

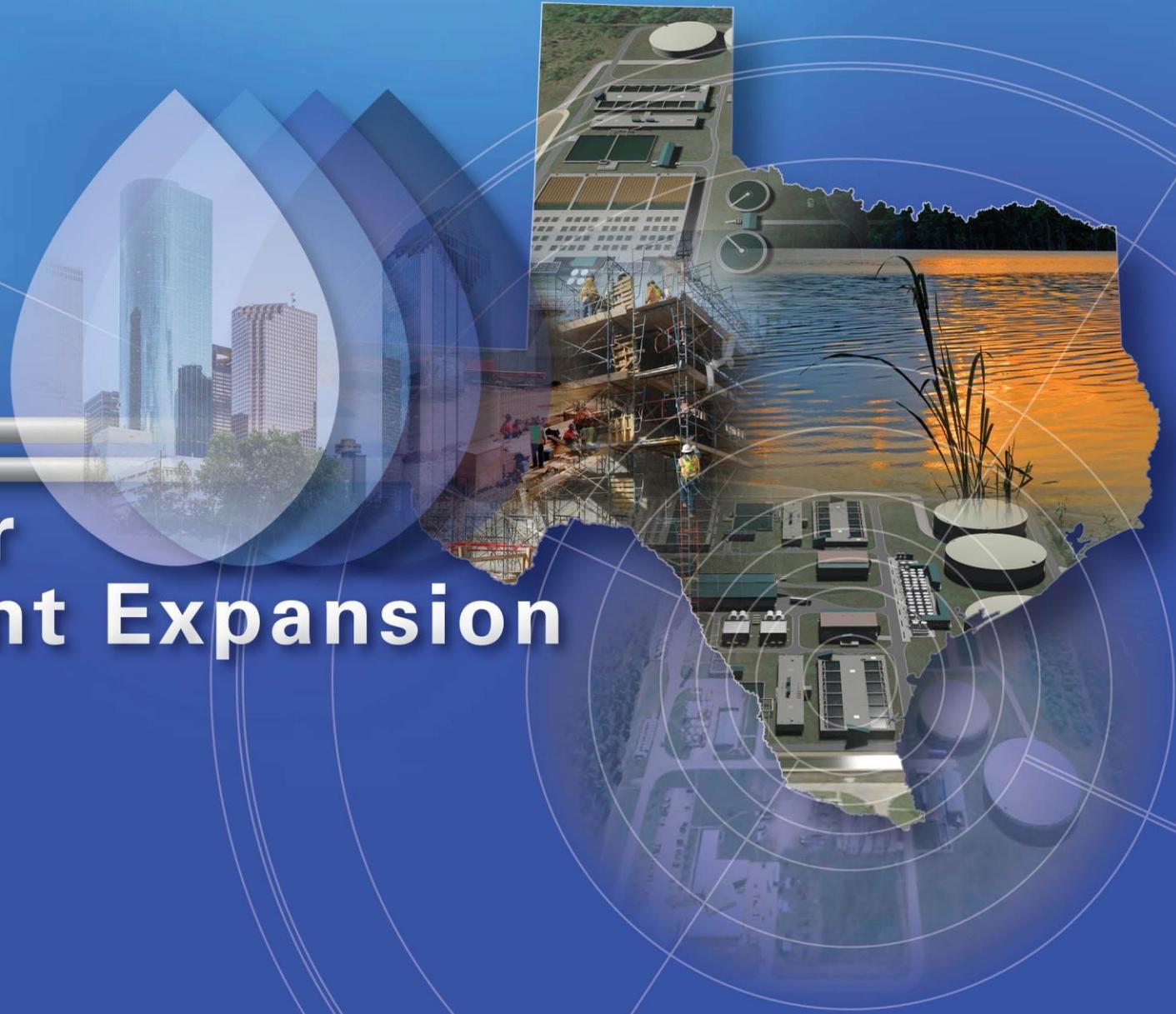


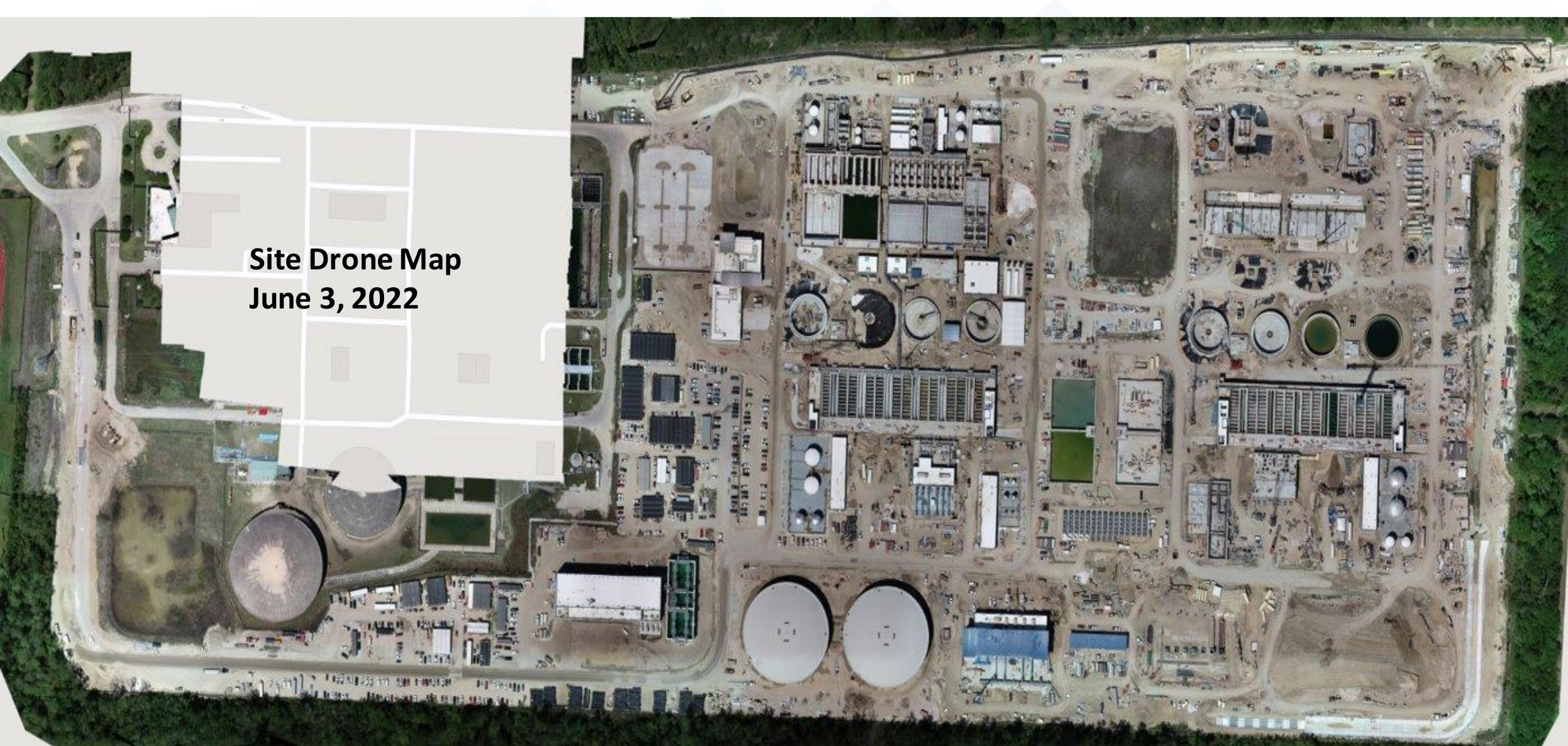
**CITY OF HOUSTON**  
Houston Public Works

# DESIGN-BUILD SERVICES

# Northeast Water Purification Plant Expansion

June 8, 2022





**Site Drone Map  
June 3, 2022**



# Construction Progress – Site Electrical

- **Ongoing Duct bank Install at Facility 402**
- **Ongoing Lindsey Electric Running New Trailer City Temp Power**
- **Ongoing Installation of Facility 401 Bus duct**
- **Shermco Testing Cables Facility 401PMP10101**



# Continued Duct bank Install at Facility 402



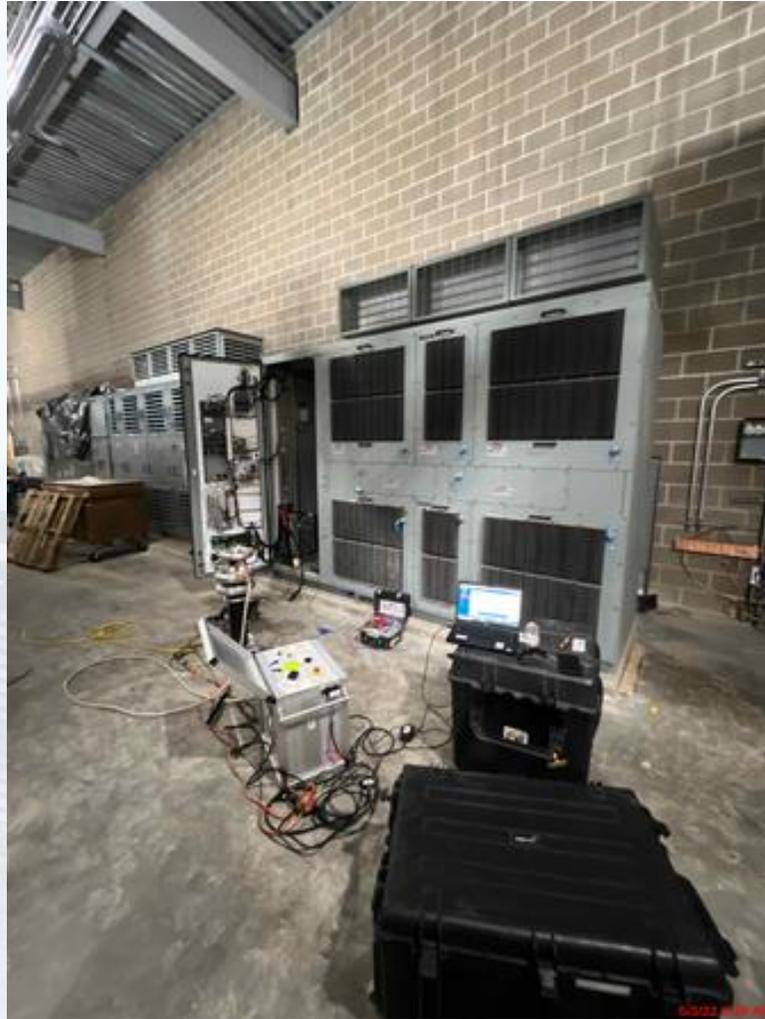
# Ongoing Lindsey Electric Running New Trailer City Temp Power



# Ongoing Installation of 401 Bus duct



# Shermco Testing Cabels 401PMP10101

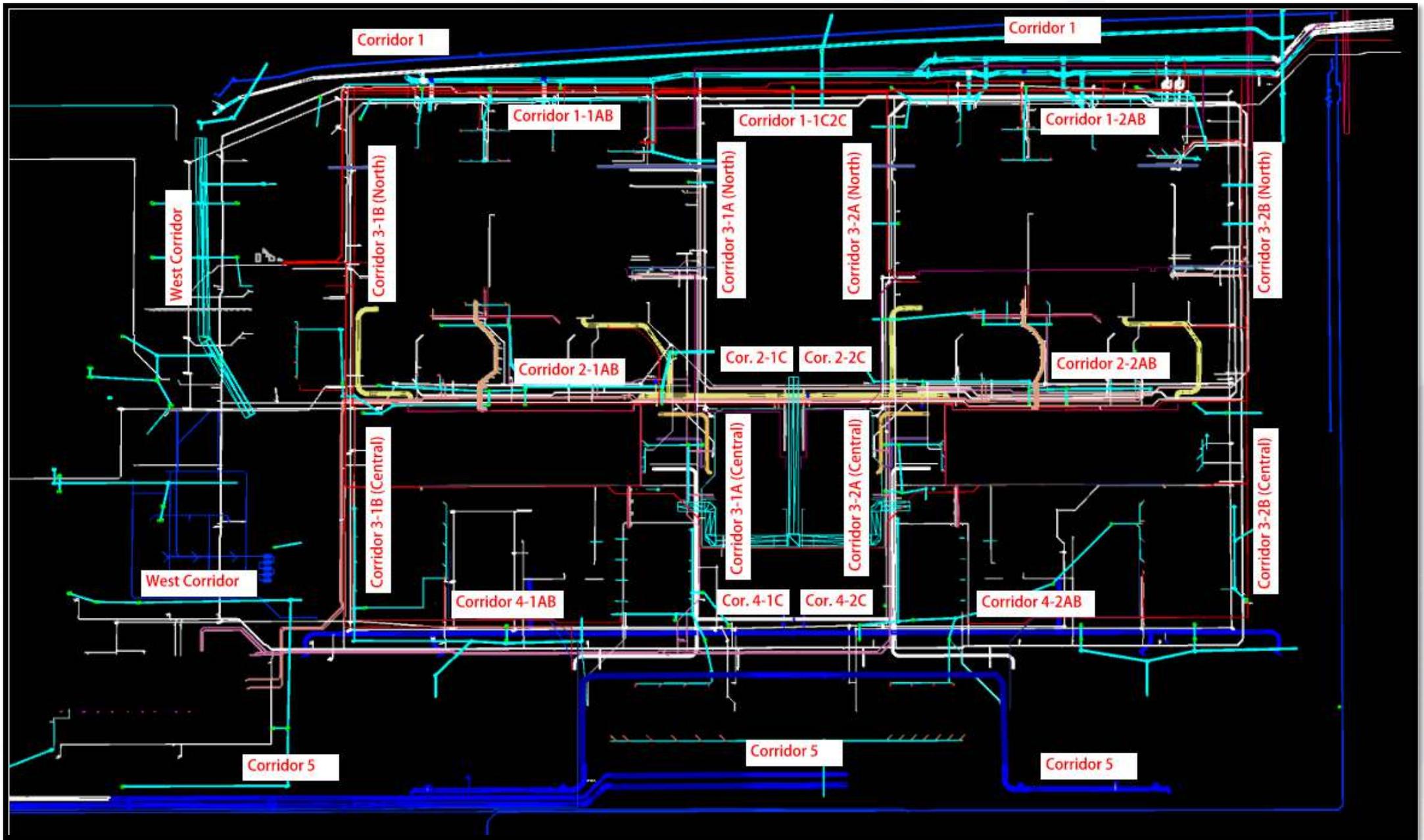




# Construction Progress – Yard Piping

- **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

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

- Exterior Process Mechanical Piping system coating.



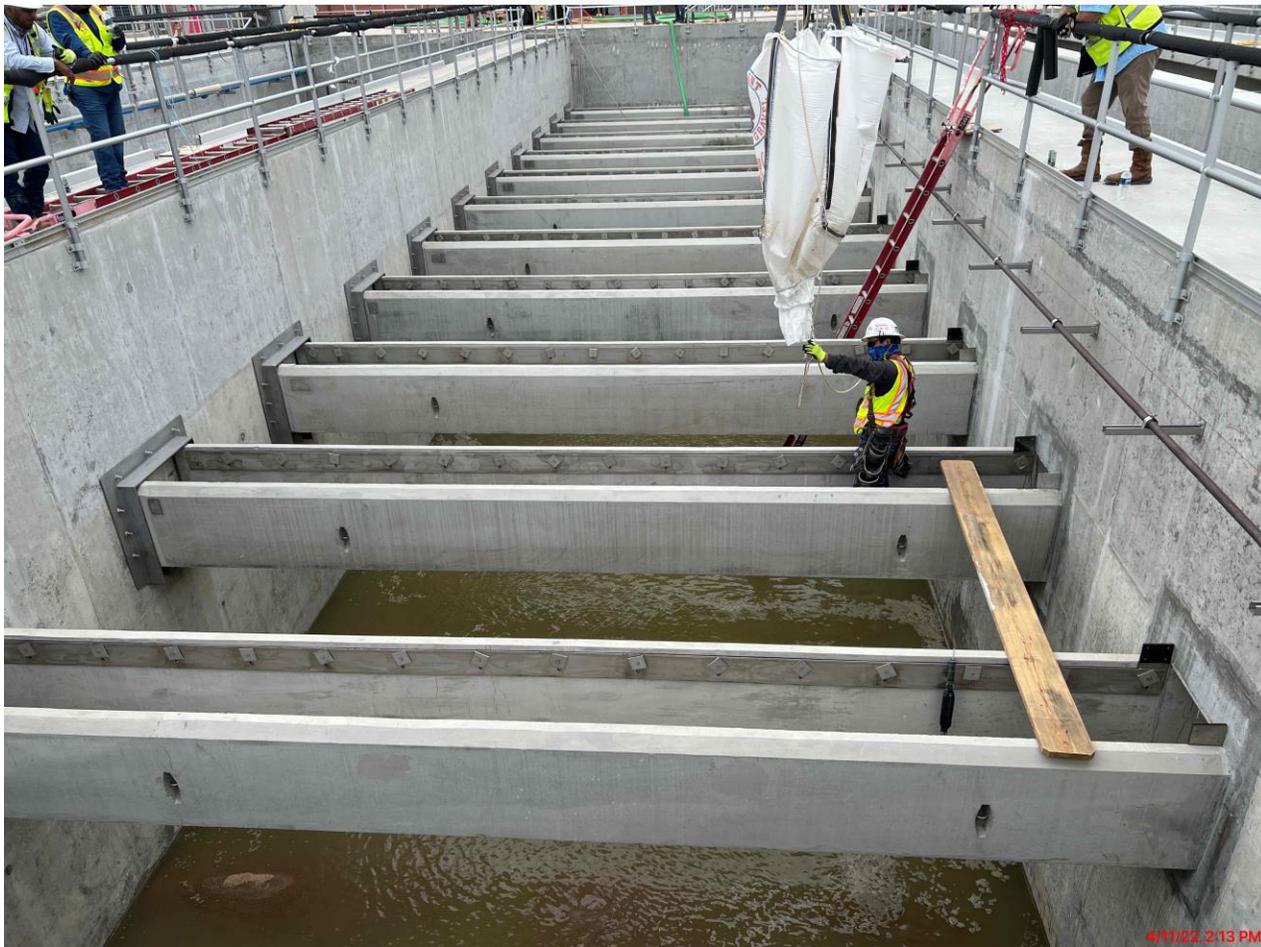
# CENTRAL PLANT- PHASE 1 OVERALL



# 281 FILTER MODULE- Chemical Piping Installation Testing



# 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 installation and Testing



Houston Waterworks Team



# 311 – Aerial view –02/09/2022



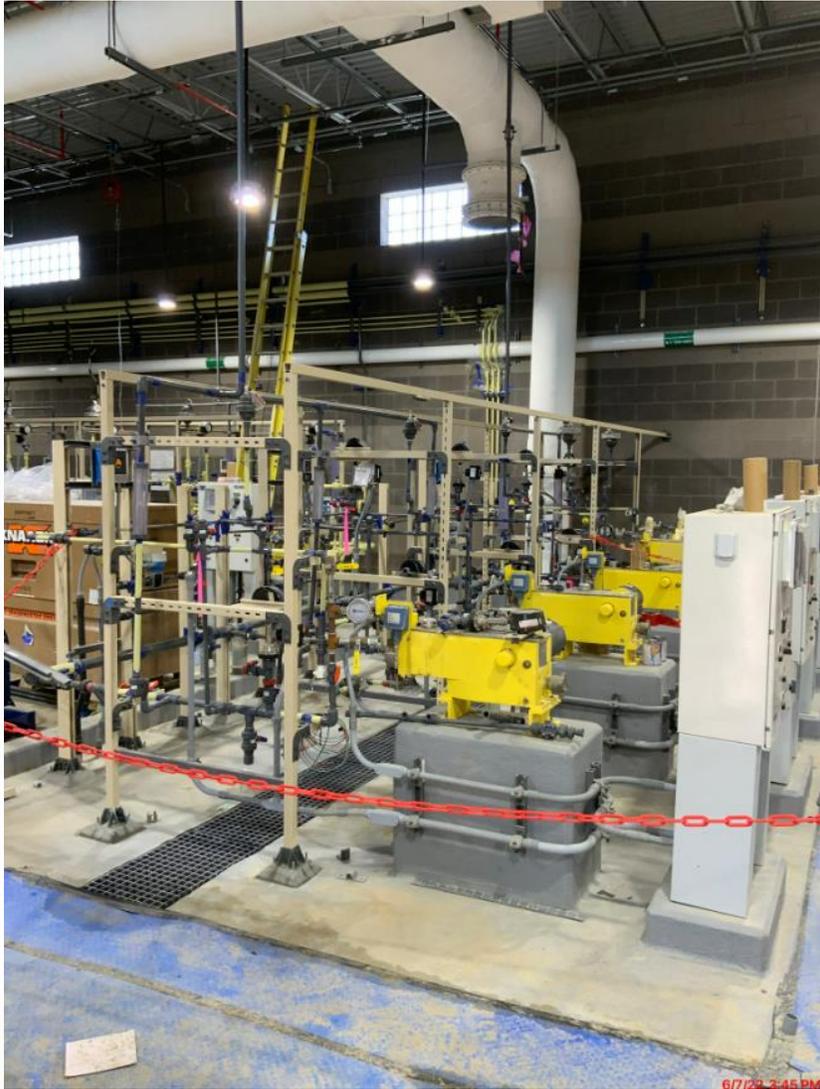
# 311 –Chemical Process Mechanical Pipe coating



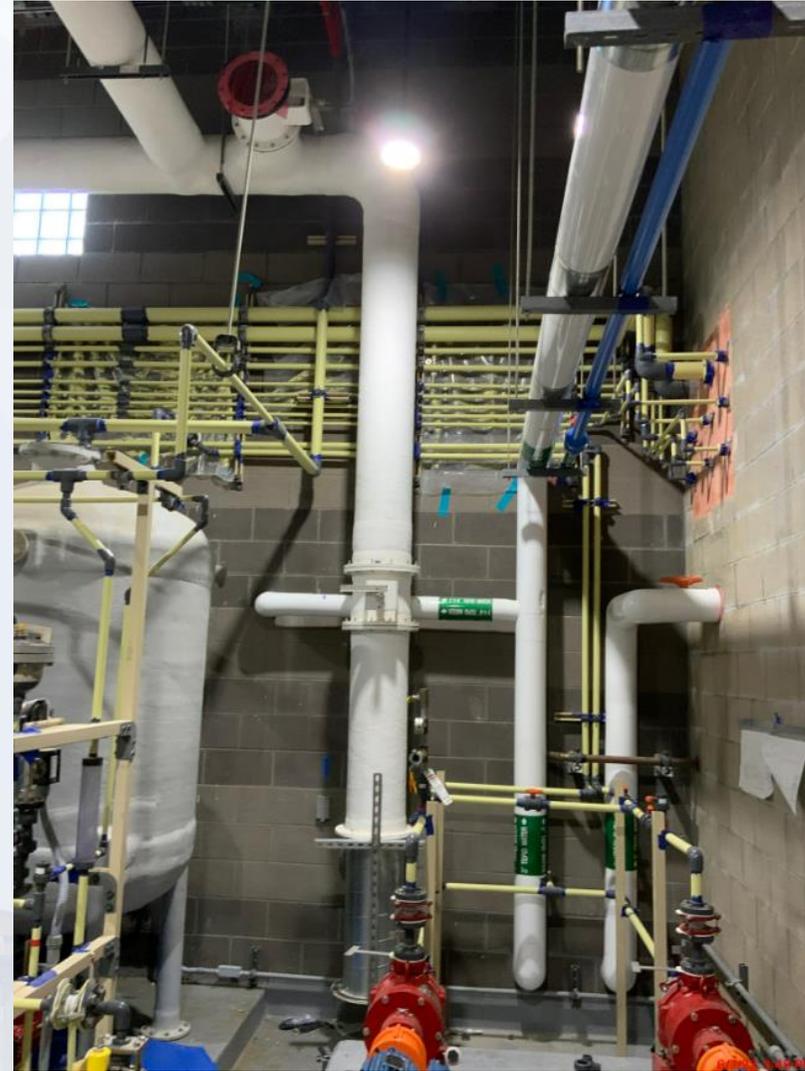
# 312 - Overall view 02/09/22



# 312 – Process Mechanical Chem Pipe Testing



# 312 –Process Mechanical Chem Pipe Coating





# 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

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

- CMU Block installation.
- Structural steel installation.
- F/R/P Equipment Pads

## ● 314 – POST CHEMICAL FACILITY 4 SH/CS :

- Above ground Plumbing installation
- F/R/P Sidewalks.
- CRC Coating Application



# CENTRAL PLANT- Phase 2



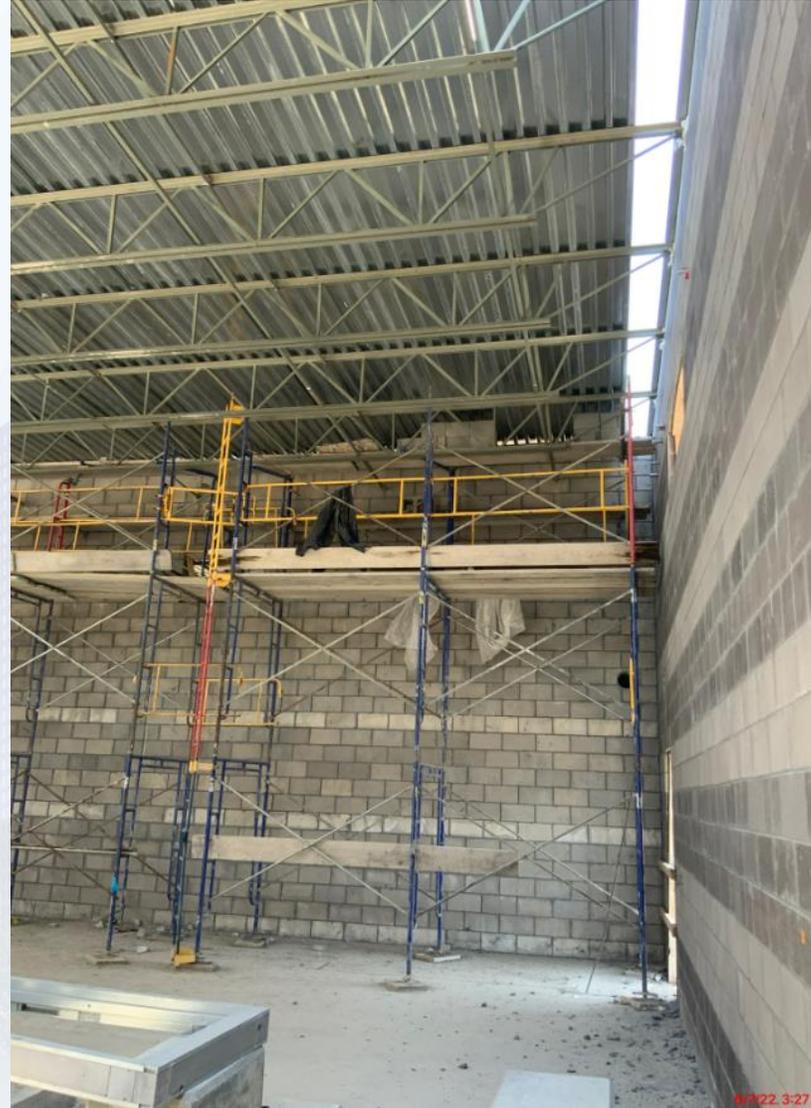
# 313 - Overall view 02/09/22



# 313 – CMU block installation continues



# 313 – Structural Steel Installation.



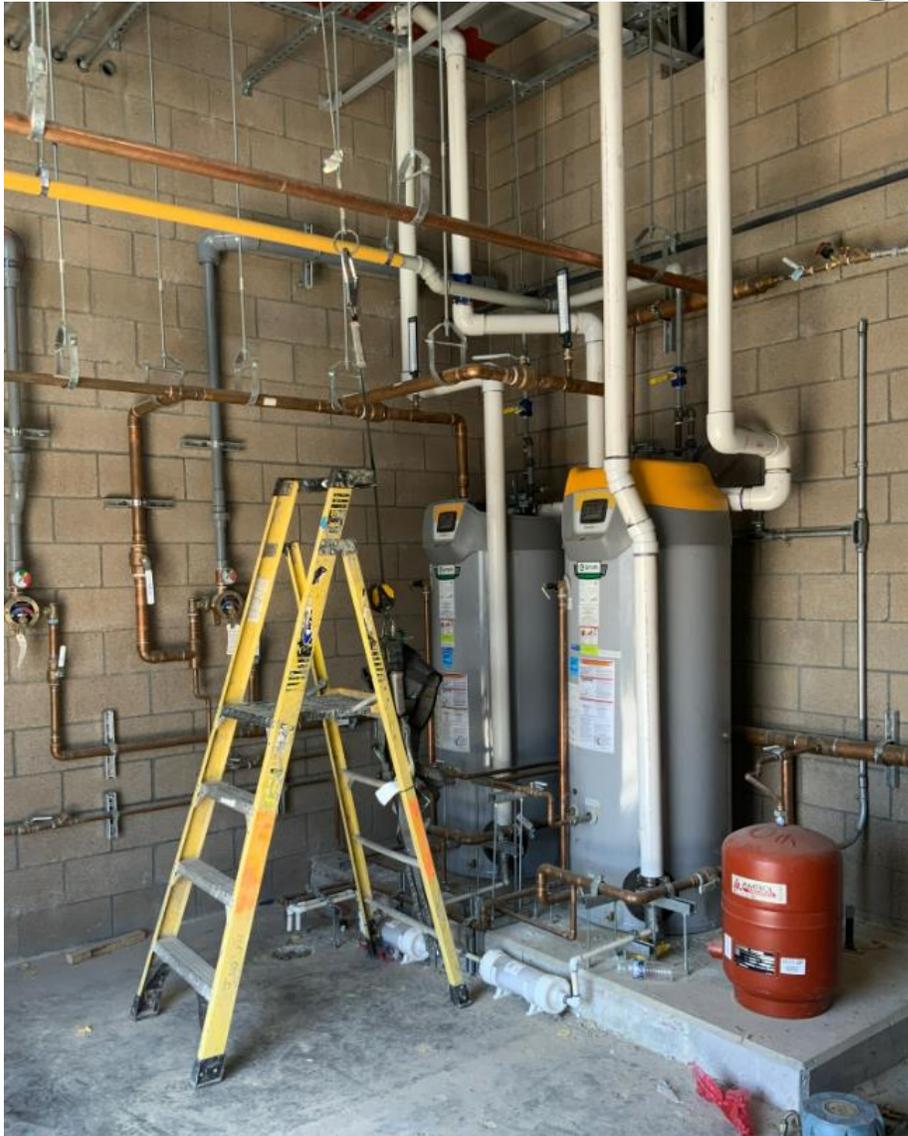
# 313 – Concrete equipment pads installation.



# 314 - Aerial view 02/09/22



# 314 – Above ground plumbing lines installation.



# 314 – F/R/P Sidewalks



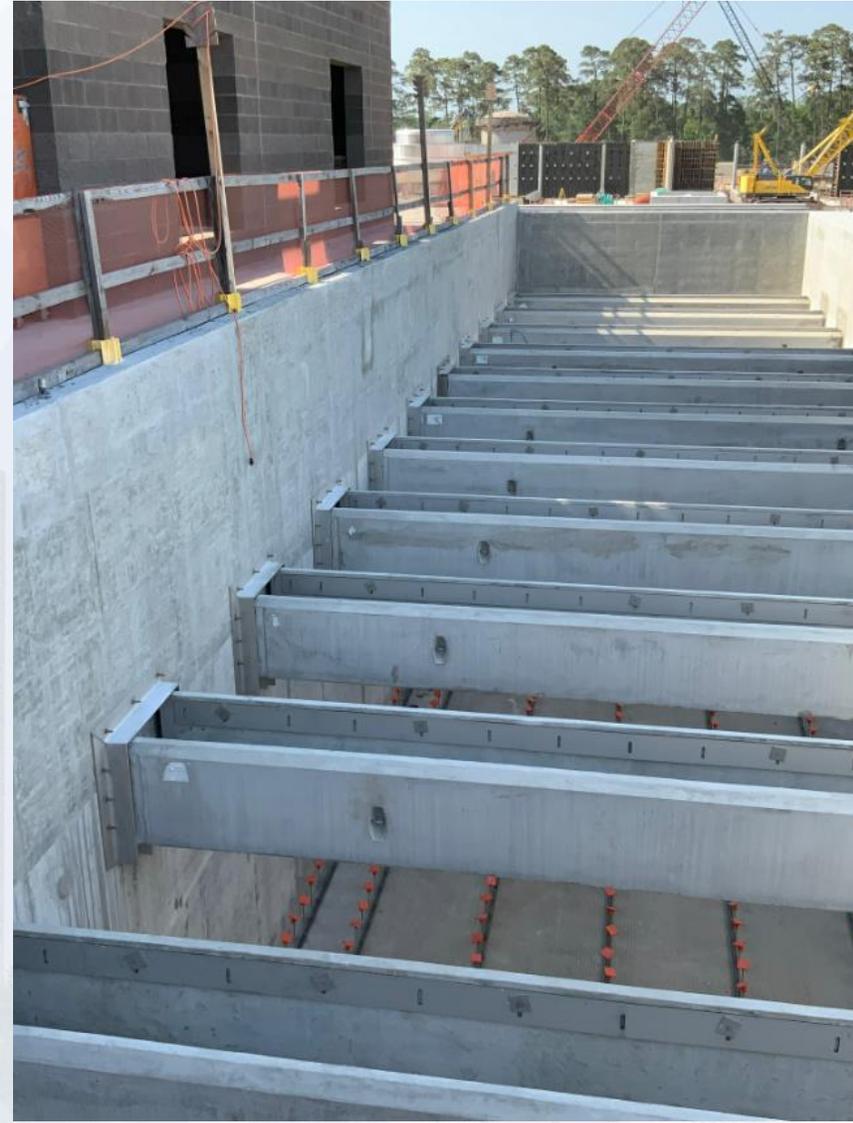
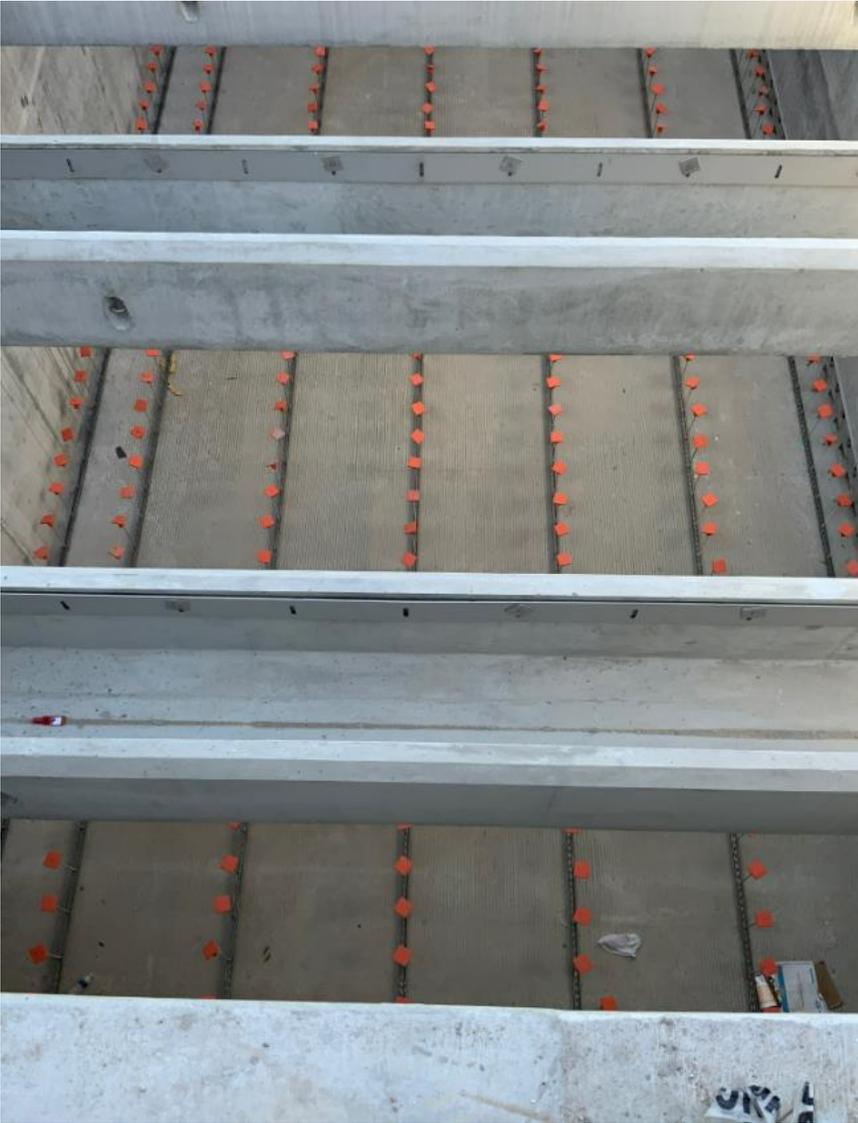
# 314 – CRC Application at Containment



# 282-FILTER MODULE 2 - Pipe installation



## 282-Underdrain anchors installation



# 282- Leak Test installation



## 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**
- **601 – Process Mechanical Pipe Installation and Supports**
- **602 – Handrail and weir plates installation**
- **602 – Process Mechanical Gates installation**



# 601 – SECO conduit Installation



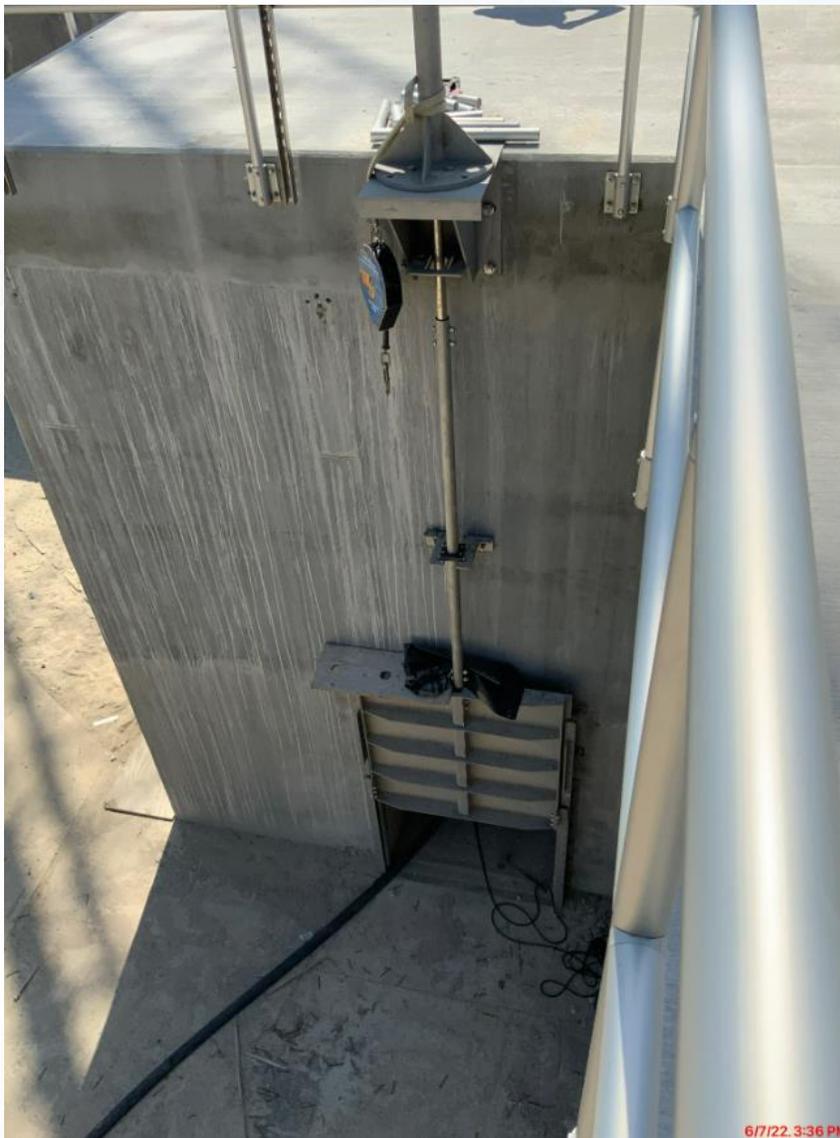
# 601 – Process Mechanical Pipe Installation and supports



## 602 – Handrail and weir plates installation



## 602 – Process Mechanical Gate Installation





# Construction Progress – North Plant

- **201-Chlorine Dioxide Facility 1:**
- **Continued Mechanical Work/ Duct work install**
- **211-Pretreatment Chemical Facility 1:**
- **CRC Coating placement in the Chemical Room**
- **212-Pretreatment Chemical Facility 2:**
- **Continued Decking and Joist install**
- **213-Pretreatment Chemical Facility 3:**
- **Continued Mechanical Work / Containment Area**
- **214-Pretreatment Chemical Facility 4:**
- **Continued Mechanical Work in Pump Room/ Truck Fill Station ongoing**
- **222-Rapid Mix Train 2**
- **Ongoing Pipe Coating**
- **241-Flocculation & Sedimentation Train 1: Continued Baffle Walls/ Leak Test ongoing**
- **242-Flocculation & Sedimentation Train 2:**
- **Trough Opening Grout ongoing / FBDC Conduit installation**
- **252-Ozone Contactor 2:**
- **Bubble Testing of Diffusers / Continued pipe installation**
- **261-Ozone Generation Facility 1:**
- **Ongoing Mechanical install / Electrical Cable Pulling**
- **218-Pretreatment Chemical Facility 8:**
- **Backfill East of Containment Area/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**
- **501-Gravity Sludge Thickener Complex 1:**
- **Concrete placement for Slabs/Walls**



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



# 211-Pretreatment Chemical Facility 1: CRC Coating placement in the Chemical Room



## 212-Pretreatment Chemical Facility 2: Continued Decking and Joist install



# 213-Pretreatment Chemical Facility 3: Continued Mechanical Work / Containment Area



# 214-Pretreatment Chemical Facility 4: Continued Mechanical Work in Pump Room/ Truck Fill Station ongoing



## 222-Rapid Mix Train 2: Ongoing Pipe Coating



# 241-Flocculation & Sedimentation Train 1: Continued Baffle Walls/ Leak Test ongoing



# 242-Flocculation & Sedimentation Train 2: Trough Opening Grout ongoing / FBDC Conduit installation



# 252-Ozone Contactor 2: Bubble Testing of Diffusers / Continued pipe installation



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



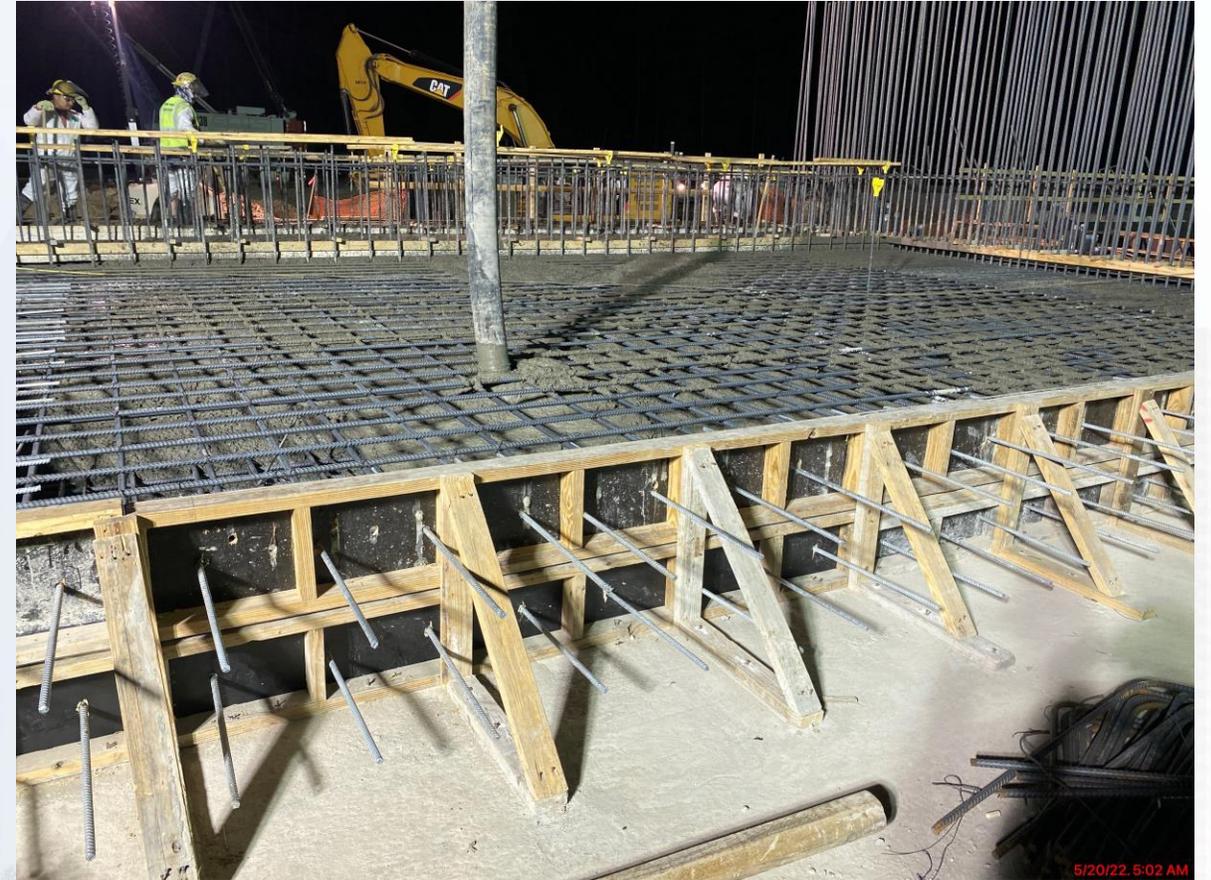
# 215 Pretreatment Chemical Facility 5: Continued Tank Welds and install



# 218 Pretreatment Chemical Facility 8: Backfill East of Containment Area/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



# 501-Gravity Sludge Thickener Complex 1: GT2 – Concrete placement for Slabs/Walls





# 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.
- Installing U.S bellows at 401 at FAC 401
- Installing HVAC drip pan & overflow pipe at FAC 401
- 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.
- Began Pouring concrete for 520 driveway



# 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 401



Installation of Translucent Panels



Continued installation of aboveground piping at Fac 401.

# HIGH SERVICE PUMP STATION 402



Continued rebar and form work Fac 402

# 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 pipe installation at Fac 510.



# Construction Progress – Administration & Maintenance Building

- Excavation of Plaza Footings
- Regrading of Pond 4

# Excavation of Plaza Footings



# Regrading of Pond 4





# Construction Progress – Site Civil

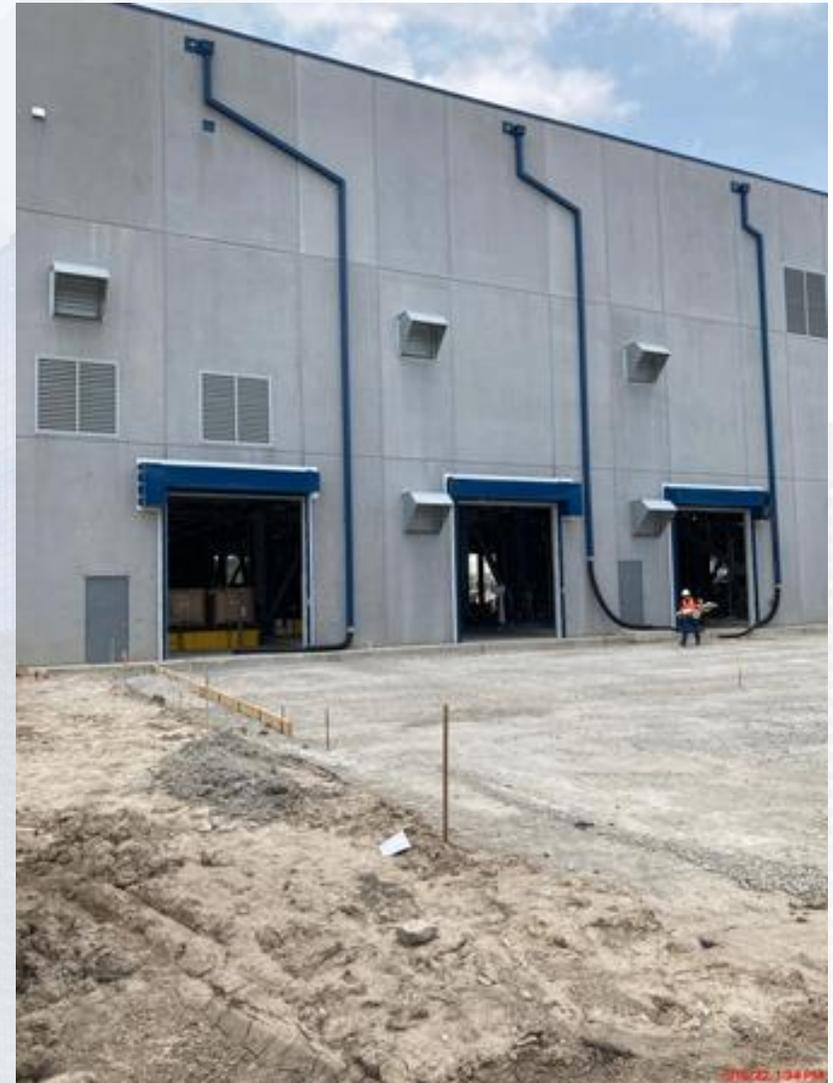
- **Continue bottom slab up to STA 11+50**
- **Installing Reinforcing Steel at South Driveway of the Dewatering Building**
- **Fusing 8" Sanitary Sewer Force Main HDPE Pipe**
- **Continuous Excavation of Overflow Channel**
- **Rebar Installation for Driveway of Dewatering Building**
- **Concrete Finishing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



# 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







