Drainage Field Siting and Percolation Test Calculation Form

Powys

NB – Development proposing the use of non-mains drainage schemes will only be considered where connection to the mains sewer is not feasible

Guidance Notes:

The following table provides details of siting distances contained in Approved Document H 2010 (Wales), Section H2 of the Building Regulations.

Siting of septic tanks, treatment plants and soakaways			
Distance from	**Dwelling**	**Watercourse**	**Borehole/well**
Drainage field	**15m**	**10m**	**50m**
Septic Tank	**7m**	**10m**	**50m**
Treatment plant	**7m**	**10m**	**50m**

Conducting the main percolation test

The percolation test should be carried out in accordance with Approved Document H 2010 (Wales), Section H2 of the Building Regulations.

1. These tests should be carried out within and be representative of, the proposed soakaway area.

2. Excavate at least 2 percolation holes 300mm square to a depth of 300mm below the proposed invert level of the effluent distribution pipe. Where deep holes are necessary, the hole should conform to this shape at the bottom but may be enlarged above the 300mm level to enable safe excavation to be carried out.

3. Fill the 300mm square section of the holes to a depth of at least 300mm with water and allow it to seep away overnight.

4. Next day, refill the test sections with water to a depth of at least 300mm and observe the time (T) in seconds, for the water to seep away from 75% to 25% full level. (ie a depth of 150mm)

5. Extreme weather conditions should be avoided when testing.

 # please complete the below diagram and form overleaf and return to appointed planning officer and ensure that the porosity test holes are left open for inspection.

Drainage scheme siting diagram

SEE ACCOMPANYING SITE PLANS.

I, (name) . **ADAM BARKER** _____ on behalf of (applicant) ___ **ADAM & ELISABETH BARKER**

Have carried out percolation tests in accordance with the guidance provided with this form on (date)

17 / 9 / 2020 in respect of premises at:

LAND AT CHERRY TREE BARN, NEWCHURCH, KINGTON, HR5 3QF.

Description of ground strata: **FREE DRAINING LOAMY SOIL.**

The overall depth of the test holes dug were: (state in metres/millimetres)

Test Hole 1	Test Hole 2
300mm. Square	300 mm Square

I confirm that the water table did not rise to within 1 metre of the invert of the proposed land Irrigation scheme.

The weather conditions on the day were: **COLD, DAMP, OVERCAST.**

The results of the percolation tests were: **Successful,**

Test Hole 1	Time in Seconds		V_p	Test Hole 2	Time in Seconds		V_p
Test 1	1740	÷150	11.6	Test 1	2040	÷150	13.6
Test 2	1830	÷150	12.2	Test 2	1980	÷150	13.2
Test 3	1860	÷150	12.4.	Test 3	2200	÷150	14.66
Trial Hole 1 – Average V_p			12.06	Trial Hole 1 – Average Vp			13.82

Average V_p of Test Holes 1 & 2	12.06	13.82
12.94		

Use this averaged V_p figure in the following formula $P \times V_p \times 0.25 = A$

Calculating the drainage field area								Key
P	X	V_p	X	0.25	=	A		P = no of people served by the tank
2	X	12.94.	X	0.25	=	6.47	m²	A = floor area of the drainage field (in square metres)
Calculating the linear drainage field length								V_p= Percolation Value
A	÷	TW	=	L				TW= Trench width in metres
6.47	÷	1.2	=	5.39	m			L = length of the drainage field (in metres)

Signed: _____

Address: _____