



Spillway Pump and Piping Project

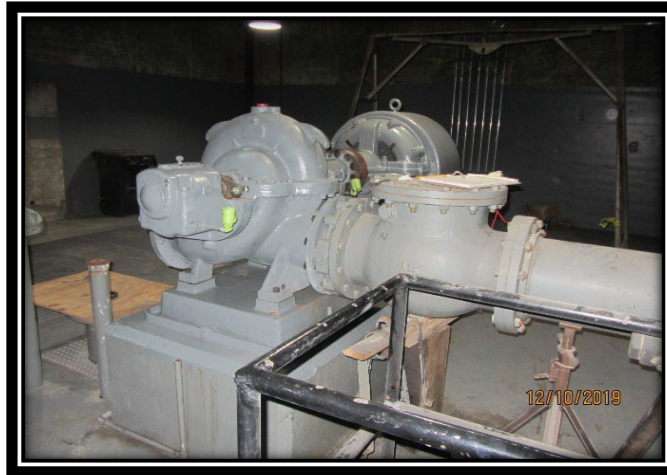
***Presented by
Michael McClendon
Upper Basin Regional Manager***

Meeting Date: May 22, 2023



Spillway Pump & Piping

- **Spillway piping runs beneath the Morris Sheppard Dam spillway**
- **Pressurized water is forced into the gate chamber to raise the gate during low lake elevations**



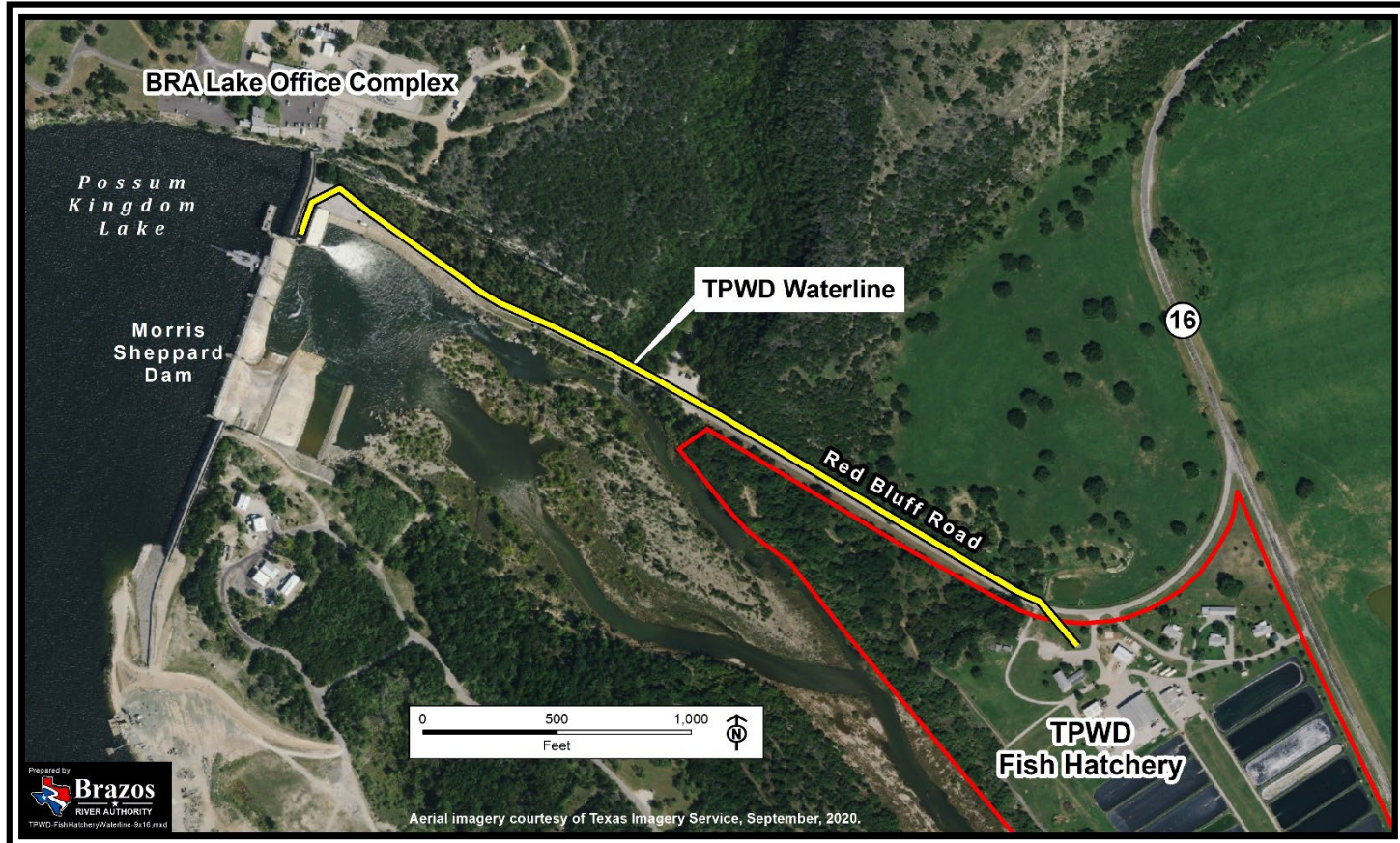


Spillway Pump & Piping

- The spillway pump is needed to provide pressurized water to the gate chambers
- Utilized to lift gates when the lake level is below approximately 995 msl

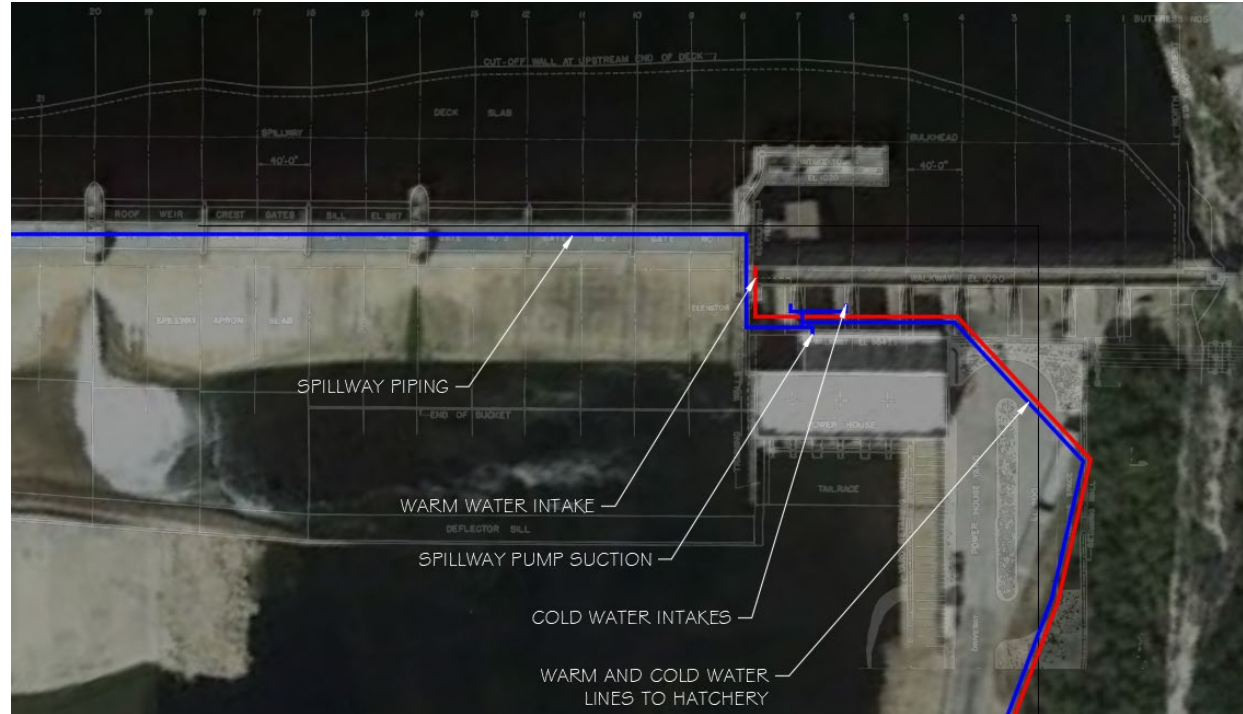


Texas Parks and Wildlife Fish Hatchery





Spillway Pump and Piping



Background and Objective

- **KCI Technologies, Inc. Engineer of Record**
- **Project will result in new piping beneath the spillway.**
- **Installation of new pump**
- **Project will retain ability to provide water to the TPWD Hatchery for their operations.**
- **A successful project will allow the BRA to test or maintain gates at low reservoir elevations.**

Bid Process & Timeline

- **March 28, 2023: Bid Advertisement**
- **April 18, 2023: Mandatory Pre-Bid/Site Visit Meeting With Two Time Offerings**
- **May 9, 2023: Bids Due/Bid Opening**

Contractor Selection

- **KCI Technologies, Inc. Opinion of Probable Construction Cost: \$2.34 million**

- **Bids Received**

Marine Diving Solutions, LLC.
\$2,519,000.00

- **Selected Contractor**
 - **Marine Diving Solutions, LLC.**



“BE IT RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to execute a contract with Marine Diving Solutions, LLC. for construction of the Morris Shepard Dam Spillway Pump and Piping Improvements Project in an amount of \$2,770,900, and;

BE IT FURTHER RESOLVED that the Board of Directors of the Brazos River Authority hereby authorizes the General Manager/CEO to approve Change Orders as deemed appropriate by the General manager/CEO, subject to the aforementioned not to exceed value, and;

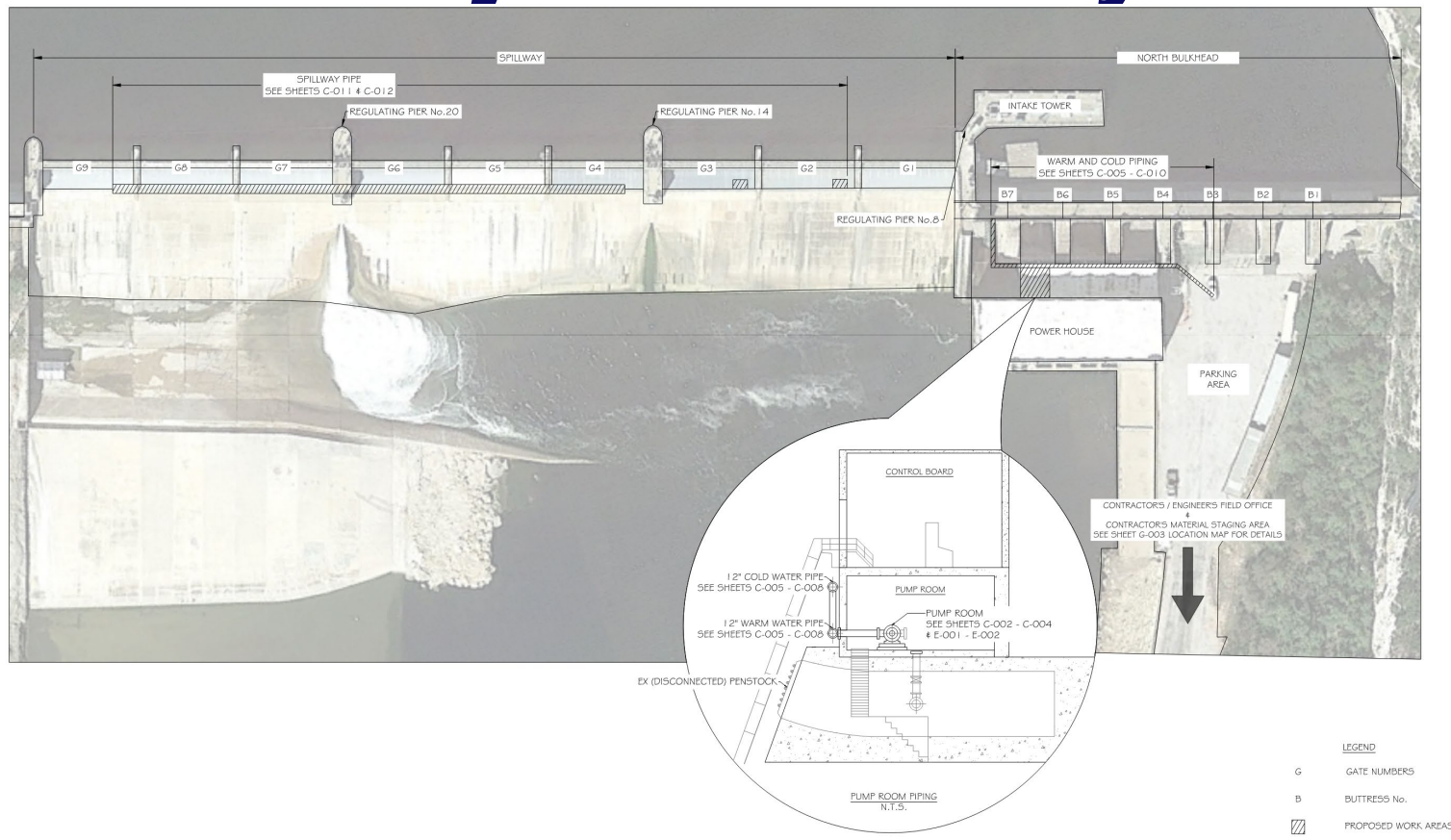
BE IT FURTHER RESOLVED that the Board of Directors of the Brazos River Authority, in exchange for a salvage credit of \$700, hereby authorizes the disposition and salvage of the following items, which are no longer necessary to the business of the Brazos River Authority and will be removed from Morris Sheppard Dam as part of the contract for the project: 20 ft. \pm 16-inch steel pipe and 380 ft. \pm 12-inch steel pipe.”



**Brazos
River
Authority**

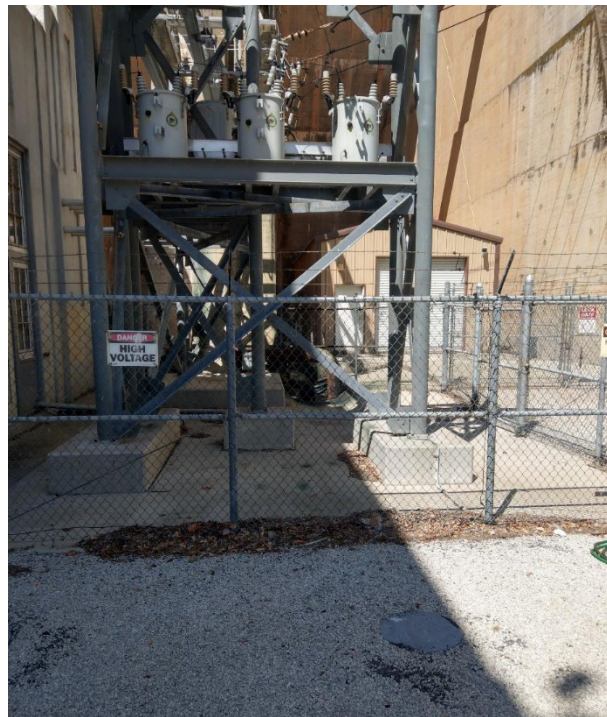
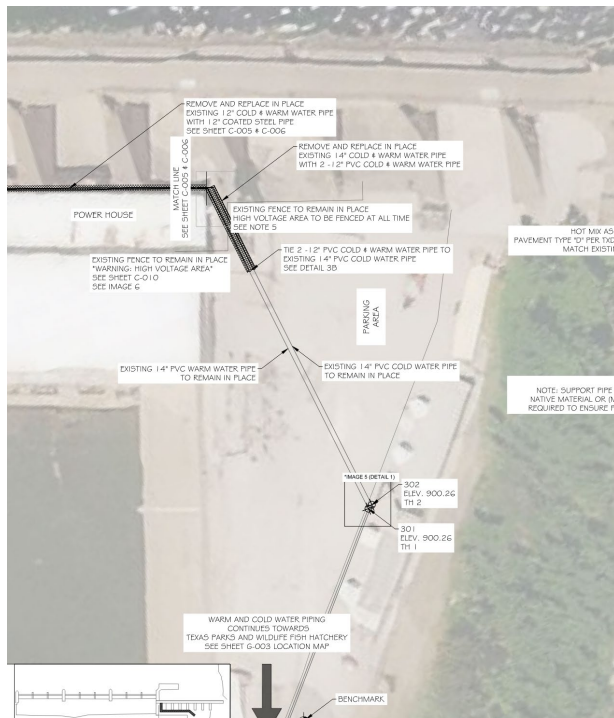


Project Summary





Warm and Cold Piping Improvements





Contractor Selection

- **Marine Diving Solutions, Inc. (MDS)**
 - Founded in 2013
 - Marine Construction/Diving Services Co
 - Based in Centennial, Colorado
 - Veteran Owned
 - 10 Employees
 - Principal – Ian Stephens, Owner
 - No Litigation History





Contractor Qualifications

Core Areas of Expertise

- **High Risk Diving**
Our highly trained professionals utilize specialized equipment to perform high risk diving in compliance with applicable OSHA regulations.
 - Ice diving
 - Penetrations
 - Confined space diving
 - HAZMAT diving
 - Mixed gas diving
 - Black water/low visibility diving
 - Deep water and/or high altitude
- **Underwater Construction**
 - Underwater support, welding, burning, cutting, and plugs
 - Installation, replacement, repair and/or maintenance
 - Racks, screens, intakes, outfalls, outlet works, valves, and gates
 - Dams, reservoirs, lakes, rivers, bridges, and pipelines
- **Valves and Gates**
 - Inspection, cleaning, repair, installation, removal and replacement
 - Valves, gates, and pipelines
- **Underwater Welding and Cutting**
 - Welding, cutting, polishing, cleaning, and inspecting
 - Steel, aluminum, zinc, stainless, and galvanized materials
- **Fabrication**
Our certified 6G welders can fabricate designs in steel, stainless, magnesium, or aluminum.
- **HDPE Certified Fusing**
 - Slip-lining failing pipes, flanges, intakes, outlets, and placements.
 - Pipeline renewal and repairing
- **Potable Water Tank and Tower**
 - Sediment removal
 - Interior/exterior inspection
 - Ultrasonic metal thickness
 - Mil coating thickness readings
 - Plumbing repair/replacement
 - Leak repairs and prevention
- **Remotely Operated Vehicle (ROV) and Push Camera Inspection**
Pipeline inspections from 2-inch to 10-foot diameter
 - Lengths up to 1500 feet
 - NASCCO PACP inspectors
 - Laser measurement readings
 - Ensuring safety in bad gas areas
 - Leak and warranty inspections
- **Video Consulting and Reporting**
 - Our divers record and report structures, condition, improvements, deficiencies, integrity, and positioning
 - Digital visual/audio recording of the work performed
 - Reports generated with still photographs for work accomplished
- **Other Operations**
 - Hydraulic and pneumatic repair
 - Aeration systems & static mixers
 - Mussel removal
 - Debris Removal

Our Clients

MDS has performed diving and underwater construction services for a variety of owners including, but not limited to:

- US Army Corps of Engineers
- Veteran Affairs
- Air Force
- Bureau of Reclamation
- Colorado Parks and Wildlife
- Colorado River District
- State of Colorado
- State of New Mexico
- Municipal, Private Utilities, HOA's, and Landowners throughout the United States and Puerto Rico.