

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion





Construction Progress – EWP 1 Site Development June 26, 2019

- Placed asphalt on truck wheel wash ramps
- Poured concrete around bolt on tapping saddles
- Hot tapped 30in Finished Water Mains (FWM)
- Installed Knife gate valves and Line stop housings to prepare for bypass operation
- Installed by-pass piping, and bolted up to line stop housing
- Temporary power installation T211 North Plant

Drone map view of site June 24, 2019



Placed asphalt on wheel wash ramps



Hot Tapping 30in FWM for bypass operation



24in Coupon cut out of 30in FWM



Installed line stop housings at each side of tie-in locations







Bolted by-pass piping to line stop housing at East tie-in location







Bolted by-pass piping to line stop housing at West tie-in location







North Plant Temporary Power T211 NW





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Construction Progress – EWP4 Raw Water Corridor

- CLSM placement
- Laying 108 RW Pipe in East Corridor
- Shoring Removal and Grouting
- Welding joints
- Installation of South Tunnel Exit Shaft



Placing CLSM and Grouting



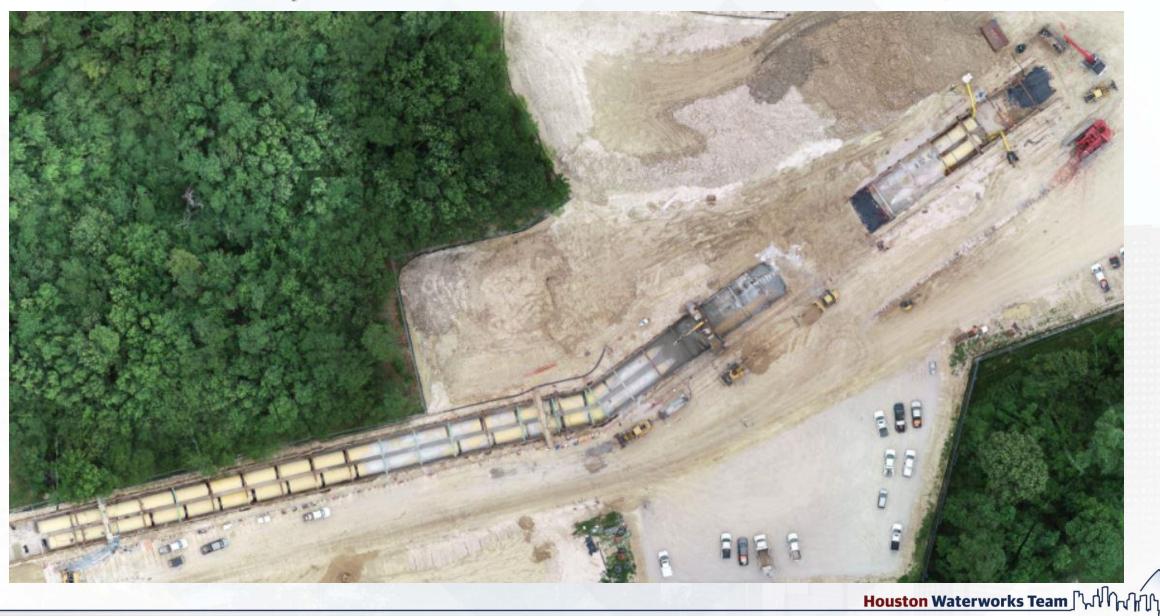




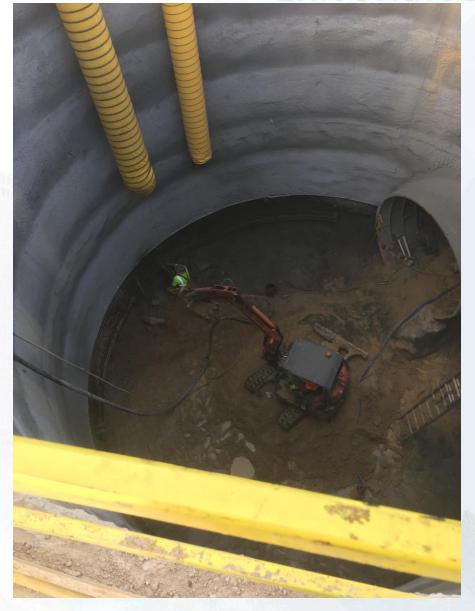
Pipe Installation in East Corridor

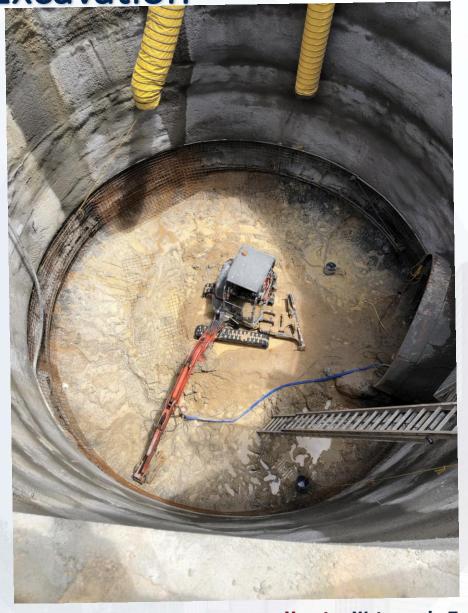


Drone map view of 108in RW trench June 11, 2019

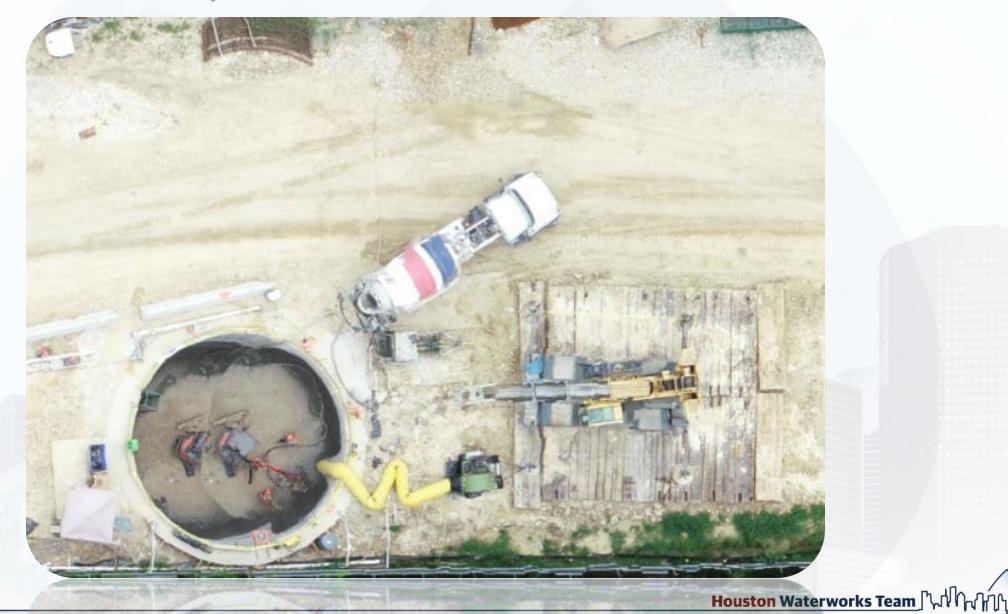


Exit Shaft Excavation





Drone map view of Exit Shaft June 11, 2019





Construction Progress – EWP 2 Filter Structure & TPS

FILTER STRUCTURE:

- Backfilling for Filter Slabs 12 & 7
- Tying rebar for Filter Slabs 10 & 8/9(South).
- Forming/Reinforcing exterior walls.

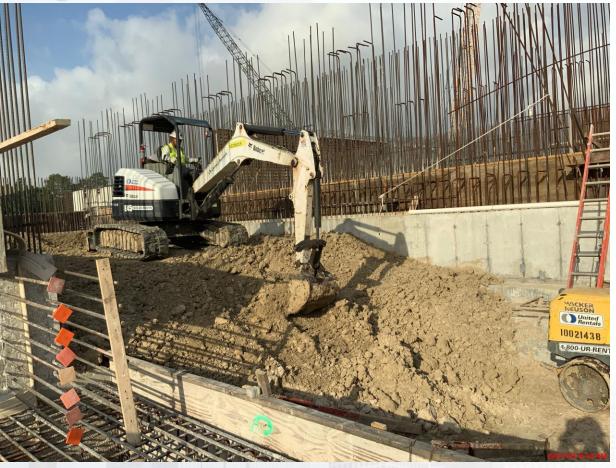
TPS:

- Poured BW4 Wall.
- Reinforcement and Form up Wall A2
- Strip Forms walls BW3 and C4



FILTER STRUCTURE- Backfilling For Filter Slabs 7 & 12

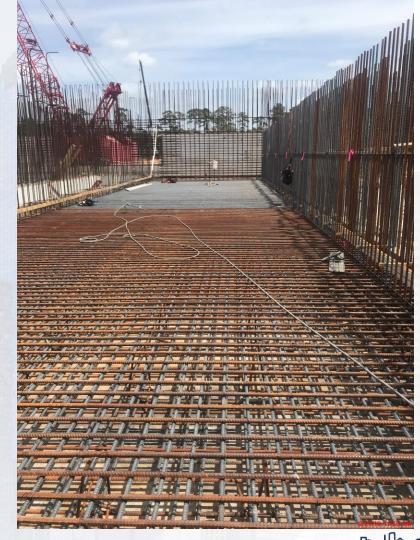






FILTER STRUCTURE- Tying rebar for Filter Slabs 10 & 8/9 (South)





FILTER STRUCTURE- Forming/Reinforcing Exterior Walls



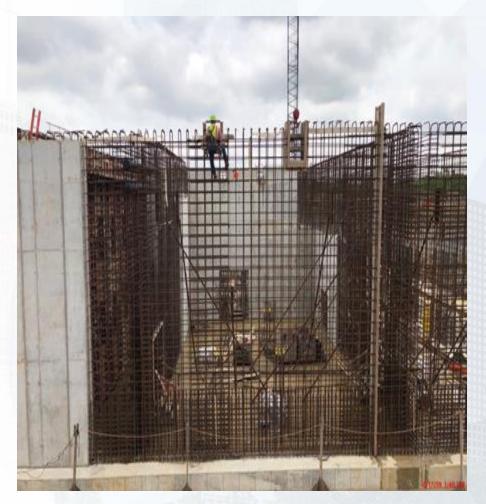


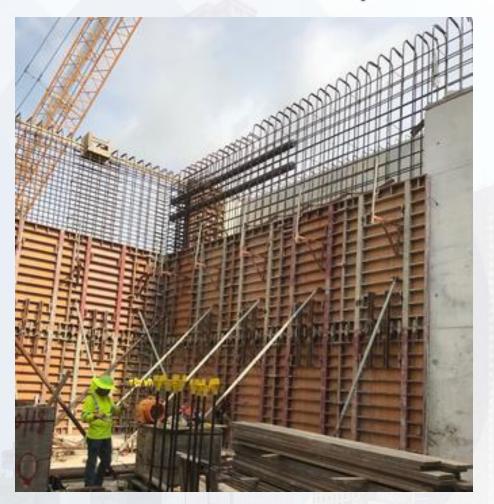
TPS-Pouring Concrete BW4 Wall



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TPS - Wall A2 Reinforcement and Form-up





TPS – Walls BW3 and C4 Strip Forms





Drone map view of Filter and TPS June 24, 2019





Construction Progress – EWP 6 North Plant

- 242 Concrete Foundation and sump rebar reinforcement
- Set formwork and install rebar for 241 Sump
- Form and Pour 242 Overflow Sump
- Excavate 611 Cross Collector



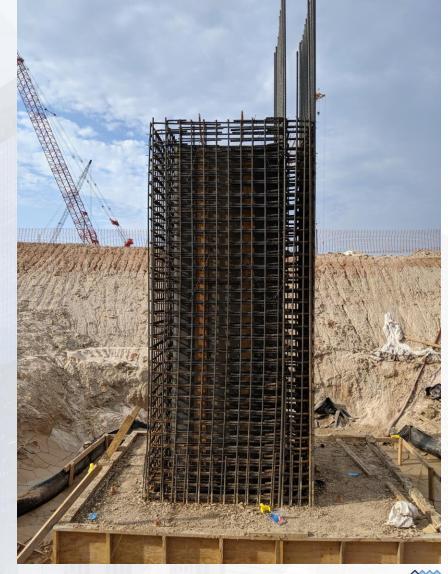
Drone map view of North Plant June 1, 2019



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241 Rebar Placement





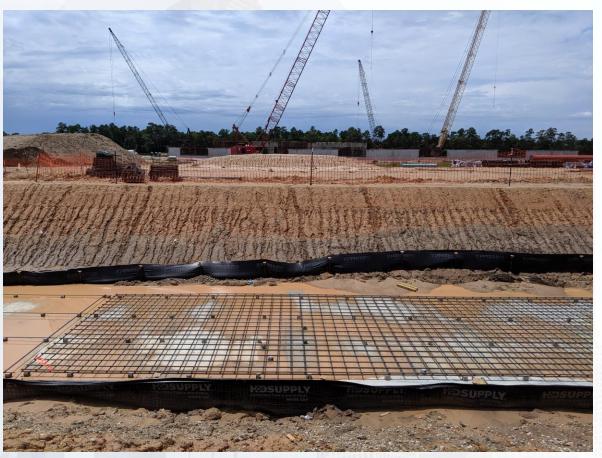


611 Cross Collector Excavation

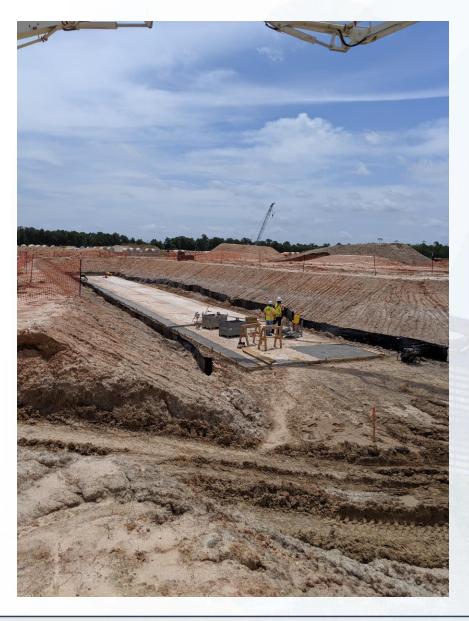


242 Concrete Foundation and rebar reinforcement





242 Concrete Foundation, sump and rebar reinforcement





242 Ductile Iron Pipe Delivery





Construction Progress – EWP 6 IPS

Driving Piles

Pile Driving Activity



