



CITY OF HOUSTON
Houston Public Works

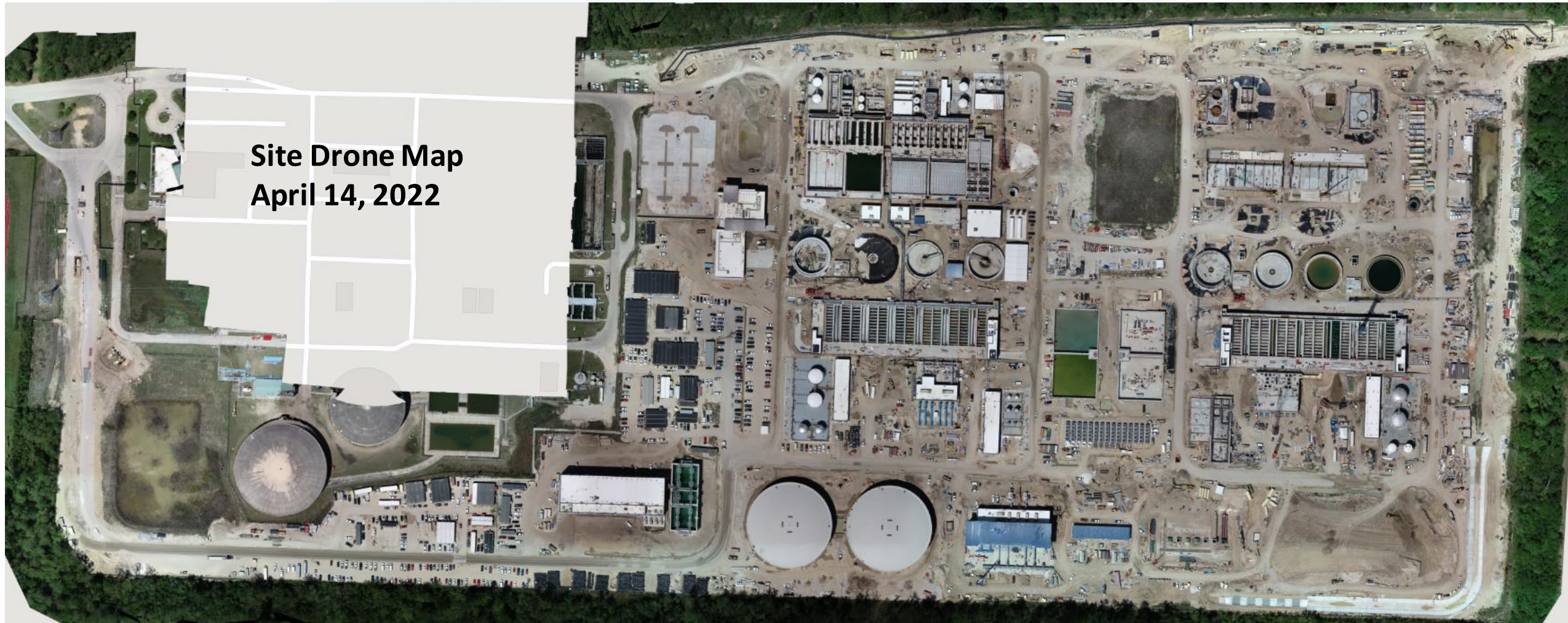
DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

April 27, 2022



**Site Drone Map
April 14, 2022**





Construction Progress – Site Electrical

- **Install Facility 261 ASD's**
- **Facility 111 Duct bank Run**
- **BLTI Terminating Facility 242 Remote Switch For Mixers**
- **Facility 242 Running Wire To Eye Wash Station**



Install Facility 261 ASD's



Facility 111 Duct bank ongoing Installation

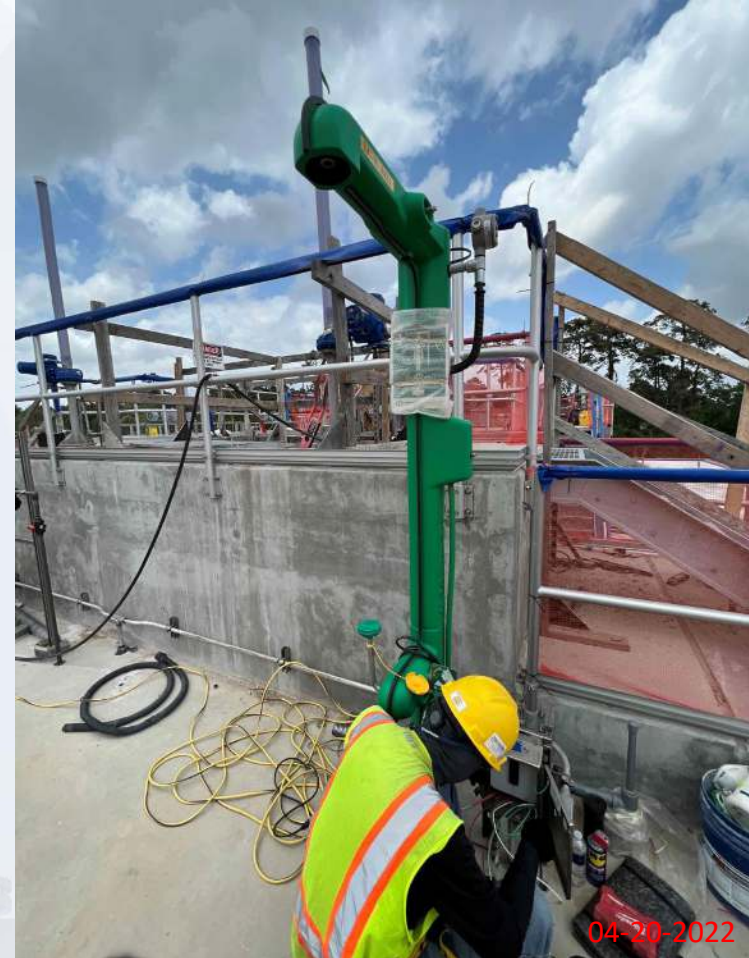


BLTI Terminating Facility 242 Remote Switch For Mixers



04-08-2022

Facility 242 Running Wire To Eye Wash Station

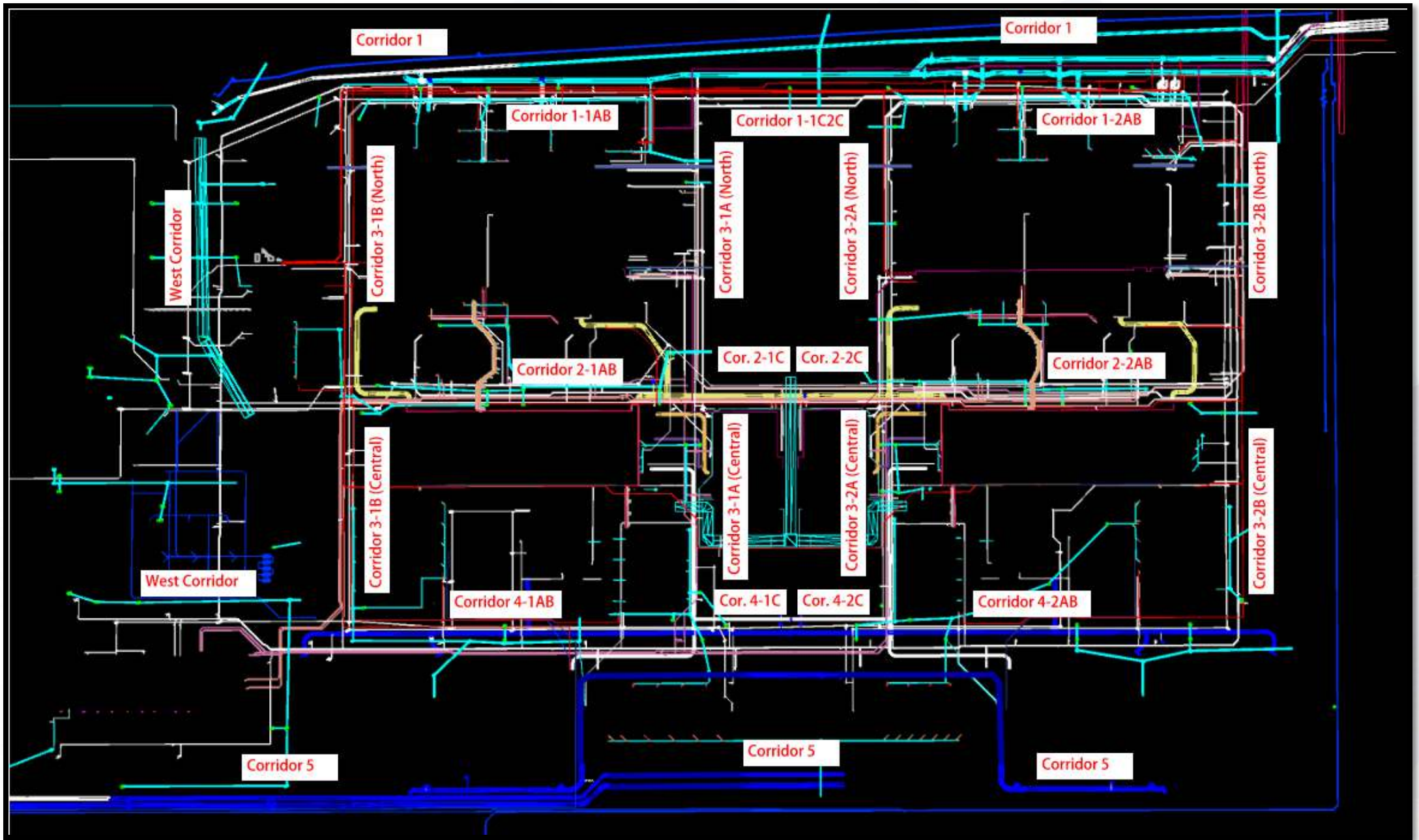




Construction Progress – Yard Piping

- **Welding 66" dish head and removing a section of the 66" existing line**
- **West tie in location pipe plug and bypass piping**
- **66" RW tie in location pipe plug and bypass piping**
- **Installing RCY meter vault slab**
- **Hydro excavation sinking of 704 pump station**





Welding 66" dish head and removing a section of the 66" existing line



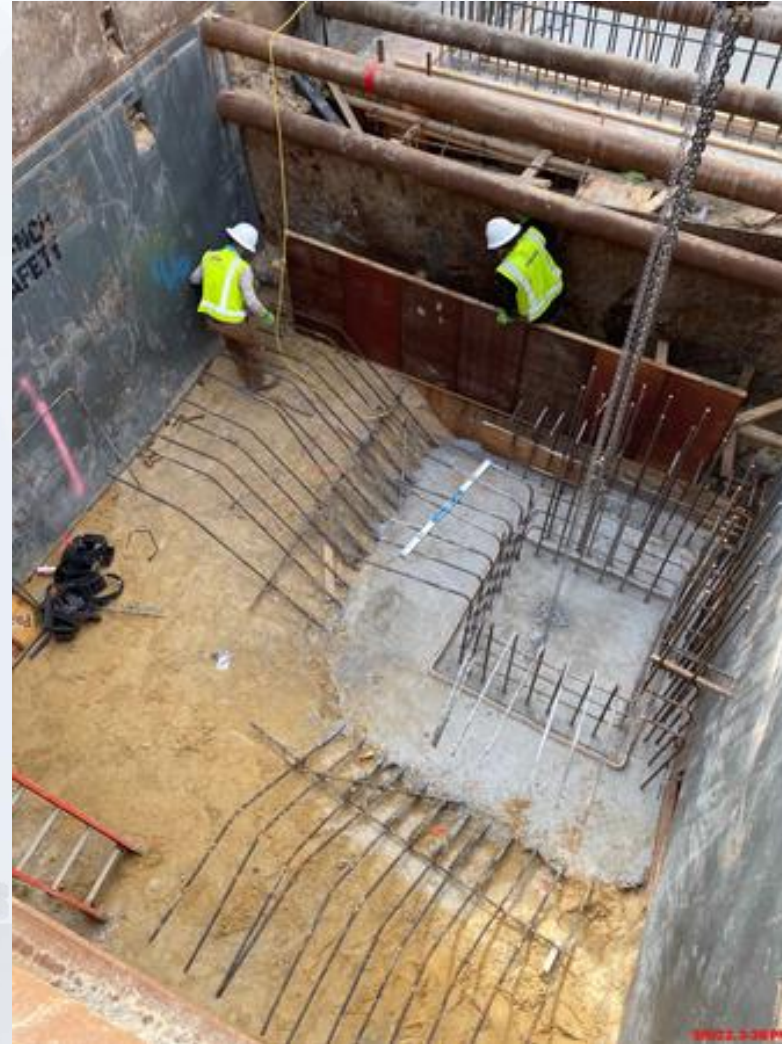
West tie in location pipe plug and bypass piping



66" RW tie in location pipe plug and bypass piping



Installing RCY meter vault slab



Hydro excavation sinking of 704 pump station





Construction Progress – Central Plant 1

281-FILTER MODULE 1 :

- Access Ramp Construction
- Double Contained Pipe Install
- Filter UD Testing
- Filter Media Installation
- Filter Media backwashing

291-TRANSFER PUMP STATION 1:

- Process mechanical pipe Coating.
- Process mechanical pipe installation.
- Install HVAC System in Mechanical Building

311 – POST CHEMICAL FACILITY SH/CS :

- Process Mechanical pipe coating.
- FRP Handrail installation.

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

- Process Mechanical Piping system coating.
- Handrail installation.



CENTRAL PLANT- PHASE 1 OVERALL



281-FILTER MODULE- Grating Installation



281 FILTER MODULE- Chemical Piping Installation (Exterior)



281 FILTER MODULE- Filter UD testing

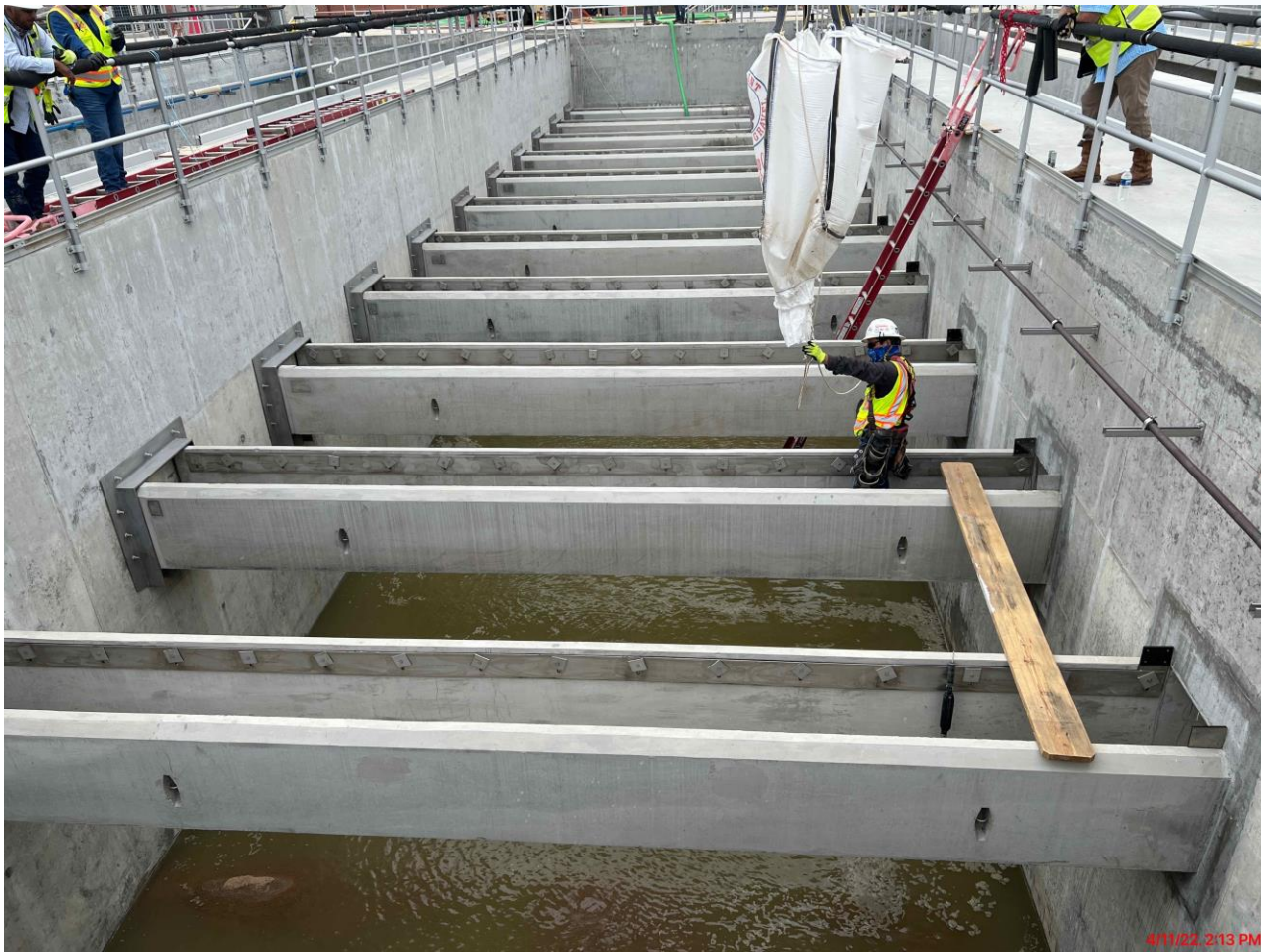


3/28/22, 2:32 PM



3/28/22, 2:42 PM

281 FILTER MODULE- Filter Media (Sand) installation



281 FILTER MODULE- Filter Media (Sand) Backwashing



291-TPS – Aerial View (02/09/2022)



291-TPS – Process Mechanical Pipe coating



291-TPS – Process Mechanical pipe installation



291-TPS – installation of Desk



311 – Aerial view –02/09/2022



311 –Chemical Process Mechanical Pipe coating



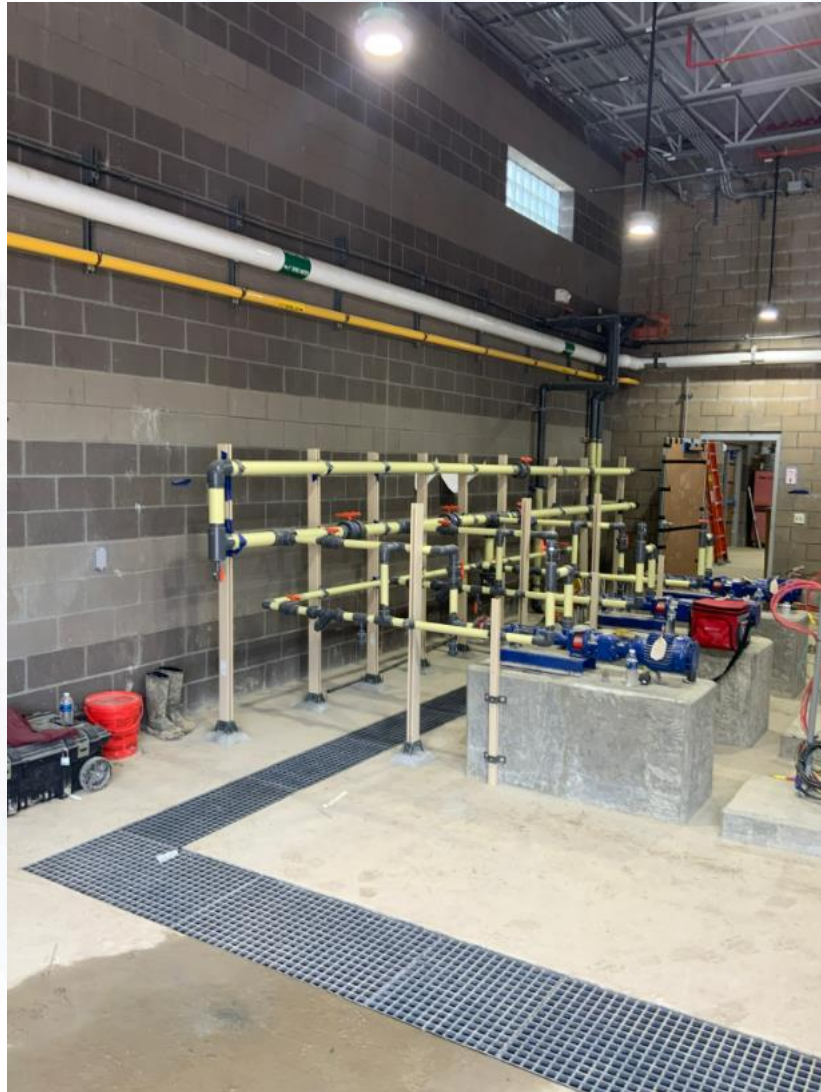
311 –FRP Handrail and walkways installation



312 - Overall view 02/09/22



312 – Chem pipe coating



312 – FRP handrail installation





Construction Progress – Central Plant 2

- **282 -FILTER MODULE 2:**

- Trough Blockout Grouting
- Pipe/Pipe supports installation

- **292-TRANSFER PUMP STATION 2:**

- CMU block Installation

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

- CMU Block installation.
- F/R/P Tank Pads

- **314 – POST CHEMICAL FACILITY 4
SH/CS :**

- CRC Coating application chem building.
- Field installation of SH and CS Metal Tank.



CENTRAL PLANT- Phase 2



313 - Overall view 02/09/22



313 – F/R/P Tank Pads



313 – CMU block installation



314- Aerial view 02/09/22



314 – CRC floor application



314 – SH Tank Insulation



314 – CS Tank field fabrication



282-FILTER MODULE 2 - Pipe installation



282-FILTER MODULE 2- Trough Grouting



te

292-TPS – Aerial View (02-09-2022)



292-TPS – CMU Block installation.



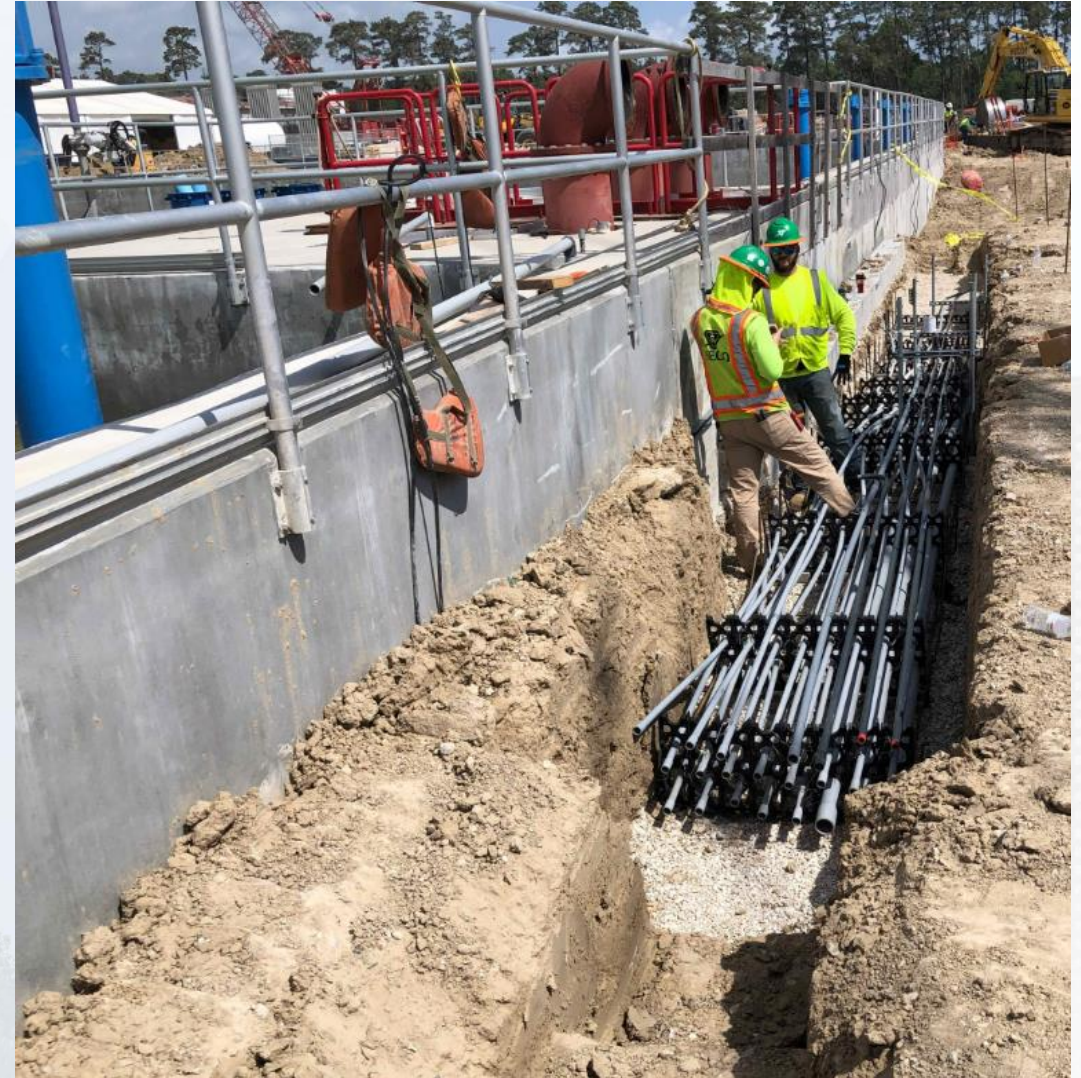


Construction Progress – LREQ Basins Facilities 601/602

- **601 – SECO Install Duct Bank – Ongoing**
- **602 – F/R/P Walkway and slab**
- **602 – Grating installation**



601 – SECO Duct Bank Installation



602 – Grating installed and walkway F/R/P





Construction Progress – North Plant

- **201-Chlorine Dioxide Facility 1:**
 - Ductwork/Chemical Tanks Installation
- **212-Pretreatment Chemical Facility 1:**
 - CMU Block installation
- **213-Pretreatment Chemical Facility 3:**
 - Continued electrical work / Pipe Bridge Installation
- **214-Pretreatment Chemical Facility 4:**
 - Continued Electrical, CRC Coating, Placement of stairs and handrails
- **222-Rapid Mix Train 2**
- **Pulling Cable to 78" RW Actuator, Prime Coating on 78" RW, Dual-Contained Pipe Installation Nearing Completion**
- **241-Flocculation & Sedimentation Train 1: Leak Test ongoing for Basin 2**
- **242-Flocculation & Sedimentation Train 2:**
 - Mixers Terminations
- **252-Ozone Contactor 2:**
 - Installation of Destruct Units & Mixer
- **261-Ozone Generation Facility 1:**
 - Ongoing Mechanical install & delivery of Vaporizers
- **218-Pretreatment Chemical Facility 8:**
 - Continued rebar/concrete placement for walls
- **243-Flocculation & Sedimentation Train 3:**
 - Continued Walls for Basin 5
- **244-Flocculation & Sedimentation Train 4:**
 - Concrete Placement for Slab and formwork on Wall 7
- **501-Gravity Sludge Thickener Complex 1:**
 - GT2 – Concrete placement for Mud mat



201-Chlorine Dioxide Facility 1: Ductwork/Chemical Tanks Installation



212-Pretreatment Chemical Facility 2: Continued CMU Block Installation



213-Pretreatment Chemical Facility 3: Continued electrical work / Pipe Bridge Installation



214-Pretreatment Chemical Facility 4: Continued Electrical, CRC Coating, Placement of stairs and handrails



222-Rapid Mix Train 2: Pulling Cable to 78" RW Actuator, Primer Coating on 78" RW, Dual-Contained Pipe Installation Nearing Completion



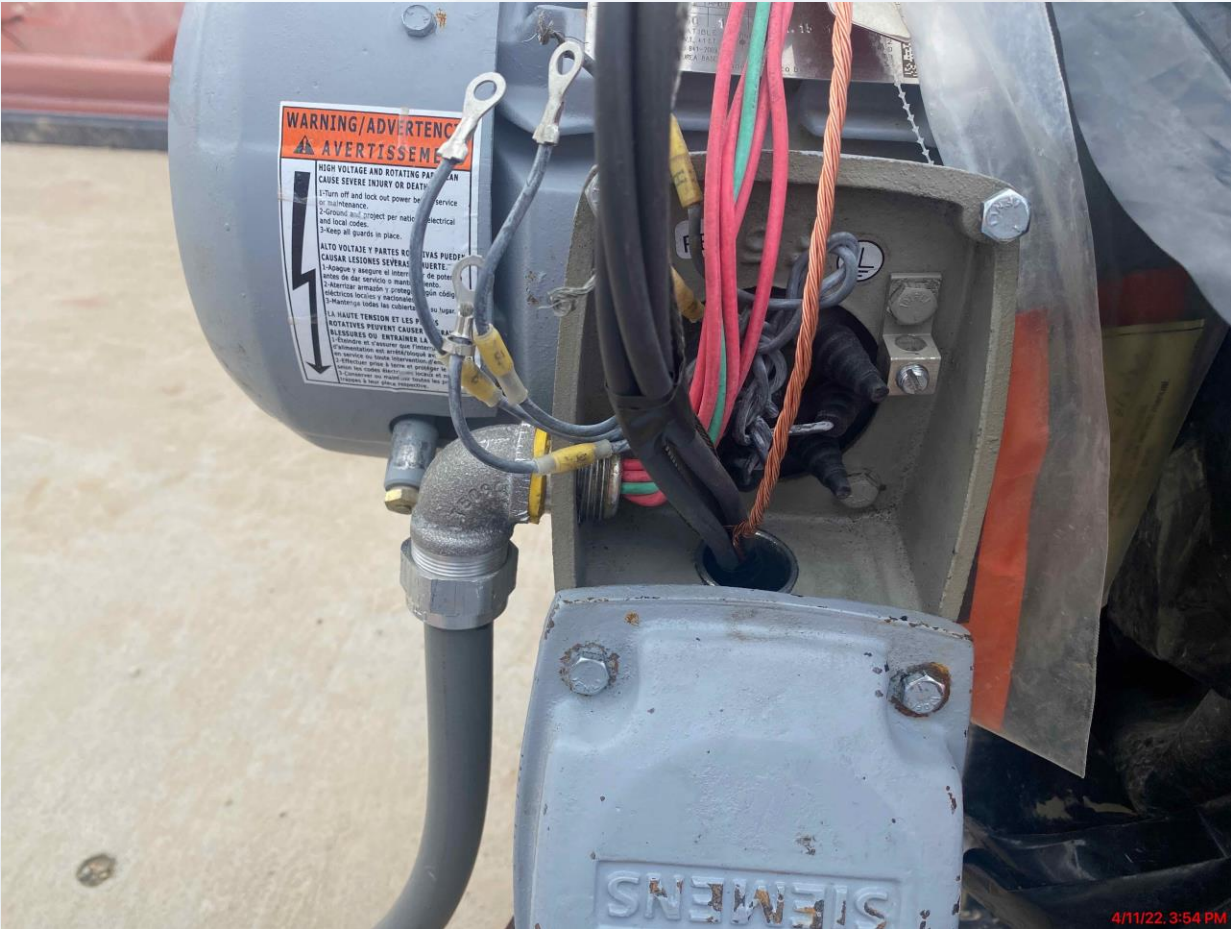
4/20/22 3:04 PM



241-Flocculation & Sedimentation Train 1: Leak Test ongoing for Basin 2



242-Flocculation & Sedimentation Train 2: Mixers Terminations



252-Ozone Contactor 2: Installation of Destruct Units & Mixer



261-Ozone Generation Facility 1: Ongoing Mechanical install & delivery of Vaporizers



215 Pretreatment Chemical Facility 5: Continued Tank Welds and install



218 Pretreatment Chemical Facility 8: Continued rebar/concrete placement for walls



243-Flocculation & Sedimentation Train 3: Continued Walls for Basin 5



244-Flocculation & Sedimentation Train 4: Concrete Placement for Slab and formwork on Wall 7



501-Gravity Sludge Thickener Complex 1: GT2 – Concrete placement for Mud mat





Construction Progress – South Plant

361 & 362:

- Watertightness testing at GST 362.

111, 401, & 402:

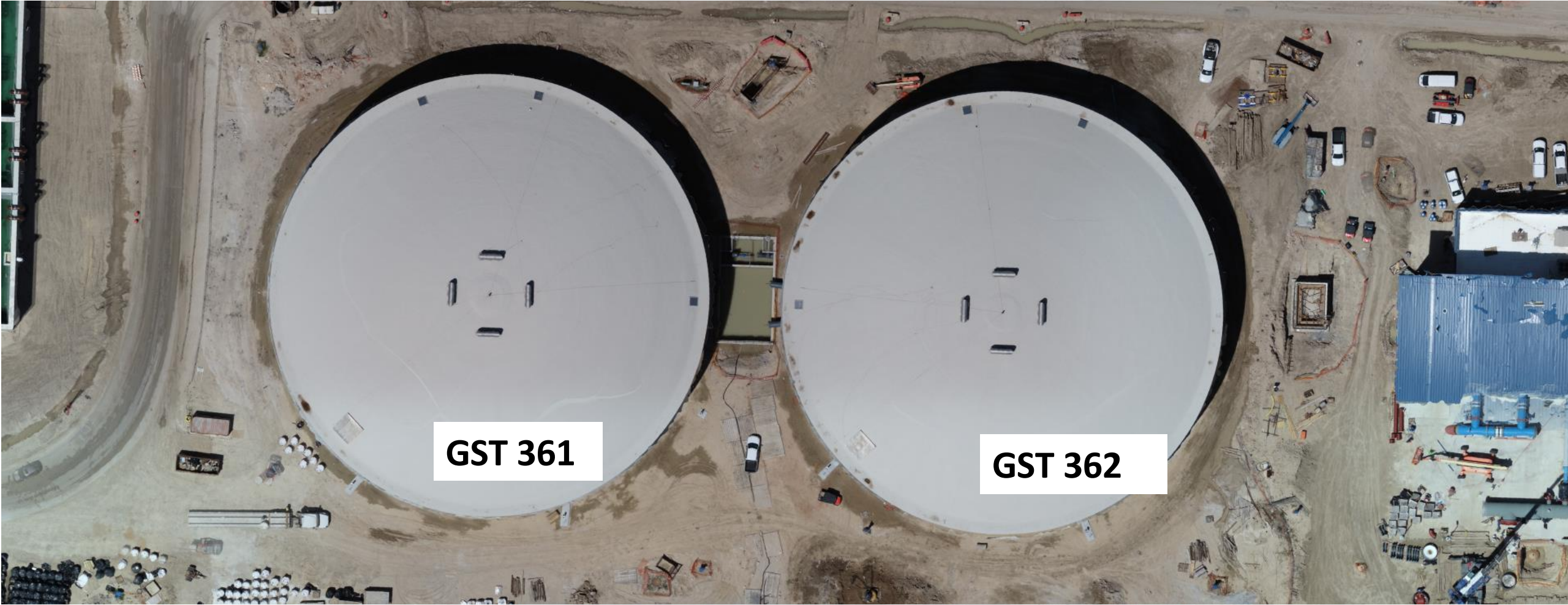
- Continued installation of insulated metal wall panels at Fac 401.
- Continued installation of louvers and exhaust fans at Fac 401.
- Continued electrical conduit and terminations in the Electrical Room at Fac 401.
- Continued installation of aboveground piping at Fac 401.
- Continued installation of 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 top of pump can encasement repairs at Fac 402.

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.



GST 361 & 362 AERIAL VIEW



GST 361

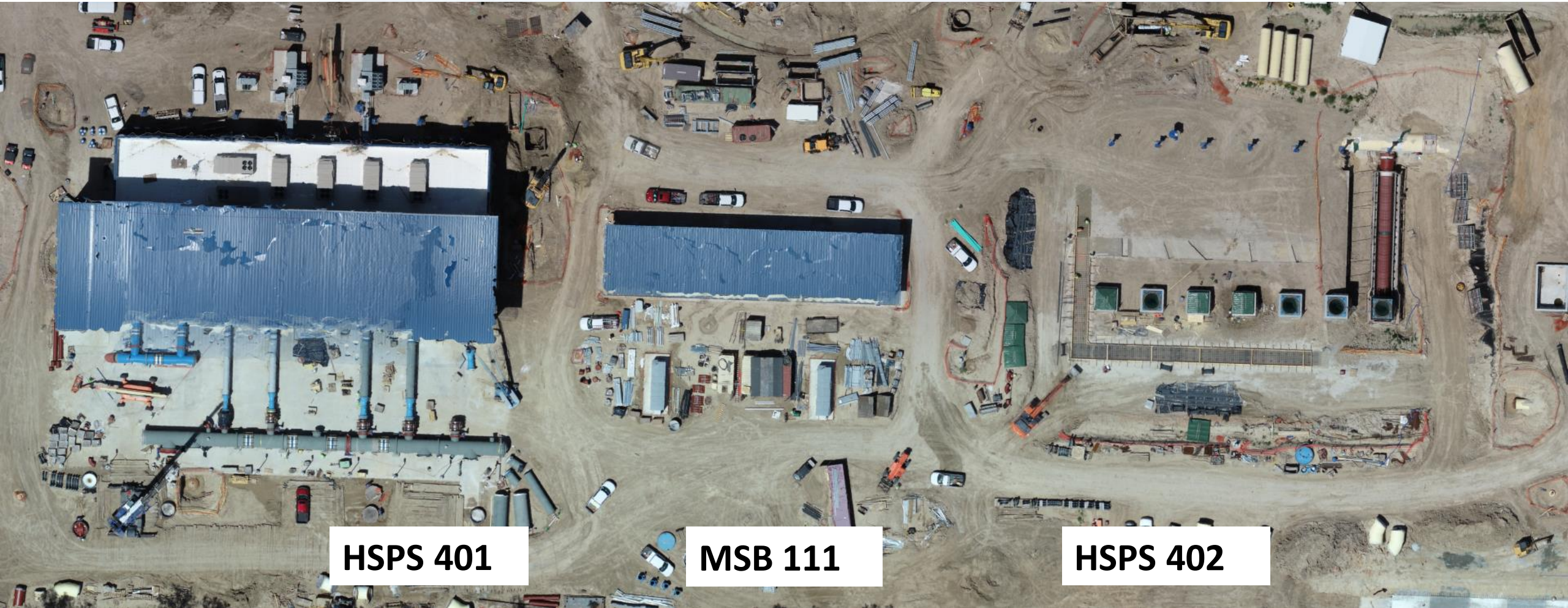
GST 362

GROUND STORAGE TANK 361



Watertightness testing at GST 362

HSPS 401, MSB 111, HSPS 402 AERIAL VIEW



HSPS 401

MSB 111

HSPS 402

HIGH SERVICE PUMP STATION 401



Continued installation of aboveground piping at Fac 401.

HIGH SERVICE PUMP STATION 402



Continued backfilling and commenced building footer slab pour at Fac 402

DEWATERING BUILDING 520 & THICKENED SLUDGE EQUALIZATION TANK 510 AERIAL VIEW



520

510

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 pipe installation at Fac 510.



Construction Progress – Administration & Maintenance Building

- Installation of Control Room Furniture
- Installation of Access Control Equipment
- Regrading of Pond 4

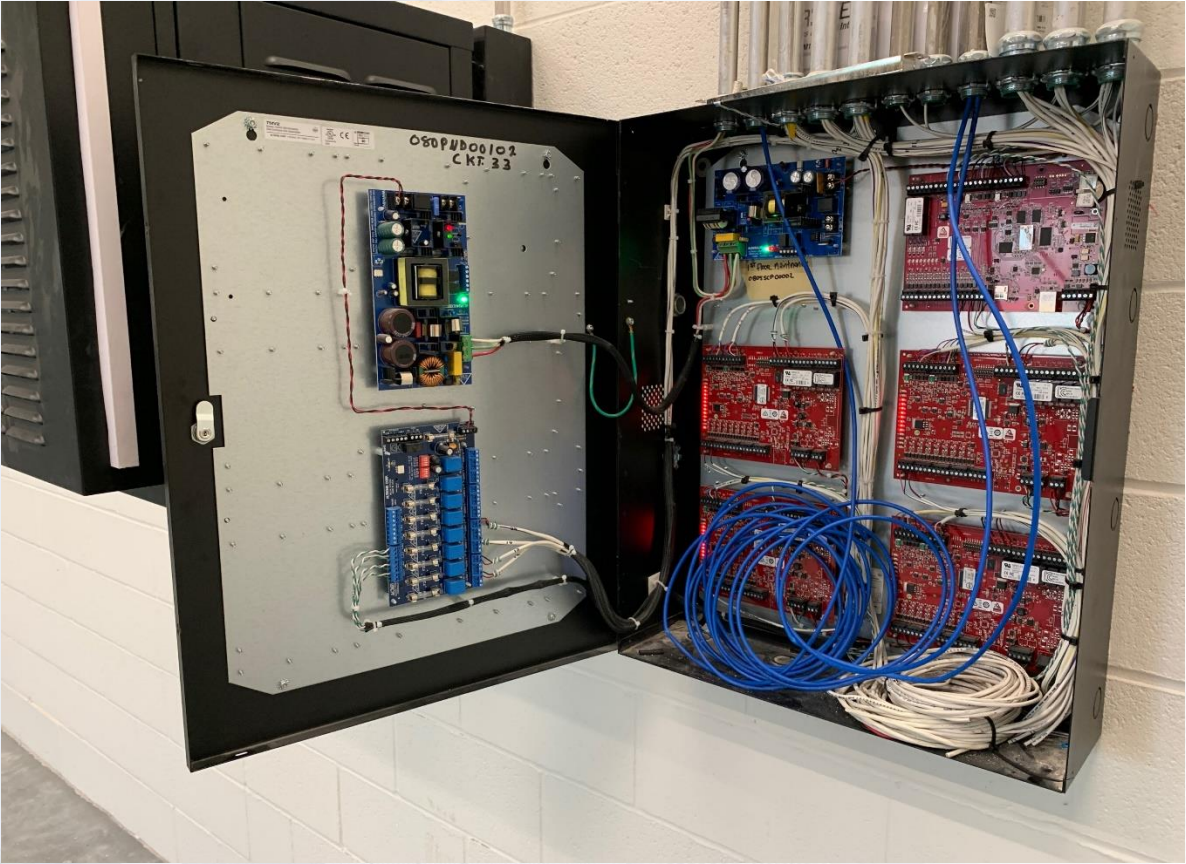


Installation of Control Room Furniture



4/13/22, 10:10 AM

Installation of Access Control Equipment



Regrading of Pond 4





Construction Progress – Site Civil

- **Continue pouring mud slab up to STA 11+00**
- **Continue excavation up to STA 8+00**



Continue pouring mud slab up to STA 11+00



Continue excavation up to STA 8+00

