

# Tanyard Bayou Mapping/ Confined Space Entry

## Memphis, TN



FISHER ARNOLD

### PROJECT EXPERIENCE

Tanyard Bayou is a tributary of Gayoso Bayou. Both Bayous are underground streams running through Downtown Memphis that were enclosed between 1910 and 1930. Part of this system is a brick culvert that runs under a property owned by the City of Memphis that was thought to have been abandoned sometime in the late 60's. The client needed to know the exact location, condition and if it was still in use.

The project required Fisher Arnold Surveyors to enter the Bayou requiring a Confined Space Entry Permit in accordance with the Occupational Safety and Health Administration's Standard 29 CFR 1910.146. Our Senior Safety Advisor, Tom Eubank and the Confined Space Entry Supervisor, Mark Sorsby, developed a Site-Specific Safety Plan for the survey. The plan addressed the level of the Mississippi River downstream, weather or discharges from industries or public utilities upstream of the site, rapid extraction in case of an injury or catastrophic event, air quality and working in a environment void of any light.

A five-person team consisting of three surveyors, a Confined Space entry Attendant and a Confined Space Supervisor, all trained in Confined Space Entry were utilized. All entrants were equipped with Four Gas Air Monitors, head lamps and back-up light sources. The culvert was ventilated using a Confined Space Ventilator Fan. The Surveyors transferred both vertical and horizontal control in to the culvert. They then traversed approximately 800 feet through a series of brick culvert locating all pipes coming in to the culvert and the exact location and condition of the culvert itself. Upon completion of the survey the entrants exited the Bayou safely with no incidents. The resulting survey, proving that the culvert was still active, was used to determine that the site was unsuitable for the new Fire Department Headquarters and an alternate site was chosen.

