

Comparison of Service Line Identification Techniques (Hensley et al., 2021)

LSL ID method	Utility cost			Disturbance		Impact on resident			Utility skills required		Overall	
	Financial	Onsite time	Pre-/post-time	Service line	Traffic flow	Water service disruption	Property damage	Resident involvement (includes pre-/post-time)	Technical interpretation	Labor	Time	Accuracy
Community records review	L or M (if digitized)	NA	M to H (L if digitized)	None	None	None	None	None	L to M	None	M	L to H
Basic/visual observations (on private side)	L	L	L to M	None	None	None	None	L	L	L	L	M to H
Water quality sampling—flushed	L	L	M to H	None	None	None	None	L	M	L	M	L to M
Water quality sampling—sequential	M	L	M to H	None	None	M	None	M to H	M	L to M	M	L to H
Water quality sampling—targeted	L	L	M to H	None	None	M	None	M to H	M	L to M	M	M
Excavation—mechanical	H	H	M to H	H	M to H	H	H	L	L to M	H	H	H
Excavation—vacuum	M to H	L to M	M to H	M	L to M	M to H	M to H	L	M	M to H	M	M to H

Source: Table 2: Relative pros and cons of lead service line identification methods using a ranking system of H: high, M: medium, and L: low (Hensley et al., 2021).

Note: This table does not include CCTV investigations in the evaluation of the basic/visual observation method.