



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

Mar 25, 2020



Drone Site Map: Mar 19, 2020





Construction Progress – EWP 1/3 & 6 Site Development

DCN-04/Pond 1 Expansion - J. Simmons Group:

- **Installed rock filter dam**
- **Modified existing restrictor**
- **Installed silt fence**

DCN-04/Pond 1 – Installed rock filter dam in existing pond



DCN-04/Pond 1 – Modified existing restrictor, and installed silt fence around drainage swale





Construction Progress – Site Electrical

- 111 Duct Bank Excavation
- Hydro Excavation in Existing Plant Near Substation
- Duct Bank Installation at 080 - Admin Building
- Fiber Duct Bank Installation at 311

111 Duct Bank Excavation



Hydro Excavation in Existing Plant Near Substation



Found the depth and mocked up the run into the 102

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Duct Bank Installation at 080 – Admin Building



Fiber Duct Bank Installation at 311





Construction Progress – EWP 4 Raw Water Corridor

- **Preparing to Work On Drainage at STA 142+50**
- **Setting ARV's near STA 134**
- **Preparing to Fill South 108" RW Pipe**



Preparing to Work On Drainage at STA 142+50



Setting ARV's Near Sta 134



Preparing to Fill South 108" RW Pipe





Construction Progress – Central Plant

281-FILTER MODULE 1 :

- Stripping Gallery Deck, Area D.
- Forming/Reinforcing/Pouring Walls.
- Reinforcing/Pouring Filter 4/5 Slab(North Half).
- Backfilling outside Filter Building (North Side).

291-TRANSFER PUMP STATION 1:

- Forming and Reinforcing Overflow Channel Slab
- Continue Top Dack Shoring over Wet Well
- Hydrostatic Testing of Pump Cans & 60" Pipes

311-POST CHEMICAL FACILITY 1 SH/CS :

- Installation of Electrical Underslab Conduits.

312- POST CHEMICAL FACILITY 2 LAS

- Relocation of Temporary Power.

282 -FILTER MODULE 2:

- Pouring FD Pump Cans Encasement (Lift 1).
- Laying Under-Slab 36" FTW/ 84" CFE Pipeline.
- Deep area excavations – Bypass Vault & OZW Inlet Box (West)

292-TRANSFER PUMP STATION 2:

- Driving Sheet Piles



281-FILTER MODULE- Stripping Gallery Deck , Area C



281-FILTER MODULE-Reinforcing/Forming/Pouring Walls



281-FILTER MODULE- Reinforcing/Pouring Filter 4/5 Slab(North Half)



281-FILTER MODULE- Backfilling outside of Filter Building (North Side)



TPS – Form and Reinforce Overflow Channel Slab



TPS – Top Deck Shoring and Forming Over Wet Well - Continued



TPS – Hydrostatic Testing of Pump Cans and 60" Pipes



311-PostChemical: Installation of underslab Elect. Conduits



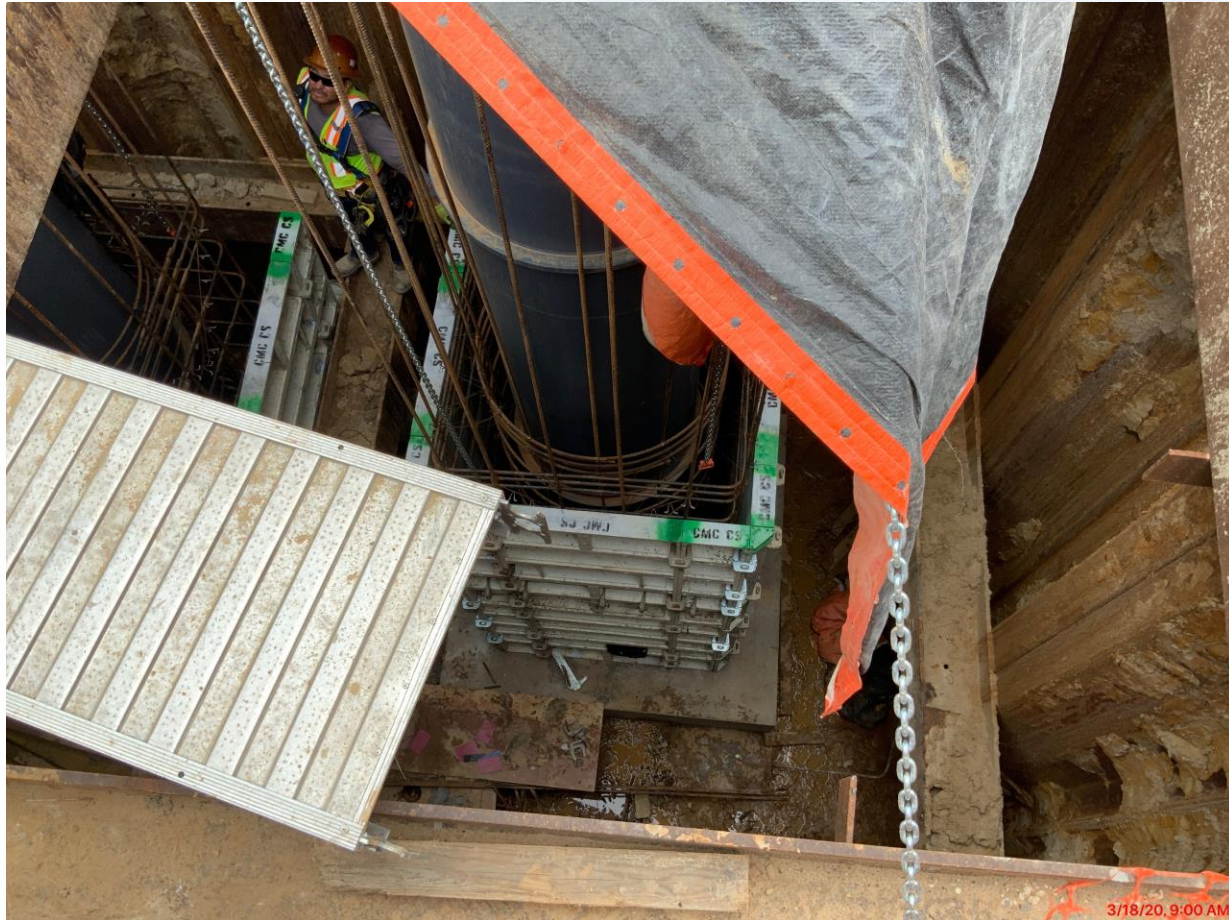
311-PostChemical: Installation of underslab Elect. Conduits



312-PostChemical: Relocation of Temporary Power



282-FILTER MODULE 2- Encasing FD Pump Cans (Lift 1)



282-FILTER MODULE 2- Laying Under-slab 36" FTW/ 84" CFE Pipeline



282-FILTER MODULE 2- Deep Area Excavations- Bypass Vault/ OZW Inlet Box(West)



292 – Driving Sheet Piles





Construction Progress – EWP 6 North Plant

- **Facility 221 Slab-on-Grade F/R/P**
- **Facility 222 PDR Piping installation**
- **Facility 241 PDR Piping Installation**
- **Facility 242 PDR Piping, Flocculation and Distribution Walls F/R/P, Setting 96 inch CW Pipe**
- **Facility 252 Inlet and Outlet Boxes F/R/P**
- **Facility 611 RCYS Valve Vault and Overflow Sump F/R/P**
- **Facility 502 Excavation and GT#3 and Service Bldg F/R/P**



Facility 221 Slab-on-Grade Mud Mat and Rebar Placement



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Facility 222 PDR Piping



Facility 242 96 inch CW Pipe



Facility 242 Flocculation and Distribution Walls F/R/P



Facility 252 Outlet Box Formwork



3/17/20, 2:31 PM

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Facility 502 GT#3 F/R/P



Facility 502 Service Bldg Slab-on-Grade F/R/P



3/18/20 10:01 AM

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Facility 611 Valve Vault of OF sump F/R/P



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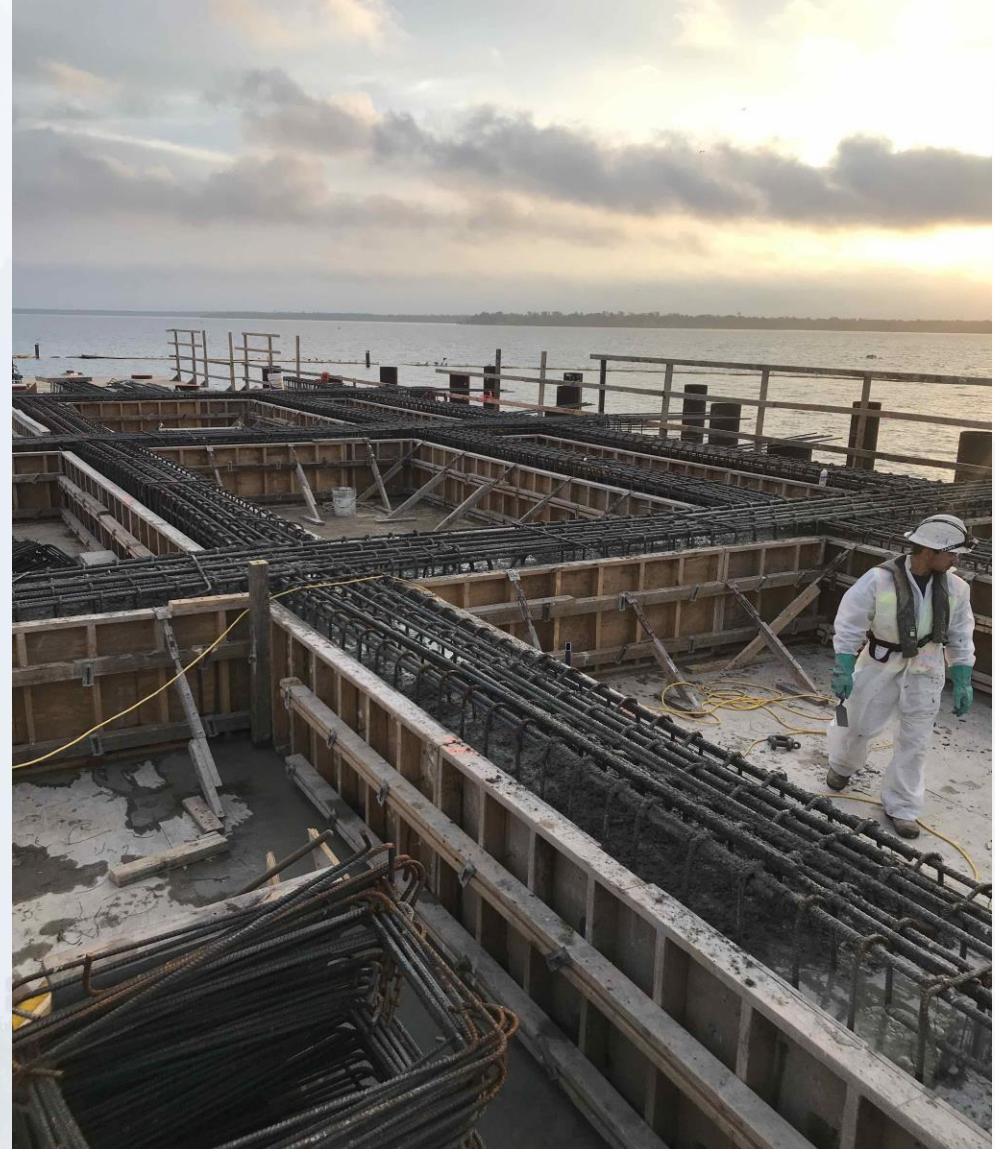
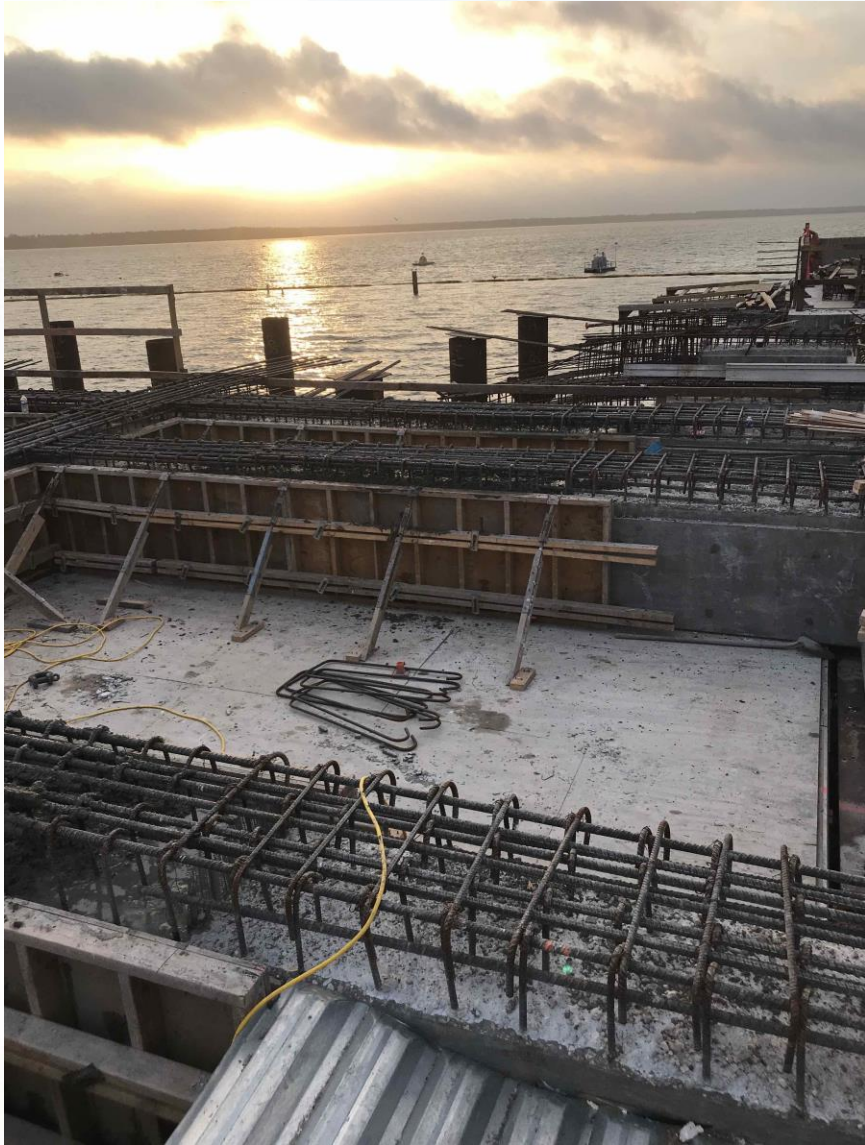
Construction Progress – EWP 6 IPS

- **Delivery of Precast Caps for Bridge**
- **Preparing Phase 3 for Beam Pours**
- **Removal of Templates for Bridge Pile Driving**

Precast Caps For IPS Bridge




Starting Phase 3 Beam Pours on Platform



Removing Template After Bridge Pile Completion





Construction Progress – BOP LREQ Basins Facilities 601/602

- **Base Slab Pour North Area of 601**
- **Formwork Installation North Area of 601**
- **Rebar Installation North Area of 601**
- **Installation of Limestone Rock South Area of 601**



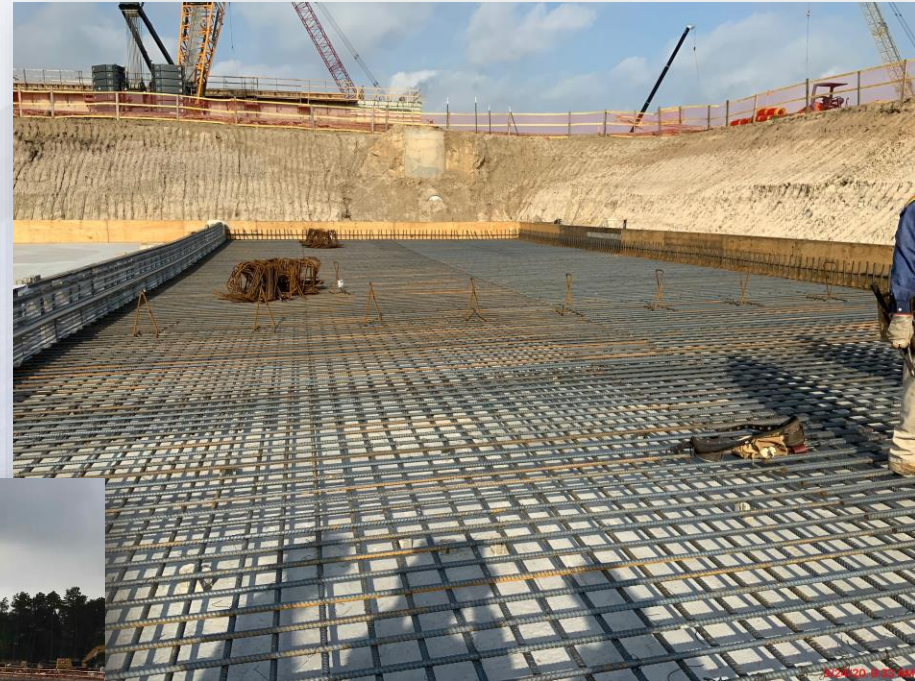
Base Slab Pour North Area of 601



Formwork Installation North Area of 601



Rebar Installation North Area of 601



Installation of Limestone Rock South Area of 601





Construction Progress – Yard Piping

- **Welding 66” RW steel pipe line in Corridor 1**
- **Installing and welding 108” RW steel pipe line in Corridor 1**
- **Installing and welding 84” & 96” FW steel pipe in Corridor 4**
- **Installing and welding 120” FW steel pipe in Corridor 5**
- **Installing and welding 60” BWS steel pipe in Corridor 4**
- **Installing Double 8’x4’ storm box culverts, manholes, and storm RCP Laterals in Admin area**
- **Installing 30” RCY ductile iron pipe line in Corridor 3**
- **Installing 12” PDR and manhole in Corridor 4**



Installing 108" RW steel pipe line in Corridor 1



Installing 96" FW steel pipe in Corridor 4



Installing 120" FW steel pipe in Corridor 5



Reinforcing pipe encasement for 120" FW steel pipe in Corridor 5



Pouring the 120" FW steel pipe encasement in Corridor 5



Installing 60" BWS steel pipe in Corridor 4



Installing manholes and storm RCP laterals from Double 8'x4' storm box culverts in Admin area



Installing 30" RCY pipe, valve, and tee in Corridor 3



Installing 12" PDR pipe and Manhole 512 in Corridor 4





Construction Progress – Administration Building

- **Achieved Backfill to EL 52**
- **Completed Density Tests on 15 Lifts**
- **Excavated Footings in the MB**
- **Installed Electrical Conduit in the MB**

Achieved Backfill to EL 52



Achieved Backfill and Compaction to EL 52 in Admin

Completed Density Tests on 15 Lifts



Compaction & Density Test of 16th Lift in Admin

Installed Electrical Conduit in the MB



Installation of Electrical Conduit in the MB

Installed Electrical Conduit in the MB



Installation and Backfill of Electrical Conduit



Construction Progress – South Plant

- **24" pipe encased at GST 361 and 362 overflow box**
- **Mud mat poured and ready to place 84" pipe at GST 362**
- **Concrete pouring at Facility 520 polymer containment pit**
- **Removed concrete formwork at Facility 111**
- **Pump cans placement at HSPS 401**



24" pipe encased at GST 361 and 362 overflow box



Mud mat poured and ready to place 84" pipe at GST 362



Concrete pouring at Facility 520 polymer containment pit



Removed concrete formwork at Facility 111



Pump cans placement at HSPS 401





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