

9.24 Water Supply Installation at the Allotments

Initial brief

Allotment holder at Rublees have raised concerns regarding the lack of water pressure at parts of the allotment.

Verbally briefed 28th April

Upon initial enquires with 2 contractors the cost for a Bore hole is estimated at £12-15K (to include installation of bore hole and pumping equipment, it was then suggested that the working party to be increased to look at all options available to the allotment.

Working party to consist of

1. Cllr Simon Alexander
2. Cllr Tim Lloyd
3. John Fulbrook
4. Cllr Trevor Cree (if willing as not on Amenities committee but worked in water sector)

22nd May 2020 @ 1130 First meeting of the new Working Party

I am pleased to advise that all members and Hazel took part in our first WP meeting. It was a good discussion with lots of ideas from all. It was agreed at the end to look at the following areas as potential methods to improve the water supply of Rublees

1. Installation of a replacement pipe
2. Installation of bulk water storage tank
3. Installation of a Bore hole
4. Installation of additional Dip Tank and removal of stand pipes of hoses

In addition we have agreed to set up a site visit with Mark ??, Cllrs Alexander and Cree to understand the currently layout of pipework in Rubless Allotment.

Finally working with the Clerks we will look at the current water consumption on both Allotment site and in turn prorate per plot to look at long term efficacies that we can bring to the Allotment plots inline with climate change and the SCP Climate Change Working Party

Draft Terms of Reference for agreement by Amenities committee

Steyping Parish Council
Allotment Water Supply Working Party
Terms of Reference

Purpose of Allotment Water Supply Working Party

The Allotment Water Supply Working Party ("AWSWP") has been formed to:

1. Inform and advise Steyping Parish Council ("SPC") about opportunities for local action to promote resilience to the effects of climate change.

Reporting

The AWSWP will report regularly to meetings of SPC Amenities Committee.

Status and Responsibilities

The AWSWP is a working party of SPC. It will act in an advisory capacity to SPC. It has no powers to commit SPC to spending and does not hold decision making powers. The AWSWP may liaise with other parish councils, consult with other organisations and seek expert advice subject to SPC Amenities Committee first having approved any expenditure for such advice.

The final version of the AWSWP's terms of reference shall be approved by SPC.

Term

The AWSWP will be constituted for an initial period ending with the successful improvements being made to the water supply

Meetings

Subject to its terms of reference from SPC, the AWSWP shall regulate its own business and procedures. Notes of each meeting should be kept and a monthly report including any recommendations presented to SPC Amenities Committee, either verbally or written.

The meeting schedule will be set by the AWSWP as required.

Membership

The AWSWP must include not fewer than two SPC councillors, one of whom shall be appointed chair of AWSWP and the other vice-chair. In the absence of the councillor chair and vice-chair from any meeting of AWSWP the members present shall elect a chair limited to the duration of that meeting. One Member of the Allotment Association and One none member of the Allotment Association are to be included in the AWSWP

The minimum number of AWSWP members shall be four.

Quorum will be three and the AWSWP members must use their best endeavours to ensure at least two SPC councillors are in attendance.

The membership of AWSWP must be approved by the Parish Council.

Code of Conduct

All AWSWP members, including members of the public, must abide by the Code of Conduct for Councillors as adopted by SPC and must complete a register of interests form in the same format as is applicable to councillors which will be available for public inspection and may be uploaded to the SPC website.

Expenses

The AWSWP has no budget, and reimbursement for the members' time will not be made.

Food and drink expenses will not be reimbursed.

The AWSWP may apply to the SPC for reasonable out of pocket expenses incurred in the course of the working group's work.

A recommendation should be made to SPC as to expenses for inclusion in the Council's annual budget. Many projects will fall under the remit of different SPC committees.

Intellectual Property

In the event that the AWSWP develops intellectual property, all rights in that property shall vest in SPC

GDPR/Data Protection Act/Freedom of Information Act/Environmental Information Regulations

All members of AWSWP are subject to the provisions of the GDPR, the Data Protection Act, the Freedom of Information Act, and the Environmental Information Regulations and on request from SPC must deliver up all data acquired in their capacity as a member and must, under potential criminal penalties, prior to delivery retain all data securely and in accordance with SPC's published policies.

AWSWP members must not share information with any individual or organisation external to AWSWP unless approved by the AWSWP or the clerk to the Council.

Authority to Correspond

There are three separate scenarios with different rules applicable to each:

- 1 SPC
Any correspondence (including emails) external to AWSWP sent on behalf of SPC must be sent only by SPC's clerk
- 2 AWSWP
Any correspondence (including emails) external to AWSWP sent on behalf of AWSWP must be sent only by SPC's clerk unless it has been approved by the Clerk before sending and the Clerk is copied into the outgoing message and any replies.
- 3 Individual
Any AWSWP member may correspond externally to AWSWP in their individual capacity provided any such communication contains prominently the explanation *"Please note that, unless the contrary is stated, any views expressed in this message are mine as an individual member of the Steyning Parish Council Allotment Water Supply Working Party and are not the views or policy of either the Working Party or the Council. Please consult the Council's Clerk, Mr John Fullbrook, if you wish to know the Council's policy on any issue."*

Sunday 26th January 2020

Rublees Allotments: Preliminary Investigation of Existing Water Supply Issues

1. Introduction

On the 7th January 2020 a preliminary assessment was undertaken of the existing water supply issues that have been reported at the Rublees Allotments, Steyning. This work was enabled because at this time of year water is not required by allotment holders and therefore the assessment could be undertaken without any disruption. The Steyning Parish Council had earlier purchased equipment from Access Irrigation consisting of a pressure gauge and two way water fitting with on/off controls.

2, Rublees Allotment Water Meter

The water meter is located on the driveway at the Newham Lane entrance. The dials on the water meter were stationary and that therefore indicated that there was no leakage in the existing water distribution system. The reading dated the 7th January 2020 was **05768**

(12) cubic metres and this can therefore be directly compared with readings taken over the last few years. The meter reading on the 14th December 2019 was reported to be 5767

(74) cubic metres. The SPC will have on file previous water bills detailing water usage and associated costs. On the 14th December 2019 Roger (Brown) was informed on a chance meeting with the Siemens water board technician that usage since the last reading might have been as high as 1,100 cubic metres (241,966 gallons) but that needs to be confirmed. The water supply pipe from the water meter to the first allotment water outlet is stated to be 15 mm in diameter but that requires confirmation.

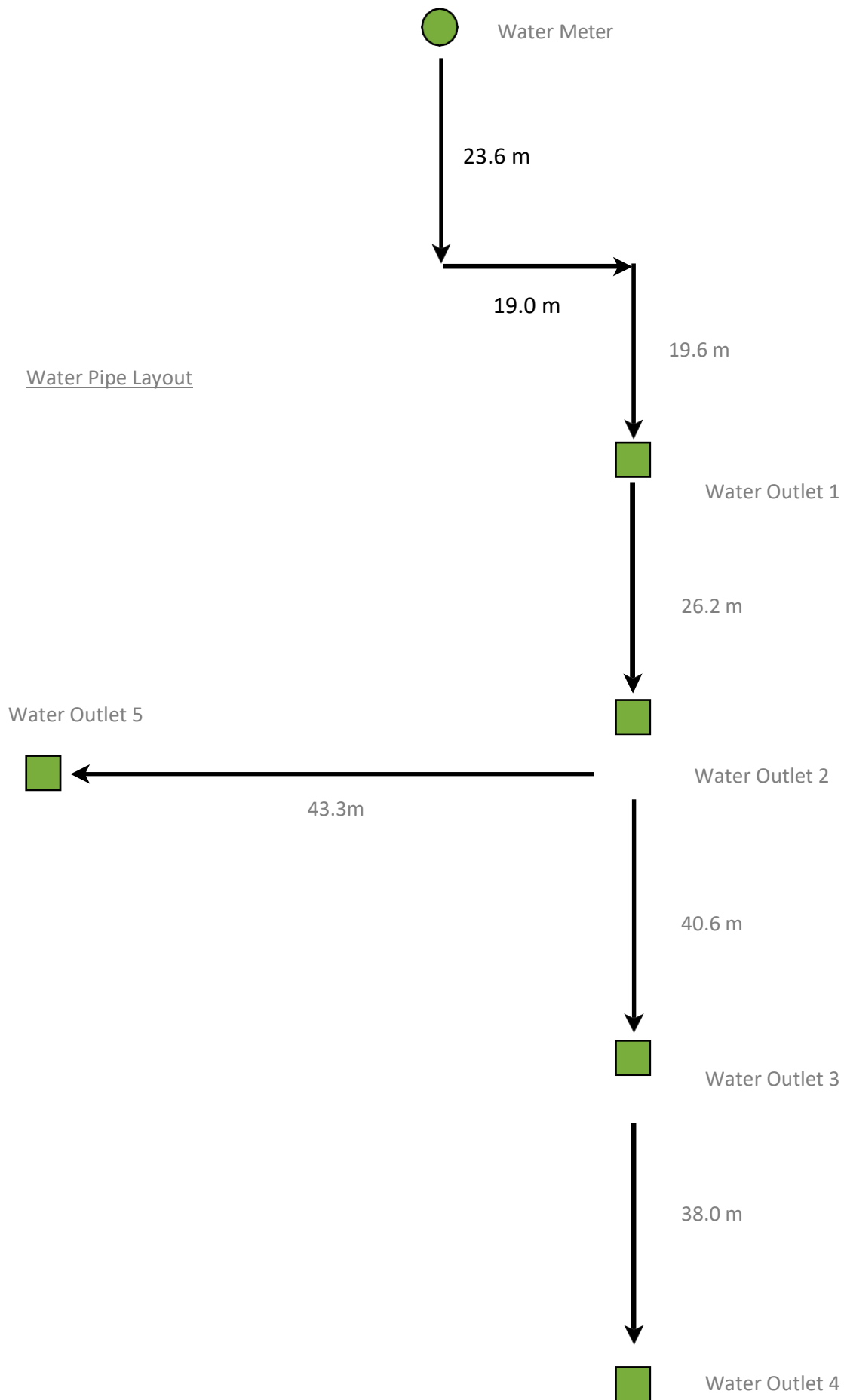
Following discussion with the Allotment holders and the SPC it is recommended that during the winter months that the water supply to both of the allotments (Rublees and Canada Gardens) be turned off at the meter. This will help to ensure that water is not wasted and excessive costs incurred due to undetected leakage or water taps or hoses being left on unattended. If water is required during the winter months then the existing tanks can be topped up as required.

In addition consideration should be given to replacing water tanks that are corroded or have holes in them since that currently leads to water loss.

3, Water Distribution System

As far as could be determined there are five water outlets within the Rublees allotments, four with water storage tanks and one without. Water is accessed by elevated water taps using watering cans or hoses or from the individual tanks. The distance from the water meter to each individual water outlet were measured to be:

Water Meter to Outlet 1 = 62.2 m
Water Meter to Outlet 2 = 88.4 m
Water Meter to Outlet 3 = 129.0 m
Water Meter to Outlet 4 = 167.0 m
Water Meter to Outlet 5 = 131.7 m



4. Preliminary Findings

Water Pressure: With all of the outlets in the off position the water pressure at Outlet 4 was measured to be 6.6 bar ($6.6 \times 14.50 = 95.7$ psi). The tap at Outlet 3 was then fully opened and the pressure measurement at Outlet 4 dropped significantly to 1.2 bar. When Outlet 3 and Outlet 2 were both fully opened the pressure measurement at Outlet 4 dropped to 0.6 bar. When Outlet 3, Outlet 2 and Outlet 1 were all fully opened the pressure measurement at Outlet 4 dropped to 0.3 bar.

Water Flow Rates: Preliminary water flow measurements were taken using indicative scenarios:

Scenario (a) Four water outlets fully open (Outlets 1, 2, 3 and 4 open, Outlet 5 closed)

This scenario was very interesting and rather baffling. Usually the flowrate will be greatest nearest the water source (Outlet 1) and then because of pipe friction loss the pressure and flowrate should have decreased the further one was from the source.

Outlet 1 Flowrate = 20.0 litres/min
Outlet 2 Flowrate = 0.00 litres/min
Outlet 3 Flowrate = 4.14 litres/min
Outlet 4 Flowrate = 10.47 litres/min

The flow at Outlet 1 provides a benchmark but then you would expect the flow at Outlet 2 to be the second highest when in fact there was zero flow. The flow at Outlet 3 was much reduced but rose at Outlet 4. Clearly allowance has to be made for the height differences between Outlet 1 and 2, 3 and 4 but the results are very odd, particularly zero flow at Outlet 2.

Scenario (b) Three water outlets fully open (Outlets 2, 3 and 4 open, Outlets 1 and 5 closed)

Although Outlets 2, 3 and 4 were fully open only the flowrate at Outlet 2 was measured. That had increased from 0.00 litres/minute up to 9.5 litres/minute.

Outlet 2 Flowrate = 9.5 litres/min

Scenario (c) Two water outlets fully open (Outlets 3 and 4 open, Outlets 1, 2 and 5 closed) The flow at Outlet

3 was measured with Outlets 1, 2 and 5 closed but 2 and 4 open.

Outlet 3 Flowrate - 12.9 litres/min

Scenario (d) One water outlet fully open (Outlet 4 open, Outlets 1, 2, 3 and 5 closed) In the final

scenario only Outlet 4 was open whilst all other Outlets were closed.

Outlet 4 Flowrate = 32.8 litres/min

5. Follow-Up

Time was very limited for the preliminary investigation and it is clear that further work should be undertaken as soon as possible before the Spring.

(i) I understand that Mark undertakes the maintenance of the Rublees allotment water distribution system. He will probably have a very clear understanding of the underground pipe sizes and fittings that have been installed and that may help to explain some of the anomalies. A visit to the Rublees with Mark might be the next step.

(ii) It was reported that there may be another water pipeline feeding the Rublees allotment and that can be easily verified by turning the flow off at the Newham Lane water meter and then opening all of the taps until flow ceases (or does not). In addition a resident might be able to confirm the location of the second water source, if it exists.

(iii) The initial tests were undertaken without any hose attachments and many allotment holders prefer to use hoses rather than watering cans. In fact there are multiple scenarios of water usage on any one day of the year but the main requirement is that all allotment holders have equal access to the available water.

(iv) In cooperation with Hazel we need to determine if the annual water usage in 2019 was exceptional in comparison with other years and what was the final cost to the SPC. The work on the efficient use of resources may mean that we should aim to decrease the annual water usage and cost at the Rublees allotments.

(v) One potentially controversial option would be to ban the use of hoses but increase the number of water tanks to make the use of watering cans easier. Clearly no action should be taken before discussions are undertaken between the SPC and allotment holders.

(vi) It is understood that Councillor Alexander is investigating the financial viability of a borehole but it is not known how far that work has progressed.

(vii) A further investigation should be undertaken as soon as possible. At that time it will be possible to discuss different solutions to the current water problem,