

# **Case Study - Leak Seal & Soil Stabilization**

**Pressure Grouting, LLC** 

## Repairing a Leak in a Retention Pond

A property management company in metro Atlanta contacted SiteMix Pressure Grouting, LLC to address an issue with a neighborhood retention pond that was not holding water at the proper level. The customer reported that the water level was not running through the top of the concrete outlet control structure as designed but water was exiting on the other side of the earthen dam through the concrete outlet pipe. Upon inspection it was discovered that the pond water was piping along the outside of the concrete outlet pipe and leaking back into the outflow pipe through several bad joints in the concrete pipe.

## **Repair Materials**

The SiteMix Pressure Grouting crew choose AP Fill 700, a single component, water-activated, hydrophobic, low viscosity, closed-cell polyurethane injection resin for



the repair. Specifically, AP Fill 700 is NSF-approved for contact with drinking water, safe for the environment and allows the crew the ability to adjust the catalyst for set time. The polyurethane material is ideal for permeating soil, filling voids and water cutoff.

### **Procedures**

AP Fill 700 was injected on 18-inch centers around the base of the OCS and outlet pipe in order to inject resin into the flow of the piping water. Specifically, the set time of the resin was reduced so that the piping water would take the resin the length of the pipe to the leaking joints. The goal was to have the AP Fill 700 react from downstream back up to the OCS. Crew members observed the pipe joints until AP Fill 700 presented and all the leaks stopped.

### Results

The job took one day to complete and less than 50 gallons of resin. Within three days the pond was at full pool and the management company and neighborhood residents were very satisfied with the work.treatment plant were extremely happy with the results.