 84” and 120” FW steel pipe in Corridor 5**





Installing 108" RW pipe and valve support in Corridor 1



Welding and grouting joints of 108" RW pipe in Corridor 1



Setting the 108" KGV on the RW line in Corridor 1



Installing 12" PW in Corridor 3-1A and Corridor 4



Installing 6" & 24" PW pipe and valves in Corridor 4



Installing Storm Sewer RCP, inlets, and manholes in Corridor 4



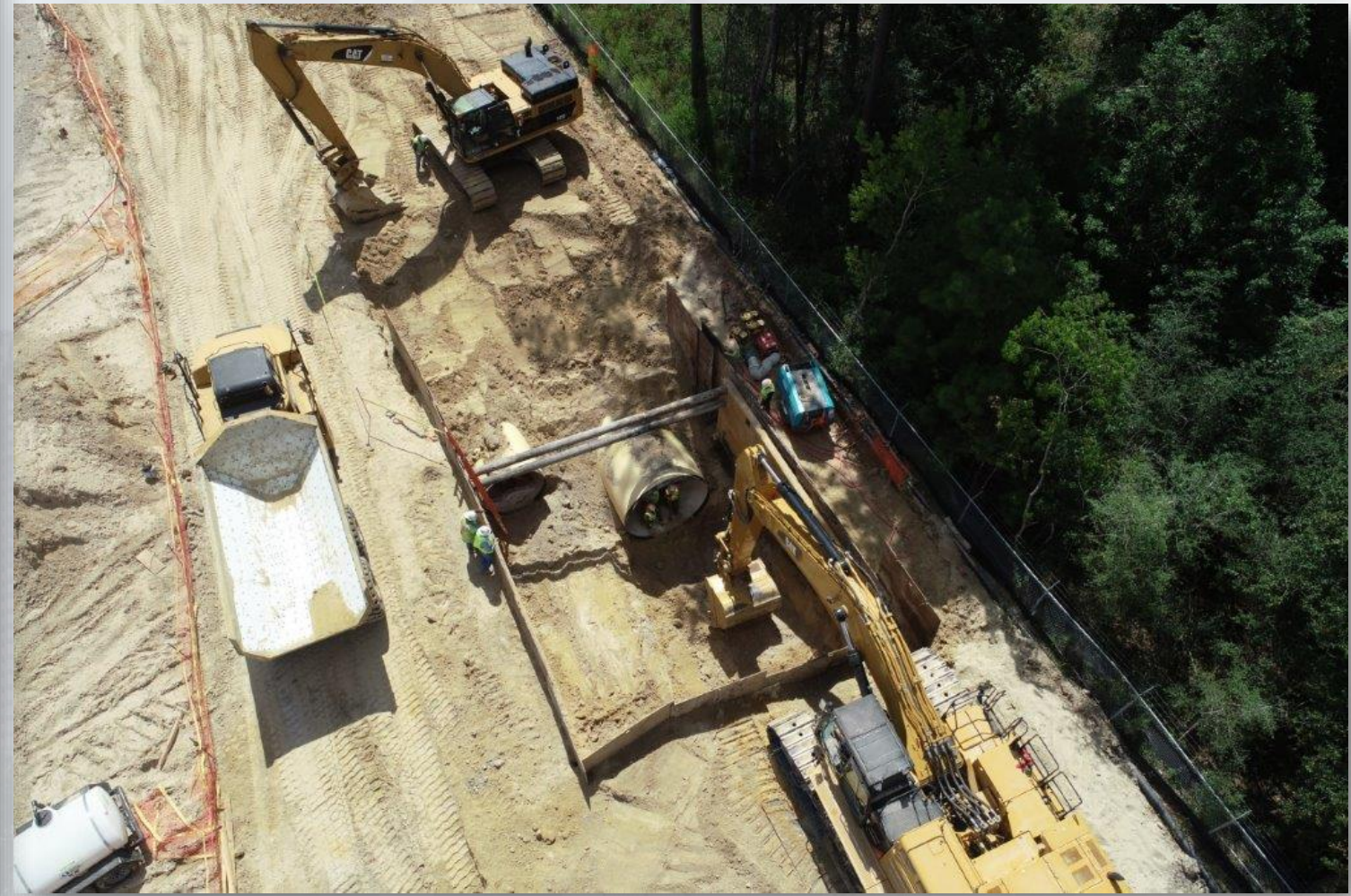
Laying 96" FW pipe and poured 96" BFV support in Corridor 4



Setting 78" BFVs on 120" FW header in Corridor 5



Laying 84" and 120" FW steel pipe in Corridor 5





Construction Progress – Central Plant

281-FILTER MODULE 1 :

- Forming/Reinforcing Walls.
- Pouring Walls.
- Forming/Reinforcing Walkways.
- East Side Masonry.
- Gallery Deck B1

291-TRANSFER PUMP STATION 1:

- Top Deck Curbs Concrete Pour – Middle Section
- Top Deck Sections A6 and C6 Form-up and Reinforcing

292-TRANSFER PUMP STATION 2:

- FRP Pump Can Lower Wall (East & West)
- Retaining Wall Reinforcing

311-POST CHEMICAL FACILITY 1 SH/CS :

- Installation of Underground Conduit –Building Area
- Concrete Pour SOG A1
- Concrete Pour CS Tank Pads

312 – POST CHEMICAL FACILITY 2 FA/LAS/PEC/SB

- Installation of Underground Conduit –Building Area

282 -FILTER MODULE 2:

- Retaining Wall
- Excavating For Base Slabs 1 & 2
- Forming/Reinforcing Base Slab 1



Central Plant-1st Phase



281-FILTER MODULE-Forming/Reinforcing Walls



281-FILTER MODULE-Pouring Walls



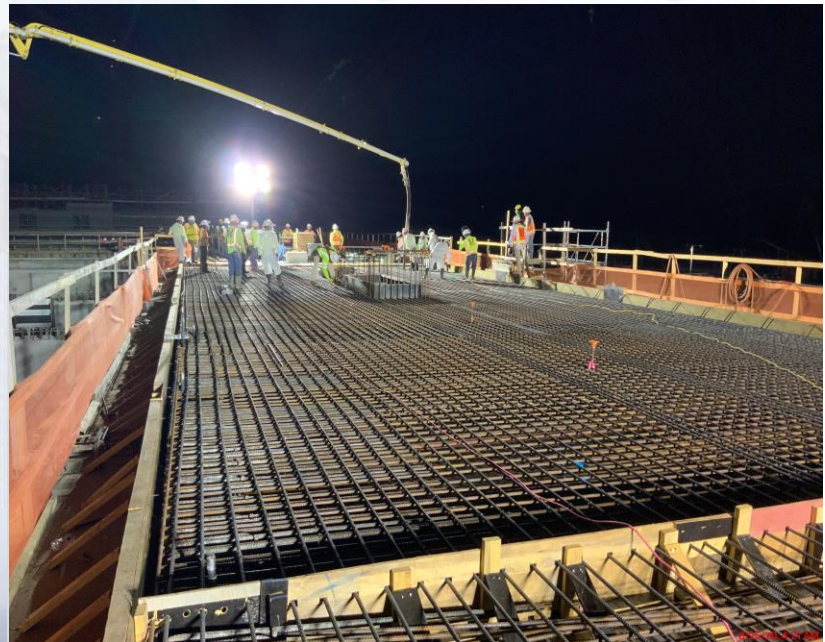
281-FILTER MODULE- Reinforcing & Pouring Walkways



281-FILTER MODULE- East Side Masonry



281-FILTER MODULE- Gallery Deck B1 Forming/Reinforcing/Pouring



291– Top View



291– Top Deck Curbs Concrete Pour – Middle Section



291– Top Deck Sections A6 and C6 Form-Up and Reinforcing



311-Post Chemical Building: Backfill UG Conduits



311-Post Chemical Tank Farm: Concrete Pour SOG A1



311-Post Chemical Tank Farm: RFP CS Tanks



312-Post Chemical Building: Installation UG Conduits



Central Plant – 2nd Phase



282-FILTER MODULE 2- Retaining Wall



282- FILTER MODULE 2- Excavating Base Slabs 1/2



282-FILTER MODULE 2- Forming/Reinforcing Base Slab 1



292 – FRP Pump Can Lower Wall (East & West)



292 – Reinforcing Retaining Wall





Construction Progress – LREQ Basins Facilities 601/602

- **601 – Formwork and Rebar Installation for Pump Station Walls**
- **601 - Concrete Pour for Pump Station Walls**
- **601 – Build forms for 24" RCY pourbacks**



601 – Formwork and Rebar Installation for Pump Station Walls



601 - Concrete Pour for Pump Station Walls



601 – Build forms for 24" RCY pour-backs





Construction Progress – North Plant

211-Pretreatment Chemical Facility 1

- Mudslab

213-Pretreatment Chemical Facility 3:

- Structural Concrete Work
- U/G Electrical

214-Pretreatment Chemical Facility 4:

- Structural Concrete Work

221-Rapid Mix Train 1:

- 78 inch RW pipe Installation
- Vault Backfill

222-Rapid Mix Train 2:

- RM-WL-4A F/R/P

241-FlocSed Train 1

- Cross Collector Slabs F/R/P

242-FlocSed Train 2

- Slab-on-Grade
- Elevated Slab Column F/R/P
- Ported Wall F/R/P
- Knife Walls

244-FlocSed Train4

- East/West Corridor Excavation
- 8 inch RCYS and 24 inch PDR Installation

252-Ozone Contractor Train 2:

- OZ WL-1/WL-1a

502-Gravity Thickener Complex 2

- Basin #4 Walls F/R/P
- Basin #3 Slab-On-Grade F/R/P

504-Gravity Thickener Complex 4

- Service Building Walls F/R/P

611-Liquid Residuals Clarifier Facility 1:

- PSW-1 & WDW-2 F/R/P

612-Liquid Residuals Clarifier Facility 2:

- RCYS and PDR Excavation and Backfill



Facility 211 – Mudslab



Facility 213 - Spread Footing F/R/P



Facility 214 - Slab-on-Grade and Walls F/R/P



Facility 221 – Vault Backfill/78" RW Encasement



Facility 222 - RM-WL-4A F/R/P



Facility 241 – Cross Collector SL-3/SL-5 F/R/P



Facility 242 - EL-SL Columns



Facility 242 - Ported Wall/Divider Wall F/R/P



Facility 242 – Knife Walls



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Facility 244 – 24" PDR Installation



Facility 252 – WL-1/WL-1a F/R/P



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Facility 502 - GT#4 Walls and GT#3 SL-3/SL-6 Placement



Facility 504 - Service Bldg Walls F/R/P



Facility 504 - GT#7 SL-1 F/R/P



Facility 611 – PSW-1 & WDW-2 F/R/P



Facility 612 - PDR and RCYS Piping Backfill





Construction Progress – South Plant

- **Backfilling of 102” Outlet Pipe is complete at GST 361**
- **Load Transfer Platform Installation at GST 362**
- **Erection of Structural steel at MSB 111 Roof**
- **Installation of 78” Pipe and Backfilling at HSPS 401**
- **Installation of pump can footing rebar at HSPS 402**
- **Cellular Concrete Pour and TSL pipe at Sludge Equalization Building 510**
- **Installation of Vertical Mixers for Polymer Tanks at Dewatering Building 520**
- **Erection of Structural Steel at the 3rd floor Dewatering Building 520**
- **Concrete Pour on 2nd floor metal decking at Dewatering Building 520**



Backfilling of 102" Outlet Pipe is complete at GST 361



Load Transfer Platform Installation at GST 362



Erection of Structural steel at MSB 111 Roof



Installation of 78" Pipe and Backfilling at HSPS 401



Installation of pump can footing rebar at HSPS 402



Cellular Concrete Pour and TSL pipe at Sludge Equalization Building 510



Installation of Vertical Mixers for Polymer Tanks at Dewatering Building 520



Erection of Structural Steel at the 3rd floor Dewatering Building 520



Concrete Pour on 2nd floor metal decking at Dewatering Building 520





Construction Progress – Administration Building

- Achieved Final Grade at AB
- Installed Trench Drains at MB
- Reinforcement of SOG at MB
- Final Installation of Electrical Conduit at AB

Installation of Trench Drains at MB



Reinforcement of SOG at MB



Final Installation of Electrical Conduit above EL 53' at AB



Achieved Final Grade at AB



