

#### DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion





# Construction Progress – EWP 1 Site Development Jan 23, 2019

- Excavating and laying 36in FW Pipeline
- Setting the FW Pipeline Manways and Manholes
- Embanking and grading East Areas C & F
- Laying fabric and flex base for Barnard Laydown area.

## Laying the 36in FW Line







#### Stabilizing, placing flex base, & compacting Barnard Laydown Pad







## Filling and grading Areas C & F







#### Setting Manways and Manholes for 36in FW Line





#### Construction Progress – EWP 4 – Raw Water Corridor

- Cutting pipeline excavation, and installing shoring system
- Tunneling in shaft
- Delivering 108in Pipe Joints
- Laying 108in Pipe, & Backfilling
- Placing CLSM
- Resumed Welding



#### Excavating 108in Pipe Trench







#### Laying 108in RW Pipe







#### Transporting 108in RW Pipe Joints





#### CLSM placement operations in the trench



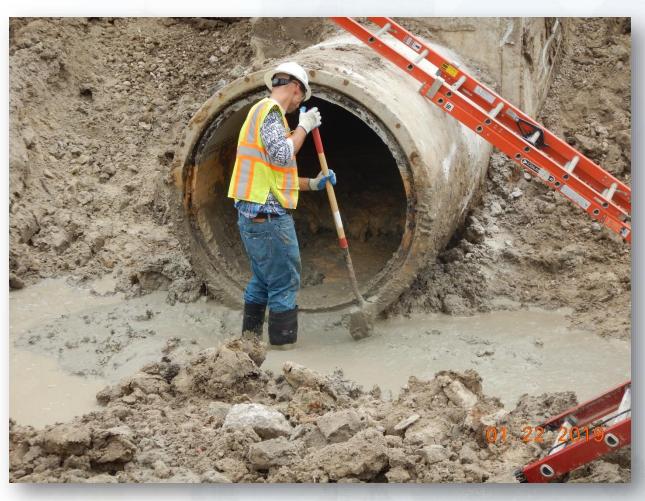
# Installing 108in Pipe with Manways







#### Prepping trench area and access road at station 105+00







#### Tunneling, grouting, and placing pea gravel









#### Construction Progress – EWP 2 Filter Structure & TPS

#### **FILTER STRUCTURE:**

- Reinforcing/Forming walls
- Pouring walls
- Placing and aligning pipelines.
- Stripping forms and patching.
- Excavation and backfilling around structures

#### **TPS:**

- Forming and reinforcing main slab sections
- Pouring main slab sections



84in Pipe Installation



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#### East wall repair at Interconnect Vault







#### Forming and Pouring Mud slab for 60in Pipeline







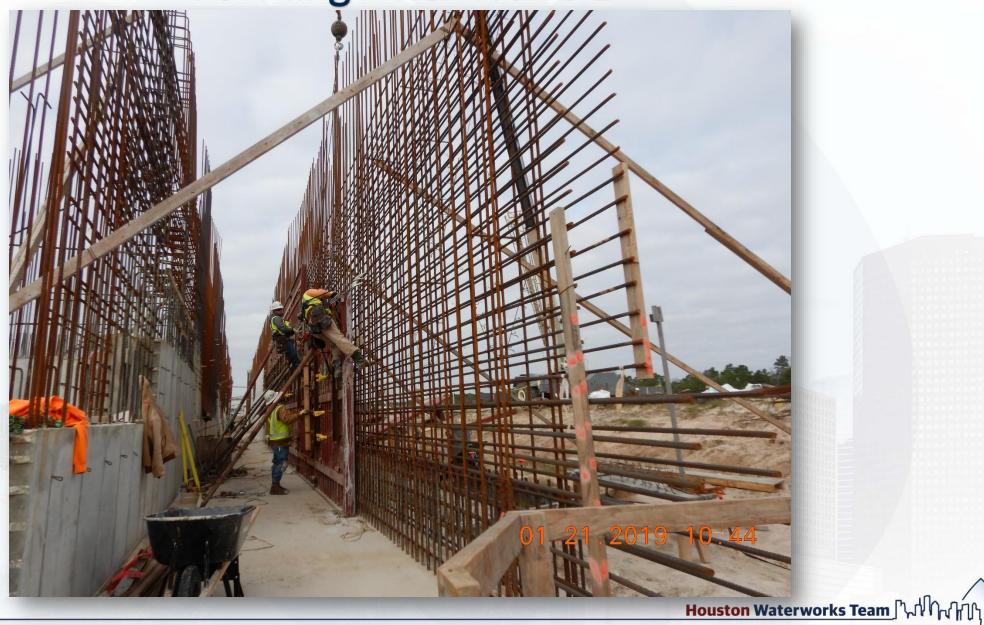
#### Forming and Pouring Mud slab for 36-42in FTW



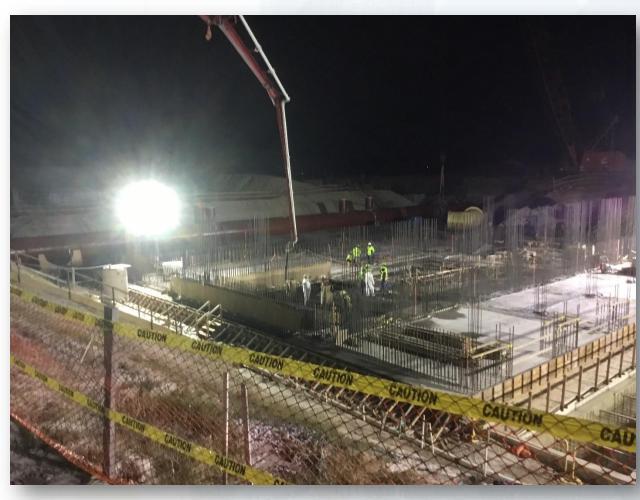


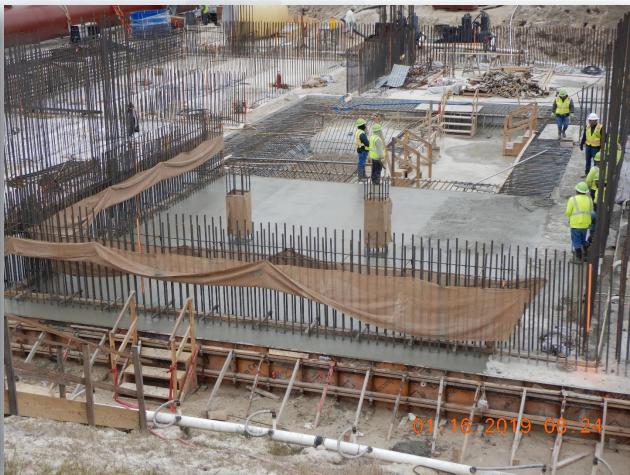


Forming Filter Wall D1



# Pouring TPS Slab Area A3

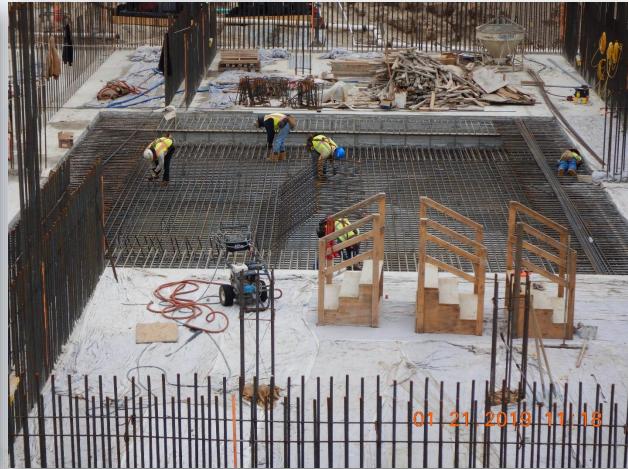






# Reinforcing TPS Slab Area B3







#### **TPS Wall Rebar**



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#### **TPS Slab Concrete Curing**



