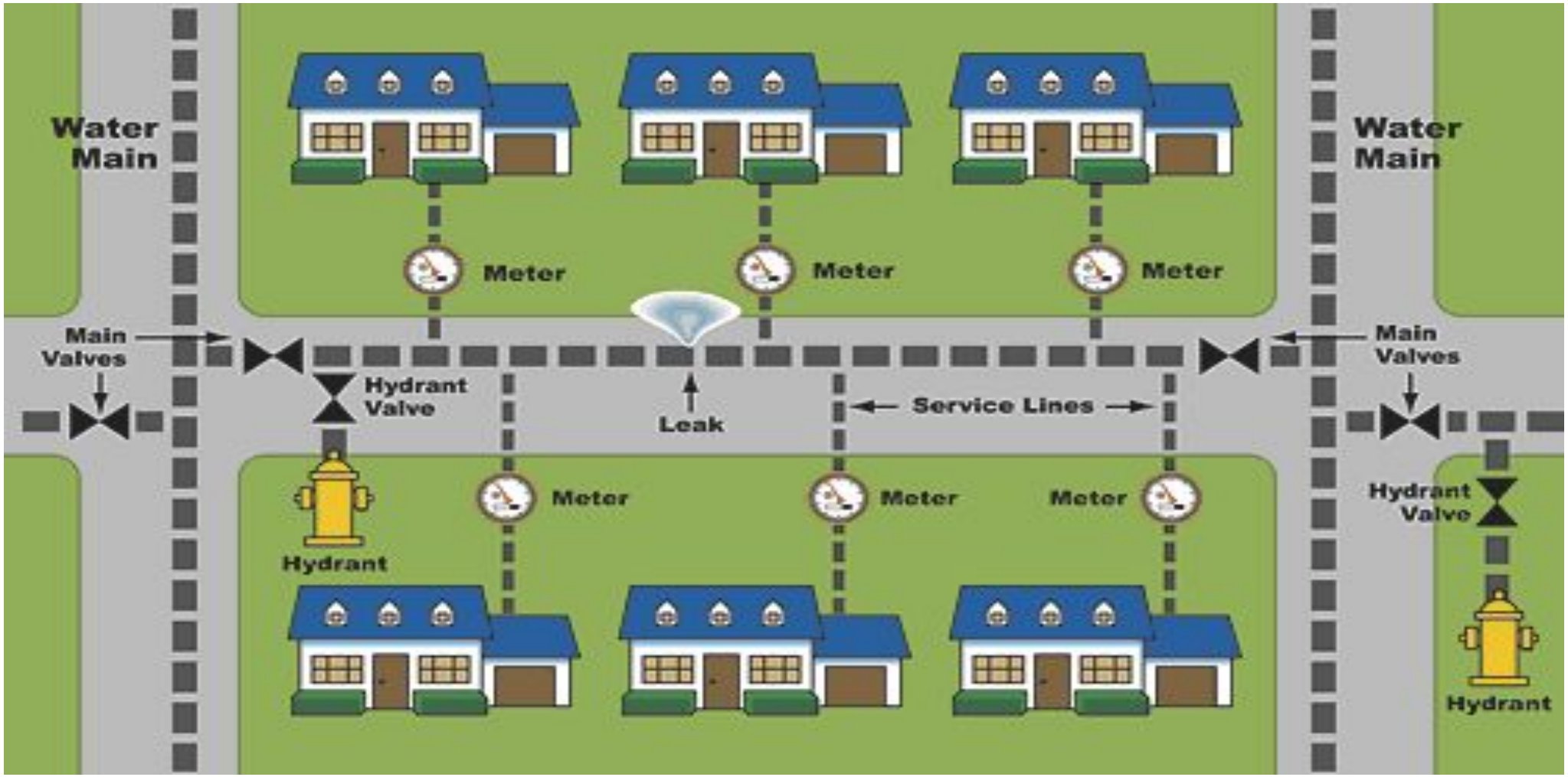
Leak Detection Survey in Water Line

Survey

- “Surveying” is the term applied to listening for water leaks when there is no obvious evidence, like water flowing on the street.
- Every hydrant, valve, and service line is a possible location to hear the sounds of water leaks.
- Since the sounds travel on the pipe walls better than through the soil, always listen at the hydrants, valves, and meters first.
- As you get closer to the leak, the sound gets louder.
- Finally, decide which two of these locations are the loudest. Now you are ready for “Water Leak Pinpointing.”


Water Main
Water Main
Meter
Meter
Meter
Main Valves
Main Valves
Hydrant Valve
Leak
Service Lines
Hydrant Valve
Meter
Meter
Meter
Hydrant
Hydrant



Listening for Leak Sounds at Hydrant

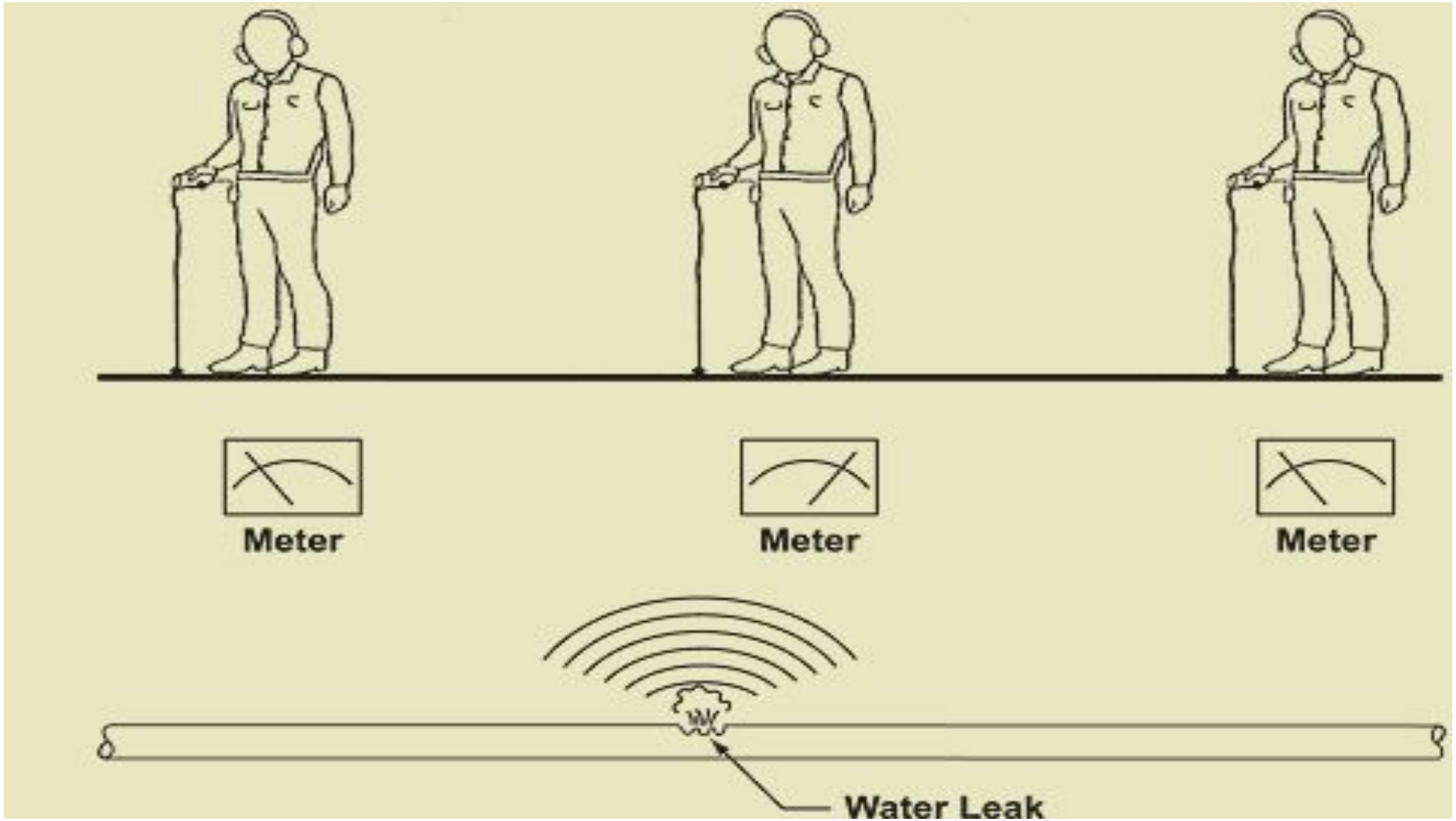


Listening for Leak Sounds at Meter

Pinpointing

- Water Leak Pinpointing” is the term applied to the process of pinpointing the exact leak location.
- For Leak Detection, the exact leak location is usually the spot where the leak sounds are the loudest.
- To find this spot, the listener must carefully mark the location of the water line on the street.
- Usually, the piping between the valve or hydrant with the loudest sound and the valve or hydrant with the second loudest sound is the section of the line that needs to be marked.
- The section must be accurately located and marked on the street in order for the listener to consistently listen directly over the pipe.

Pinpointing



Pinpointing

- The listener moves the ground microphone 3 to 4 feet each time in the direction of the water line, listening, and moving closer to the water leak.
- When the listener is very close to the leak, it may be impossible to decide based upon the user's hearing alone whether the leak is in one spot or in a spot 3 to 4 feet away.
- When this occurs, the listener must study the visible display (meter) to see if the signal is slightly stronger at one location than at another location.



Leak Pinpointing Over a Hydrant Line