



# Leakage Investigation Survey

**Client: Caravan Park, Stratford on Avon**

## Mains water meter information

Size (mm)	15-28		32-50	✓	75-100		125-200		Above 200mm	
Serial number	14KE12345									
Readings (1)	43193				Time:	09:43 11 <sup>th</sup> March 2019				
Readings (2)	43193				Time:	09:48 11 <sup>th</sup> March 2019				
Location	Meter located top of drive on right hand side.									

## Leakage Activities

Acoustic sounding	✓	Correlation		Ground microphone	✓	Environmental Inspection	
Other	Isolation of rising main (limited by not operating fully)						
Pipe traced		CAT & Genny			Distance		
Pipe correlated	Accelerometer			Hydrophones	Distance		

## Background Information

To attend site to carry out water leak detection due to the fact the water company had been in touch with the client to say there was leakage at site and this needed to be rectified.

## Activity Summary

### Pipework & Metering



Pic 1



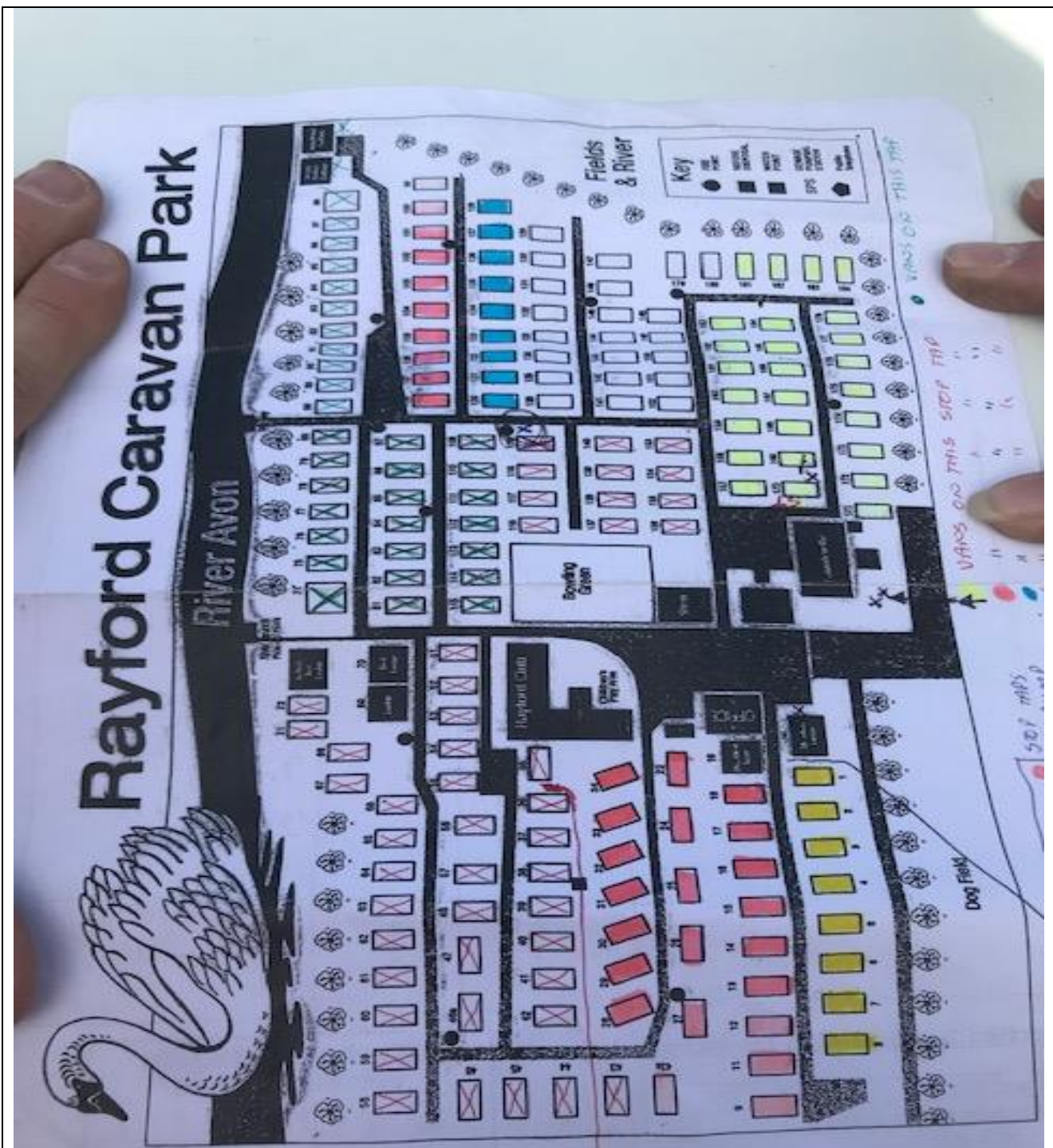
Pic 2



Pic 3



Pic 4



Pic 5

### **Leakage Survey Activities**

On arrival at site I met with Wayne (park maintenance), Wayne explained what the Water Company were saying about high consumption.

It was pointed out that several isolation tests had been carried out around the park by park maintenance trying to locate the problem pointed out by the Water Company, on every section (pic 5) that was shut down the meter was checked and still had a substantial flow rate.

The Water Company were stating losses at 1m<sup>3</sup> per hour but as Wayne pointed out there were now many people on site as it had now re opened for the new season so the Water Company estimates were a little high.

Whilst I was on site I too shut all isolation points (pic 5) and checked the meter (pic 1), which

had a constant flow rate of 9.5 litres per minute.  
Looking at the site layout (pic 5) it looked like there was a leak between the meter and the traffic barrier to the park, on investigation there was approx. 30 homes that were still live with water.

These homes were checked along with the section between the barrier and the meter, noise was picked up on two homes (pic 2&3). Further investigation showed that water was constantly flowing in a sewer chamber (pic 4) at the side of one of the homes that had the leak noise. Further checks were carried out using electronic ground probe and the leak pinpointed under one of the homes.

This was pointed out to park maintenance staff to enable repair works when possible.

### **Summary & Recommendations**

Summary:

Excavate and carry out repairs to leaking pipe work, this is being undertaken by the site themselves.

Install additional isolation point to remaining section of 30 homes, also being undertaken by the site.

The leak is working out at 13.6m<sup>3</sup> per day which over a month is 408m<sup>3</sup> at a cost of £991 per month.

### **Survey carried out by**

Engineer	H2O Building Services	Date	April 2019
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