



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

June 29, 2022



**Site Drone Map
June 17, 2022**





Construction Progress – Site Electrical

- **Facility 520 Terminating LCP's and Rio's**
- **Facility 520 Bus Duct Installation**
- **Facility 401 Energized**
- **Facility 080 SCADA Server Rack and Monitors Installed**



Facility 520 Terminating LCP's and RIO's



Facility 520 Bus Duct Installation



Facility 401 Energized



Facility 080 SCADA Server Rack and Monitors Installed

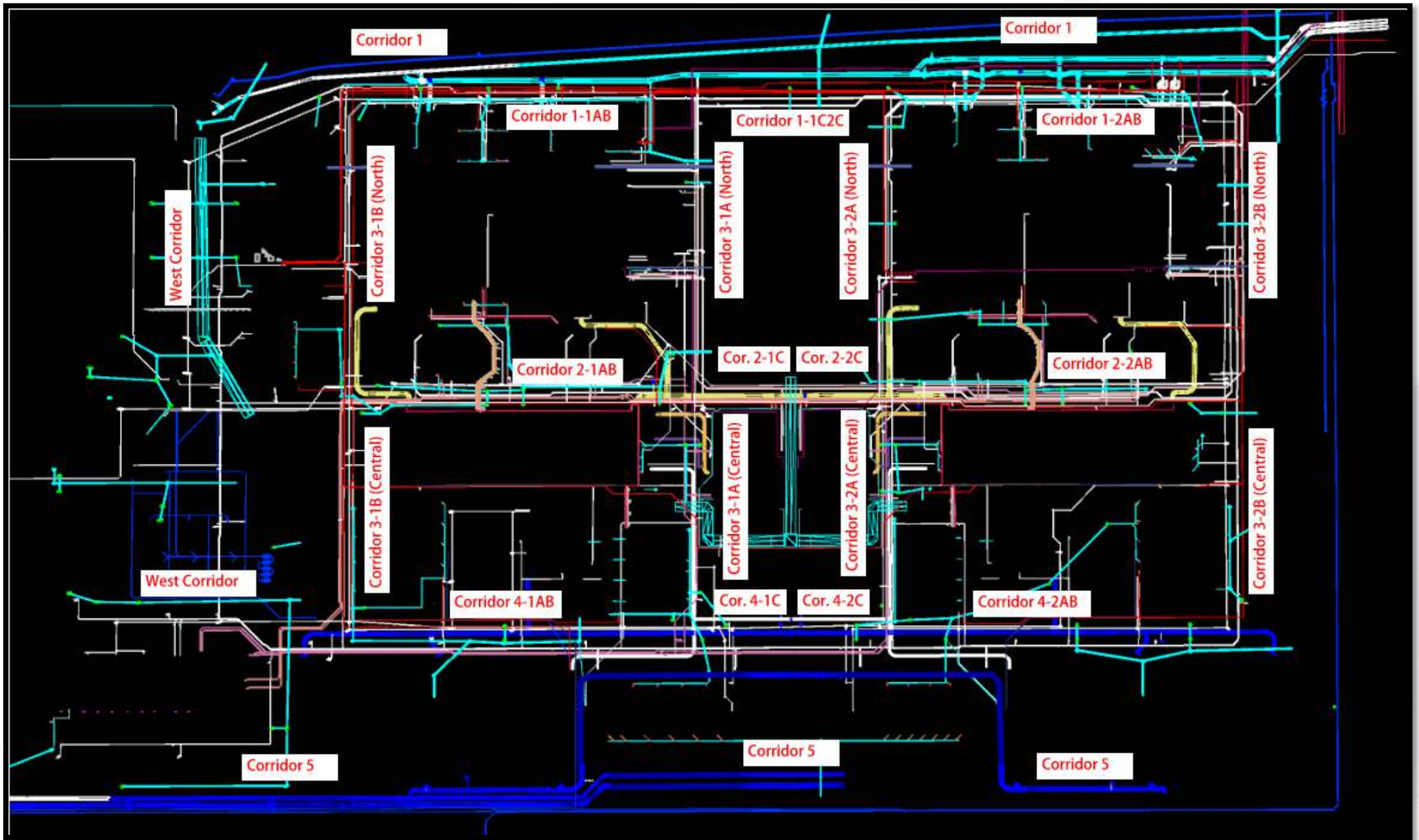




Construction Progress – Yard Piping

- **Installing Victaulic Ring at Facility 282**
- **Continue installing tie-in to the existing 66-inch RW pipe**
- **Continue installation of Lift Station 711**
- **Continue installation of Lift Station 704**
- **Continue installation of the meter vault**
- **96 Inch M11 Coupling**
- **New 66 Inch Raw Water Valve**
- **Installation of temporary Commissioning 42 Inch Line**





Continue installing tie-in to the existing 66-inch RW pipe



Continue installation of Lift Station 711



Continue installation of Lift Station 704



Continue installation of the meter vault











Construction Progress – Central Plant 1

281-FILTER MODULE 1 :

- Installation and Testing of chem piping.
- Installing Media filters

291-TRANSFER PUMP STATION 1:

- Process mechanical pipe installation and Testing.

311 – POST CHEMICAL FACILITY SH/CS :

- Process Mechanical Piping system coating.
- Testing Process Mechanical piping system at containment area.
- Vendor inspection on site.

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

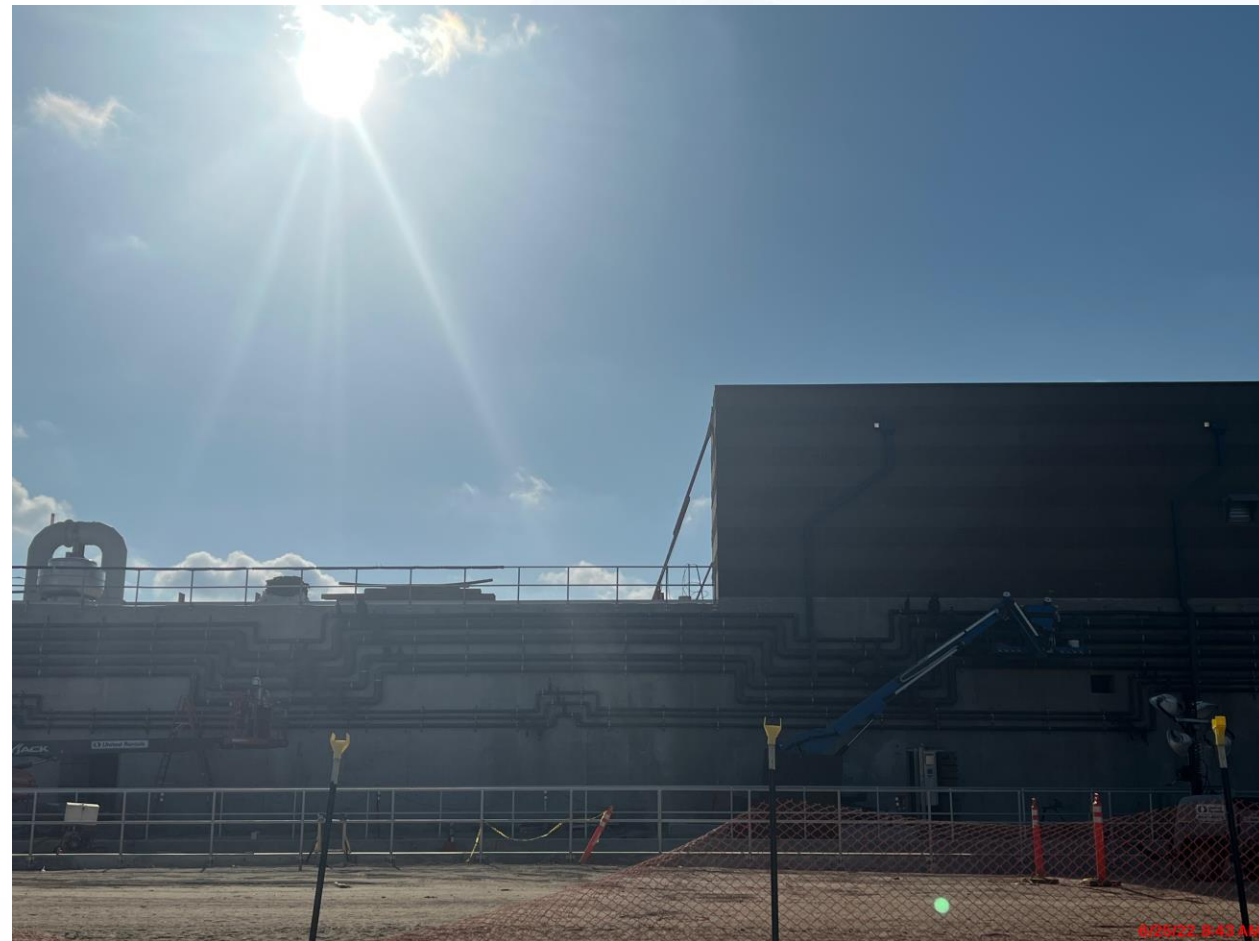
- Process Mechanical testing
- LCP Terminating.



CENTRAL PLANT- PHASE 1 OVERALL



281 FILTER MODULE- Chemical Piping Testing



281 FILTER MODULE- Filter Media Washing & Depth verifications



281 FILTER MODULE- Equipment Training



291-TPS – Process Mechanical pipe installation and Testing



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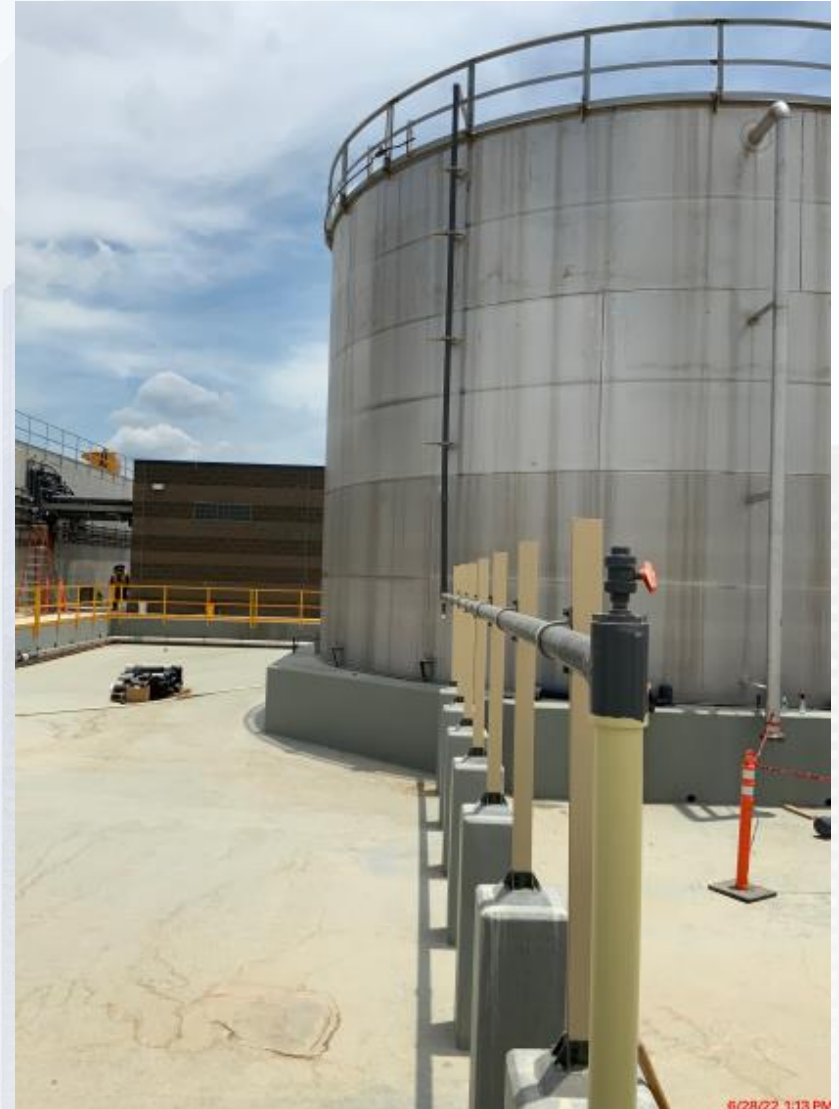
311 – Aerial view –06/14/2022



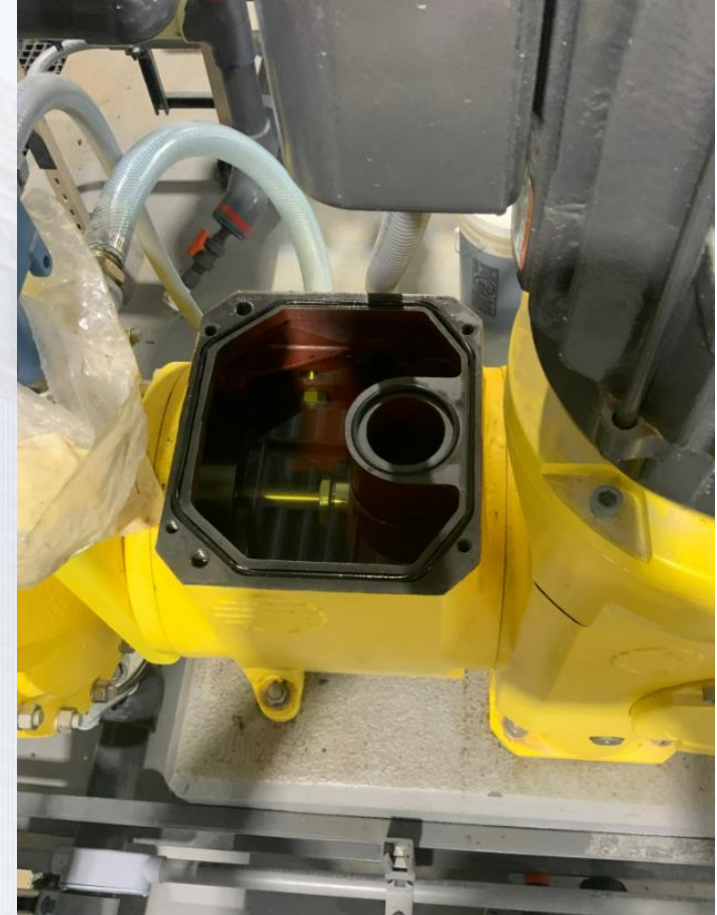
311 –Chemical Process Mechanical Pipe coating



311 –Process Mechanical pipe testing at containment area.



311 – Metering Pumps Vendor inspection on site.



312 - Overall view 06/14/22



312 – Process Mechanical Chem Pipe Testing



312 –Terminating PLC's.





Construction Progress – Central Plant 2

● 282 -FILTER MODULE 2:

- Filter underdrain anchor block installation.
- 24-BWA Pipe installation
- Filters Leak test.

● 292-TRANSFER PUMP STATION 2:

- CMU block Installation
- Mixer Installation

● 313 – POST CHEMICAL FACILITY 3 FA/LAS/PEC/SB :

- CRC Feed room Application.
- F/R/P trenches.

● 314 – POST CHEMICAL FACILITY 4 SH/CS :

- Above ground Plumbing installation.
- CRC Coating Application.
- Metering Pumps Installation.



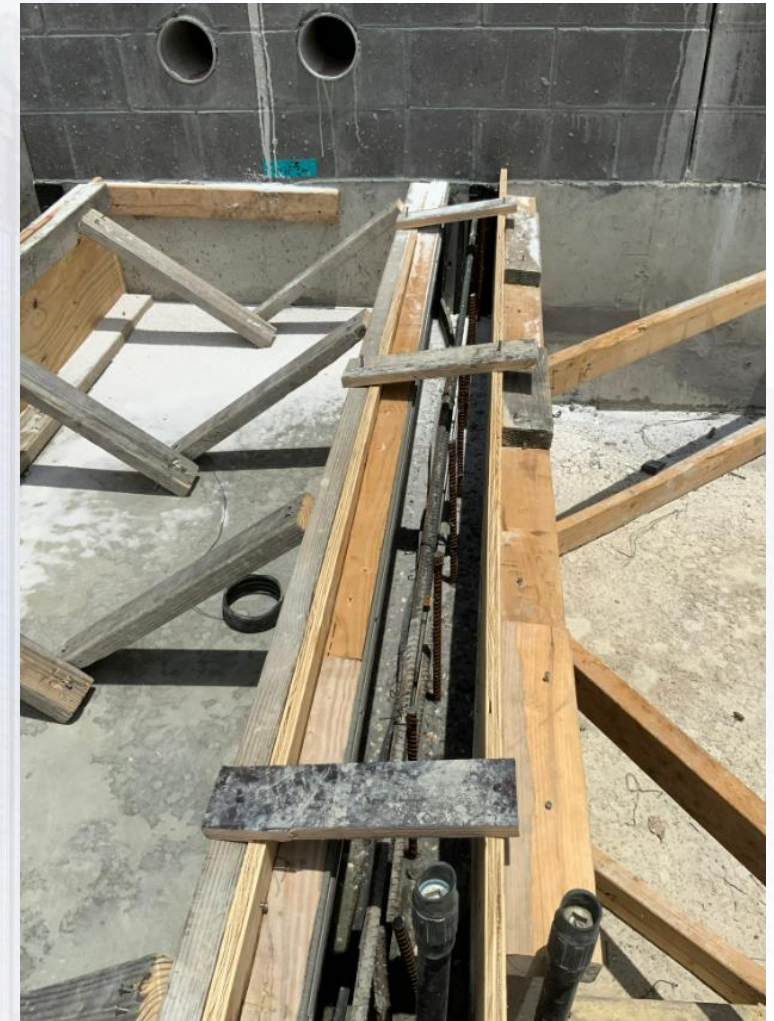
CENTRAL PLANT- Phase 2



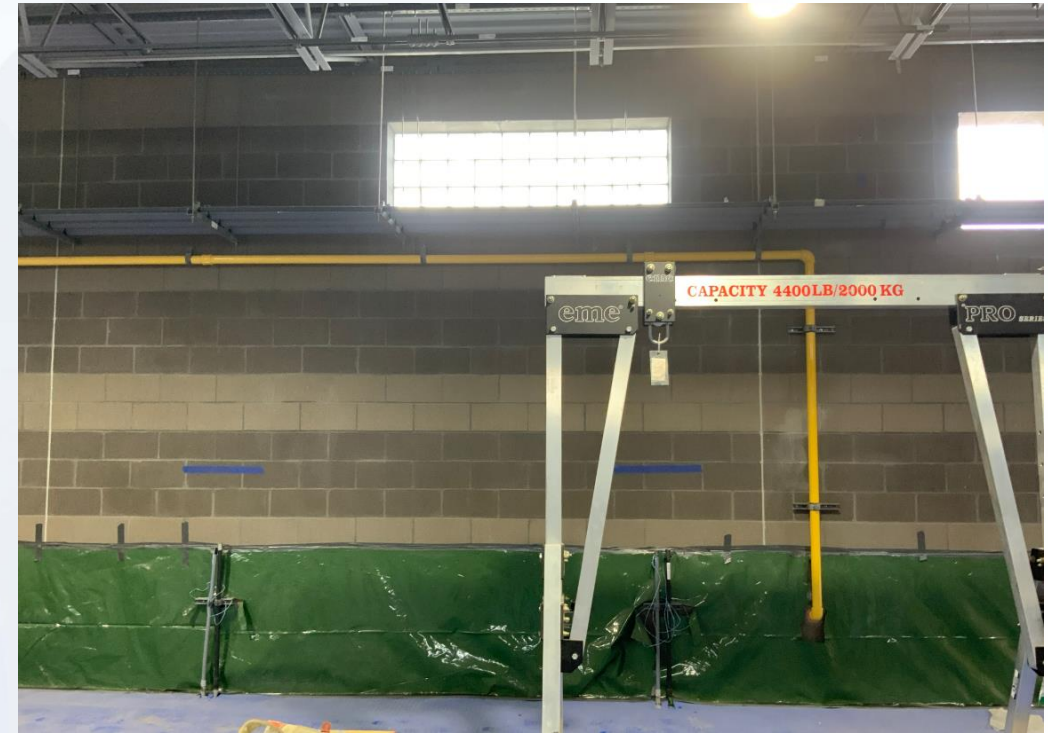
313 – CRC Chem Building application



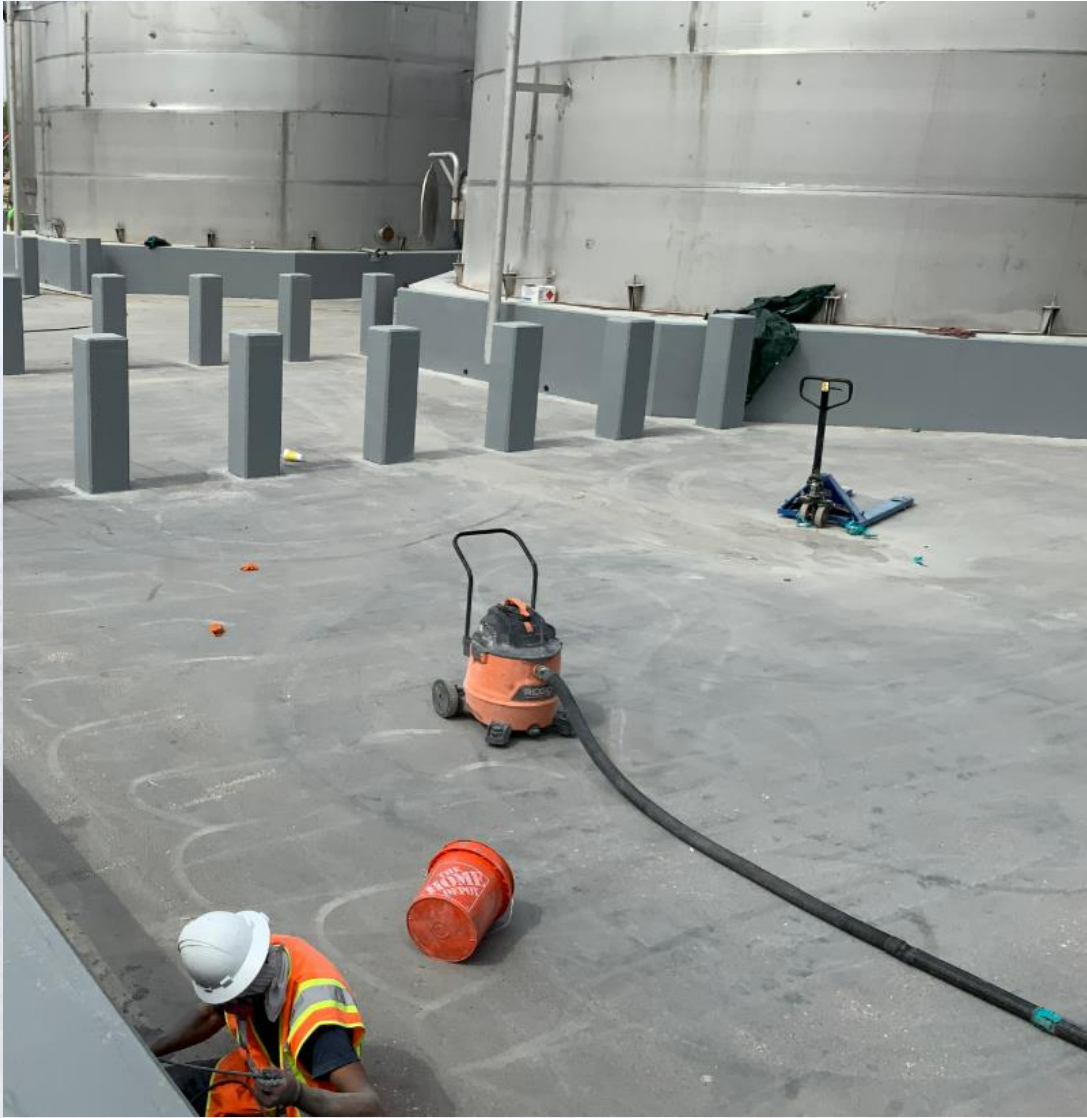
313 – F/R/P Trenches between building and containment



314 – Above ground plumbing lines installation.



314 – CRC Application at Containment



314 – Metering Pumps Installation.



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282-FILTER MODULE 2 - BWA Pipe installation



ex

282-Underdrain installation – West Half



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282- Structure Leak Testing



282- Handrail Installation - West



292-TPS – CMU Block installation.



292-TPS – Mixers Motor Installation





Construction Progress – LREQ Basins Facilities 601/602

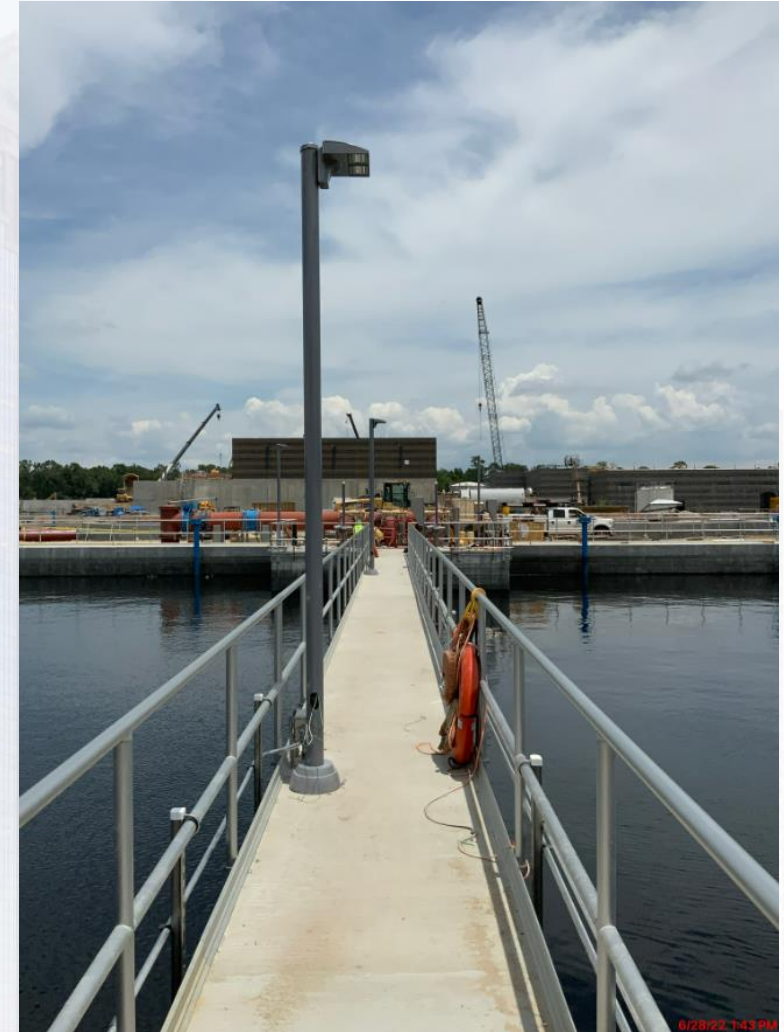
- **601 – SECO Install Conduits – Ongoing**
- **601 – Process Mechanical Pipe Installation and Supports**
- **602 – Handrail and weir plates installation**



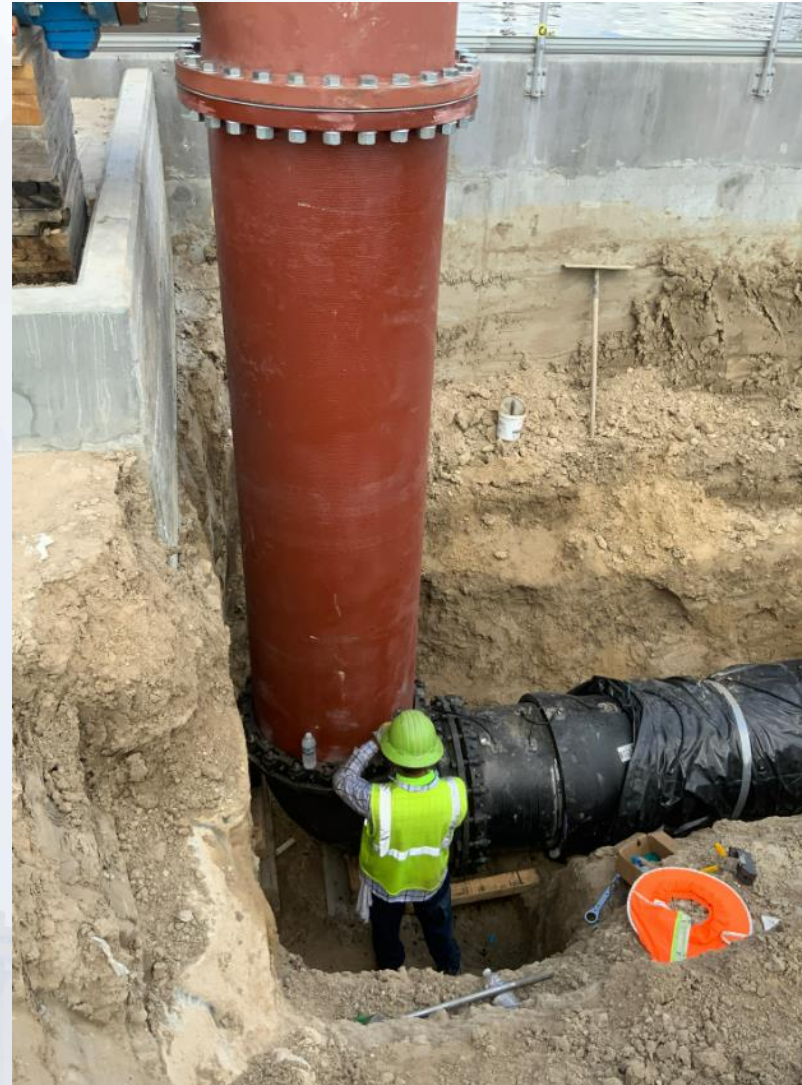
601/602 Overall view 06/14/2022



601 – SECO Conduit Installation



601 – Process Mechanical Pipe Installation and supports



602 – Handrail and weir plates installation





Construction Progress – North Plant

- **201-Chlorine Dioxide Facility 1:**
 - Continued Mechanical Work/ Duct work install
- **212-Pretreatment Chemical Facility 2:**
 - Continued Decking and Joist install
- **213-Pretreatment Chemical Facility 3:**
 - Continued Mechanical Work / Fill station ongoing work
- **214-Pretreatment Chemical Facility 4:**
 - Continued Mechanical Work/ Containment Area Stairs and walkway
- **222-Rapid Mix Train 2**
 - Ongoing Mechanical work
- **241-Flocculation & Sedimentation Train 1: Continued placement of columns and beams/ Leak Test ongoing**
- **242-Flocculation & Sedimentation Train 2:**
 - Pipe painting ongoing/Plate settlers cleaning
- **252-Ozone Contactor 2:**
 - Continued pipe installation
- **261-Ozone Generation Facility 1:**
 - Ongoing Mechanical install / Electrical Cable Pulling
- **218-Pretreatment Chemical Facility 8:**
 - Preparing to erect Steel Tanks
- **243-Flocculation & Sedimentation Train 3:**
 - Continued Concrete Placements for Main Slabs/Walls
- **244-Flocculation & Sedimentation Train 4:**
 - Concrete Placement for Vertical Walls/Main base slabs
- **501-Gravity Sludge Thickener Complex 1:**
 - GT1 – Ongoing Leak Test / GT2 Concrete placement for Walls 5 and 8



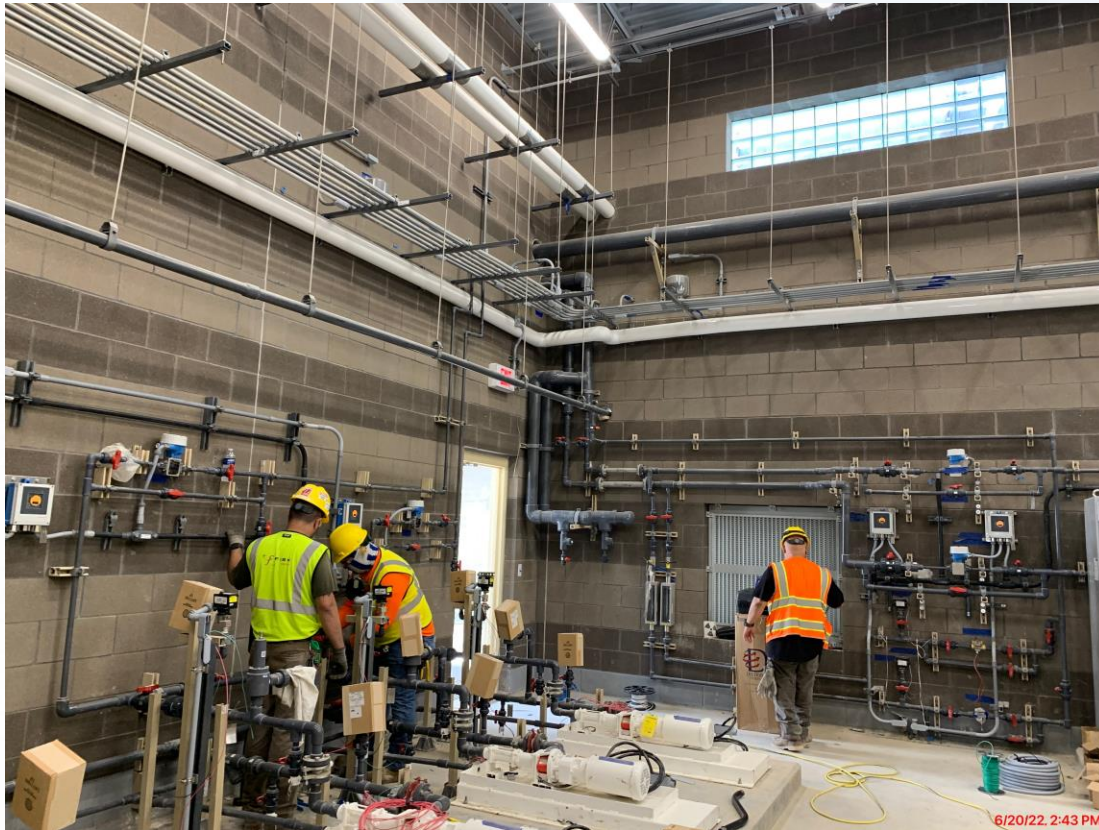
201-Chlorine Dioxide Facility 1: Continued Mechanical Work/ Duct work install



212-Pretreatment Chemical Facility 2: Continued Roofing installation



213-Pretreatment Chemical Facility 3: Continued Mechanical Work / Fill Station ongoing work



214-Pretreatment Chemical Facility 4: Continued Mechanical Work/ Containment Area Stairs and walkway



222-Rapid Mix Train 2: Ongoing Mechanical work



241-Flocculation & Sedimentation Train 1: Continued placement of columns and beams/ Leak Test ongoing



242-Flocculation & Sedimentation Train 2: Pipe painting ongoing/Plate settlers cleaning



252-Ozone Contactor 2: Continued pipe installation



261-Ozone Generation Facility 1: Ongoing Mechanical install / Electrical Cable Pulling



215 Pretreatment Chemical Facility 5: Continued Tank Coatings



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218 Pretreatment Chemical Facility 8: Preparing to erect Steel Tanks



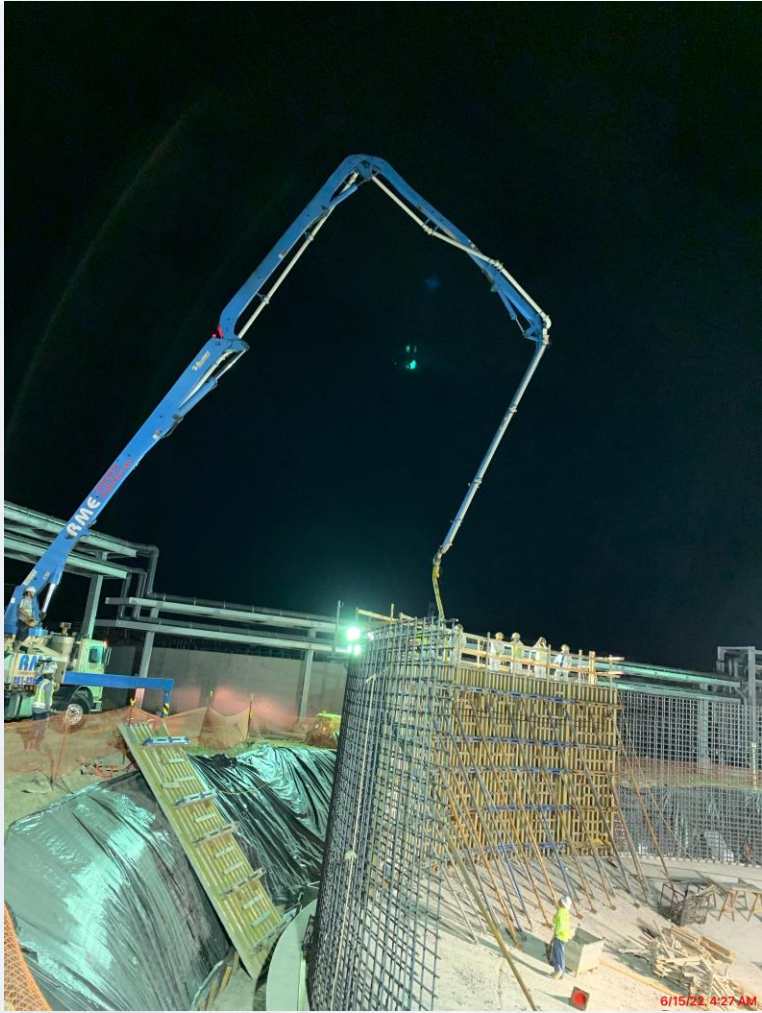
243-Flocculation & Sedimentation Train 3: Continued Concrete Placements for Main Slabs/Walls



244-Flocculation & Sedimentation Train 4: Concrete Placement for Vertical Walls/Main base slabs



501-Gravity Sludge Thickener Complex 1: GT1 – Ongoing Leak Test / GT2 Concrete placement for Walls 5 and 8





Construction Progress – South Plant

361 & 362:

- Watertightness testing at GST 362.

363 & 364:

- Getting rid of stockpile and setting elevation

111, 401, & 402:

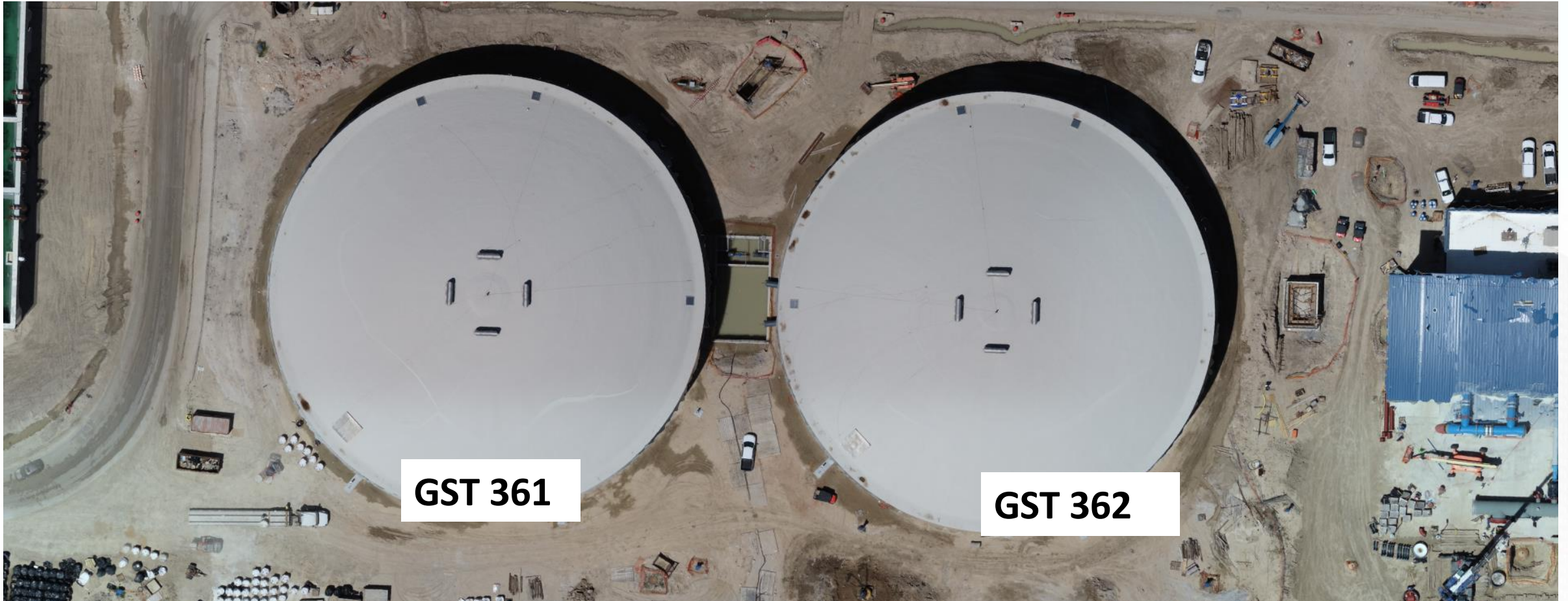
- Continued installation of insulated metal wall panels at Fac 401.
- Continued installation of louvers and exhaust fans at Fac 401.
- Continued electrical conduit and terminations in the Electrical Room at Fac 401.
- Continued installation of aboveground piping at Fac 401.
- Continued installation of FRP pipe support pedestals at Fac 401.
- Continued pulling overhead branch wire at the Analyzer Room at Fac 401.
- Continued backfilling at Fac 402.
- Continued FRP pipe encasement at Fac 402.
- Commenced building footer slab pour at Fac 402.
- Continued Installing U.S bellows at 401 at FAC 401
- Continued Installing translucent Pannels at FAC 401

510 & 520:

- Continued installing plumbing, process pipe, and electrical conduit on levels 1, 2, and 3 at Fac 520.
- Continued wire pulling at Fac 520.
- Continued mechanical coatings installation at Fac 520.
- Continued fire-resistant joint system installation at Fac 520.
- Continued installing truck loading/output conveyors at Fac 520.
- Continued installing centrifuge thickened sludge pumps seal water at Fac 520.
- Continued process pipe installation at Fac 510.
- Commenced terminating power to wiring sludge mixers, LCP's, and MCS's at Fac 510.
- Continued pouring of concrete for 520 driveway
- Ductbank installation



GST 361 & 362 AERIAL VIEW



GST 361

GST 362

HSPS 401, MSB 111, HSPS 402 AERIAL VIEW



HSPS 401

MSB 111

HSPS 402

HIGH SERVICE PUMP STATION 402



Pouring, rebar and form work Fac 402

HIGH SERVICE PUMP STATION 401



Installation of Translucent Panels



Continued installation of aboveground piping at Fac 401.

DEWATERING BUILDING 520 & THICKENED SLUDGE EQUALIZATION TANK 510 AERIAL VIEW



DEWATERING BUILDING 520



Continued installing plumbing, process pipe, and electrical conduit on levels 1, 2, and 3 at Fac 520

THICKENED SLUDGE & EQ BASIN 510



Continued process mechanical pipe installation at Fac 510.



Construction Progress – Administration & Maintenance Building

- Installation of Tile Base
- Form and Reinforce Plaza Footings
- Placement of Plaza Footings
- Installation of FRP
- Installation of Industrial Storage Racks



Installation of Tile Base



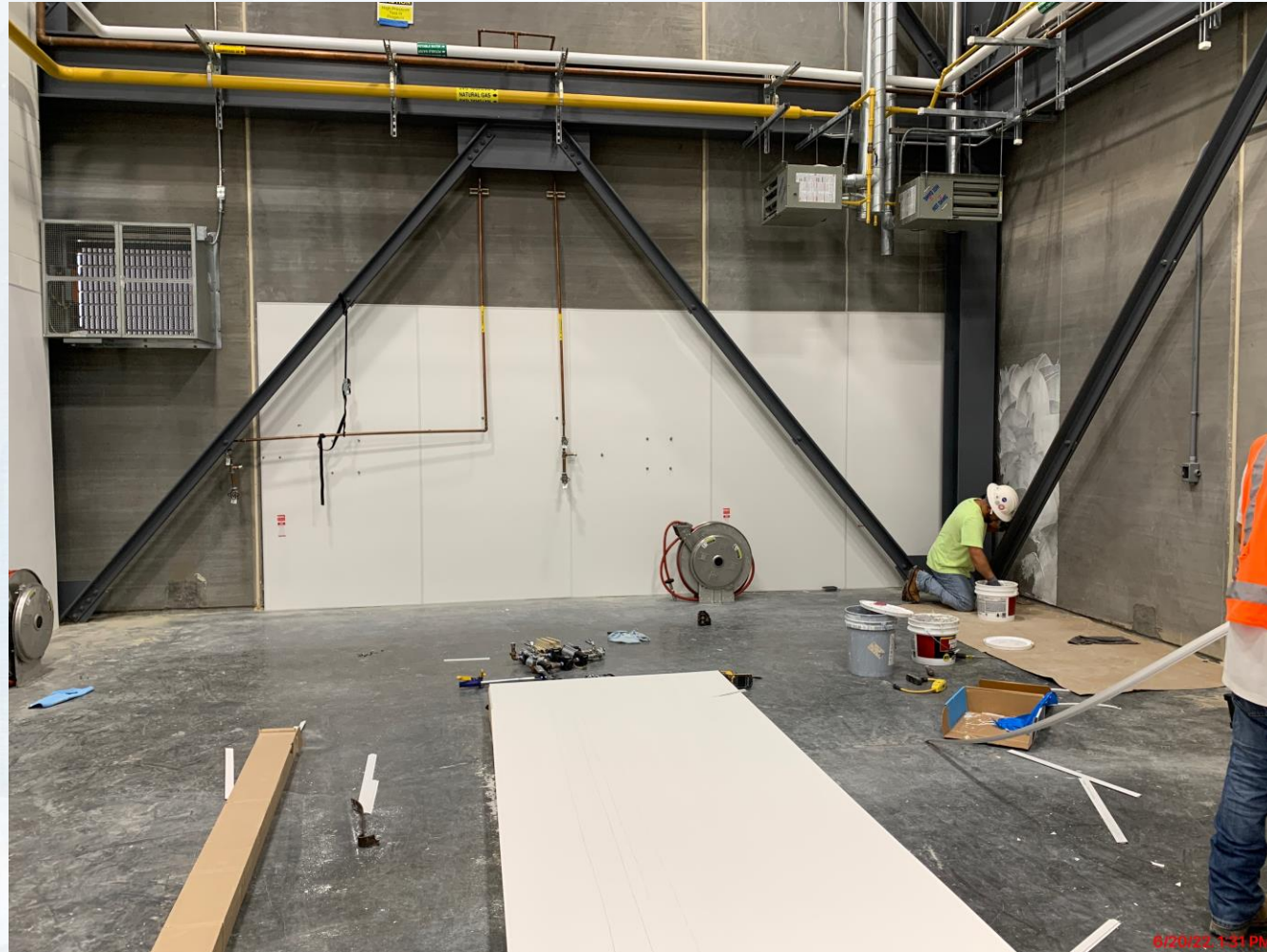
Form and Reinforce Plaza Footings



Placement of Plaza Footings



Installation of FRP



Installation of Industrial Storage Racks





Construction Progress – Site Civil

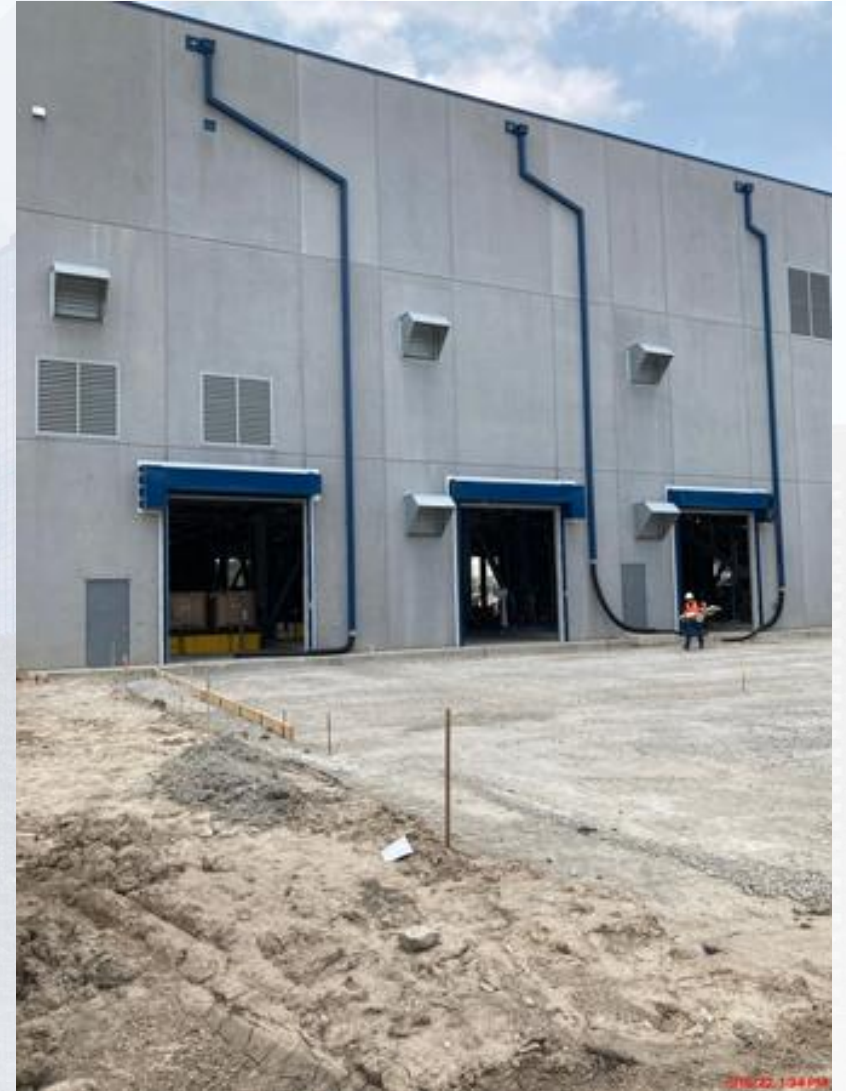
- **Continue bottom slab up to STA 11+50**
- **Installing Reinforcing Steel at South Driveway of the Dewatering Building**
- **Fusing 8" Sanitary Sewer Force Main HDPE Pipe**
- **Continuous Excavation of Overflow Channel**
- **Rebar Installation for Driveway of Dewatering Building**
- **Concrete Finishing for Driveway of Dewatering Building**
- **Rebar Installation for Sidewalks on East and South side of 201**
- **Excavation and leveling for Sidewalk on North side of 201**



Continue bottom slab up to STA 11+50



Installing Reinforcing Steel at South Driveway of the Dewatering Building



Fusing 8" Sanitary Sewer Force Main HDPE Pipe











