



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

Feb 26, 2020



Drone Site Map: Feb 7, 2020





Construction Progress – EWP 1/3 & 6 Site Development

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

- **Installed the dual 24-inch RCP and riprap**
- **Installed the 24-inch RCP to Pond 1 and rip rap**
- **Extended excavation of Pond 1**
- **Cleared and grubbed drainage swale**



Uprooted trees & ground



DCN-04/Pond 1 – Installing dual 24” RCP to Pond 1



DCN-04/Pond 1 – Installed the single 24” RCP from Pond 1 to drainage swale, headwall, and restored Road 1



DCN-04/Pond 1 – Extended excavation of Pond 1

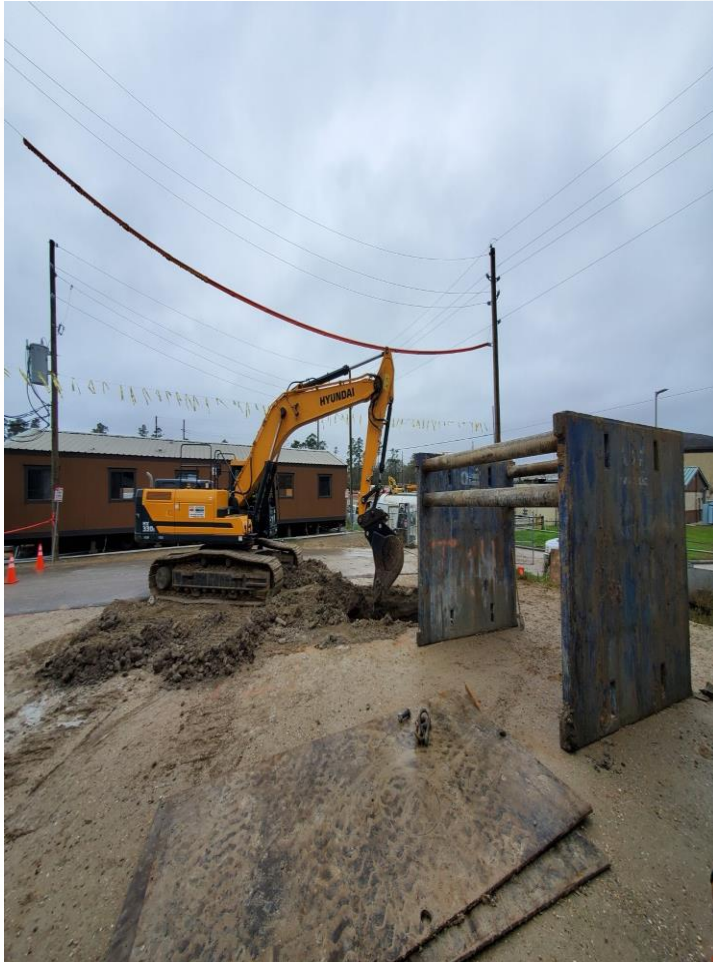




Construction Progress – Site Electrical

- **Placement of Manhole Near HWT Trailers**
- **Hydro Excavating in Existing Plant South Road (Zone 2)**
- **Trenching at Dewatering near South Plant for Manhole Placement**

Manhole Placement near HWT Trailer

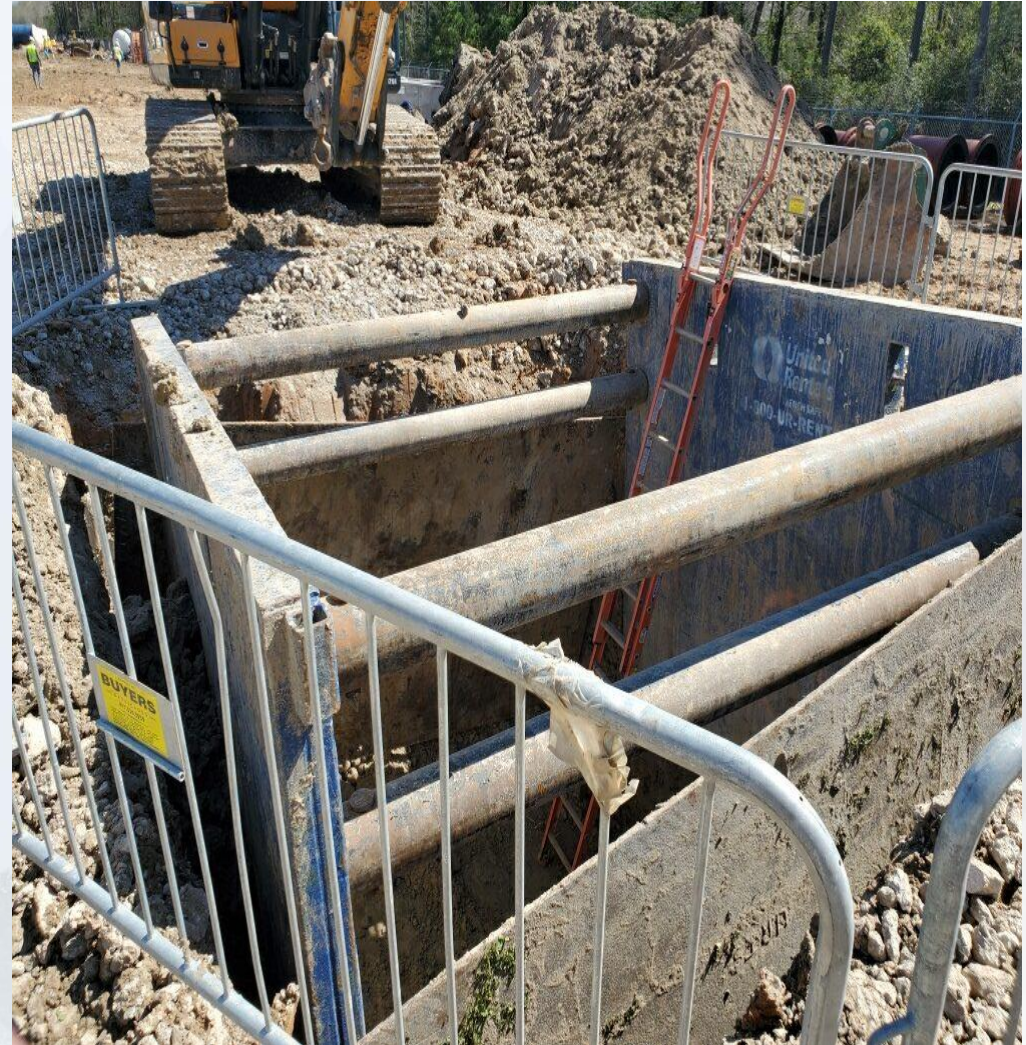


Hydro Excavating South Road in Existing Plant



Houston Waterworks Team 

Trenching for Manhole Placement at Dewatering





Construction Progress – EWP 4 Raw Water Corridor

- **Removing shoring**
- **CLSM Placement**
- **Manhole Installation**
- **Welding and grouting joints**
- **ARV Prefabrication**



Sta 134+60 CLSM Backfill and Shoring Removal



2/17/20, 2:00 PM

Houston Waterworks Team



Sta 142+50 Native Backfill and Manhole Placement



Sta 128+50 Pipe Installation



2/17/20, 2:03 PM

Houston Waterworks Team





Construction Progress – Central Plant

281-FILTER MODULE 1 :

- **Pouring/Finishing A1A.**
- **Reinforcing/Forming Wall.**
- **Shoring for Walkways and Area C Top Deck.**
- **Pouring/Finishing Gallery Deck D1.**

291-TRANSFER PUMP STATION 1:

- **Stripped Forms at 60" Suction Pipe Block-outs**
- **Cleaned Pump Cans**
- **Poured 84" BFV Wall Sleeves Block-outs**

282 -FILTER MODULE 2:

- **Interconnect Vault Slab Work.**
- **Tower Crane foundation Rebar.**
- **Pouring Seal Slabs.**

292-TRANSFER PUMP STATION 2:

- **Mass Excavation**



281-FILTER MODULE- Pouring and Finishing Base Slab A1A



281-FILTER MODULE- Pouring Top Deck D1



281-FILTER MODULE-Shoring For Walkways & Area C Decks



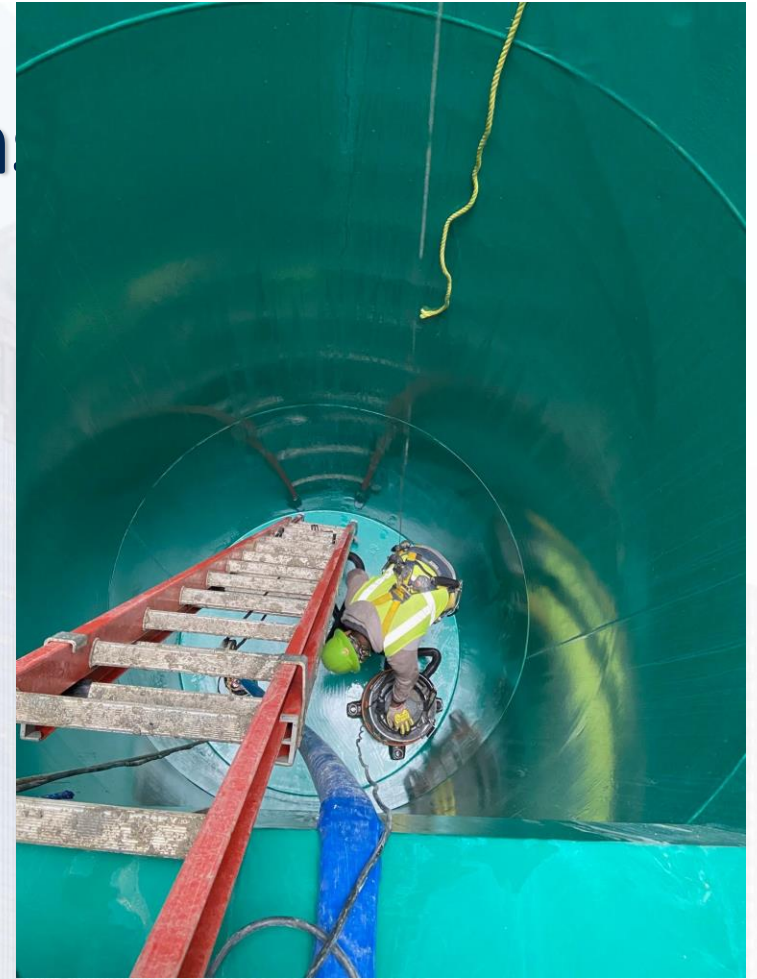
281-FILTER MODULE- Reinforcing/Forming Walls



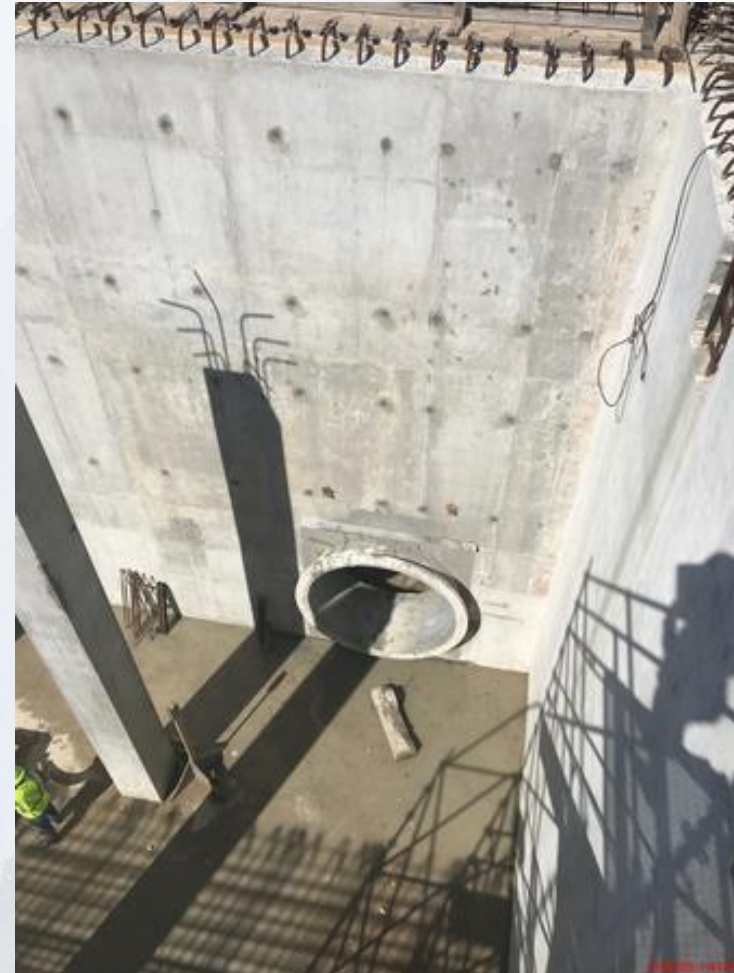
TPS – Stripped Forms 60" Suction Pipes Block-outs



TPS – Cleaned Pump Canal



TPS – Poured 84" BFV Wall Spools' Block-outs



282-FILTER MODULE 2- Interconnect Vault Slab



282-FILTER MODULE 2- Tying Tower Crane foundations



282-FILTER MODULE 2- Pouring Seal Slabs



2/1/20, 10:18 AM





Construction Progress – EWP 6 North Plant

- **Facility 213 Walls and Slab-on-grade F/R/P**
- **Facility 242 PDR Piping**
- **Facility 242 Walls and Slab-on-grade F/R/P**
- **Facility 611 RCYS Valve Vault and Overflow Sump F/R/P**
- **Facility 252 Inlet and Outlet Boxes F/R/P**
- **Facility 502 Excavation**



Facility 213 SL-2 Concrete Placement



Facility 242 SL-4 Concrete Placement



Facility 242 FLDC-1 Walls Rebar Erection



2/21/20, 1:58 PM



Facility 242 16 inch PDR Piping



Facility 252 Outlet Box Formwork



2/21/20, 1:38 PM



Facility 252 Inlet Box Formwork and Rebar



Facility 502 Mass Excavation



Facility 502 Mass Excavation



Facility 611 Valve Vault and Sump F/R/P



2/14/20 12:33 PM





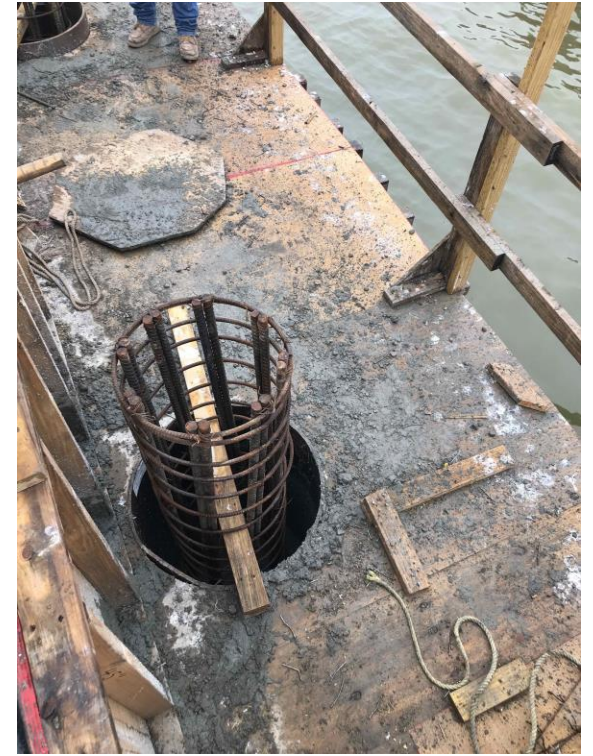
Construction Progress – EWP 6 IPS

Preparing bridge piling for bridge beams
Completion of deck pour 5

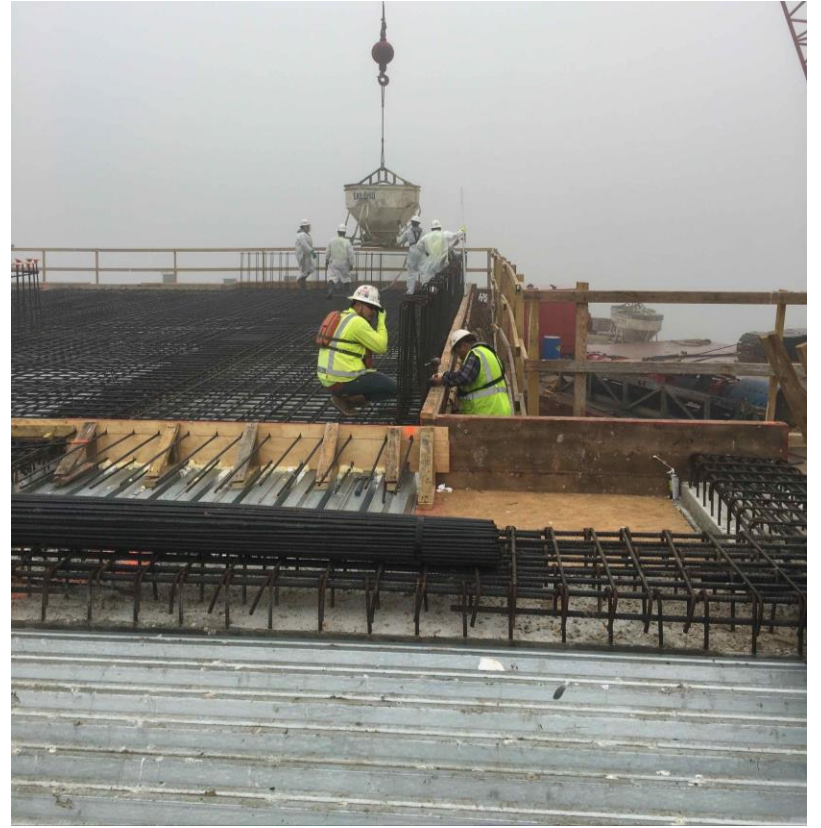


Barge and platform at IPS





Preparing Bridge Piles For Precast Bridge



Deck Pour #5



Construction Progress – EWP 6 Substation Facility 102

- **Installation of Static Mast #3**
- **Installation of Piers for the Building Foundation**
- **Installation of Jumpers to Central Breaker/Testing Transformer**



Installation of Static Mast #3




Installation of Piers for the Building Foundation



Installation of Jumpers to Central Breaker/Testing Transformer





Construction Progress – BOP LREQ Basins Facilities 601/602

- **Facility 601/602 Excavation Progress**
- **Base Slab Final Grading**
- **Base Slab Pour Around Pump Station**
- **Limestone Rock Placement for 601 Underdrain**

Base Slab Final Grading



Base Slab Pour Around Pump Station



Limestone Rock Placement for 601 Underdrain





Construction Progress – Yard Piping

- **Installing and welding 66” RW steel pipe line in Corridor 1**
- **Installing and welding 84” & 96” FW steel pipe in Corridor 4**
- **Installing 16” SPD ductile iron pipe line in Corridor 3**
- **Installing Double 8’x4’ storm box culverts in Admin area**
- **Installing 12” PW in Corridor 3, and 24” PW in Corridor 4**



Installing 66" RW steel pipe line in Corridor 1



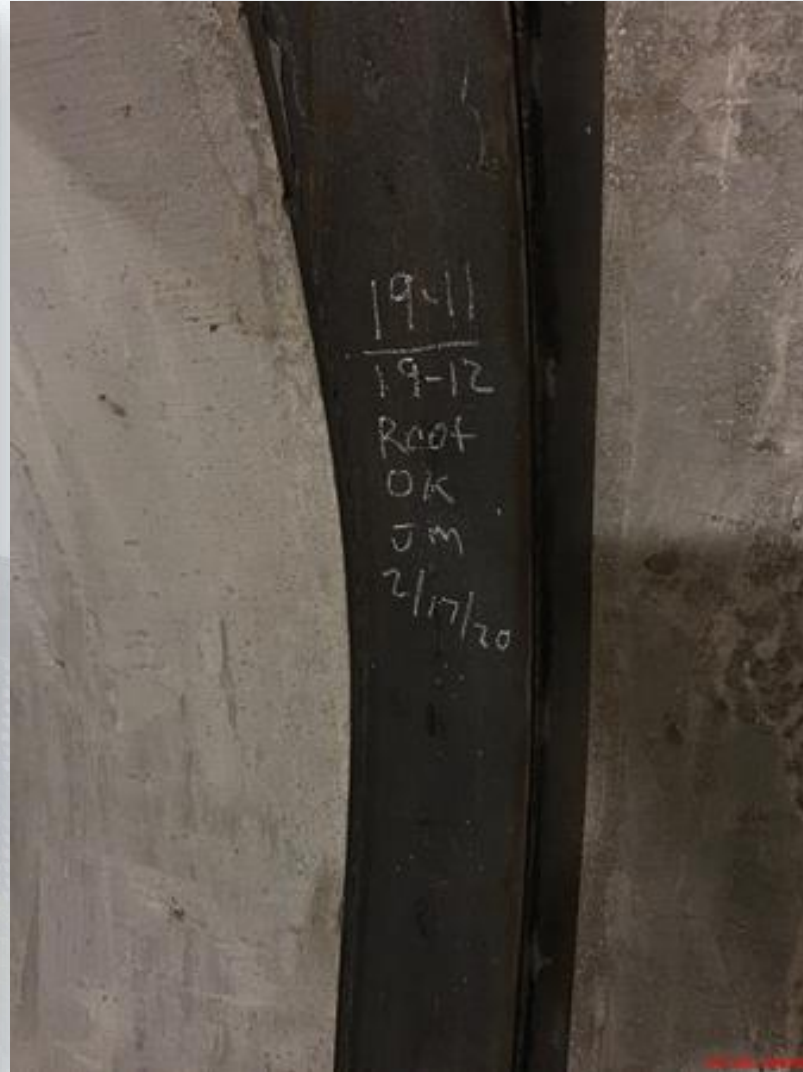
Formed, reinforced, and poured FW 84" BFV foundation pad in Cor. 4



Installing 84" FW steel pipe in Corridor 4



Welding 84" FW steel pipe in Corridor 4



Installing 16" SPD ductile iron pipe line in Corridor 3



Installing Double 8'x4' storm box culverts in Admin area



Installing 12" PW in Corridor 3 and 24" PW in Corridor 4





Construction Progress – Administration Building

- **Achieved Backfill to EL 50**
- **Completed Density Tests on 14 Lifts**

Achieved Backfill to EL 50



Completed Density Tests and Proof Roll on 8" Lifts





Construction Progress – South Plant

- **Concrete reinforcing for 90° 84" pipe at GST 361**
- **Continuing 102" pipe encasement at GST 362**
- **Underslab plumbing installation at Facility 520**
- **Installing vapor barrier and formwork at Facility 111**
- **Pump can foundation concrete poured at HSPS 401**

Concrete reinforcing for 90° 84" pipe at GST 361



Continuing 102" pipe encasement at GST 362



Underslab plumbing installation at Facility 520



Installing vapor barrier and formwork at Facility 111



Pump can foundation poured at HSPS 401

