

Officer responsible Water Services Manager	Author Tom Brien, Customer Services Manager
Corporate Plan Output: Information and Advice - External	

The purpose of this report is to inform the Community Board of the steps taken by Council staff to source out the apparent “loss of water pressure/flow” experienced by some of the residents on the eastern side of Harakeke Street.

INTRODUCTION

Following receipt of a letter to the Board Chairman from Mr Graeme Craigie (on behalf of the residents of northern Harakeke Street), a site meeting took place at 4.30pm on 12 May 1999. One of the issues to be discussed at the site meeting was the loss of water pressure/flow to the residences located between 90 and 108 Harakeke Street.

The residents were primarily concerned that the 40mm diameter submain was too small to deliver the required pressure/volume. It was stated that the pressure/flow appeared to suffer most during summer draw offs. The residents also stated in their letter that, “the provision of adequate water supply is a health issue and was considered by most ratepayers as a right”.

Four residents along with Val Carter and Keith Nuttall and four Council Officers attended the site meeting.

RESOLVE OF SITE MEETING

At the site meeting it was agreed that the Water Services Unit arrange to have the flow into each property checked at the meter and at the front tap inside the property.

Also, that subject to the findings resulting from the flow tests referred to above, a separate 50mm diameter connection be laid across the road from the Council’s 100mm diameter main to interconnect with the 40mm diameter submain to supplement the flow in this submain.

Further that the investigation be carried out as soon as possible.

RESULTS OF SITE INVESTIGATION

The flow tests taken at the respective meters for Nos 90 to 108 (excl 106), gave a range of flows from 38 litres per minute to 56 litres per minute. These flows exceed our minimum standard of 25 litres per minute at the meter.

In contrast, the range of flows at the front taps to Nos 90 to 100 inclusive ranged from 13 litres per minute to 20 litres per minute. (A considerable reduction of flow in all cases.)

Similar results to the above were also recorded at No 101 Harakeke Street which is located on the other side of the road. This property is served directly off the 100mm diameter main. The flows recorded here were 77 litres per minute at the meter and 18 and 11 litres per minute respectively at the front and rear taps.

The valves on the 40mm diameter submain and the 100mm diameter supply main in the road, were checked and found to be in good operating condition.

The pressure at the fire hydrant opposite No 93 was tested at 400Kpa (ie approximately a 40 metre head) which is within the expected 300 to 450Kpa range in this particular north west pressure zone under normal operating conditions.

From a site inspection carried out on 31 May 1999, it was observed that the 40mm diameter connection serving 67A Fendalton Road (but which is served via the Right of Way adjacent to 100 Harakeke Street), comes directly off the Council's 100mm diameter main on the other side of Harakeke Street and not from the 40mm diameter submain (as recorded on the Council's record plan).

CONCLUSIONS

1. At the point of supply the flows universally exceeded the Water Services Unit's minimum level of service of 25 litres per minute.
2. The hydraulic loss of flow between the point of supply at the meter and the house's front taps, points to defective or faulty supply lines or fittings within the properties. An example of a before and after replacement of an internal supply line (ie rear section - 50 Clyde Road) saw an increase of flow at the front tap of 22 litres per minute, ie from 18l/m to 40l/m.
3. In nearly all cases, the loss between the meter and the front tap within each property was close to or exceeded the 25 litres per minute minimum service delivery standard accepted by the Unit. For individual results please refer to the **attached** plan showing the recorded flows.
4. That Council staff will continue to monitor the mains supply in Harakeke Street during the summer months to see what effect the 'draw-off' (ie from garden hosing etc) has when peak demands put pressure on the overall system.
5. It should also be noted that the Council saw fit to renew its own water supply reticulation along this portion of Harakeke Street in 1978.

- Recommendations:**
1. That the resident owners be advised that on the investigations carried out to date, it would appear that the supply lines within the properties need to be either replaced and/or upgraded to improve the supply into their residences.
 2. That no additional supply pipeline be laid across Harakeke Street at this stage to interconnect with the existing 40mm diameter submain but that further consideration be given to increasing the pressure/flow in the area, should the problem remain after the private owners have “upgraded and/or replaced” the defective pipelines within their own premises.

Chairman’s

Recommendation: That the foregoing recommendations be adopted.