



Discussion of Depth Tolerance for Sewer Depth Locates:

1. Sonde transmits radio frequency to Receiver.
2. Angle that radio receiver is held can affect accuracy.
3. Sonde can rise and fall in pipe due to debris, sediment, offset joints, etc. affecting accuracy.
4. Diameter of the bell of a lateral sewer pipe, here shown as 6" clay pipe can affect accuracy by 8" from sonde position.
5. Theoretical advertised accuracy of sonde/receivers is 2.5 to 5% with sondes that are larger and higher strength than those that can be robotically launched with CCTV equipment.
6. Interference, calibration deviations, etc. adds to accuracy tolerance.
7. Larger diameter pipes require additional tolerance to allow for position of sonde vs. outside diameter of pipe joint.

**8. Because of combination of above factors and to provide a margin of safety, a 2 ft or greater tolerance is often used for depth locates prior to trenchless installation on smaller pipes using sondes.**

