



DO YOU TRUST YOUR AS BUILT?

Frederick R. Holley | Circuit Rider III

The Super Bowl Flush. When I started training at a water system, I was introduced to a phenomenon they called, "The Super Bowl Flush". We were supplying water from a ground water source to a town with a population of 37,000. We were producing between 2-3 MGD, with a total capacity of 13 MGD. At half time and at the end of the football game you could see a definite spike in our head pressure. Everyone flushing at once. This became known as the Super Bowl Flush. It was even circled and so noted on the head pressure chart.

I learned early on that there was a special map drawer that contained the "as built's". Just what is an as built? An as built is a revised set of drawings submitted by a contractor upon completion of a project or a particular job. They reflect all changes made in the specifications and working drawings during the construction process, and show the exact dimensions, geometry, and location of all elements of the work completed under the contract (also called record drawings or just as built's). I was told these were Gospel. I found out the hard way that they were wrong.

We attended a pre-design meeting for a bridge replacement and were asked to bring our as built's. Looking through the special drawer I found the cleanest set of as built plans I could find. Keep in mind, these were dated 1965 and had been viewed many times. As built's in hand, we were the stars of the show. These helped with the design process immensely. We felt that we had really contributed to the project. According to the drawing, our 16" ACP water main was well out of the way. We all know how hard tracing ACP can be so we were happy to mark it as per the as built.

A year later, the project finally broke ground. Utilities were marked and those in the way were relocated or just exposed to verify the depth. About 2 weeks into the project, I was shocked to get a panic call from the county workers that they had water shooting 20' into the air. They weren't even supposed to be near

the main.

We were able to isolate the main without any customers being without water, and it also cut off the feed to our 3 MG storage tank. Thankfully it was not our only tank, so shutting it down was OK.



Checking the excavation, we determined that the as built was 30" off. How could that be? It was an as built therefore it was gospel. I guess not. The main was relocated putting a strain on our budget.

Let's jump ahead a few years. I am now a Circuit Rider with New York Rural Water Association and have gone on an emergency call to locate a leak, possibly under a stream. The system was able to shut down the area effecting only 1 customer who was fed with a temporary line. I asked to see the as built. The print said that the water main was either ACP, or Cast Iron. They had always referred to it as being ACP. Correlation done, 2 leaks showing, the area was excavated. The pipe they found was neither ACP nor Cast iron, it was tar coated steel with a tar lining. In all of my years with water, this was definitely a first. A valve was inserted so that the temporary service could be removed and I was asked to correlate again. This time, using the setting for steel pipe, we were able to get a better location about 6' into a stream. Time to call in the engineers. Hopefully this time things can be properly documented so that the next generation won't run into the same thing.

Helping small systems can sometimes be a big challenge. We are up to it. Every day brings something different. Give us a call; we are here to help you. Let us work together to keep our water safe, and flowing. Quality on Tap! I hope to see you soon in my travels through Western NY. 💧💧💧

