DETAILS OF PERCOLATION TEST

Before carrying out the testing procedure, a trial hole should be dug to determine the position of the standing water table. The trial hole should be minimum of 1m² in area and 2m deep, or a minimum 1.5m below the invert of the proposed drainage field pipework. The ground water table should not rise to within 1m of the invert level of the proposed effluent distribution pipe.

Name: Mr Liam O'Brien

FULL ADDRESS OF PROPERTY TO BE DRAINED:

Hare Hill Farm, Edgton, Craven Arms,

SY7 8HN

PROCEDURE.

(1) A hole 300mm square should be excavated to a depth 300mm below the proposed invert level of the effluent distribution pipe.
(2) Fill the 300mm square section of the hole to a depth at least 300mm with water and allow it to seep away overnight.
(3) Next day, refill the test section with water to a depth of at least 300mm and observe the time, in seconds, for the water to seep away from 75% full to 25% full level. Divide this time by 150mm. The answer gives the average time in seconds (Vp) required for the water to drop 1mm.
(4) The test should be carried out at least three times with at least two trial holes. (care to be taken to avoid abnormal conditions ie. Heavy rain, severe frost, drought).

TEST No 1 Trial Hole 1

Date: 19/6/20 Weather Conditions: Dry & Bright

(A) Depth of water (Minimum 300mm) 310

(B) Time in seconds taken to seep away. 5400

Therefore average time for water to drop to 1mm = B/A = 17.4

TEST No 2 Trial Hole 1

Date: 20/6/20 Weather Conditions: Dry & overcast

(A) Depth of water (Minimum 300mm) 305

(B) Time in seconds taken to seep away. 4788

Therefore average time for water to drop to 1mm = B/A = 15.69

TEST No 3 Trial Hole 1

Date: 21/6/20 Weather Conditions: Dry & Bright

(A) Depth of water (Minimum 300mm) 310

(B) Time in seconds taken to seep away. 5976

Therefore average time for water to drop to 1mm = B/A = 19.27

TEST No 4 Trial Hole 2

Date: 19/6/20 Weather Conditions: Dry & Bright

(A) Depth of water (Minimum 300mm) 300

(B) Time in seconds taken to seep away. 5400

Therefore average time for water to drop to 1mm = B/A = 18

TEST No 5 Trial Hole 2

Date: 20/6/20 Weather Conditions: Dry & overcast

(A) Depth of water (Minimum 300mm) 305

(B) Time in seconds taken to seep away. 6480

Therefore average time for water to drop to 1mm = B/A = 21.24

TEST No 6 Trial Hole 2

Date: 21/6/20 Weather Conditions: Dry & Bright

(A) Depth of water (Minimum 300mm) 300

(B) Time in seconds taken to seep away. 5220

Therefore average time for water to drop to 1mm = B/A = 17.4

(C) Average of the 6 tests (Vp): (1 + 2 + 3 + 4 + 5 + 6) / 6 = 18.16

Floor area of land drainage trench (M²) required for irrigation.

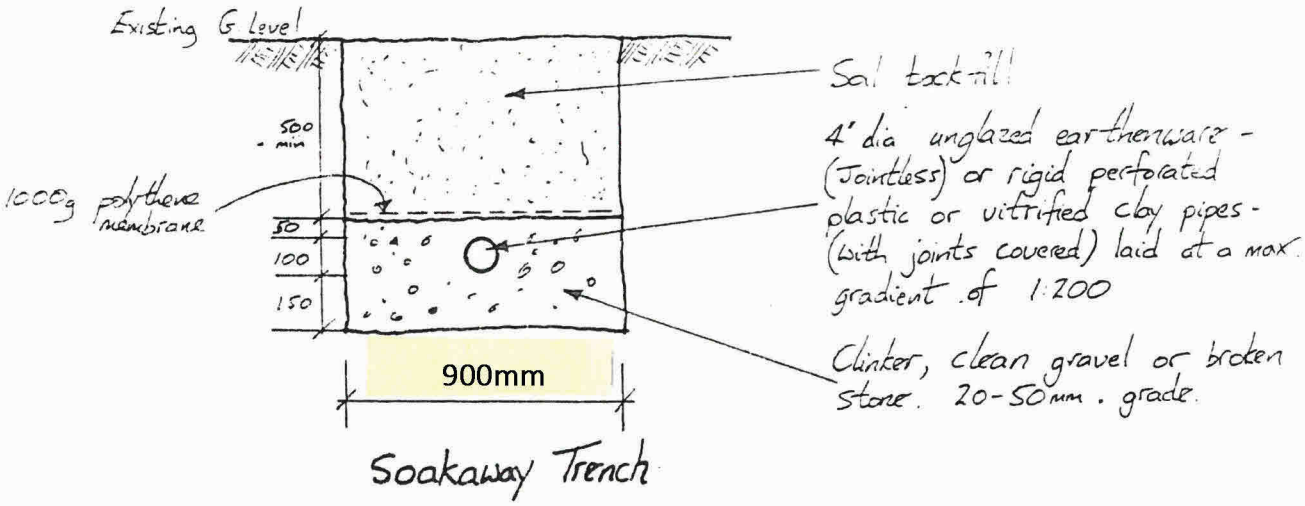
= (C) 18.16 X 0.25 X No. of persons 4

= 18.16 M²

Using a 900mm wide trench the length will be $\frac{18.16}{0.9}$ =

20.17 metres.

* There must be a 2 metre width of undisturbed ground between trenches.



Soakaway Trench

SIGNED: [redacted]

STATUS: AGENT