

Date: Wc 29.8.2022
Ref: QU-0125
Percolation Test

Re: Viners Shed, Green Road, Hales Green, Hales, Norfolk NR14 6TB

Works carried out

3 percolation test holes were excavated 300mm lower than the intended inlet depth of the new soak away system at different locations on the site as shown below.



Location A-



Location B-



Location C-



Method:

1. The tests were carried out within the proposed infiltration area at least 5m away from the intended building and at least 5m away from any intended boundary.
2. 3 percolation holes were excavated, each with a footprint of 1m x 1m wide, to a depth of 2m.
3. In preparation for timed testing, the test pits were completely filled to 1000mm depth and allowed to drain for 24hrs prior to testing. This was important to saturate the soil surrounding the test hole to simulate day to day conditions
4. Weather conditions at time of testing were fair to good.
5. The following day, the test holes were refilled and the time (T) in seconds observed for the water to seep away from 75% to 25% full level. Distance from 75% to 25% was 0.5m.
6. Replication - Three tests were completed for the 3 test holes.
7. Test holes where reinstated.

Percolation Test Results

Width	Length	Depth
1000	1000	2000

Test Pit A

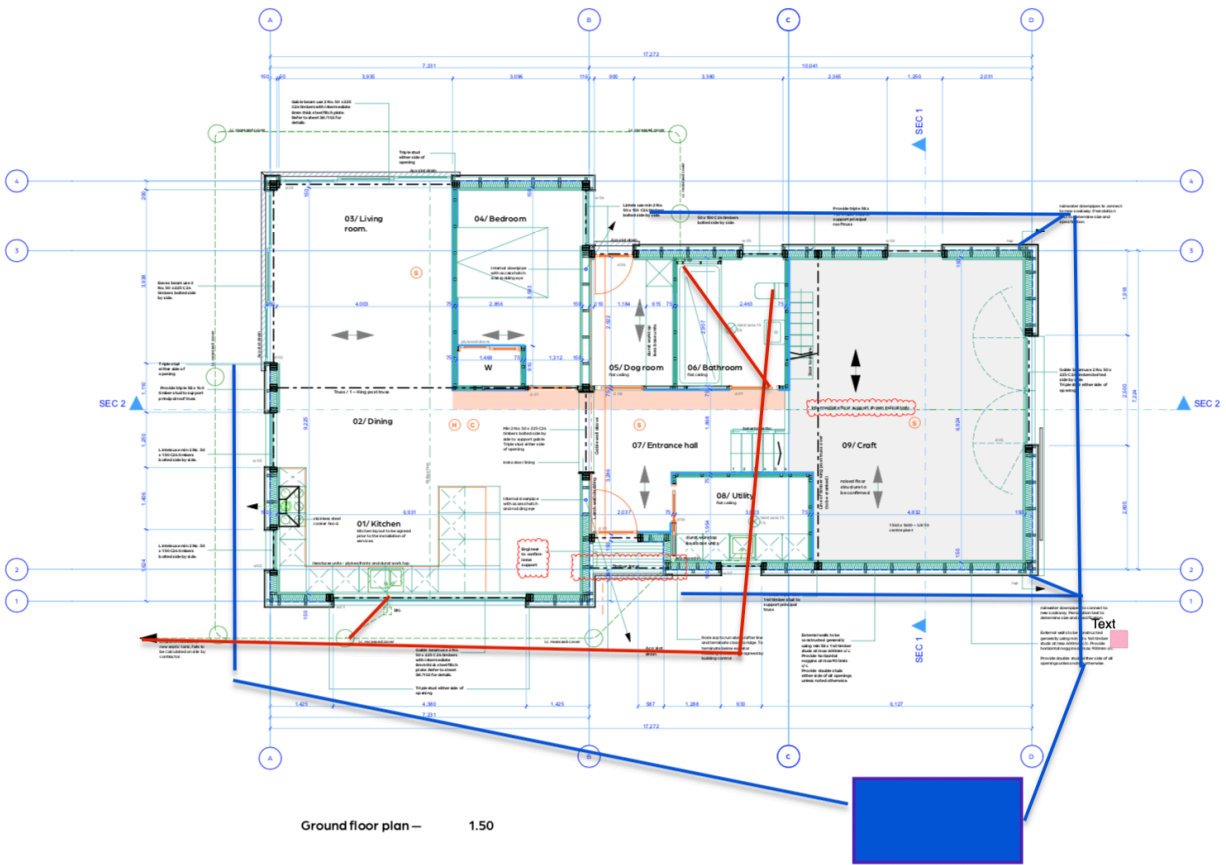
Percolation Test	Time taken to drain from 75% to 25 % (Seconds)	Percolations Value VP= T/500 500mm = distance between 75%-25%
1	46800	93.60
2	36000	72
3	46800	86.40

Test Pit B

Percolation Test	Time taken to drain from 75% to 25 % (Seconds)	Percolations Value VP= T/500 500mm = distance between 75%-25%
1	25200	50.40
2	21800	34.60
3	28800	57.60

Test Pit C

Percolation Test	Time taken to drain from 75% to 25 % (Seconds)	Percolations Value VP= T/500 500mm = distance between 75%-25%
1	43800	87.60
2	25200	50.40
3	36000	72



Based on the results, we proposed to install a soakaway in location B, where the sub soil was favourable. We proposed to install a soakaway with a 5m³ capacity with around 30 soakaway crates, depending on manufacturer, wrapped in geo-textile membrane on a 100mm shingle bed and surround.

Based on the size of the building it is recommended a soakaway of around 2m³ is installed, it proposed we increase that size to allow for the driveway and to act as a detention tank in high rainfall periods.