# Surface Water Management.

**Site: 54 Valley Park, Whitehaven**

Three soakaways are proposed as onsite management of surface water. Two separate percolation tests have been conducted with a maximum of 350 minutes of elapsed time for water to discharge to ground.

**Percolation Test Results.**

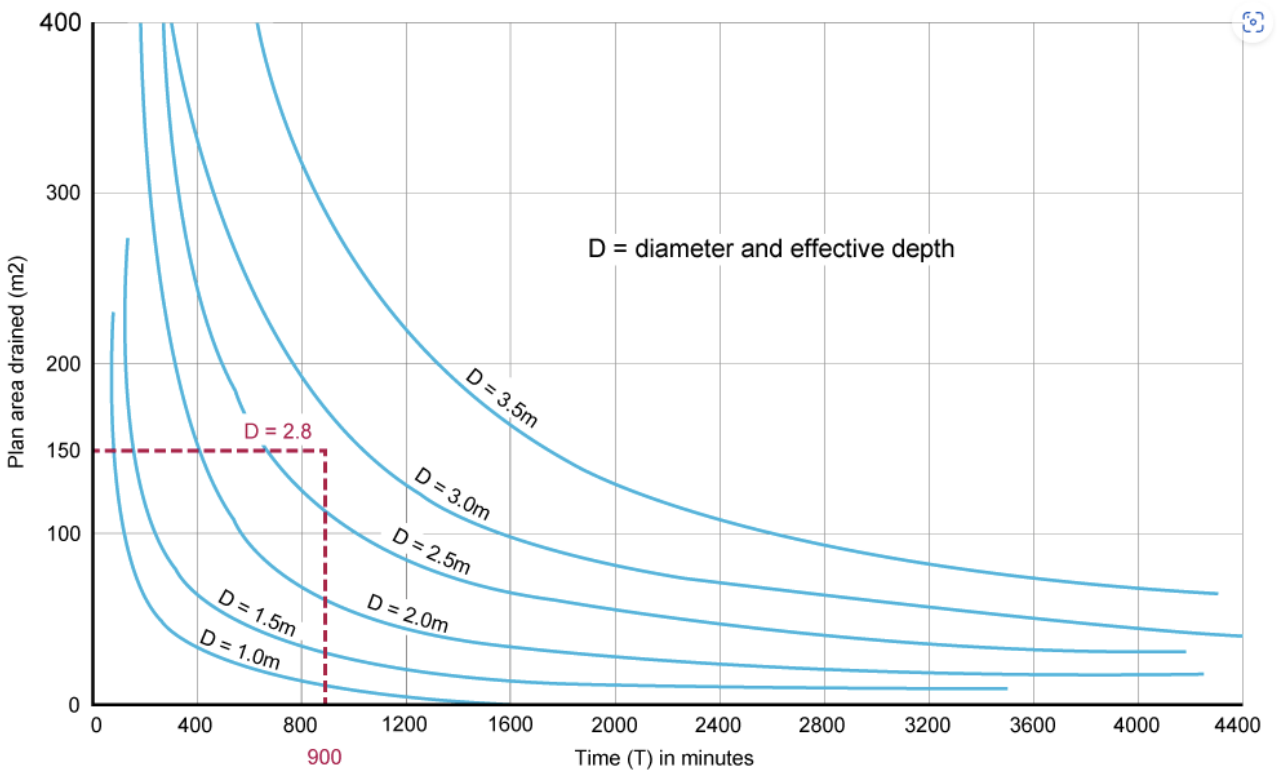
| Hole #1 Front Garden | Date | Test | Start Time (Level @ 75%) | Finish Time (Level @ 25%) | Elapsed Time | | |
|---|---|---|---|---|---|---|---|
| | | | | | Hours | Minutes | Seconds |
| | 10/05/24 | 1 | 15:20 | 20:40 | 5 Hrs 30Mins | 330 Mins | 19800 Secs |
| | 11/05/24 | 2 | 09:25 | 14:55 | 5 Hrs 25Mins | 325 Mins | 19500 Secs |
| | 11/05/24 | 3 | 15:40 | 21:30 | 5 Hrs 50Mins | 350 Mins | 21000 Secs |

| Hole #2 Back Garden | Date | Test | Start Time (Level @ 75%) | Finish Time (Level @ 25%) | Elapsed Time | | |
|---|---|---|---|---|---|---|---|
| | | | | | Hours | Minutes | Seconds |
| | 10/05/24 | 1 | 15:20 | 20:30 | 5 Hrs 10 Mins | 310 Mins | 18600 Secs |
| | 11/05/24 | 2 | 09:50 | 15:10 | 5 hrs 20 Mins | 320 Mins | 19200 Secs |
| | 11/05/24 | 3 | 15:45 | 21:15 | 5 Hrs 30 Mins | 330 Mins | 19800 Secs |

**Soakaway Proposals**

Based on NHBC guidance (5.3 Drainage below ground) three 1.2m diameter/effective depth soakaway pits are required. Filled with proprietary soakaway matrix installed and verified by specialist supplier. Final details of precise specifications to be provided and approved by Building Control prior to installation.

**NHBC 5.3.11 Surface Water Soakaways**




Surface area to be drained – approx. 150sq.m
Three soakaways – each to hold discharge from 50sq.m
Percolation test result to soakaway – 350 minutes

**From the graph above this gives an equavalent of 1.2m diameter pit with an effective dept of 1.2 sq.m (1.44 cubic meters per pit, 4.32 cubic meters in total). Soakaways to be located in front and rear gardens**