



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion



Houston Waterworks Team



Construction Progress – EWP 1 & 3 Site Development

September 25, 2019

- **Completing EWP1 Punchlist items: Grouting Manholes, installing temp water lines and ARVs**
- **Relocating soil pile from South Plant area**
- **Backfilling Pond 2 and compacting**



Site Crew relocating soil pile from South Plant area



Installing ARV, piping, and bollards



Backfilling Pond 2 and compacting





Construction Progress – EWP 1 Temporary Power

- **Complete South Plant Temp Power T-362, T-HSPS and Main Feed**
- **12.47kV- 480V Transformers/Pole and Local Disconnects**
- **T-292 Relocate (Directional Bore), T-312 Relocate (Directional Bore)**
- **T-601 EQ Basin Temporary Power**
- **Clear Overgrowth at CenterPoint Energy® R-O-W, Lewis Tree Service®**
- **H12 East Plant Temporary Service Size Increase, CenterPoint Energy®**



Temporary Power East Plant



Temporary Power South Plant, HSPS





Construction Progress – EWP 4 Raw Water Corridor

- **Trench shoring installation and excavation in East Corridor**
- **Welding and grouting joints**
- **Storm Drainage Installation**
- **Shoring installation at transition to tunnel**
- **Excavation for support of existing 66 inch RW**



Storm Drainage Installation in West Corridor



CLSM Placement at Box Culvert sta 100+50



Sheet Pile Shoring Installation at sta 128+50



CLSM Placement at exist 66 inch RW sta 134+00





Construction Progress – EWP 2 Filter Structure & TPS

281-FILTER STRUCTURE:

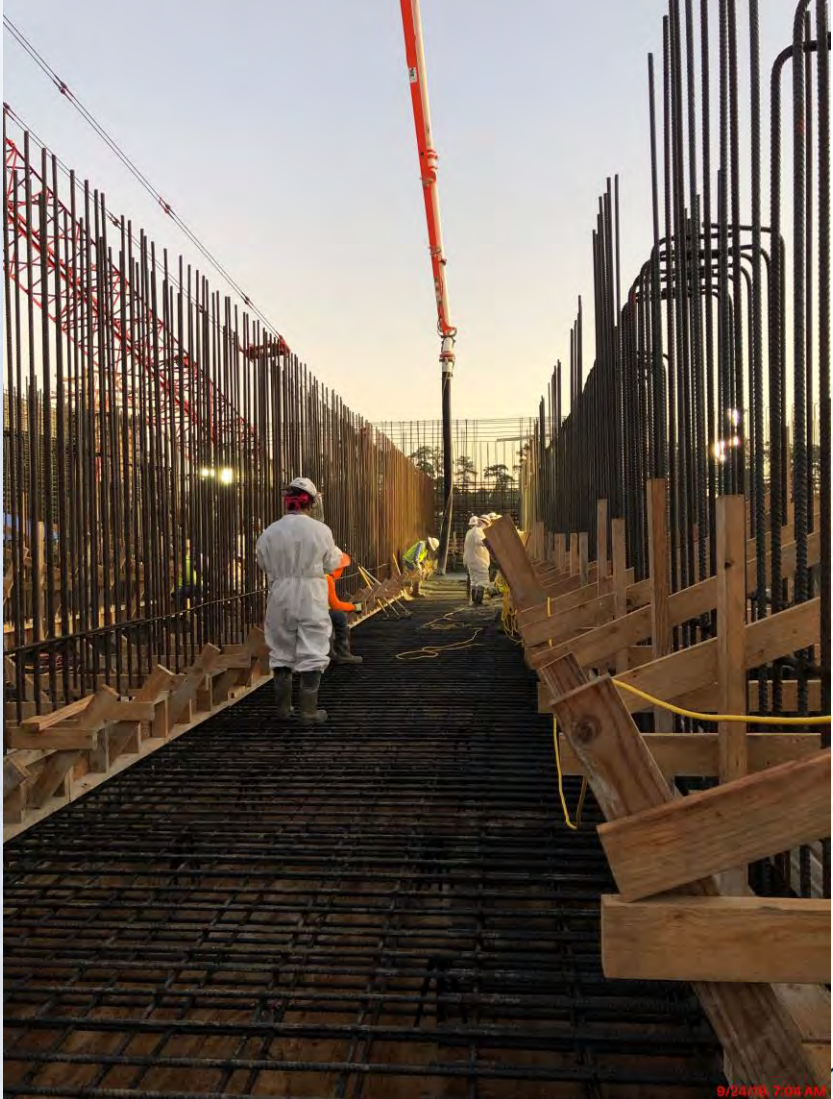
- **Pouring Lower Manifold Decks 11/12**
- **Tying/Pouring Walls**
- **Pouring West CFE/FTW Pipe Encasement**

291-TPS:

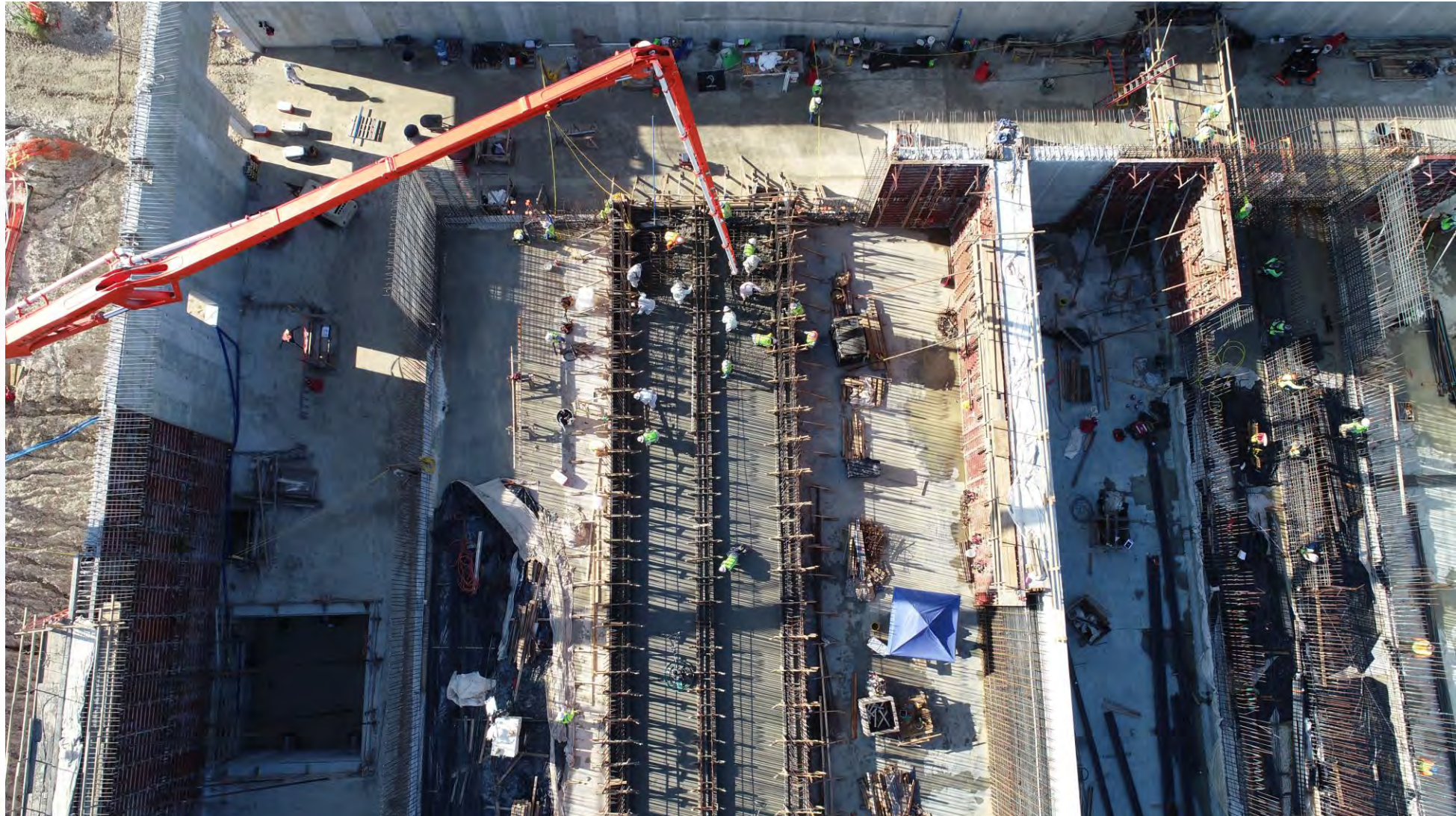
- **Repair Waterstop at 60" suction pipe opening**
- **Tie in 84" CFE Pipe Spool**
- **Install Pump Cans**



281-FILTER MODULE- Forming/Pouring Lower Manifold Decks 11/12



281-FILTER MODULE- Pouring Lower Manifold Decks 11/12



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281-FILTER MODULE- Tying/Pouring Walls (D4,D10,C14)



281-FILTER MODULE- Lift 2 Pour West CFE/FTW Pipeline Encasement



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TPS – Repair Waterstop at 60" suction pipe openings



TPS – Installing Pump Cans



TPS - Tie in 84" CFE Pipe Spool



CENTRAL PLANT- PHASE 1 AERIAL



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Construction Progress – EWP 6 North Plant

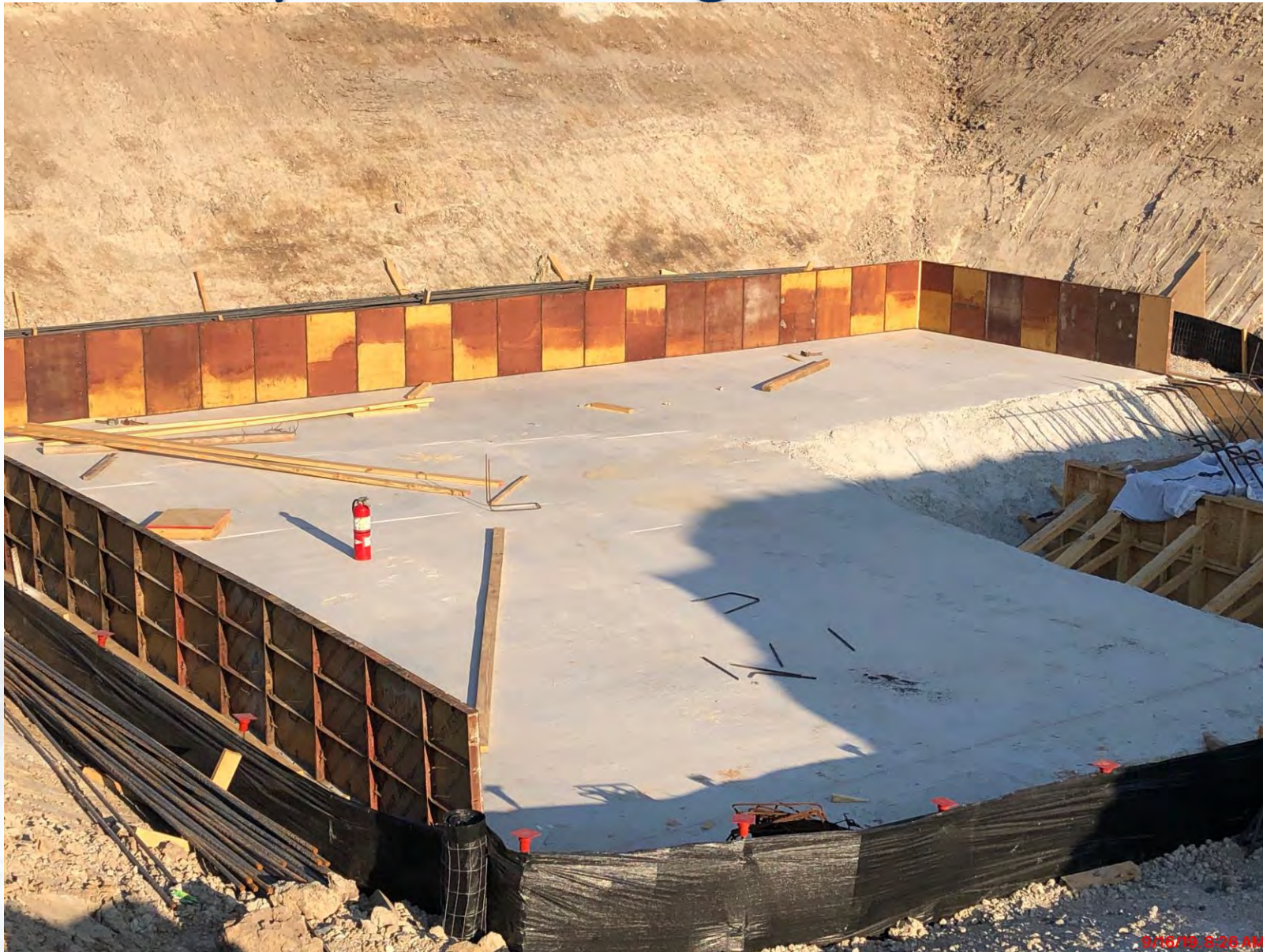
- **Facility 222 Sump and Slab-on-grade F/R/P**
- **Reinforcing Facility 241 Stem Wall Formwork and Rebar**
- **Reinforcing Facility 242 Stem Wall Rebar**
- **Facility 611 Cross Collector slab-on-grade F/R/P**
- **Facility 611 U/G Piping**



Facility 222 Sump formwork, rebar, and concrete placement



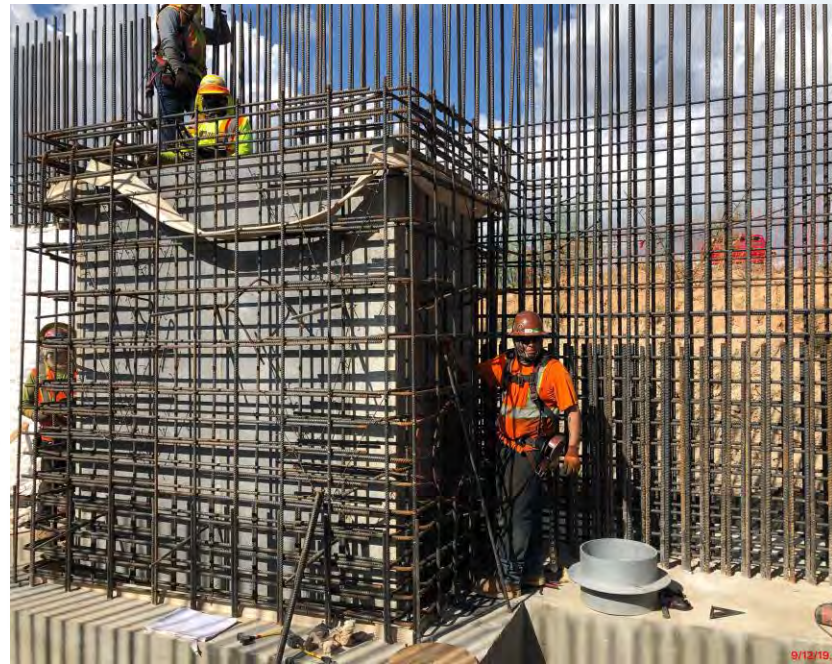
Facility 222 Slab-on-grade Formwork



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Facility 241 Stem Wall Rebar



Facility 242 Stem Wall and Cross Collector Rebar



Facility 242 Cross Collector Backfill



Facility 611 Cross Collector Rebar and Concrete Placement



Facility 611 24 inch PDR Piping

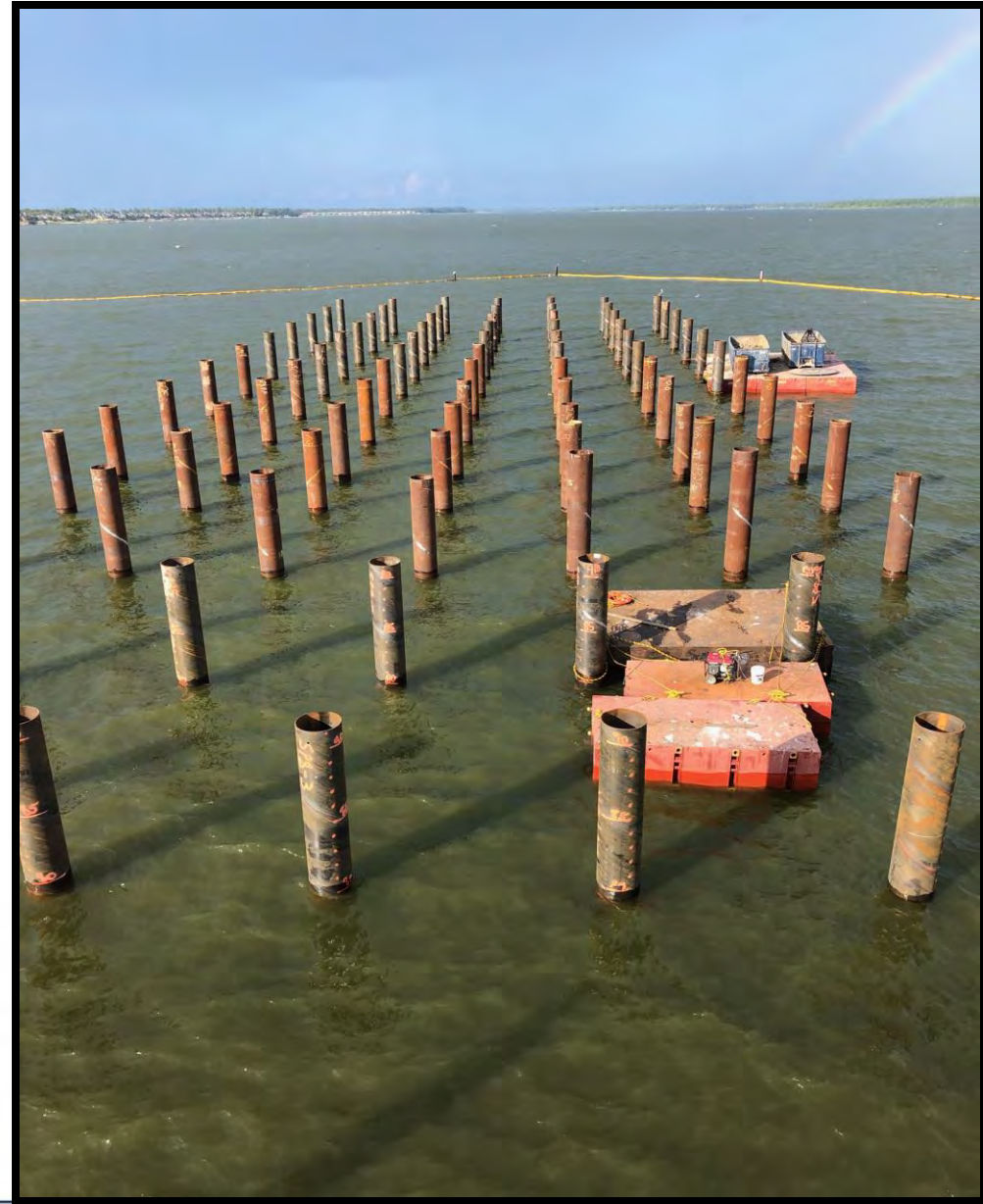




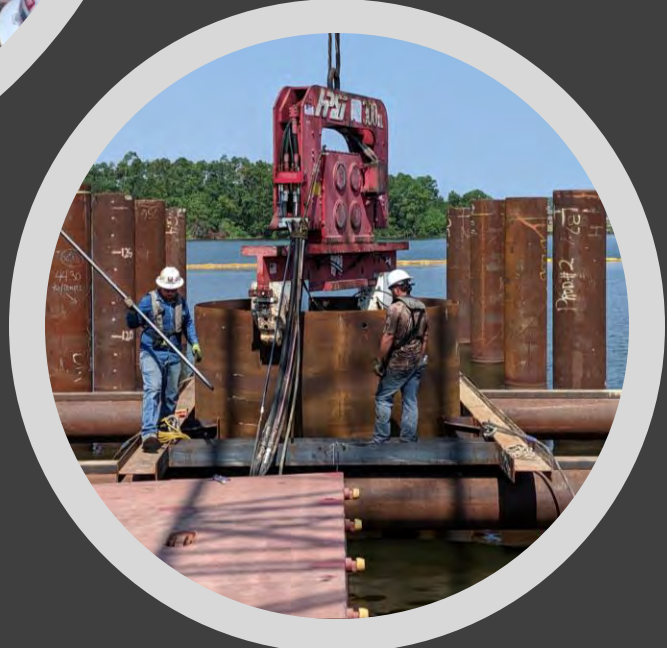
Construction Progress – EWP 6 IPS

- **Completion of Platform Piles**
- **Preparing To Drive 10' Pump Can Casings.**

Platform Pile Completion



Preparing To Drive 10' Pump Can Casings






Construction Progress – EWP 6 Substation Facility 102

- **Yard Foundations**



Yard Foundations





Construction Progress – BOP LREQ Basins Facilities 601/602

- **Mass excavation at Facility 601/602 and dewatering**



Mass excavation at Facility 601/602 and dewatering





Construction Progress – Yard Piping

- **Demolishing: Removing, crushing, and disposing of the existing 36-in, 30-in, and 24-in Finished Water (FW) Pipe, appurtenances, and manholes**
- **Verification and inspection of Mid-America Pipe Fabrication facility**



Demolishing Existing 36-in FW Pipe



Demolishing Existing 30-in & 24-in FW Pipe & Manholes



Ferguson, PLW, & HWT Site Visit to Mid-America (and Big Brutus)



Steel spools for NEWPP yard piping project, and Victaulic rings delivered to Mid America



Mid-America: Fabricating and welding pipe joints



Mid-America: Spraying concrete lining & hydrotesting



Mid-America: Spraying polyurethane coating and testing mil thickness



Big Brutus Field Trip - [Click: Big Brutus Home Page](#)



Big Brutus Field Trip - [Click: Video](#)





Construction Progress – Administration Building

- NP Phase 1 West Pond Fill and Compact
- Backfilling West Pond using onsite material
- Setup Temporary Facilities and Trailer

Geo testing sample collection



Spoil Haul off at AMB

Setup Temporary Facilities and Trailer





Construction Progress – South Plant

- **Putting in a temporary road access around ground storage tanks**
- **Site Crew backfilling Pond 2 in dewatering area**



Installing temporary road access around ground storage tanks

