INFILTRATION TESTING REPORT

Report Reference: 518 – R1

PROPOSED EXTENTION TO THE SPRING GARDENS HOLIDAY PARK, ST ASAPH

MÔN CIVILS LIMITED

April 2025

Revision P01

CONTENTS

PAGES

APPENDICES

1.0 Introduction

This report has been compiled to supplement the proposed drainage strategy for the proposed residential development located at Spring Gardens Holiday Park, The Roe, Saint Asaph LL17 0HY. (grid reference: **SJ 03404 75367**). The location and site boundary of the site is illustrated on the attached plan contained within **Appendix A**.

1.1 Scope of Report

In accordance with CIRIA C753 'SuDS Manual' 2015 and The Statutory SuDS Guidance for Wales 2018, surface water run-off generated from all new developments should consider a discharge into the ground via a proposed soakaway as the highest priority. In order to confirm the sites suitability infiltration testing should be undertaken.

This report provides a summary and conclusion of the infiltration testing carried out on site.

2.0 Infiltration Testing

Infiltration testing has been undertaken on the 22nd/04/2025. Six trial holes were excavated within the site, referenced TP1 – TP6 excavated to a maximum depth of 1.500m below ground level. Infiltration testing was conducted within all trial holes, no ground water was encountered during the intrusive investigation. The location of the trial pits is indicated on the trial pit location plan contained within **Appendix B**.

A trial pit log along with comments and photographs of the trial hole is contained within **Appendix C**. The below ground strata located within the site consisted of very dense CLAY.

In accordance with BRE digest 365 which outlines the best practice procedure for undertaking porosity tests, each trial pit should be filled and the rate in which the water level drops should be recorded until it is dry, this should be repeated for three consecutive tests. The design of any proposed soakaway structures should then be based upon the poorest infiltration rate of the three tests.

The test results of the infiltration tests undertaken are summarised within **Tables 1 – 6**.

TP1

Table 1. TP1 – Test 1 results

Time	Duration (mins)	Depth to water from GL	Drop in water level (mm/min)
11:25	0	470mm	-
11:50	25	470mm	0.000mm
12:25	60	470mm	0.000mm
Infiltration Rate (f)		**Test Abandoned**	

TP2

Table 2. TP2 – Test 1 results

Time	Duration (mins)	Depth to water from GL	Drop in water level (mm/min)
11:50	0	420mm	-
11:20	30	420mm	0.000mm
12:50	60	420mm	0.000mm
Infiltration Rate (f)		**Test Abandoned**	

TP3

Table 3. TP3 – Test 1 results

Time	Duration (mins)	Depth to water from GL	Drop in water level (mm/min)
12:00	0	430mm	-
12:30	30	430mm	0.000mm
13:00	60	430mm	0.000mm
Infiltration Rate (f)		**Test Abandoned**	

TP4

Table 4. TP3 – Test 1 results

Time	Duration (mins)	Depth to water from GL	Drop in water level (mm/min)
12:10	0	400mm	-
12:40	30	400mm	0.000mm
13:10	60	400mm	0.000mm
Infiltration Rate (f)		**Test Abandoned**	

TP5

Table 5. TP3 – Test 1 results

Time	Duration (mins)	Depth to water from GL	Drop in water level (mm/min)
12:15	0	420mm	-
12:45	30	420mm	0.000mm
13:15	60	420mm	0.000mm
Infiltration Rate (f)		**Test Abandoned**	

TP6

Table 6. TP3 – Test 1 results

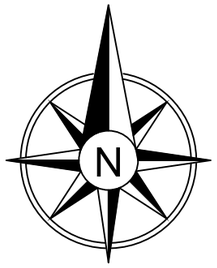
Time	Duration (mins)	Depth to water from GL	Drop in water level (mm/min)
12:30	0	400mm	-
13:00	30	400mm	0.000mm
13:30	60	400mm	0.000mm
Infiltration Rate (f)		**Test Abandoned**	

2.1 Result Discussion

Due to the lack of infiltration recorded within all six trail holes a second a third fill of water, in accordance with the standard procedure set out in BRE Digest 365, was not possible and all tests were abandoned after 2 hours of recording. Therefore, alternative methods of surface water disposal in accordance with the SuDS hierarchy should be explored.

APPENDICES

APPENDIX A
Site Location Plan



GRID REFERENCE	SJ 03404 75367
EASTING	303404
NORTHING	375367
POSTCODE	LL17 0HY
SITE AREA	59,357.269m³ (5.94 ha)

LEGEND

DENOTES PROPOSED SITE BOUNDARY

SCALE:	SIZE:	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	DATE:
1:2,500	A3	B.Thorne	K.Blackwell	K.Blackwell	B.Thorne	APRIL 2025

MÔN CIVILS
LIMITED

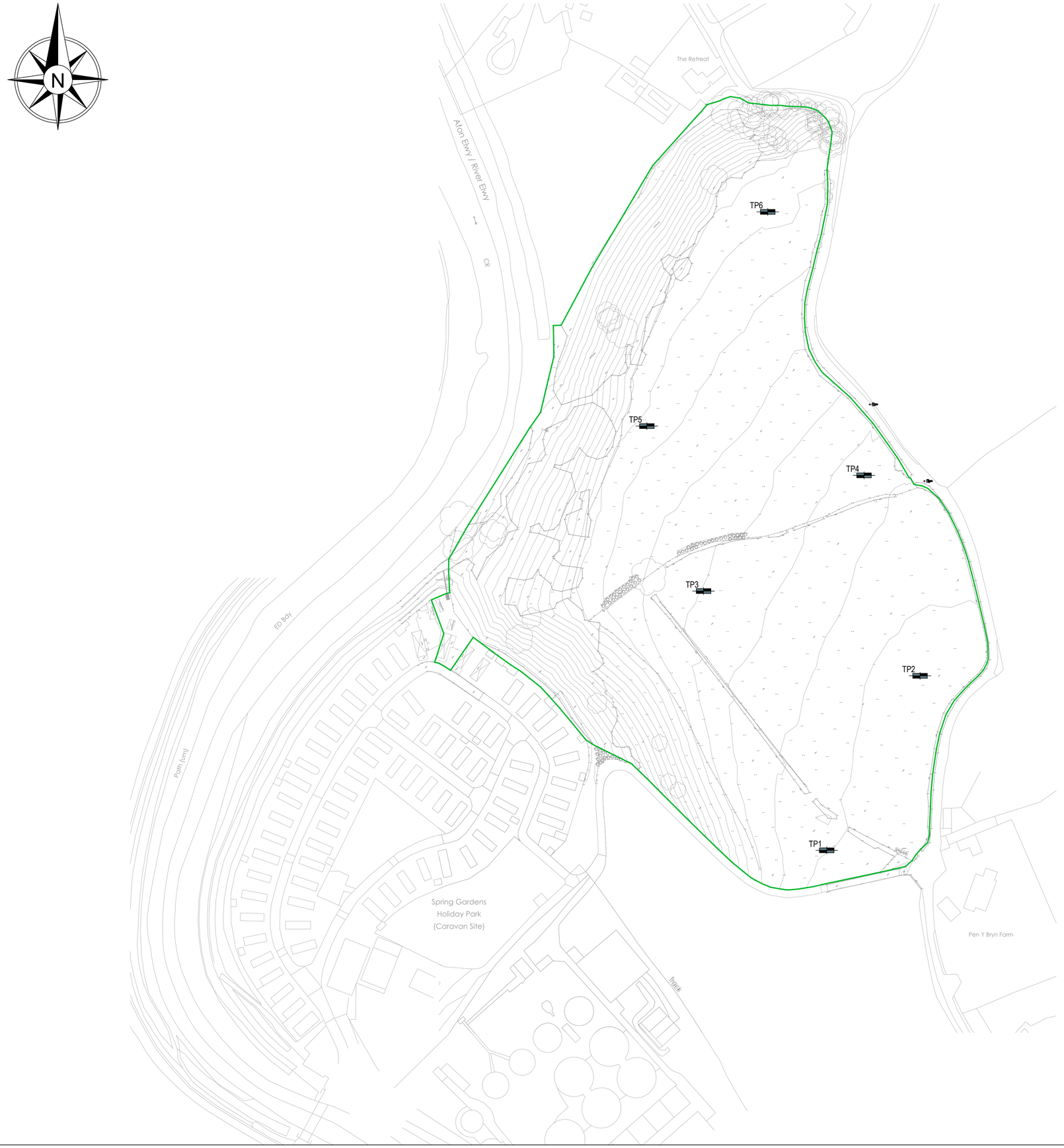
REV	DATE	DESCRIPTION	BY	APP
P01	22.04.2025	FIRST ISSUE	KB	BT

PROJECT: SPRING GARDENS, ST ASAPH

TITLE: SITE LOCATION PLAN

STATUS:	PROJECT No:	DRAWING No:	REV:
S2	518	**001**	P01

APPENDIX B
Trial Pit Location Plan



LEGEND

DENOTES PROPOSED SITE BOUNDARY

TP# TRIAL PIT LOCATION.

REV	DATE	DESCRIPTION	BY	CHK	APP
P01	22.04.2025	FIRST ISSUE	KB	KB	KB

DRAWING STATUS: **PRELIMINARY**

CLIENT: SPRING GARDENS HOLIDAY PARK

ARCHITECT: CADNANT PLANNING

PROJECT: SPRING GARDENS, ST ASAPH

TITLE: TRIAL PIT LOCATION PLAN

STATUS:	PROJECT No.	DRAWING No.	REV:
S2	518	002	P01

SCALE @ A1:	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	DATE:
1:1,000	KB	KB	KB	KB	APRIL 2025

MÔN CIVILS LIMITED

APPENDIX C
Trial Pit Logs

Trial Pit 1 (TP1)

0.000m – 0.300m	Topsoil: loses sandy, clayey, SILT with occasional fine angular gravels.
0.300m – 0.800m	Very Silty, slightly clayey SAND with occasional fine to small angular gravels.
0.800m – 1.100m	Very sandy, slightly silty, CLAY.

Comments

1. Trial pit dimensions: 1.300m (L) x 0.500m (W) x 1.100m (D)
2. No ground water was encountered within the trial pit.
3. Sides of trial pit where stable throughout.

Trial Pit 2 (TP2)

0.000m – 0.250m	Topsoil: loses clayey, SILT with occasional fine angular gravels.
0.250m – 0.900m	Very Firm CLAY with occasional small to fine angular gravels.

Comments

1. Trial pit dimensions: 1.300m (L) x 0.500m (W) x 0.900m (D)
2. No ground water was encountered within the trial pit.
3. Sides of trial pit where stable throughout.

Trial Pit 3 (TP3)

0.000m – 0.360m	Topsoil: loses clayey, SILT with occasional fine angular gravels.
0.360m – 1.000m	Very Firm CLAY with occasional small to fine angular gravels.

Comments

1. Trial pit dimensions: 1.300m (L) x 0.500m (W) x 1.000m (D)
2. No ground water was encountered within the trial pit.
3. Sides of trial pit where stable throughout.

Trial Pit 4 (TP4)

0.000m – 0.300m	Topsoil: loses clayey, SILT with occasional fine angular gravels.
0.300m – 1.200m	Very Firm CLAY with occasional small to fine angular gravels.

Comments

1. Trial pit dimensions: 1.200m (L) x 0.500m (W) x 1.200m (D)
2. No ground water was encountered within the trial pit.
3. Sides of trial pit where stable throughout.

Trial Pit 5 (TP5)

0.000m – 0.270m	Topsoil: loses clayey, SILT with occasional fine angular gravels.
0.270m – 1.100m	Very Firm CLAY with occasional small to fine angular gravels.

Comments

1. Trial pit dimensions: 1.300m (L) x 0.500m (W) x 1.100m (D)
2. No ground water was encountered within the trial pit.
3. Sides of trial pit where stable throughout.

Trial Pit 6 (TP6)

0.000m – 0.310m	Topsoil: loses clayey, SILT with occasional fine angular gravels.
0.310m – 1.050m	Very Firm CLAY with occasional small to fine angular gravels.

Comments

1. Trial pit dimensions: 1.150m (L) x 0.500m (W) x 1.050m (D)
2. No ground water was encountered within the trial pit.
3. Sides of trial pit where stable throughout.