Sewer – Look at Cross Bores

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ONE KILLED WHEN BLAST FLIPS UPS MANHOLE COVER
Methods for Utility Installation

- Open Cut
- Horizontal Directional Drilling
- Moles
- Plowing
Benefits of Directional Drilling

- Cost savings over traditional open cut
- Reduced installation time
- Minimizes surface disruption
- Flexibility in location and alignment
- Durability
- Less soil contamination
- Fewer permit issues
What is a Cross Bore?

“An intersection of an existing underground utility or underground structure by a second utility resulting in a direct contact between the transitions of the utilities that compromises the integrity of either utility or underground structure.”
How do Cross Bores Happen?

- More utilities are being installed or updated underground.
- Limited width to work within due to utility easement size.
- Only choice is to go deeper – resulting in boring through sewer mains and private service laterals.
- Utilities
• Based on information from the North American Society of Trenchless Technology, field experience suggests that there are 2 to 3 cross-bores per running mile of installed pipe.

• This information is based on all types of utilities.
Dry Weather Sanitary Sewer Overflow
Root Mass in Sewer Pipe
Sewer Cleaning Root Saw
Distance: 22.4 ft.
MSA - Abandoned Survey
Clock from:
Clock to:
Rating:
Dimension 1:
Dimension 2:
%

GAS PIPE THRU CENTER OF MAINLINE BLOCKING CAMERA
Dangers of Cross Bore

• Gas bores are the biggest danger due to the potential for explosion
• Detection of a cross bore may go unnoticed for decades
• Plumbers can unknowingly cut a plastic line while clearing a blockage
• Death, injury and property damage all can be an unfortunate result
Gas Explosion

(Trenchless Technology Magazine 05-18-15)
What can be done?

• Educate both the public, and utility workers
• Post investigation for directional drilling projects
• Legacy projects
Mainline Inspections
Thank You!

Questions?

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