Tridax Ltd
Design Office, Suite 3
Honeywood House
Whitfield, Dover
Kent, CT16 3EH
Tel : 01304 820777

Job No. **EMC-2017-081**
Job **Queen Street, Deal**
Client **Mr G Pound**
Sheet **01**
Rev:

Soakage Test

1.0 Calculation of Soil Infiltration Rate — **Design to BRE 365: Sept 2003**

Pit 1 Test 1

Time	Dip	
0	1.300	**0.400**
25	1.500	**0.200**
120	0.750	**0.950**
180	1.000	**0.700**

Pit 1 Test 2

Time	Dip	
0	0.000	**1.700**
28	0.250	**1.450**
125	0.750	**0.950**
190	1.000	**0.700**

Pit 1 Test 3

Time	Dip	
0	0.000	**1.700**
30	0.250	**1.450**
130	0.750	**0.950**
210	1.000	**0.700**

Trial Pit Length x Width x Depth
1.20 0.80 1.70

$$f = \frac{V_{P75-25}}{a_{p50} \times t_{p75-25}}$$

therefore lowest f= 3.02E-06 m/s

= **0.01** m/hr

	Test 1	Test 2	Test 3	
V_{p100} (Start test)=	0.576	1.632	0.360	m^3
V_{p0} (End test)=	0.192	0.672	0.000	m^3
Total Volume=	0.384	0.960	0.360	m^3
V_{p75} =	0.288	0.720	0.270	m^3
V_{p25} =	0.096	0.240	0.090	m^3
a_p100(Start Test) =	2.400	3.360	3.360	m^2
a_p0(End Test) =	1.760	0.360	0.360	m^2
t_p75 =	90	28	30	min
t_p25 =	390	125	130	min
V_{P75-25} =	0.192	0.192	0.192	m^3
a_{p50} =	2.080	2.080	2.080	m^2
t_{p75-25} =	300	510	510	min
therfore f=	5.13E-06	3.02E-06	3.02E-06	m/s