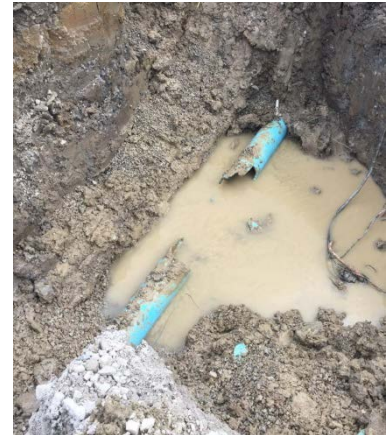


Safety Flash

Incident with Property Damage

Incident: The geothermal contractor planned to hand-dig to locate the 4-inch main gas line and set the geothermal vault. After they located the gas line, the plan changed when they could not set the vault due to excessive groundwater filling the hole for the vault. The subcontractor then used the excavator to locate stub outs from the building, and struck an 8-inch main water line.



Possible contributing factors

- A Notice of Excavation (NOE) form was filled out only to locate the gas line. After locating the gas line, the contractor began a new task before revisiting the NOE form to address the water line.
- Due to the change in scope of work, the crew had more time left in the day and the contractor performed additional tasks outside the scope of the NOE.
- The excavation was much deeper than intended to allow 10-inch mains to run underneath the gas line without disturbing it.
- The size of the excavator/bucket size led to over-digging under the gas line.
- The geothermal stub outs and gas line were at the same elevation, which required the crew to dig deeper.
- The length of the pipe supplied by the geothermal contractor required the stub outs to be near the water line.

Primary contributing factor

A Notice of Excavation form was filled out only to locate the gas line. After locating the gas line, the contractor began a new task before revisiting the NOE form to address the water line.

Possible solutions

- Complete the NOE form for specific tasks. If the scope changes, stop work and update the NOE or complete another NOE.
- When planning the work, consider the size/type of equipment and buckets appropriate for the conditions. (Example: Remove rock teeth from the bucket when digging in soil.)
- Review drawings in detail when stubbing out pipes to avoid future conflicts with other utilities.
- Whenever possible, plan work to install the deepest utilities first.

Action Plan

- Upcoming project manager and superintendent training sessions will stress the fact that the NOE process needs to be followed every time we dig.
- Incident review findings were discussed and the NOE process was reviewed at the weekly subcontractor meeting, and a stand-down was held by the subcontractor.

Keep improving

Your health and safety are our core value on every project. If you see a way we can support you in keeping our job sites safe, see your supervisor or contact: Jim Philo, 419/654-2043; Mark Hoffman, 419/360-9280; Rich Franklin, Michigan, 734/679-7283 or Alan Doane, Cleveland, 440/429-0639.