



Cross Bore Safety Association
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On April 5th the CBSA sent a questionnaire to several dozen people actively interested in the cross bore issue asking if they have information or experience with acoustic methods of identifying cross bores during construction. Many had no information, several commented. Please note the results below:

“I believe that it was better than nothing in the past. However, I believe that it could lead to a false impression that things were good when they aren’t. I question how well one could hear a hit several hundred feet from the microphone, or when the hit is on the far side of a blockage in the line, away from the microphone.”

--Safety expert

“We have tried it and even developed a proto type. At best it is reactive. But it works. I do not recommend that we support this type of locating device, it truly defeats the purpose that they (laterals) be marked. We had a customer require this, they still found cross bore due to operator error.”

-- Large installation contractor

“Sorry we do not mic the manholes. I have recently heard of a HDD operator hitting a concrete storm main, in that case the operator was able to tell he hit something. Unfortunately, we have a lot of a sewer lateral piping made up of tarred paper pipe, very soft stuff especially when it's been in the ground for a few years. I don't believe you will hear a torpedo penetrating that. Also if there any blockages currently in the sewer lateral downstream of a potential cross bore it is also very unlikely that a microphone would pick it up, the sound would go up to the home instead.”

-- Senior Project Leader, Engineering Department, major Canadian gas distribution operator

“I have heard about it but never seen it done. It makes sense that you could definitely hear the hit when the bore went through the lateral if you are listening on the lateral with an acoustic device. Of course this would require monitoring / listening on each lateral (at a cleanout or inside a building) with the device and would further require planning and scheduling for all laterals that would be in the bore path.”

-- Large Municipal gas operator

“My thoughts using the listening devices are that you really have to trust that your drillers are indeed using them, I have used these in the past but I was always checking the equipment myself being the responsible foreman on the project.

I have heard where other company's have used them but still had breaches and what I heard was that the drillers were not really using them at all it was just a case of being flat out lazy what I refer to as C players for there company in my eyes.....

But if used correctly they do work, I have been listening while my driller were doing there thing and have heard people having conversations in there homes.....”

-- Large installation contractor

“I have heard of using microphones in live drilling applications. I have not heard anything about the outcome of there use.”

-- Vacuum excavation contractor

“We know of a few customers that have listening devices as a requirement. I don’t have any good info on their effectiveness, at all. I know they were used a bit by contractors in Cincinnati and with the drill heads grinding on rocks all the time, not sure it would work. My belief is that GPR and listening devices give customers an inexpensive and false sense of security, but have no data to back that up.”

-- Large installation contractor

“We have used and purchased mics in the past with very limited success. Same with GPR. The only way to know is to post construction video every customer lateral from the structure to the main.”

-- Senior City Utility Project Engineer



Mark H. Bruce
President CBSA