



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

April 6, 2022



**Site Drone Map
March 24, 2022**





Construction Progress – Site Electrical

- **Facility 401 Busduct being installed**
- **Pulling Wire to 242LCP31003**
- **BLTI Terminating 213 ASD's**
- **801 Duct bank**

Facility 401 Busducts being installed



Pulling Wire to 242LCP31003



BLTI Terminating 213 ASD's



Facility 801 Duct bank

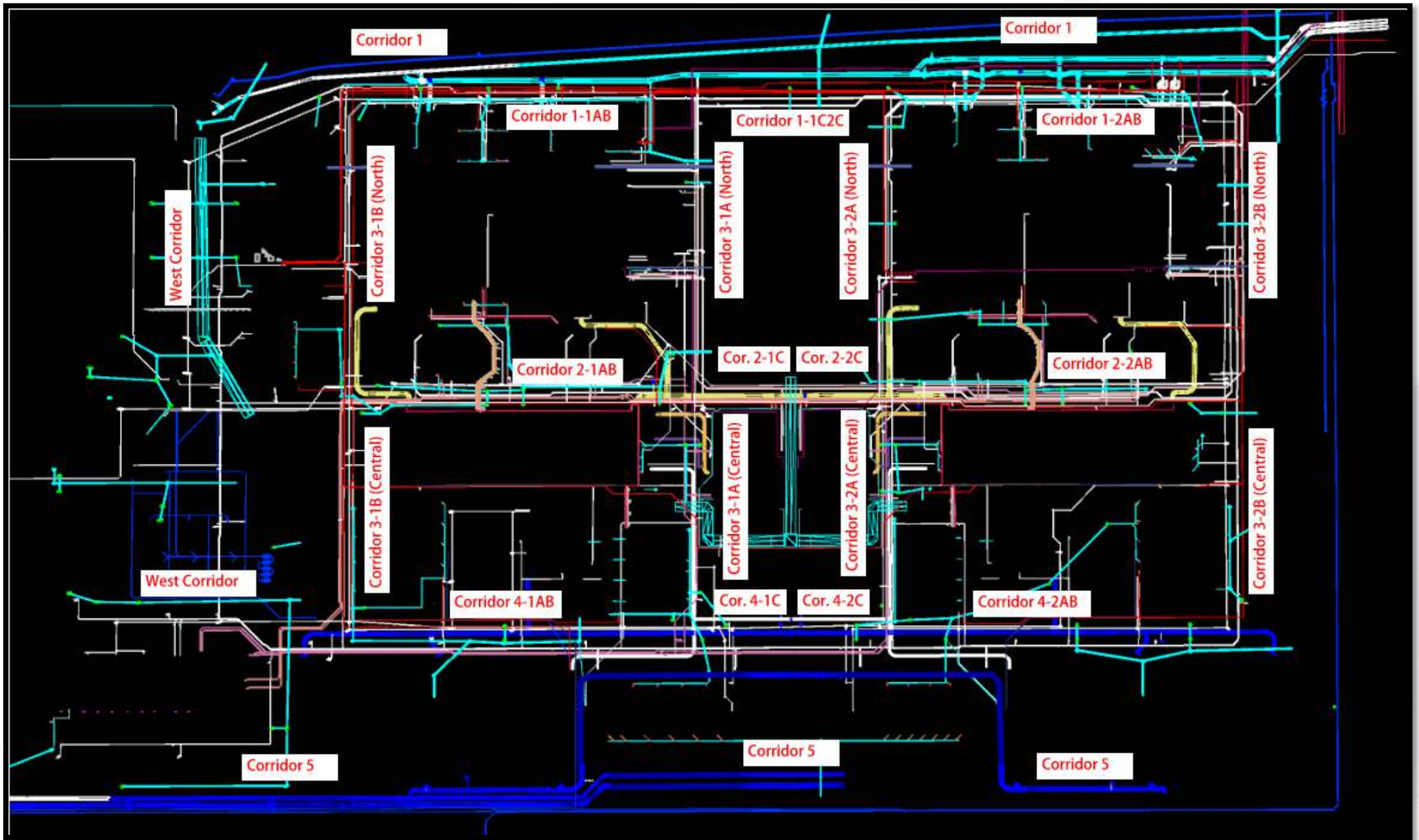




Construction Progress – Yard Piping

- **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



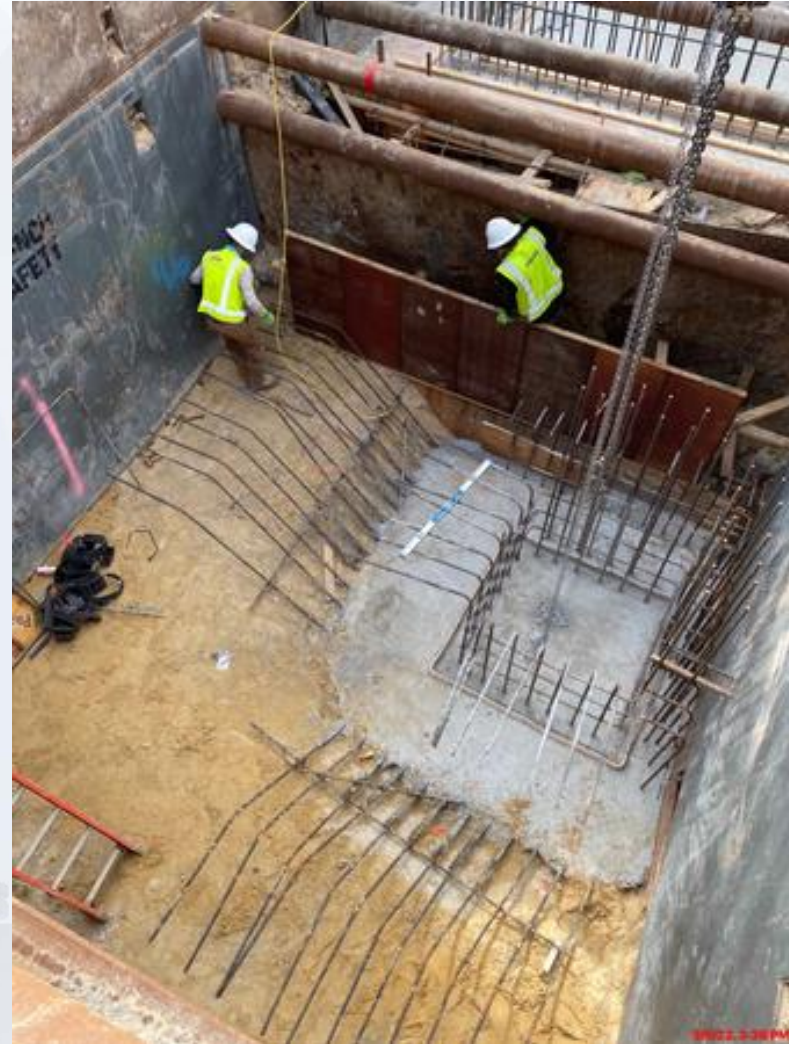
West tie in location pipe plug and bypass piping



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

291-TRANSFER PUMP STATION 1:

- Install Corrugated Pipe.
- Install $\frac{3}{4}$ " SA Line
- Install HVAC System in Mechanical Building

311 – POST CHEMICAL FACILITY SH/CS :

- Continue Installation of Process Mechanical piping

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

- Continue Installation of Process Mechanical Piping system.



CENTRAL PLANT- PHASE 1 OVERALL



281-FILTER MODULE- Access Ramp and Walls Construction



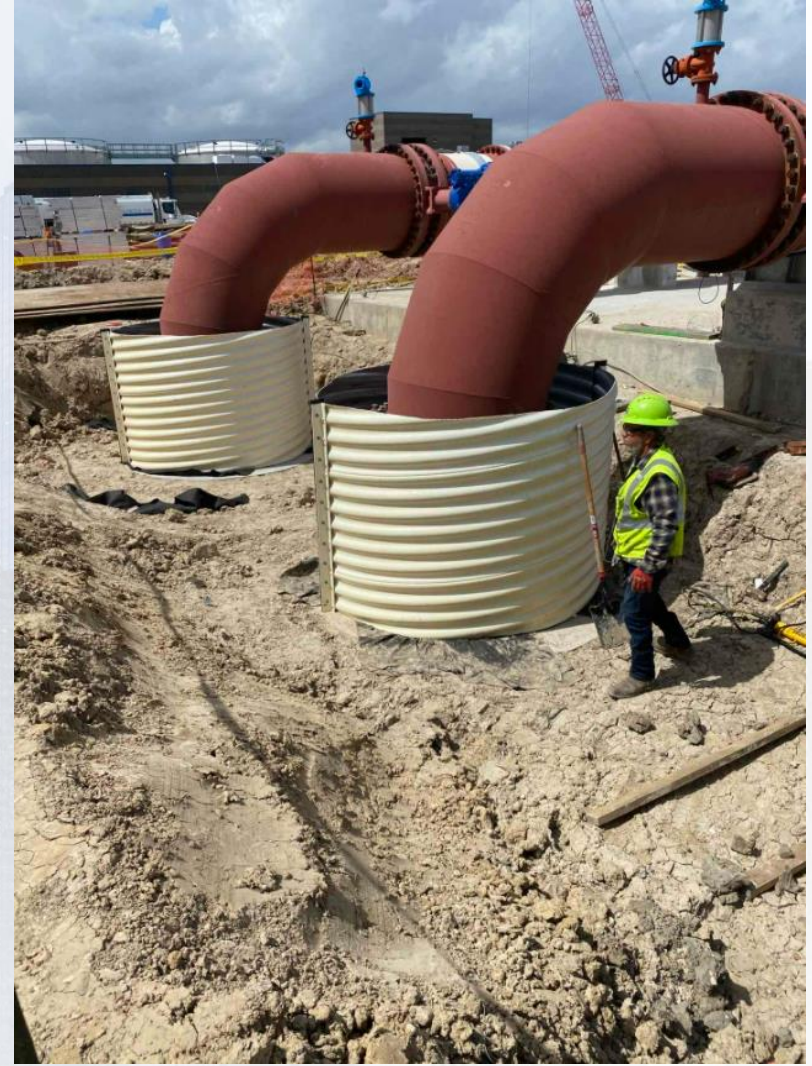
281-FILTER MODULE- Final Coating of Pipes



291-TPS – Aerial View (02/09/2022)



291-TPS – Install ¾" SA Lines



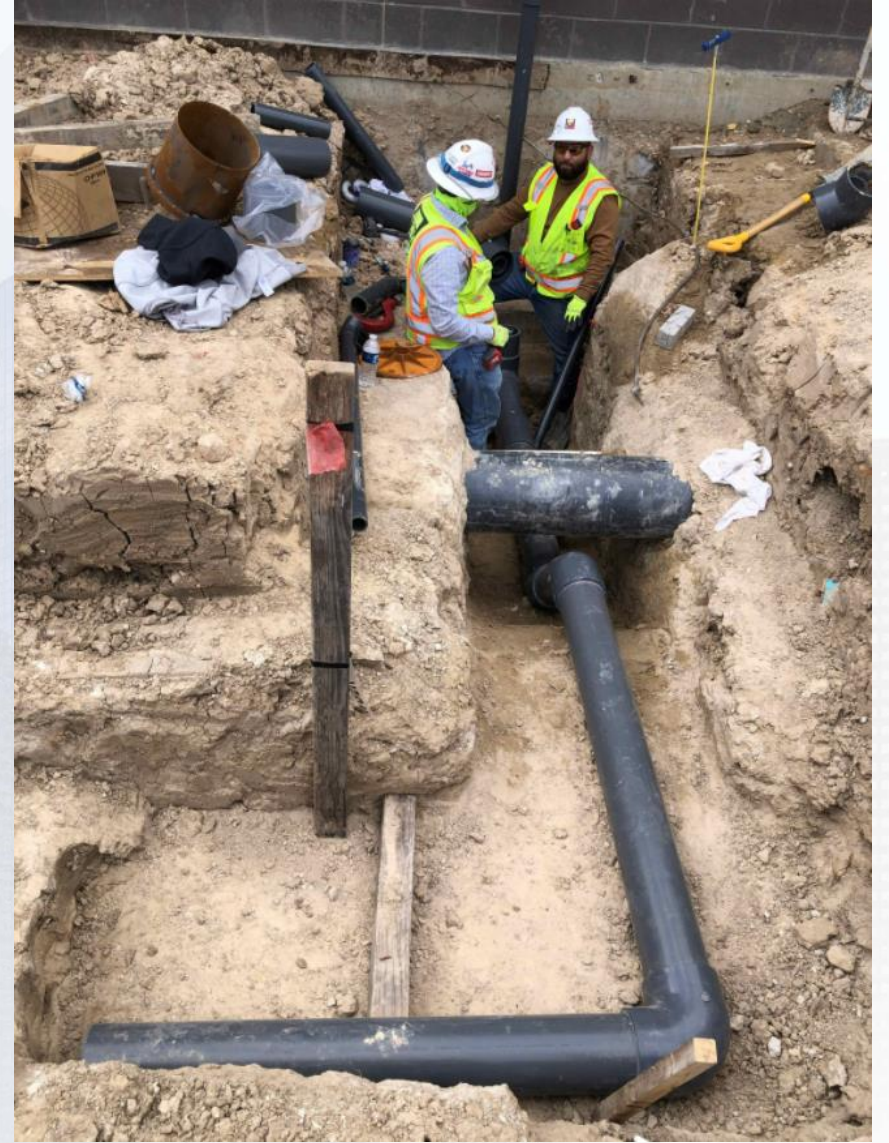
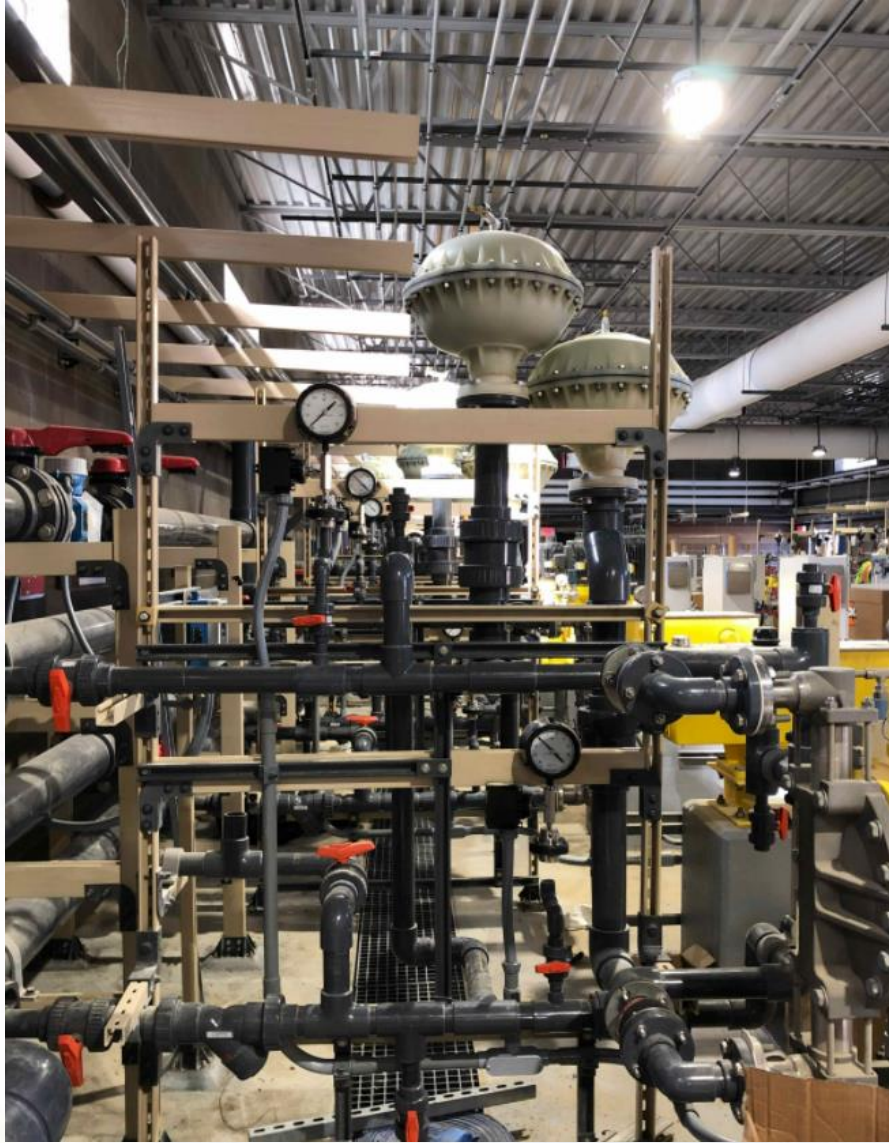
291-TPS – Continue installation of Chem Lines



311 – Aerial view –02/09/2022



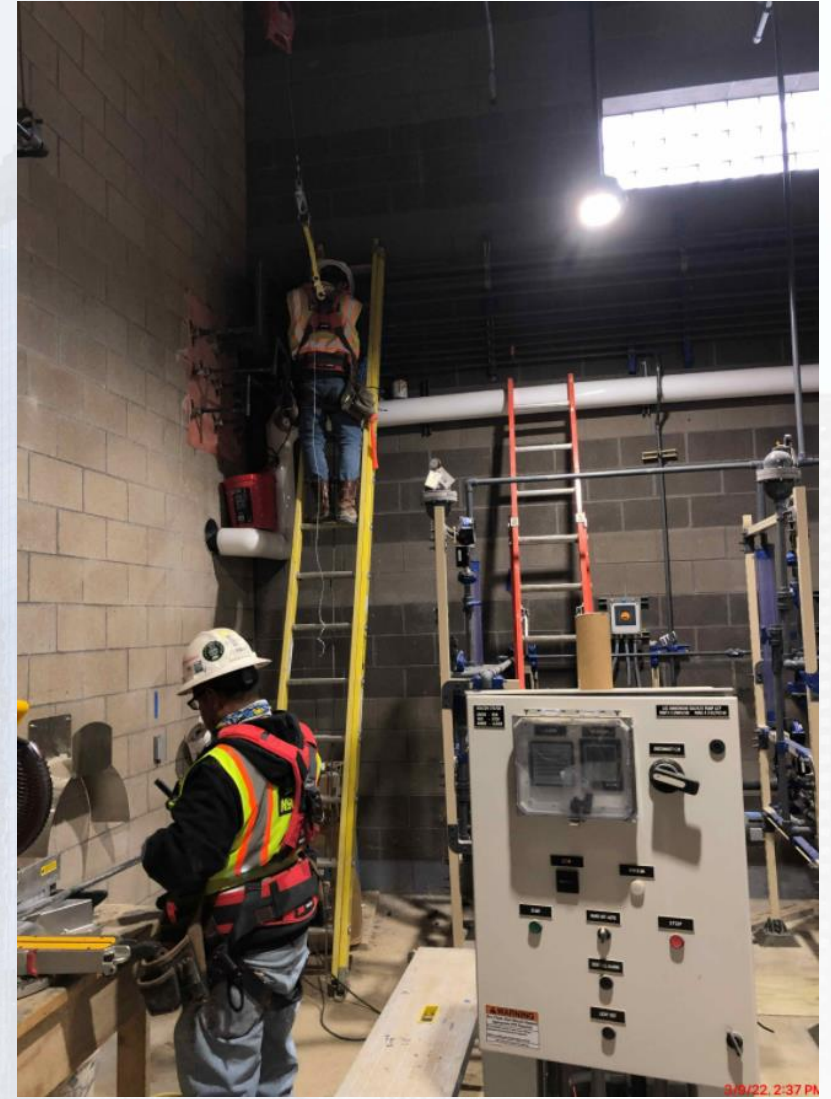
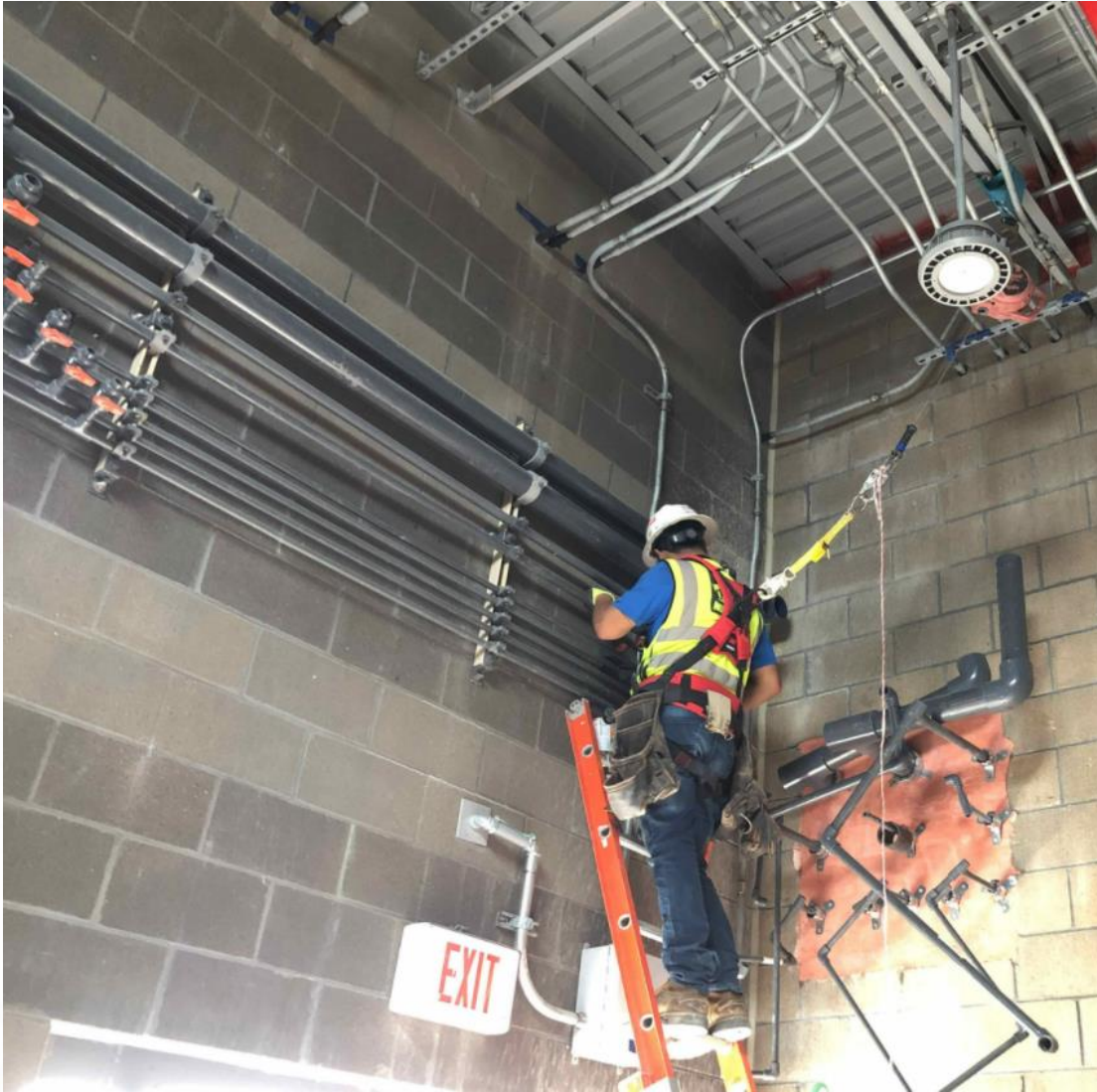
311 –Chemical Process Mechanical installation



312 - Overall view 02/09/22



312 – Chem pipe system Installation



312 – Chem pipe system Installation



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Houston Waterworks Team





Construction Progress – Central Plant 2

● 282 -FILTER MODULE 2:

- Continuing Masonry & Steel Deck Install.
- Pipe installation

● 292-TRANSFER PUMP STATION 2:

- F/R/P Top decks, C6, B3 and B6
- F/R/P Top deck curbs

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

- F/R/P Slab on grade containment and bldg.
- CMU Block installation.

● 314 – POST CHEMICAL FACILITY 4 SH/CS :

- Metal deck coating application
- Field installation of SH and CS Metal Tank.
- SH tank coating application



CENTRAL PLANT- Phase 2



313- Overall view 02/09/22



313 –F/R/P SOG Chem containment area.



313 –CMU block installation



314- Aerial view 02/09/22



314 –Metal Coating application



314 –SH and CS Steel tank fabrication



314 –SH Tank coating



282-FILTER MODULE 2- Pipe installation



282-FILTER MODULE 2- Masonry Structures



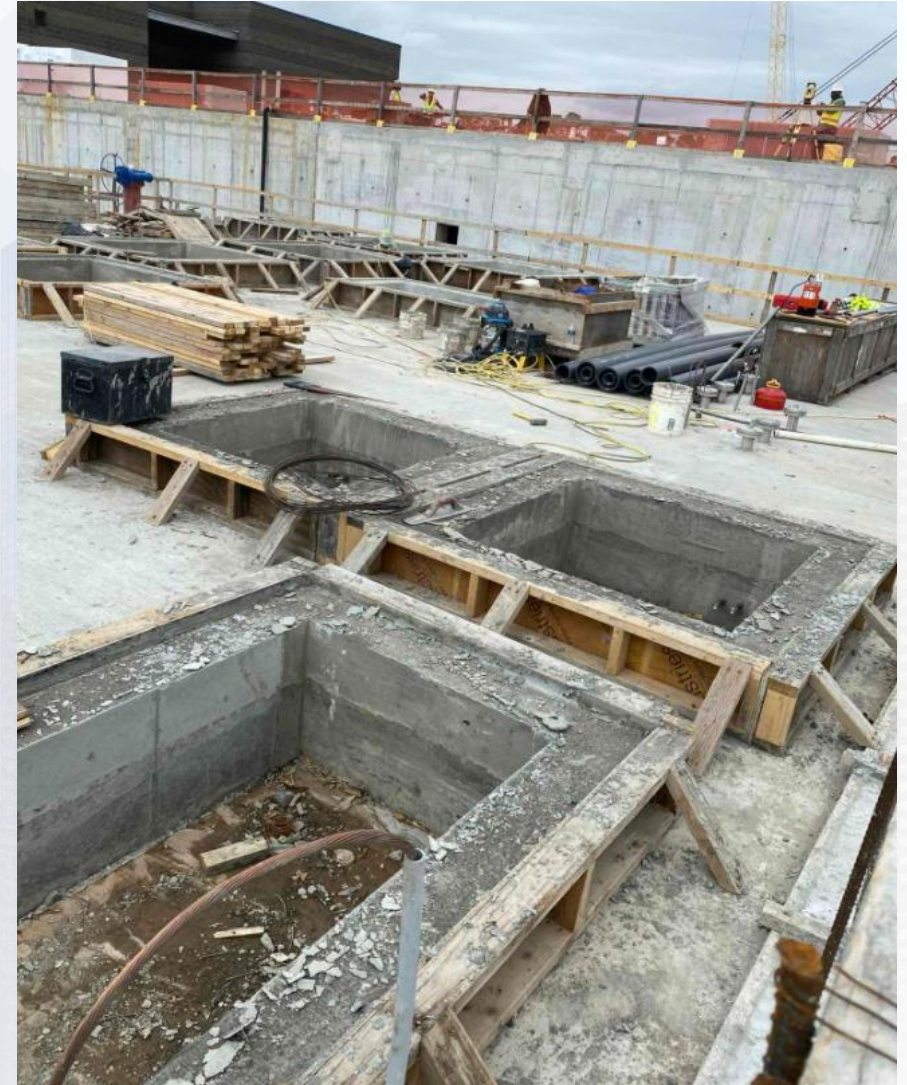
292-TPS – Aerial View (02-09-2022)



292-TPS – F/R/P Top Deck Sections C6, B3 and B6



292-TPS – F/R/P Concrete curbs





Construction Progress – LREQ Basins Facilities 601/602

- **601 – SECO Install Duct Bank – Ongoing**
- **601/602 – Install Storm Culvert**
- **602 – Interior Wall Finish - Ongoing**



601 – SECO Duct Bank Installation



601/602 – Install Storm Culvert



602 – Interior Wall Finish - Ongoing





Construction Progress – North Plant

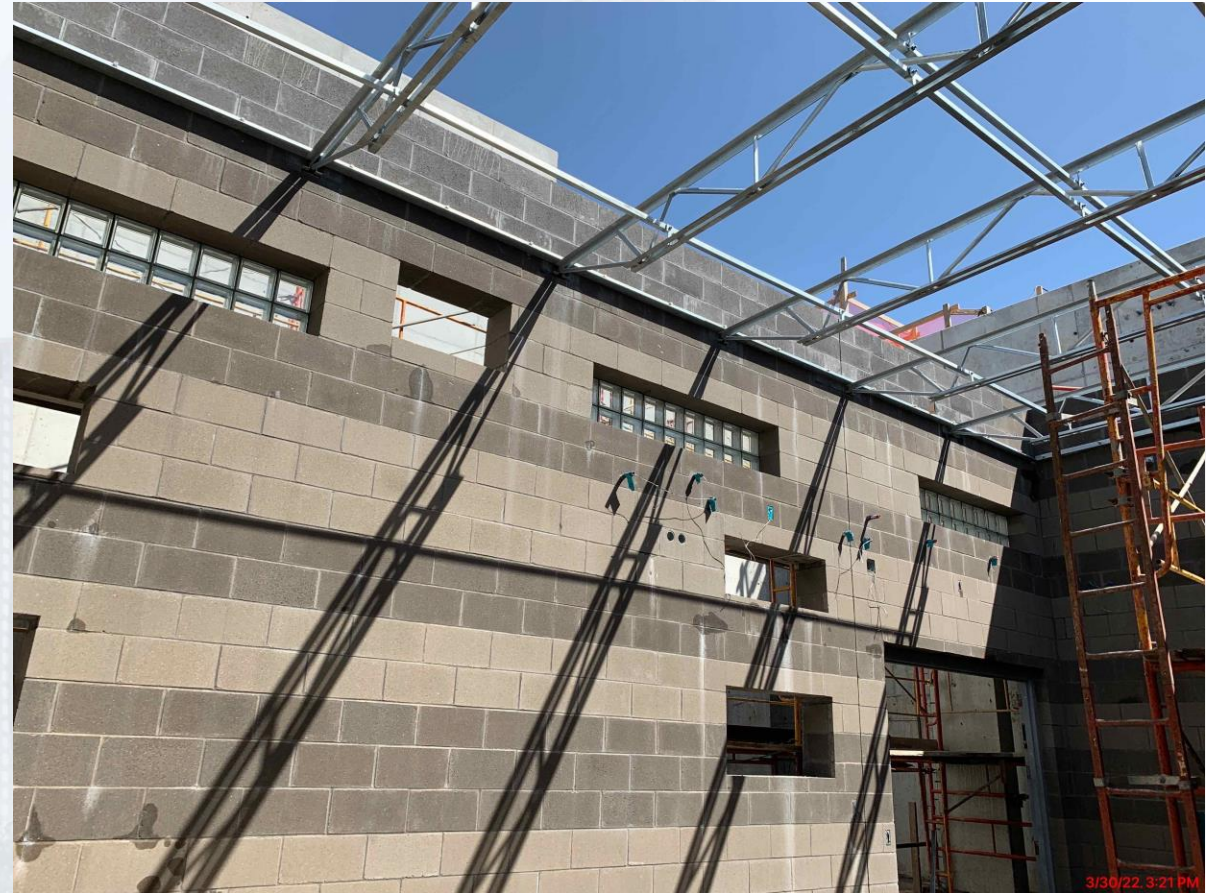
- **201-Chlorine Dioxide Facility 1:**
- **Permanent Lighting/Overhead door installation**
- **211-Pretreatment Chemical Facility 1:**
- **Joist and Decking installation**
- **213-Pretreatment Chemical Facility 3:**
- **Continued electrical work / Doors installation**
- **214-Pretreatment Chemical Facility 4:**
- **Mechanical installation / Misc. Metals**
- **222-Rapid Mix Train 2**
- **6"x10" CS and 2"x4" PEC Pipe Installation**
- **242-Flocculation & Sedimentation Train 2:**
- **Pulling cable to North Wall Pull Boxes**
- **PVC Pipe Coating Basin 3**
- **252-Ozone Contactor 2:**
- **Installation of West stairs and walkway**
- **261-Ozone Generation Facility 1:**
- **Ongoing Pipe and electrical install**
- **218-Pretreatment Chemical Facility 8:**
- **Continued rebar/concrete placement for slab**
- **243-Flocculation & Sedimentation Train 3:**
- **Sed Basin 5 Walls F/R/P**
- **244-Flocculation & Sedimentation Train 4:**
- **Slab(s) on Grade F/R/P**
- **501-Gravity Sludge Thickener Complex 1:**
- **GT1 Weir Anchors**



201-Chlorine Dioxide Facility 1: Permanent Lighting/Overhead door installation



211-Pretreatment Chemical Facility 1: Joist and Decking installation



213-Pretreatment Chemical Facility 3: Continued electrical work / Doors installation



214-Pretreatment Chemical Facility 4: Continued Mechanical installation / Placement of stairs and handrails



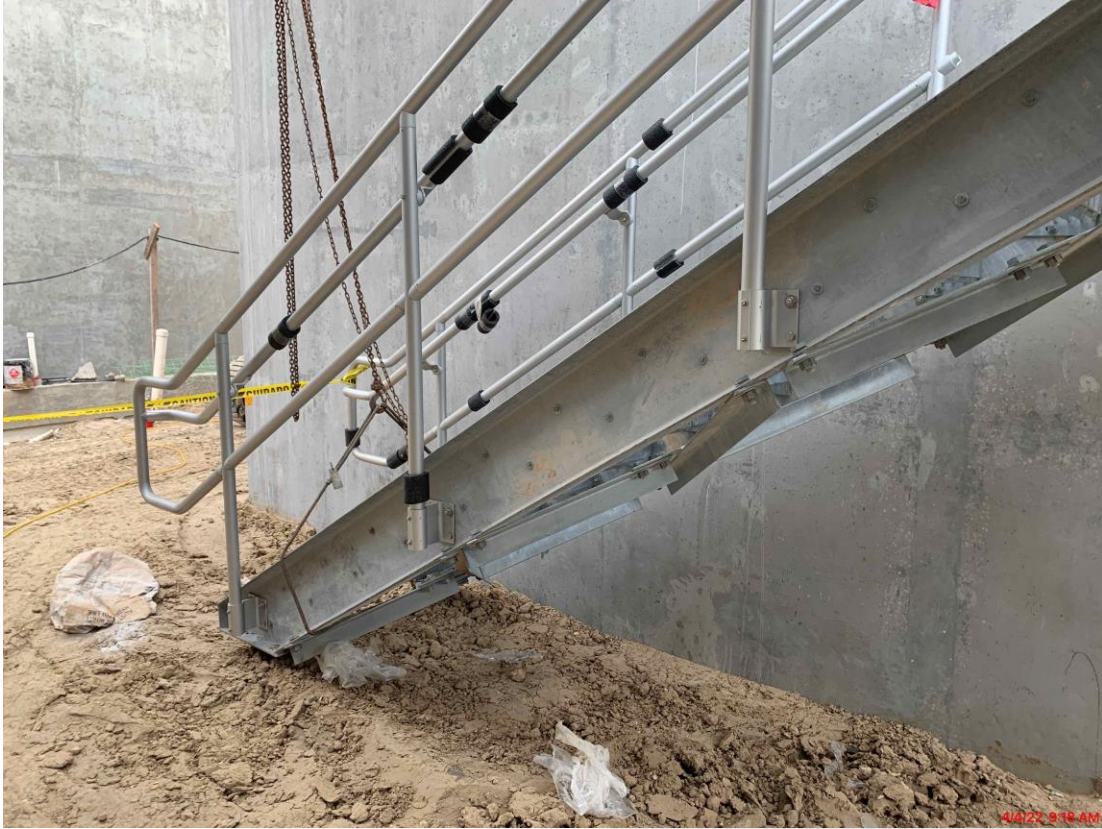
222-Rapid Mix Train 2: 6" X 10" CS and 2" X 4" PEC Pipe Installation



242-Flocculation & Sedimentation Train 2: Cable Pulling at North Wall Basin 4 & Continued Coating PVC Basin 3



252-Ozone Contactor 2: Installation of West stairs and walkway



261-Ozone Generation Facility 1: Ongoing Pipe and electrical install



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



243-Flocculation & Sedimentation Train 3: Sed Basin 5 Walls F/R/P



244-Flocculation & Sedimentation Train 4: Sed Basin 7 &8 Slab on Grade F/R/P



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501-Gravity Sludge Thickener Complex 1: GT1 Setting Anchors for Decant Channel Weir





Construction Progress – South Plant

361 & 362:

- Watertightness testing at GST 361.

111, 401, & 402:

- Continued installation of cold form metal framing at Fac401.
- Continued installation of low roof coping / trim at Fac401.
- Continued installation of insulated metal wall panels at Fac401.
- Continued installation of louvers and exhaust fans at Fac401.
- Continued installation of instrument conduit at pumps at Fac401.
- Continued pulling feeder and control cables to pumps at Fac401.
- Continued installation of discharge piping #6 & #7 at Fac 401.
- Continued installation of FRP pipe support pedestals at Fac401.
- Continued installation of buss duct in the Electrical Room at Fac401.
- Continued installation of conduits in the Analyzer Room at Fac401.
- Continued backfilling 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 door and window frames installation at Fac 520.
- Continued bus duct installation 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.
- Commenced terminating power to wiring sludge mixers, LCP's, and MCS's at Fac 510.
- Continued process pipe installation at Fac 510.



GST 361 & 362 AERIAL VIEW



GST 361

GST 362



GROUND STORAGE TANK 361



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Watertightness testing at GST 361

HSPS 401, MSB 111, HSPS 402 AERIAL VIEW



HSPS 401

MSB 111

HSPS 402

HIGH SERVICE PUMP STATION 401



Continued installing electrical rough-in/conduits at Fac 401 pump room

HIGH SERVICE PUMP STATION 401



Continued installation of aboveground piping at Fac 401.

HIGH SERVICE PUMP STATION 402



Continued backfilling and continued top of pump can encasement correction 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 Countertops
- Installation of Interior Storefront Doors
- Placement of Sidewalks
- Regrading of Pond 4

Installation of Countertops



Installation of Storefront Doors



Placement of Sidewalks



Regrading of Pond 4





Construction Progress – Site Civil

- **Continue pouring concrete for the side slope and mud slab up to STA 14+00 and 12+50**



Continue pouring concrete for the side slope and mud slab up to STA 14+00 and 12+50

