

The background of the left side of the image is a photograph of the Austin skyline, featuring several tall skyscrapers. In the foreground, there is a concrete wall and a paved area. On the paved area, there are several concrete repair projects, including a large star-shaped patch with the word "AUSTIN" and a star inside it, and another patch with the word "BRAUN" and "250 WILSON" inside it.

# Keep Concrete Weird

## UNUSUAL PROJECTS



# 2025 **SPRING CONVENTION**

**AUSTIN, TEXAS • APRIL 13 – 16, 2025**

[www.icri.org](http://www.icri.org)



# SEALING SEAHOLM INTAKE WELL 6

Austin, TX

## *Live Content Slide*

*When playing as a slideshow, this slide will display live content*

**Poll: What type of chemical grout can shrink when dry?**





# BACKGROUND

The Seaholm Intake Facility was originally constructed in the 1950s on the north shore of Town Lake (Lady Bird Lake) in downtown Austin. The facility, composed of a collection of three buildings, housed pump equipment and intake structures for conveying water from the lake to the Seaholm Powerplant, located to the north across Cesar Chavez Street. The plant ceased operation in 1992; however, portions of the intake structure are currently undergoing Phase 1 renovations that consist of transforming the facility into an event space.

# YESTERDAY



PICA 14339 Austin History Center, Austin Public Library



# SEAHOLM YESTERDAY







# SEAHOLM TODAY



[www.icri.org](http://www.icri.org)

2025 SPRING  
CONVENTION  
APRIL 13 – 16, 2025

# INTAKE STRUCTURE





# INTAKE STRUCTURE



# BACKGROUND CONTD.

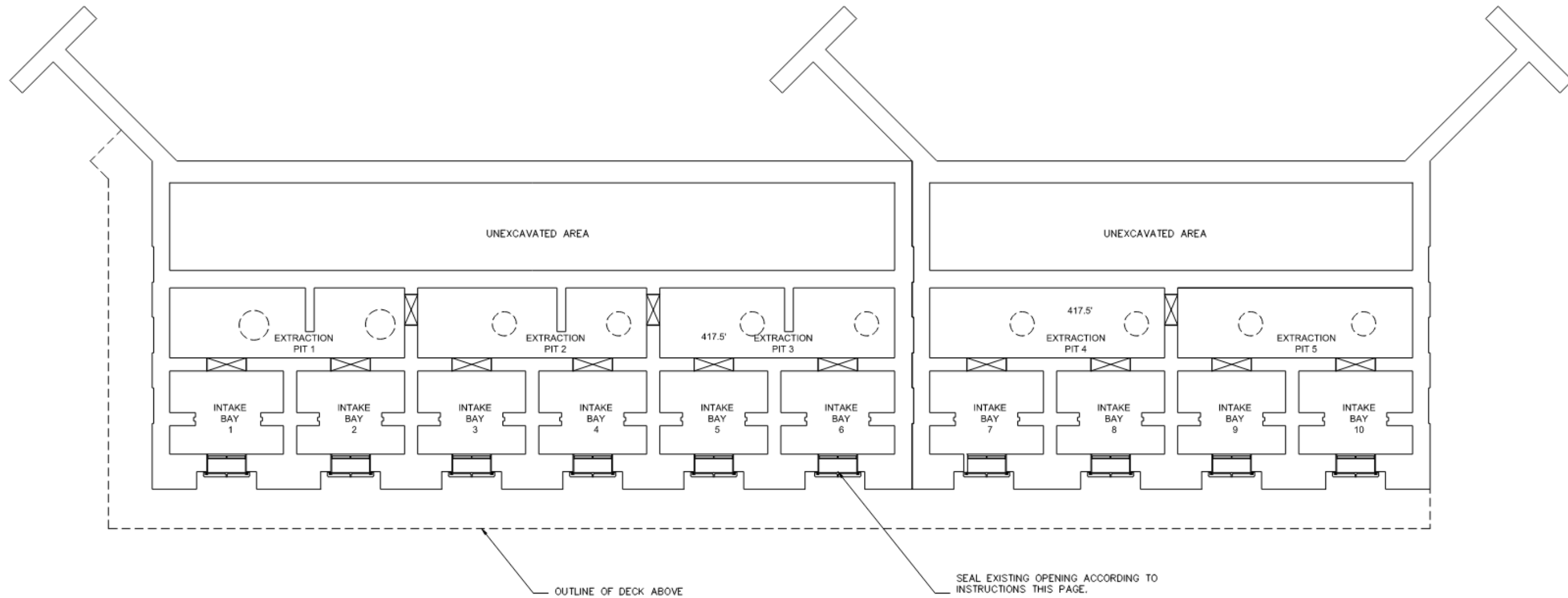
Bay 6 is located in Building 1, which includes a basement and a sub-basement level that is reportedly supported by a mat slab of unknown thickness. The sub-basement level houses ten intake bays, each approximately 13 feet wide by 9.5 feet long (Figure 1). Building 1 was originally constructed in two phases—Bays 1 through 6 in the western phase and Bays 7 through 10 in the eastern phase. Bays 1 through 6 are connected by extraction pits that extend along the north side of each intake bay.



# CONTRACTOR CHALLENGES

- The intent of this project was to turn the old intake facility into an event space /visitor center. One of the main challenges was ensuring a safe work environment for the crew. The intake tank was filling up rapidly and a pump had to remain on all night every night. Access was difficult as the passage opening was roughly 3'x2', and we needed a hoist to lower all equipment. We decided to use core drilling because we needed to drill 1-inch holes 7' into the concrete and that was outside of our normal capabilities. Upon drilling, there were geysers due to the pressure and the crew had to work quickly to stop the water. There were 6 holes/ports drilled, and we utilized a highly expansive hydrophobic polyurethane grout to seal the leaks. . After the water intrusion was stopped in our contracted work area (bay 6), we observed continued water intrusion in the tank. This was found to be coming from an adjacent bay.

# SUB BASE PLAN

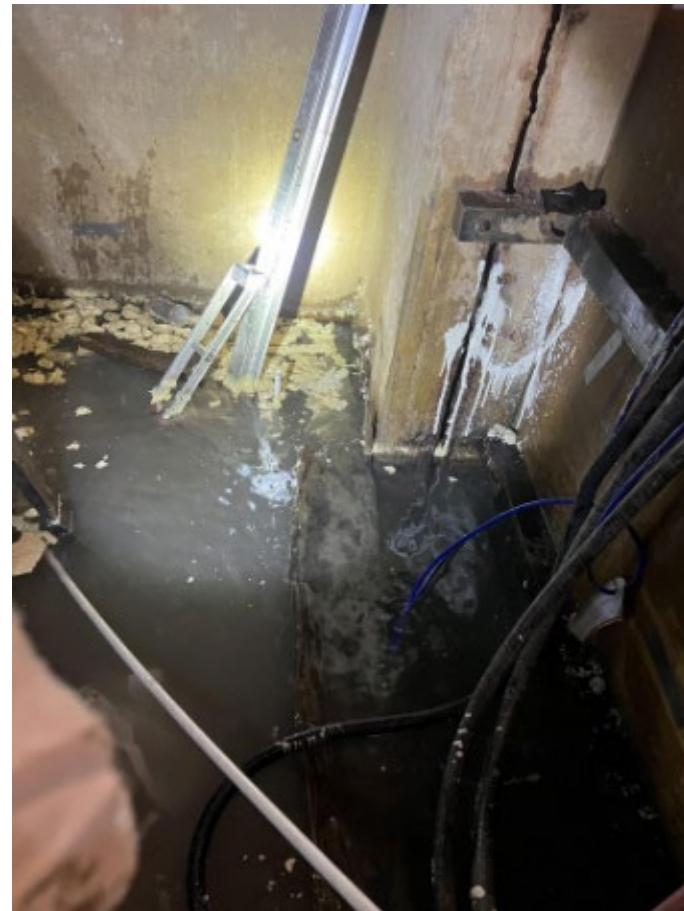




# LEAK



# OVERNIGHT LEAKS

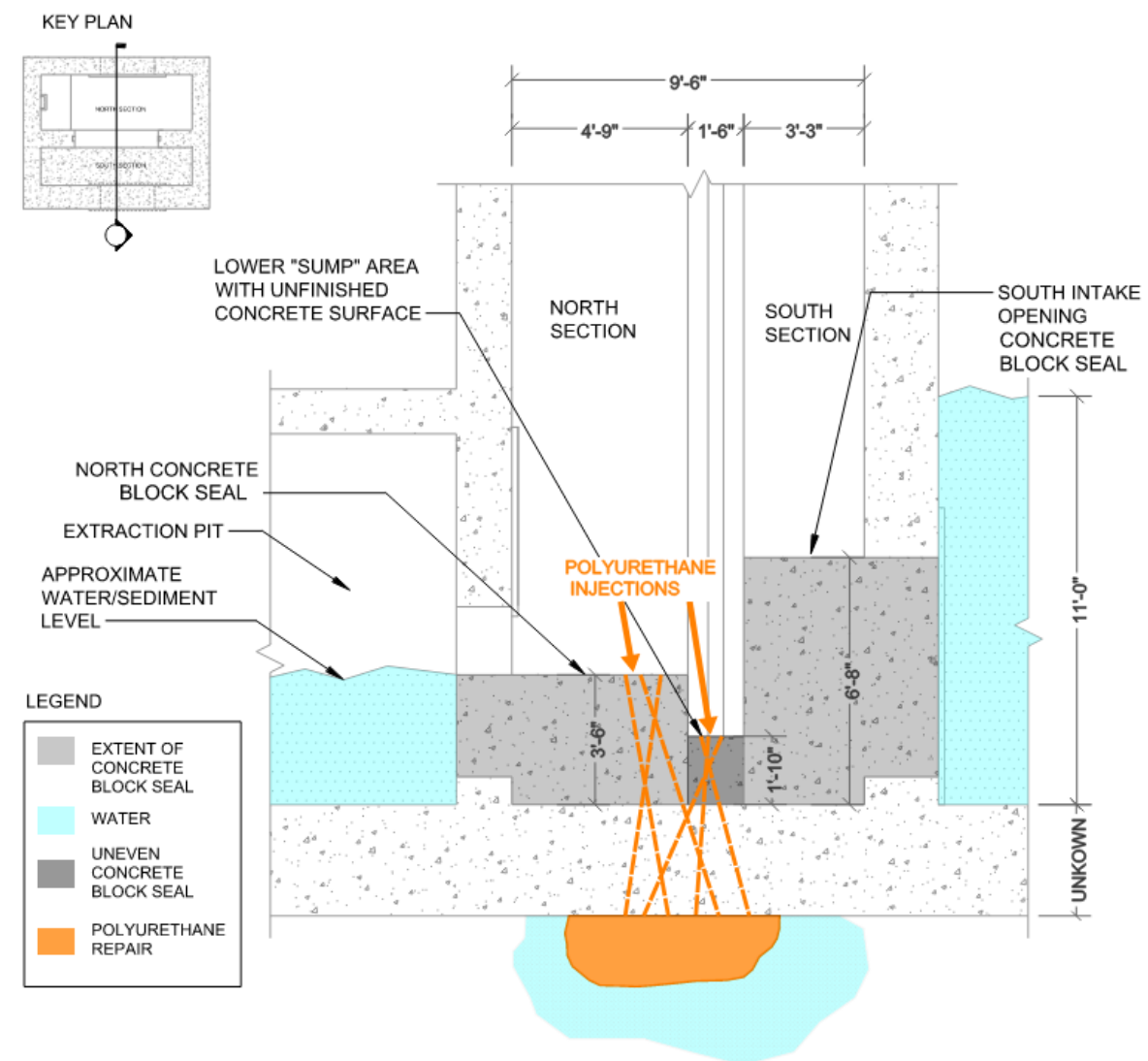




# GUSHER



# GROUTING PLAN



SCALE: 1/4" = 1'0"

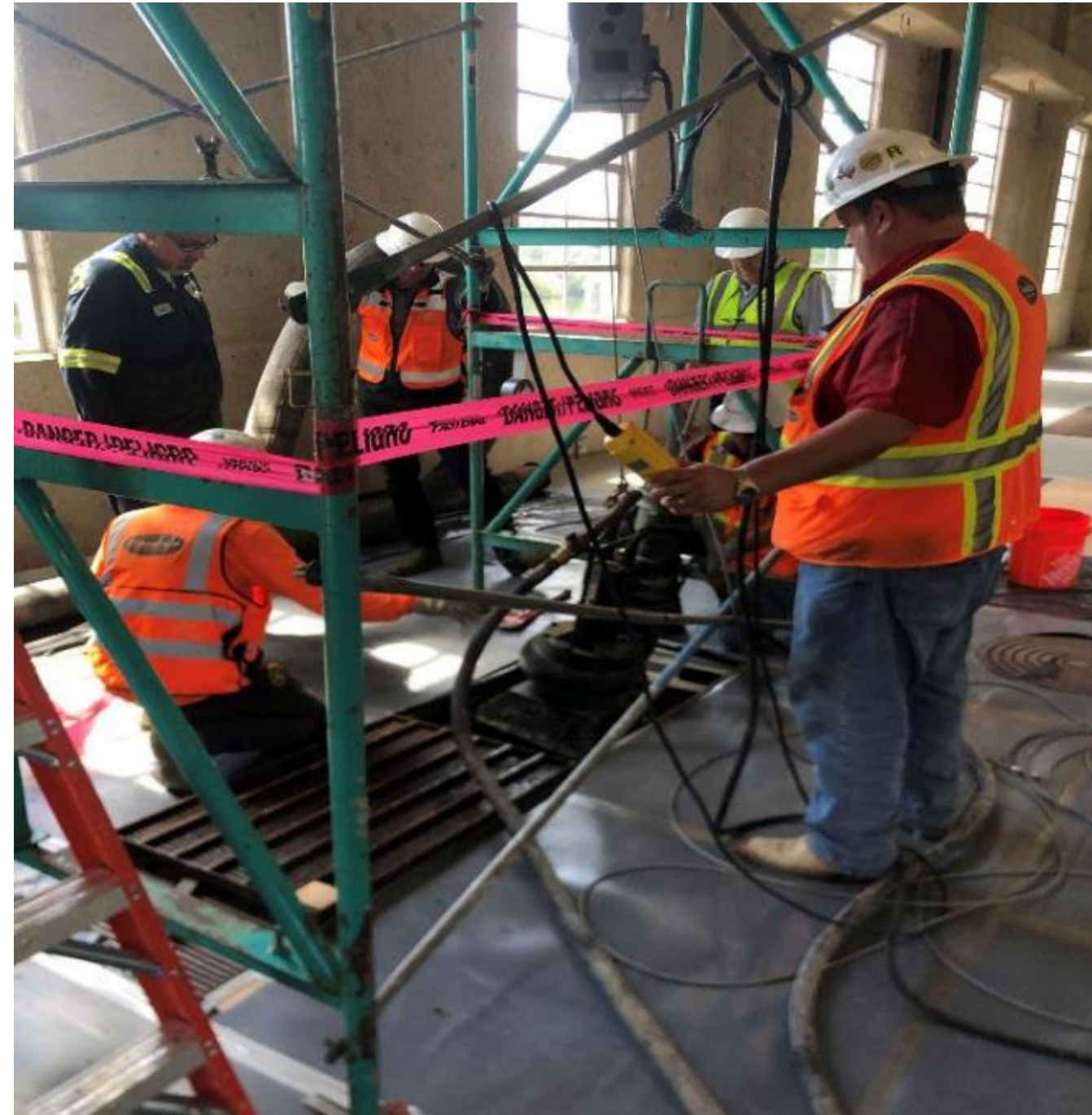


# ACCESS





# EQUIPMENT ACCESS

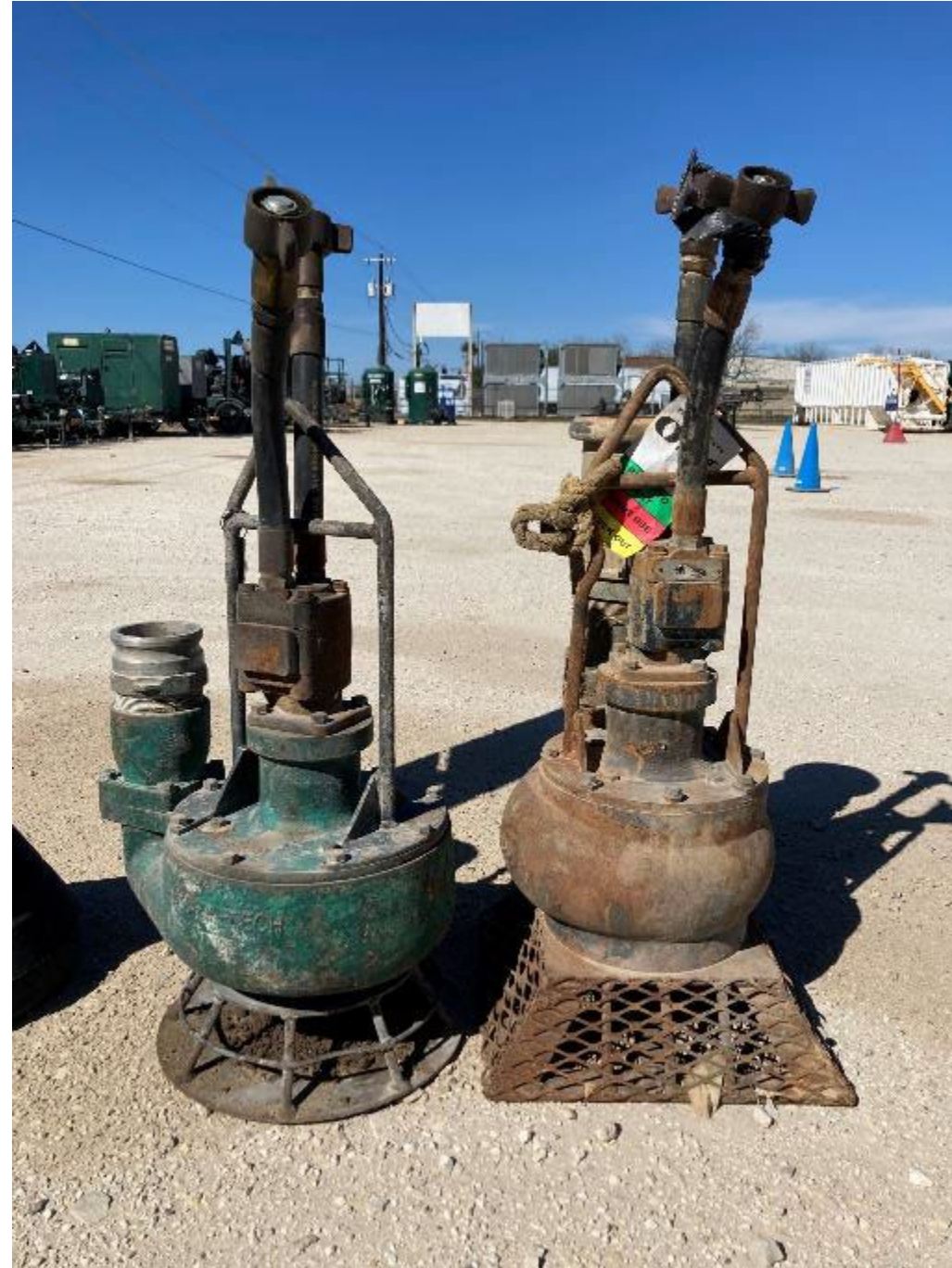




# ACCESS MANHOLE



# WATER PUMPS





# CORE DRILL



# CORE DRILLING







# WALL SPEAR



[www.icri.org](http://www.icri.org)

2025 SPRING  
CONVENTION  
APRIL 13 – 16, 2025

# AIRLESS PUMP







# PUMP SPECIFICATIONS

|                          |                |
|--------------------------|----------------|
| Max. Delivery:           | .54 GPM        |
| Max. Operating Pressure: | 3300 PSI       |
| Weight (skid frame):     | 35 lbs.        |
| Motor:                   | 7/8 hpDC Motor |



# POLYURETHANE GROUT

- Polymeric MDI Based Hydrophobic Grout
- Low viscosity
- Highly expansive – 40 to 50 times expansion
- Certified to NSF/ANSI/CAN 61 for contact with potable water
- Harmless for the environment and resistant to biological attack
- 30 gallons used



# PREPARING GROUT



# INJECTING









# FUTURE PLANS

As of September 2022, Phase 1 has been completed. Phase 1, funded through Hotel Occupancy Tax revenue and 2018 bond funding, restored the main building to a level that allows small groups to visit the site safely with the support of City or TTC guides, but does not yet support large-scale events.

In 2018, Austin City Council approved the Seaholm Waterfront concept plan. Full access to the Intake will begin upon completion of Phase 2 of the plan, bringing the facility to life and providing the amenities and maintenance needed for daily operations. The Trail Conservancy launched a \$15,000,000 capital campaign in late 2023 to fund Phase 2 and will begin the construction of this phase once the campaign goal has been reached.





# PROJECT PARTICIPANTS

- Owner – Austin Parks Department  
Austin, TX
- Engineer – Wiss Janey Elstner Associates Inc.  
Austin, TX
- Contractor – Canalco Construction Specialists  
Austin, TX
- Injection Consultant – Chamberlin Roofing & Waterproofing  
Austin, TX
- Material Supplier – Alchatek  
Tucker, GA



**John M. Ziebell**  
**President**  
***TPCCI***

***johnziebell@att.net***

**832-746-3507**

**[www.icri.org](http://www.icri.org)**

**2025 SPRING  
CONVENTION  
APRIL 13 – 16, 2025**





# SESSION EVALUATION

## Resources

Evaluate this Session



To complete the session evaluation, open the ICRI Convention App.

Under **Plan Your Event**, select Schedule, and then the Technical Session you are attending. Select the sub-session you are attending, scroll down to Resources, and select Evaluate this Session.



# ANY QUESTIONS?

[www.icri.org](http://www.icri.org)

2025 SPRING  
CONVENTION  
APRIL 13- 16, 2025





[www.icri.org](http://www.icri.org)

2025 SPRING  
CONVENTION  
APRIL 13 – 16, 2025

