

BRE365 PERCOLATION TEST REPORT

FOR

**MEADOW VIEW, BLAGRAVE LANE, CAVERSHAM,
READING, RG4 7DX.**

DOCUMENT NUMBER: C3157-R2-REV-A

Prepared by:



Contents

1. INTRODUCTION1

2. TRIAL PIT 1.....2

2.1 TEST ONE3

2.2 TEST TWO.....3

2.3 TEST THREE4

2.4 INFILTRATION RESULTS.....4

3. CONCLUSION.....6

APPENDICES

APPENDIX A – BRE365 PERCOLATION TEST RESULTS

APPENDIX B – PERCOLATION TEST PLAN

1. INTRODUCTION

Nimbus Engineering Consultants Limited have been instructed to carry out a BRE365 Infiltration test, as requested by the Local Planning Authority for Meadow View, Blagrove Lane, Caversham, Reading, RG4 7DX.

The BRE365 Infiltration test was carried out on the 10th of February in a suitable location in the back garden, as shown in Appendix B.

The test was carried out to the BRE365 Digest in order to calculate the infiltration rate for the proposed site to treat and deal with the surface water runoff produced by the proposed replacement dwelling.

2. TRIAL PIT 1

A test pit of dimensions 400mm by 400mm by 1400mm deep was excavated in a suitable location.

The excavated ground was described as:

- Approximately 100mm of lawn topsoil (0 – 0.1m deep)
- Approximately 300mm of subsoil (0.1 – 0.4m deep)
- Approximately 800mm sandy clay flint (0.4 – 1.2m deep)
- Approximately 200mm sand/clay and chalk mix (1.2 - 1.4m deep)

2.1 TEST ONE

Water was added to the pit at a consistent rate, and the following was measured:

- Water drained from the 100% full level to the 75% level in approximately 9 minutes.
- Water drained to the 25% level in approximately 93 minutes.

Therefore the 25% full minus 75% full time was approximately 84 minutes, which is the time required in order to calculate the BRE365 Infiltration rate.

2.2 TEST TWO

Water was added to the pit at a consistent rate, and the following was measured:

- Water drained from the 100% full level to the 75% level in approximately 13 minutes.
- Water drained to the 25% level in approximately 114 minutes.

Therefore the 25% full minus 75% full time was approximately 101 minutes, which is the time required in order to calculate the BRE365 Infiltration rate.

2.3 TEST THREE

Water was added to the pit at a consistent rate, and the following was measured:

- Water drained from the 100% full level to the 75% level in approximately 15 minutes.
- Water drained to the 25% level in approximately 153 minutes.

Therefore the 25% full minus 75% full time was approximately 138 minutes, which is the time required in order to calculate the BRE365 Infiltration rate.

2.4 INFILTRATION RESULTS

Using the slowest rate, the infiltration rate has been calculated as 1.1×10^{-5} m/s or 3.96×10^{-2} m/hr.



Figure 1 – Trial Pit 1

3. CONCLUSION

A trial pit was excavated at the site in order to carry out a BRE365 Infiltration test at a suitable location provided on the drawing included in Appendix B.

The test sheets can be found in Appendix A, these results show that infiltration in soakaways is feasible onsite. Using the slowest rate, the infiltration rate has been calculated as 1.1×10^{-5} m/s or 3.96×10^{-2} m/hr.

Groundwater was not encountered in the trial pit.

APPENDIX A – BRE365 PERCOLATION TEST RESULTS

CHECK SHEET

1. Please specify the size of the soakaway that you are proposing to use:

Width (m) Length (m) Depth (m)

2. Please specify the area that is to be drained to the soakaway

3. Please specify the size of the trial pit:

Width (m) 0.4 Length (m) 0.4 Depth (m) 1.4

4. Please specify the proposed invert level of the drain:

5. Below is a table for you to input the data (times) gathered from the Soil Infiltration Rate tests:

Test Number	75%	25%	25% - 75%
1	9	93	84
2	13	114	101
3	15	153	138

*To be filled in when info arrives.

Key:

75%: The time taken in minutes for the water level to fall to 75% full.

25%: The time taken in minutes for the water level to fall to 25% full.

25% - 75%: The 25% time minus the 75% time. (This will give the time for the water level to fall from 75% full to 25% full).

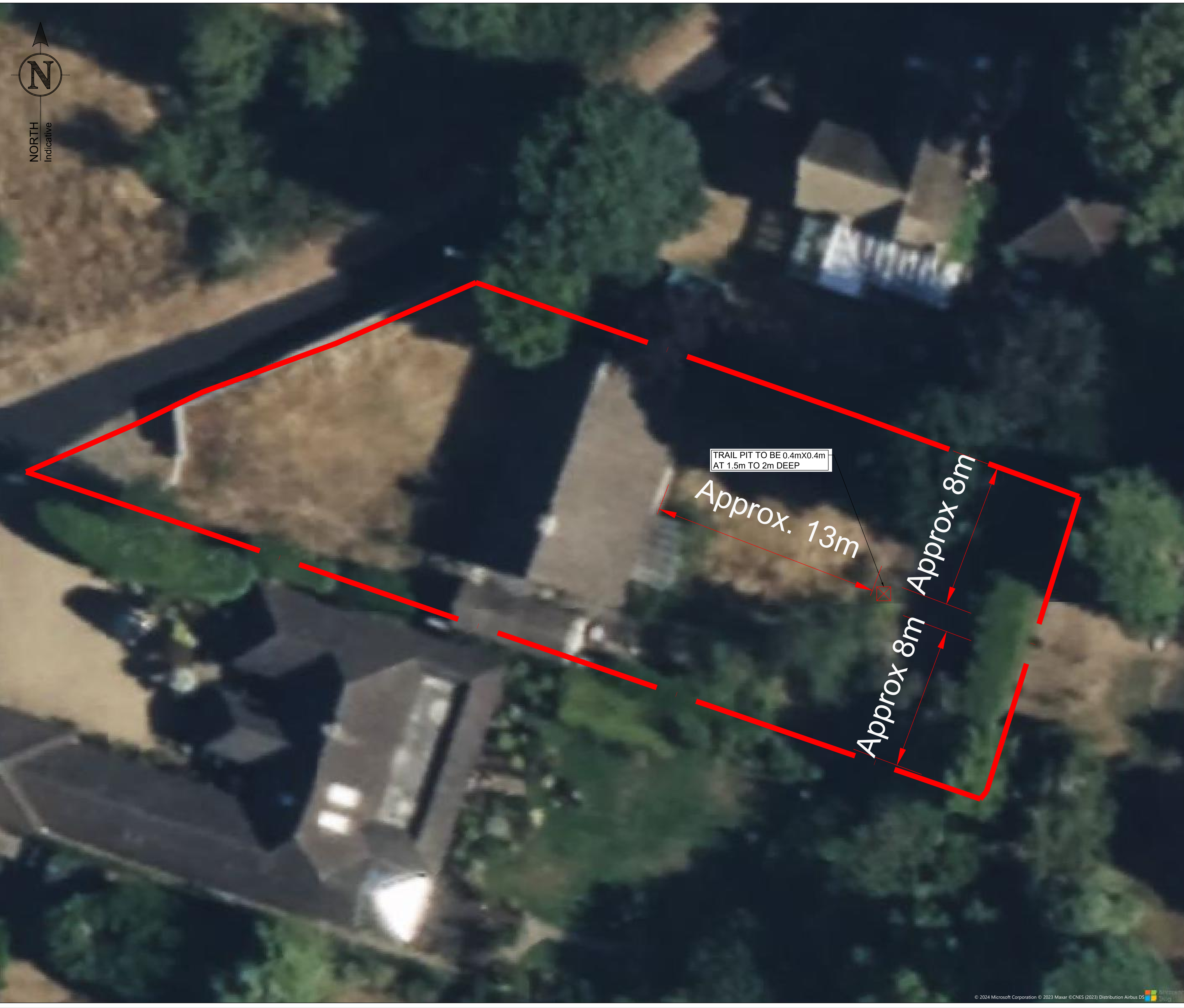
Name: Adam Lockett

Signature



Date: 14.02.2024

APPENDIX B – PERCOLATION TEST PLAN



NOT FOR CONSTRUCTION

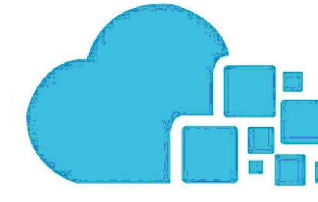
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A	09-02-24	N.E	For Information.	S.L	S.L

PROJECT:
C3157 - Meadow View, Blagrove Lane, Reading, RG4 7DX

TITLE:
Percolation Test Plan Layout

CLIENT:
Carney Construction Ltd.



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