



Leakage Investigation Survey

Client: Dudley Street, Walsall

Mains water meter information

Size (mm)	15-28	✓	32-50		75-100		125-200		Above 200mm	
Serial number	04-671111									
Readings (1)	20475.831				Time:	08.36 16/10/2019				
Readings (2)	20475.843				Time:	08.41 16/10/2019				
Location	Meter located rear of property in footpath									

Leakage Activities

Acoustic sounding		Correlation		Ground microphone		Environmental Inspection	✓
Other	Isolation of rising main						
Pipe traced		CAT & Genny			Distance		
Pipe correlated	Accelerometer			Hydrophones	Distance		

Background Information

Customer served with a section 75 water leak notice from the water company

Activity Summary

Pipework & Metering



Pic 1



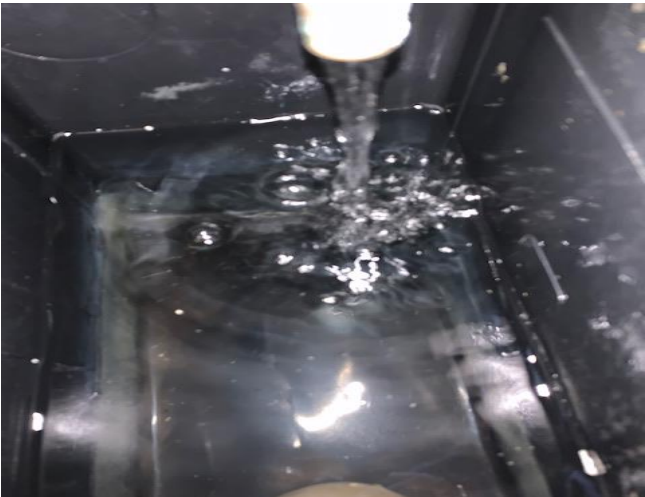
Pic 2



Pic 3



Pic 4



Pic 5



Pic 6



Pic 7

Leakage Survey Activities

We were shown around the site by the site manager who pointed out all rising mains and what had been looked into by site themselves to check for any issues.

I first went to the main revenue meter (pic 1) to check location and flow rate.

The flow rate was approx. 2.5 litres per minute of continuous flow = 3.6m³ per day.

We first closed the stop tap in the public washroom area (pic 3) and then rechecked the meter which still had a flow rate of 2.5 litres per minute.

We then closed the isolation valved at the urinals (pic 4) in the main garage area, again the meter was checked and was found to have zero flow rate, indicating that the urinals were the reason for the continuous flow rate.

Access to a stop tap (pic 2) at the washroom in the garage area was operated but found to be inoperable so an isolation test could not be carried out to the washroom as a whole.

Pipe-work to the urinals (pic 7) were checked to identify if it supplied anything other than the urinals, it was confirmed that the pipe-work only supplied the urinals and also concluded that the continuous filling of the urinals (pic 5) was the cause of the continuous flow rate at the meter.

The urinals and the stop taps were all re opened and supply fully restored, the flow to the urinals was reduced but not stopped, the main reason for this is that the site manager had pointed out that crystallising of the urinal outlets was a major problem so regular flushing was essential.

David has requested a quotation for the supply and installation of a PIR urinal control and also the repair or replacement of the garage washroom stop tap that was inoperable.

Summary & Recommendations

Summary:

No underground leak on supply, no water leak was found and the leak noise was continual uage through the flushing urinals uncontrolled.

Recommendations:

Install urinal control

Renew ½" stop tap in garage washroom.

Water wastage through the uncontrolled urinal volume is **1,314m3 per year or 289,000 gallons at a cost of £2,667 per year.**

Savings when urinal control installed and stop tap replaced £2,667 with a **payback of 1 month.**

Once the above works have been completed we will inform the water wholesaler to cancel the section 75 notice.

Survey carried out by

Engineer	H2O Building Services	Date	16th October 2019
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