

SURFACE WATER DRAINAGE STRATEGY

Proposed Residential Development, Land at Swan Meadow, Pewsey, Wiltshire SN9 5DF on Behalf of Rebecca Middleton.

Date: April 2026
Issue No. 3



DOCUMENT ISSUE RECORD

Client: Rebecca Middleton

Project: Proposed Residential Development, Land at Swan Meadow, Pewsey, Wiltshire SN9 5DF

Job Number: 10915

Document Title: Surface Water Drainage Strategy

Issue No.	1	2	3	
Date	March 2026	March 2026	April 2026	
Description / Status	Draft for Client Comment	Planning Issue	Amended Planning Issue	
Prepared	A. Wasiljew BSc (Hons)	A. Wasiljew BSc (Hons)	A. Wasiljew BSc (Hons)	
Technical Check	S. Starr BSc (Hons)	S. Starr BSc (Hons)	S. Starr BSc (Hons)	
Authorised	R. Bowley CEng MICE MCIWEM	R. Bowley CEng MICE MCIWEM	R. Bowley CEng MICE MCIWEM	
Document Check	C. Spanner BA (Hons)	C. Spanner BA (Hons)	C. Spanner BA (Hons)	

The methodology adopted and the sources of information used by Cole Easdon Consultants Limited (CE) in providing its services are outlined within this Report. Any information provided by third parties and referred to herein has not been checked or verified by CE, unless otherwise expressly stated within this Report. This Report was checked and approved on the date shown in the Document Issue Record and the Report (including its base information, adopted parameters and assessment methodology) is therefore valid on this date. Circumstances, regulations, assessment methodology and professional standards do change which could subsequently affect the validity of this Report.

All intellectual property rights in or arising out of or in connection with this Report are owned by CE. The Report has been prepared for the Client named on the Document Issue Record who has a licence to copy and use this Report only for the purposes for which it was prepared and provided. The licence to use and copy this Report is subject to other Terms & Conditions agreed between CE and the Client. This document cannot be assigned or transferred to any third party and no third party may rely upon this document nor shall CE have any liability to any third party for the contents of this Report without the express written agreement of both CE and the Client.



CONTENTS

SECTION	HEADING	PAGE No.
1.0	INTRODUCTION	1
2.0	THE EXISTING SITE	3
3.0	SURFACE WATER DRAINAGE STRATEGY	7
4.0	DISCUSSION AND CONCLUSIONS	13

List of Figures

Figure 2.1 BGS Bedrock Geology Map

List of Tables

Table 2.1	BRE 365 Infiltration Test Results
Table 2.2	Summary of Greenfield Runoff Rates
Table 3.1	Review of SuDS Components in accordance with the Drainage Hierarchy
Table 3.2	Pollution Hazard Indices for the Proposed Site (from Table 26.2 of CIRIA C753 The SuDS Manual)
Table 3.3	Pollution Mitigation Indices for Discharge to Surface Water from the Proposed Site (from Table 26.3 of CIRIA C753 The SuDS Manual)
Table 3.4	Draft Maintenance Schedule for Proposed Permeable Sub Base
Table 3.5	Draft Maintenance Schedule for Pipework and Catchpits
Table 3.6	Draft Maintenance Schedule for Rainwater Harvesting

APPENDICES

Appendix 1 – CE Figures and Drawings

CE Figure 10915/500/Figure 1	Site Location Plan
CE Drawing 10915/501(A)	Proposed Surface Water Drainage Strategy

Appendix 2 - Drawings by Others

Drawing No. 231214 02 (F) Site Plan (by Fowler Architecture & Planning Ltd)

Appendix 3 – Correspondence

Appendix 4 – Public Sewer Records

Appendix 5 – Infiltration Test Results

Appendix 6 – British Geological Survey Borehole Logs

Appendix 7 – Calculations

1.0 INTRODUCTION

- 1.1 This *Surface Water Drainage Strategy* has been prepared by Cole Easdon Consultants Limited (CE) on behalf of Rebbecca Middleton in respect of a proposed residential development on land at Swan Meadow, Pewsey, Wiltshire, SN9 5DF. Refer to CE Drawing 10915/500 Figure 1 [*Site Location Plan*] in Appendix 1.

Development Proposals

- 1.2 The proposals comprise two dwellings with detached garages, parking, landscaping and access.
- 1.3 This study is based on Drawing No. 231214 – 02 (F) [*Site Plan*] (by Fowler Architecture & Planning Ltd) in Appendix 2.

Need for Study

- 1.4 The purpose of this Report is to demonstrate that the development proposal outlined above can be satisfactorily accommodated without worsening flood risk for the area and without placing the development itself at risk of flooding, as per National guidance provided within the National Planning Policy Framework document (NPPF).
- 1.5 This Report also addresses a Wiltshire Council holding objection dated 05.01.26 concerning provision of a Surface Water Drainage Strategy for the site. Refer to Appendix 3.

Local Policy

- 1.6 This assessment demonstrates that the proposals meet the requirements set out within Wiltshire Council Core Strategy Policy 67 – Flood Risk.

Scope of Study

- 1.7 In Section 2.0, we describe the characteristics of the proposed development site and surrounding area. In Section 3.0, we assess flood risk issues. The surface water drainage strategy is outlined in Sections 4.0. Conclusions are presented in Section 5.0.
- 1.8 The following resources have been used for this study:
- Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) Map (accessed January 2026);
 - Geological Map – British Geological Survey (BGS, accessed January 2026);
 - Wessex Water Public Sewer Records (January 2026);

- Revised Climate Change Allowances (EA, May 2022);
- Wiltshire Strategic Flood Risk Assessment Data Explorer (accessed February 2026)
<https://wiltscouncil.maps.arcgis.com/apps/webappviewer/index.html?id=74a353612a934bd48fee1f2bc564cdd8>

1.9 The following publicly available documents have also been reviewed as part of this assessment:

- Building Regulations 2015 – Approved Document H (Drainage and Waste Disposal);
- CIRIA C753 The SuDS Manual (November 2015);
- National Planning Policy Framework (February 2025);
- Planning Practice Guidance – Flood Risk and Coastal Change (PPG) (September 2025).
- Non-Statutory Technical Standards for Sustainable Drainage Systems (Defra, July 2025);
- Rainfall Runoff Management for Developments (R&D Technical Report W5-074/A/TR/1 Revision E, Defra, June 2012);
- Sustainable Drainage Systems (SuDS) Adoption (Wiltshire Council 2025);
- Wiltshire Council Strategic Flood Risk Assessment Level 1 (JBA consulting, November 2024);
- Wiltshire Council Groundwater Management Strategy 2016 (accessed January 2026); and,
- Wiltshire Council Surface Water Soakaways - Developer Guidance Note (accessed January 2026)
- Wiltshire Core Strategy Adopted February 2015 (Wiltshire Council 2015)
- BRE Digest 365 Soakaway Design (2016);

1.10 The following abbreviations are used in this Report:

- AOD - Above Ordnance Datum;
- BGL – Below Ground Level;
- BGS – British Geological Survey;
- EA – Environment Agency;
- FEH – Flood Estimation Handbook;
- FMP – Flood Map for Planning;
- Ha- Hectares;
- L/S – Litres per Second;
- NPPF – National Planning Policy Framework;
- PPG- Planning Practice Guidance;
- QBAR - Annual flood flow (return period of approximately 1:2.3 years);
- SFRA – Strategic Flood Risk Assessment;
- SuDS – Sustainable Drainage Systems; and,
- WW – Wessex Water.

2.0 THE EXISTING SITE

- 2.1 The development site is located on the southern side of Swan Meadow, on the southern edge of the village of Pewsey. Refer to CE Figure 10915/500 Figure 1 [*Site Location Plan*] in Appendix 1.
- 2.2 The site covers an area of approximately 0.13 hectares (Ha) and currently comprises undeveloped grassland.
- 2.3 The site is bounded to the north by Swan Meadow; to the east by woodland and a small residential development; and to the south and west by farmland.
- 2.4 Land use in the vicinity of the site is a mix of residential and agricultural.

Existing Topography

- 2.5 Ground levels included in the proposed layout drawing indicate that local ground levels fall from southeast to northwest. Existing site levels vary between 113.50m AOD at the site's south eastern corner to 112.20mAOD at the site access onto Swan Meadow. Refer to Drawing No. 231214 – 02 (F) [*Site Plan*] (by Fowler Architecture & Planning Ltd) in Appendix 2.

Existing Sewers/Drains

- 2.6 Wessex Water sewer records indicate that a 150mm diameter highway drain is located within Swan Meadow, to the west of the site. Refer to Appendix 4.
- 2.7 The records also show public foul and surface water sewers in the existing residential areas to the north of Swan Meadow.

Existing Site Drainage

- 2.8 The site is undeveloped and as such there are no existing drainage systems at the site. Surface water runoff from the site is currently drained by a combination of infiltration and greenfield runoff which would flow off site to the north west.

Nearby Watercourses/Drainage Features

- 2.9 A watercourse known as Hurly Lake flows in an easterly direction approximately 200m east of the site.

2.10 The River Avon and Kennet and Avon Canal are located to the north of Pewsey.

2.11 There are no watercourses or ditches within or immediately adjacent to the site.

Existing Ground Conditions

2.12 British Geological Survey (BGS) records indicate that site is underlain by Upper Greensand Formation. No superficial geology has been identified. Refer to Figure 2.1 below.

2.13 BGS borehole reference SU15NE22 is situated approximately 200m south of the site, near Southcott Cottage. The log for this borehole contains a groundwater depth of 5m below ground level (bgl), recorded in November 2003. Ordnance Survey mapping indicates that existing ground level in the vicinity of the borehole is 115.50mAOD. The groundwater level in this location at the time of surveying was therefore 110.50mAOD. Refer to Appendix 5 for BGS borehole data.

2.14 At BGS borehole log reference SU15NE31, approximately 500m north of the site, groundwater was stuck at 4m bgl, a level of approximately 111.00mAOD.

2.15 The records reviewed suggest that the local groundwater table is relatively shallow, and this has been considered in the proposed Surface Water Drainage Strategy discussed in Section 3 of this Report.

2.16 Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) map shows that the bedrock strata underlying the site is classified as Principal Aquifer. The superficial deposits are identified as a Secondary A aquifer.

2.17 The mapping also confirms that the site is not within a Groundwater Source Protection Zone.

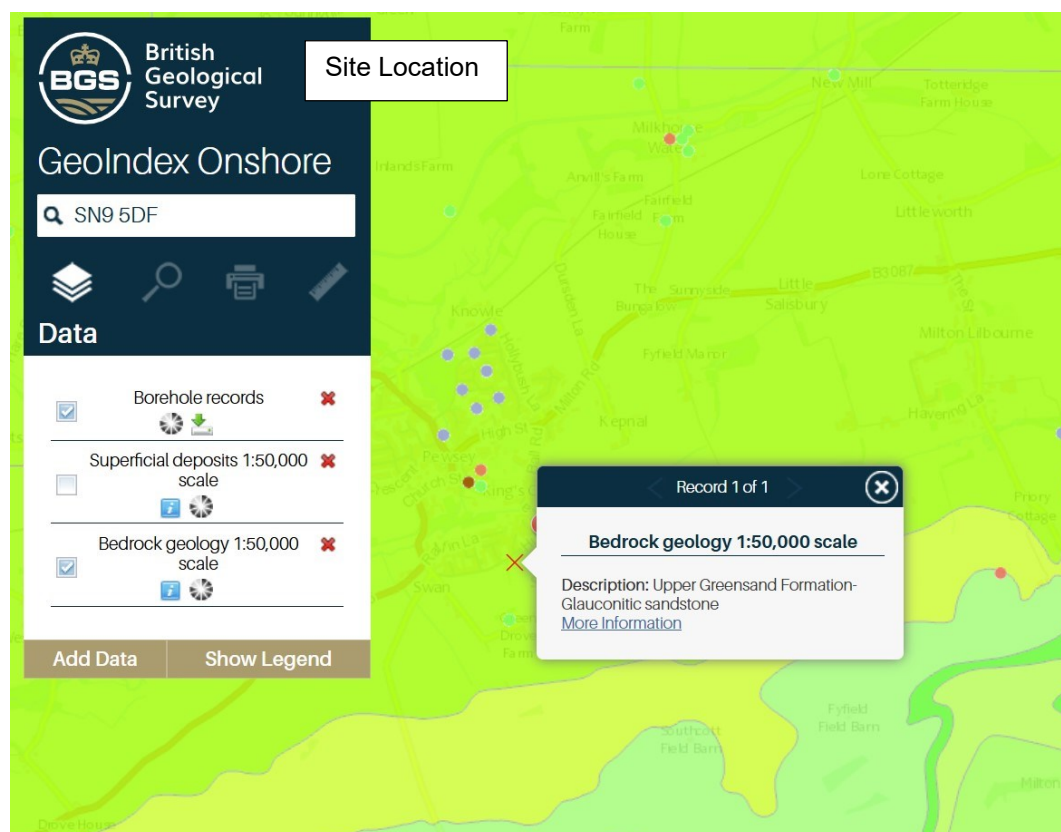


Figure 2.1: BGS Bedrock Geology Map
(Source: <https://geologyviewer.bgs.ac.uk>)

- 2.18 Two trial pits were excavated at the site in February 2026, to depths of 1.68 and 1.71m bgl. Sandy soils representative of the local Greensand strata were present to depth in both pits.
- 2.19 Groundwater was not encountered.
- 2.20 Infiltration testing in accordance with BRE DG365:2016 Digest was carried out in both pits. Refer to the test results in Appendix 5.
- 2.21 Testing within both pits was successful indicating that infiltration potential exists across the site. The lowest tested infiltration rate observed was 2.87×10^{-5} m/s, recorded at trial pit reference TP2. Refer to the infiltration test results within Table 2.1 below.

Table 2.1: BRE 365 Infiltration Test Results

Test Pit	Test 1	Test 2	Test 3
TP1	4.85×10^{-5} m/s	3.973×10^{-5} m/s	3.747×10^{-5} m/s
TP2	3.523×10^{-5} m/s	2.87×10^{-5} m/s	3.022×10^{-5} m/s

- 2.22 Equivalent existing greenfield runoff rates for the proposed impermeable areas (565m²) have been calculated using the FEH Statistical Method, with post development rates, as requested by the LPA. Refer to Appendix 7 and Table 2.2 below.

Table 2.2: Summary of Greenfield Runoff Rates

Scenario	Storm Event			
	1:1 year	QBAR	1:30 year	1:100 year
Existing (Greenfield)	0.21l/s	0.25l/s	0.57l/s	0.80l/s
Proposed	0l/s	0l/s	0l/s	0l/s

3.0 SURFACE WATER DRAINAGE STRATEGY

Refer to CE Drawing 10915/501 (A) [*Proposed Surface Water Drainage Strategy*] in Appendix 1.

- 3.1 In order to mitigate flood risk posed by post development runoff, adequate control measures will be provided within the site. This will ensure that flood risk is not increased elsewhere as a result of the development, in line with national and local guidance.

Drainage Hierarchy

- 3.2 The proposed drainage strategy for the site has been prepared according to the surface water drainage hierarchy set out in *National Standards for Sustainable Drainage Systems (DEFRA, June 2025)*, as follows. Also, refer to Table 3.1 below.

1. Collected for non-potable uses;
2. Infiltration to ground;
3. Discharged to an above ground surface water body;
4. Discharged to a surface water sewer, or another piped surface water drainage system
5. Discharged to a combined sewer.

Non-potable Uses

- 3.3 Rainwater harvesting systems and water butts will be provided for non potable uses, where practical.

Infiltration Potential

- 3.4 BRE365 infiltration testing confirms that the existing Greensand strata at the site are sufficiently permeable to allow the use of infiltration based Sustainable Drainage Systems (SuDS). The lowest recorded infiltration rate is 2.87×10^{-5} m/s. This rate has been used in the design of the proposed SuDS discussed below. Refer to Table 2.1 and Appendix 5.

Table 3.1: Review of SuDS Components in accordance with the Drainage Hierarchy

SuDS Technique	Proposed	Not proposed	Reason
Store rainwater for later use	X		Water butts and rainwater harvesting to be utilised where feasible
Use infiltration techniques	X		Infiltration feasible and confirmed via intrusive investigation
Discharge to an above ground surface water body		X	Connection not sought. Infiltration proposed
Discharge to a surface water sewer, or another piped surface water drainage system		X	Connection not sought. Infiltration proposed
Discharge to a combined sewer		X	Connection not sought. Infiltration proposed

Sustainable Drainage Systems (SuDS)

- 3.5 Permeable sub base surfaced with gravel is proposed throughout the proposed parking/access area. Surface water runoff from the proposed parking area will permeate through the surface of the system and infiltrate via a stone filled storage sub base. Runoff from roofs will be piped directly into the sub base.
- 3.6 The lower part of the proposed bitumen bellmouth onto Swan Meadow will be surfaced with permeable bitumen and will operate as a separate sub base system to the area outlined in the paragraph above. It is not practical to drain this small catchment (25m²) into the main sub base system as the existing highway is significantly lower than the site.
- 3.7 Preliminary calculations indicate that an attenuation volume of 40.571m³ will be required to accommodate runoff from the proposed development. This can be provided within a 190m² sub base with a depth of 0.80m (with 0.3 voids).
- 3.8 The minimum depth of the proposed permeable bitumen access would be 0.38m, providing a volume of 1.249m³ (with 0.3 voids).
- 3.9 The proposed SuDS have been designed to accommodate and dispose of runoff from all storms up to and including the 1:100-year storm with a 45% allowance for future climate change, in accordance with the latest EA guidance for the Avon Hampshire Management Catchment. All preliminary surface water drainage calculations have been undertaken using InfoDrainage software. Refer to Appendix 7.

Groundwater Flood Risk

- 3.10 The LPA holding objection states that it should be demonstrated that infiltration devices should not have an off site impact. Refer to Appendix 3. The Wiltshire Strategic Flood Risk Assessment Data Explorer <https://wiltscouncil.maps.arcgis.com/apps/webappviewer/index.html?id=74a353612a934bd48fee1f2bc564cdd8> indicates that there is no record of groundwater flooding at the site.
- 3.11 In any case, the local groundwater table covers an area of many square kilometres. The introduction of runoff from such a small scale development would have a negligible impact on local groundwater levels, and hence have a negligible effect upon the risk of groundwater flooding. Notwithstanding this, the proposed SuDS have been designed to be as shallow as possible, in order to ensure that they would not impact existing hydrogeology.

Interception

- 3.12 Surface water runoff will be disposed of via infiltration. Additional interception measures are therefore not required, in accordance with National Standards for SuDS guidance.

Urban Creep

- 3.13 In accordance with LASOO guidance, 10 % urban creep allowance has been considered in the drainage calculations.

Half Drain Time

- 3.14 The InfoDrainage calculations demonstrate that the half drain time is less than 24 hrs.

Factor of Safety

- 3.15 The proposed SuDS will be located adjacent to and at a higher level than Swan Meadow. Although the potential for a significant volume of water to enter the existing highway is minimal, a safety factor of ten has been used in the SuDS design calculations, in accordance with CIRIA guidance.

Design Exceedance

- 3.16 In the event of an exceedance event or blockage, exceedance flows will follow the existing topography of the site and flow onto the existing and proposed landscaped areas adjacent to the proposed SuDS, without impacting existing or proposed buildings. Any exceedance flows entering Swan Meadow would be intercepted by the existing highway drainage system. Exceedance flow routes are shown on CE Drawing 10915/501(A) [*Proposed Surface Water Drainage Strategy*] in Appendix 1.

Water Quality

- 3.17 Water quality has been assessed in line with the Simple Index approach from Chapter 26 of CIRIA C753 *The SuDS Manual*:
1. Step 1 – Allocate suitable pollution hazard indices for the proposed land use.
 2. Step 2 – Select SuDS with a total pollution mitigation index that equals or exceeds the pollution hazard index.
- 3.18 The highest pollution hazard level for the proposed land use is Low (residential car parks and low traffic roads). The pollution hazard indices for the proposed land uses are shown in Table 4.2 below.

Table 3.2: Pollution Hazard Indices for the Proposed Site (from Table 26.2 of CIRIA C753 The SuDS Manual)

Land use	Pollution hazard level	Total suspended solids (TSS)	Metals	Hydrocarbons
Residential car parks & low traffic roads	Low	0.5	0.4	0.4

- 3.19 The individual Pollution Mitigation Indices for permeable sub base are greater than the Pollution Hazard Indices for residential car parks and low traffic roads. Refer to Table 4.3 below. Therefore, the proposed drainage strategy will provide sufficient water quality treatment.

Table 3.3: Pollution Mitigation Indices for Discharge to Surface Water from the Proposed Site (from Table 26.3 of CIRIA C753 The SuDS Manual)

SuDS Feature	Total suspended solids (TSS)	Metals	Hydrocarbons
Permeable Sub Base	0.7	0.6	0.7

- 3.20 BGS logs relating to the nearest borehole to the site (SU15NE22 situated approximately 200m south of the site) include a ground water level of 110.50mAOD. The base of the proposed SuDS would be more than 1m above this level.

Adoption and Maintenance

- 3.21 The proposed permeable paving and associated drainage network will be maintained by the site owner or by a private maintenance company acting on the owner's behalf. A draft Maintenance Schedule is outlined below and summarised in Tables 3.4 to 3.6.

Permeable Sub Base

- 3.22 Permeable surfaces need to be regularly cleaned of silt and other sediments to preserve their infiltration capability. The sweeping regime should be as follows:
1. End of winter (April) – to collect winter debris.
 2. Mid-summer (July/August) – to collect dust, flower and grass-type deposits.
 3. After autumn leaf fall (November).
- 3.23 If reconstruction is necessary, the following procedure should be followed:
1. Lift surface layer and laying course.
 2. Remove any geotextile filter layer.
 3. Inspect sub-base and remove, wash and replace if required.
 4. Renew any geotextile layer.
 5. Renew laying course, jointing material and concrete block paving.

- 3.24 Materials removed from the voids or the layers below the surface of the paving may contain hazardous substances such as heavy metals and hydrocarbons which may need to be disposed of as controlled waste.

Pipework and Catchpits

- 3.25 Silt build up within the pipework will not require a rigorous maintenance regime so long as silt is removed from upstream catch pits on a regular basis. Notwithstanding this, a suitable maintenance regime for the systems will comprise of routine inspection (every six months) and silt removal (as necessary).

Rainwater Harvesting

- 3.26 Where proposed, individual rainwater harvesting systems will be the responsibility of the property owner. Communal systems will be maintained by a private management company on behalf of the participating community.
- 3.27 Any property fitted with a rainwater harvesting system should be provided with appropriate information in relation to the system installed and its operation and maintenance requirements.
- 3.28 Maintenance will typically comprise routine inspection of the tanks, inlets, pumps, gutters and filters for build-up of sediment and debris with repairs to the tank, pump and replacement of filters as required.

Table 3.4: Draft Maintenance Schedule for Proposed Permeable Sub Base

Drainage Element	Schedule	Maintenance Requirement	Frequency
Permeable Sub Base	Regular	Cleaning over whole surface	Once a year, after autumn leaf fall
	Occasional	Removal of weeds	As required
	Remedial	- Remedial work to any depressions or damage considered a hazard to end users or detrimental to performance - Rehabilitation of surface and upper sub-structure by remedial sweeping	- As required - Every 10 – 15 years, or as required
	Monitoring	- Initial inspection - Inspect for evidence of weed growth or poor operation - Inspect silt accumulation rates - Monitor inspection chambers	- Monthly for 3 months after installation - Three monthly, 48 hours after large storms in first six months - Annually - Annually

Table 3.5: Draft Maintenance Schedule for Pipework and Catchpits

Drainage Element	Schedule	Maintenance Requirement	Frequency
Pipework, & catchpits	Regular	- Inspect for accumulation of silt - Inspect for debris and litter - Inspect inlets and outlets for blockages	Every six months
	Occasional	- Remove debris and litter - Remove silt	As required

Table 3.6: Draft Maintenance Schedule for Rainwater Harvesting

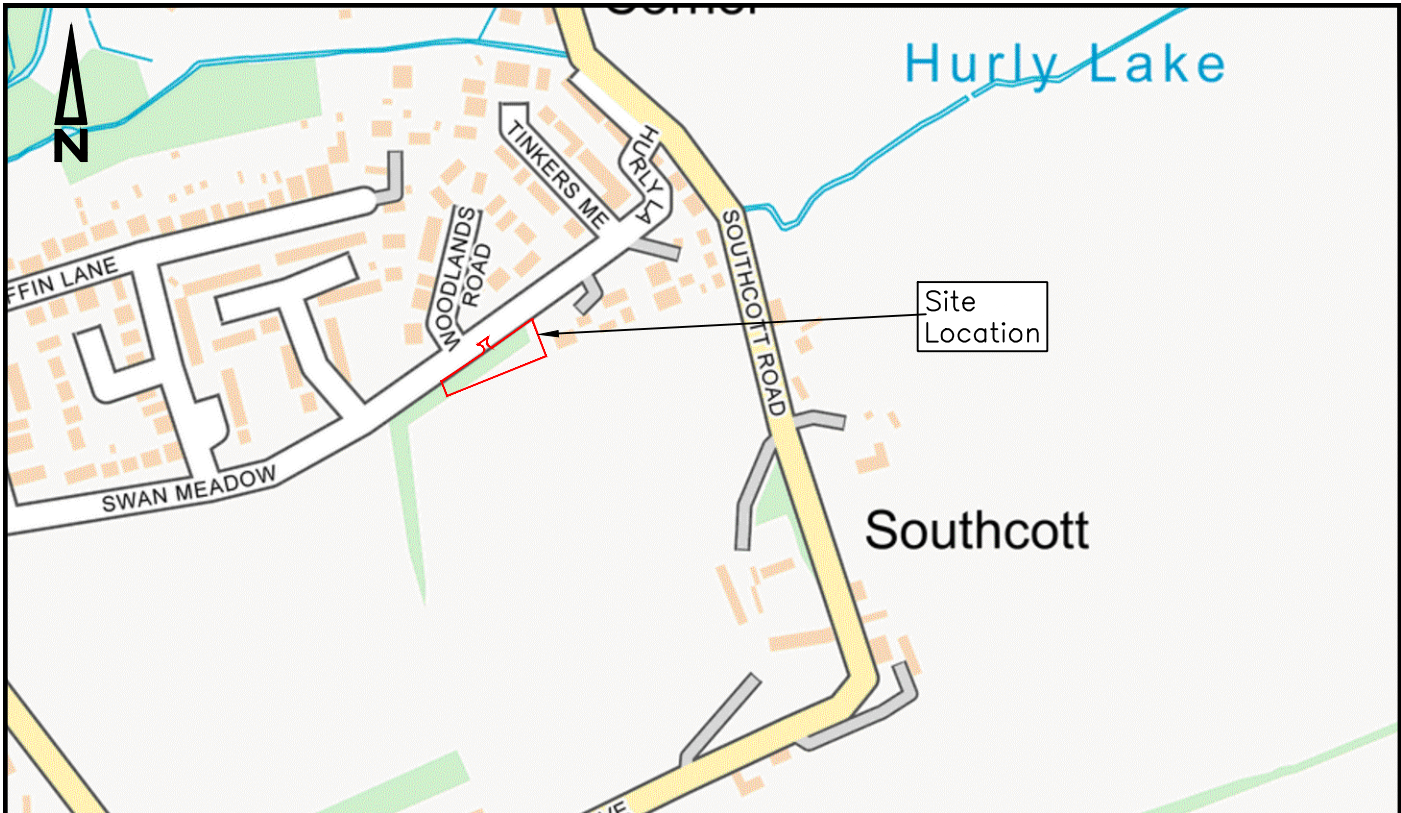
Drainage Element	Schedule	Maintenance Requirement	Frequency
Rainwater Harvesting	Regular	- Inspect of tank, inlets, outlets, overflow areas, pumps and filters for debris and sediment build-up - Cleaning of silt and debris from inlets, outlets, gutters, roof drain filters and tank	Annually
	Occasional	Cleaning and replacement of filters as necessary	Annually
	Remedial	- Repair of overflow erosion damage or damage to tank - Pump repairs	As required

4.0 DISCUSSION AND CONCLUSIONS

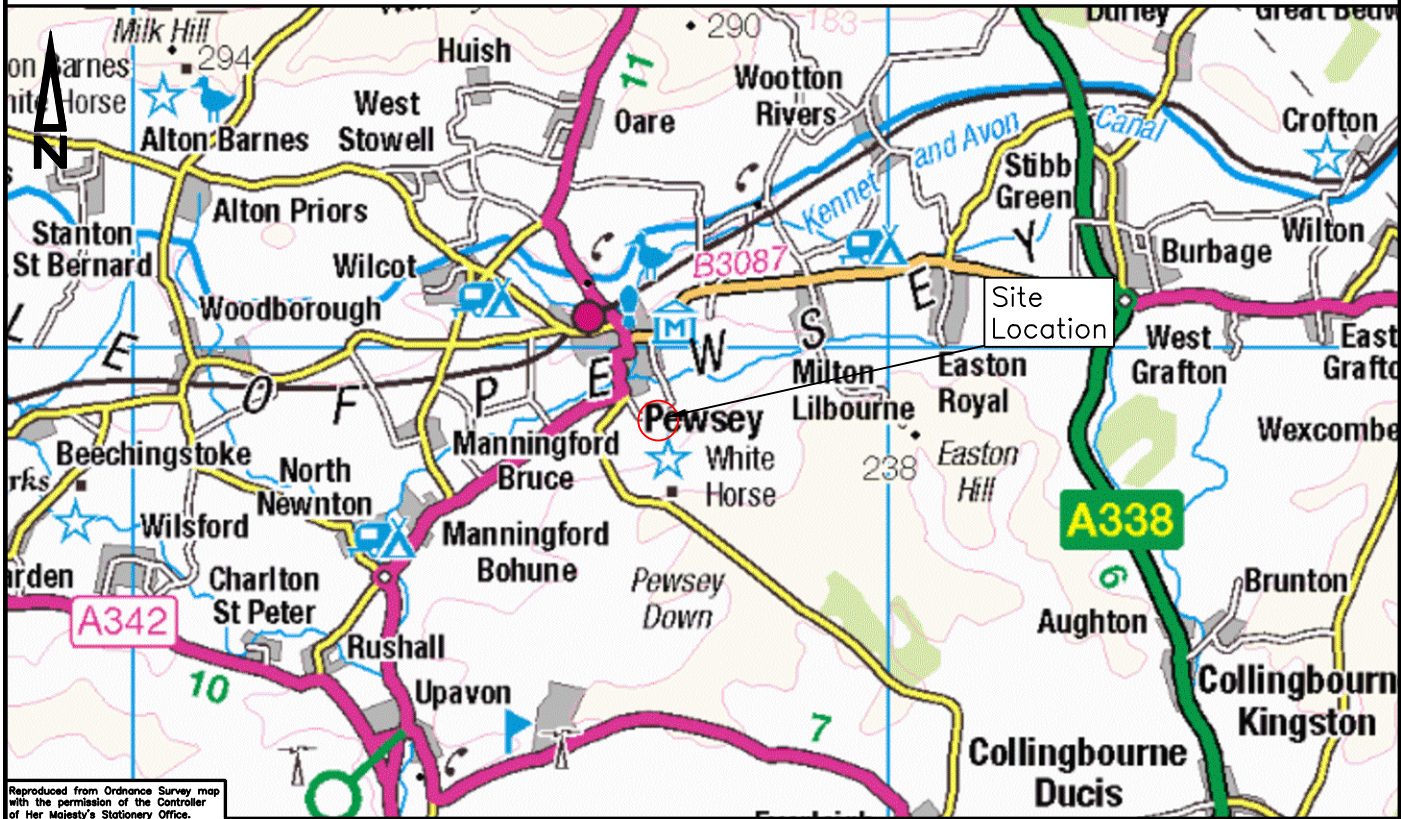
- 4.1 The surface water drainage strategy for the site has been prepared according to the drainage discharge hierarchy. An intrusive site investigation concluded that the underlying strata would support infiltration SuDS.
- 4.2 Post development runoff will therefore be infiltrated into the ground via permeable sub base systems located within the proposed access and parking area, and bellmouth onto Swan Meadow.
- 4.3 In the event of an exceedance event, or blockage, exceedance flows will follow the existing topography of the site and flow onto the adjacent landscaped areas, without impacting existing or proposed developments. If exceedance flows were to enter Swan Meadow it would be intercepted by the existing highway drainage system.
- 4.4 All on site drainage systems will remain private and will be the responsibility of the site owner. All SuDS devices will be constructed and maintained in accordance with *The SuDS Manual* and/or manufacturer's specification.
- 4.5 This study has been undertaken in accordance with the principles of the *NPPF* document. We conclude that providing the development adheres to the conditions advised within this Report, the proposals can be accommodated without increasing flood risk within the locality in accordance with objectives set by Central Government and the EA/LLFA.

Cole Easdon Consultants Limited
April 2026

Appendix 1



Scale: 1:5,000



Scale: 1:100,000

Reproduced from Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved. Licence No. 10005861 Cole Easdon Consultants Limited

© Copyright



01793 619 965 | cec@ColeEasdon.com | www.ColeEasdon.com

Job Title:
Land at Swan Meadow
Pewsey
Wiltshire
SN9 5DF

Drawing Title:
Site Location Plan

Client:
Rebecca Middleton

Drawn By

AW

Checked By

JP

Date Drawn

February 2026

Drawing No.

10915/500 Figure 1

Drawing Status:

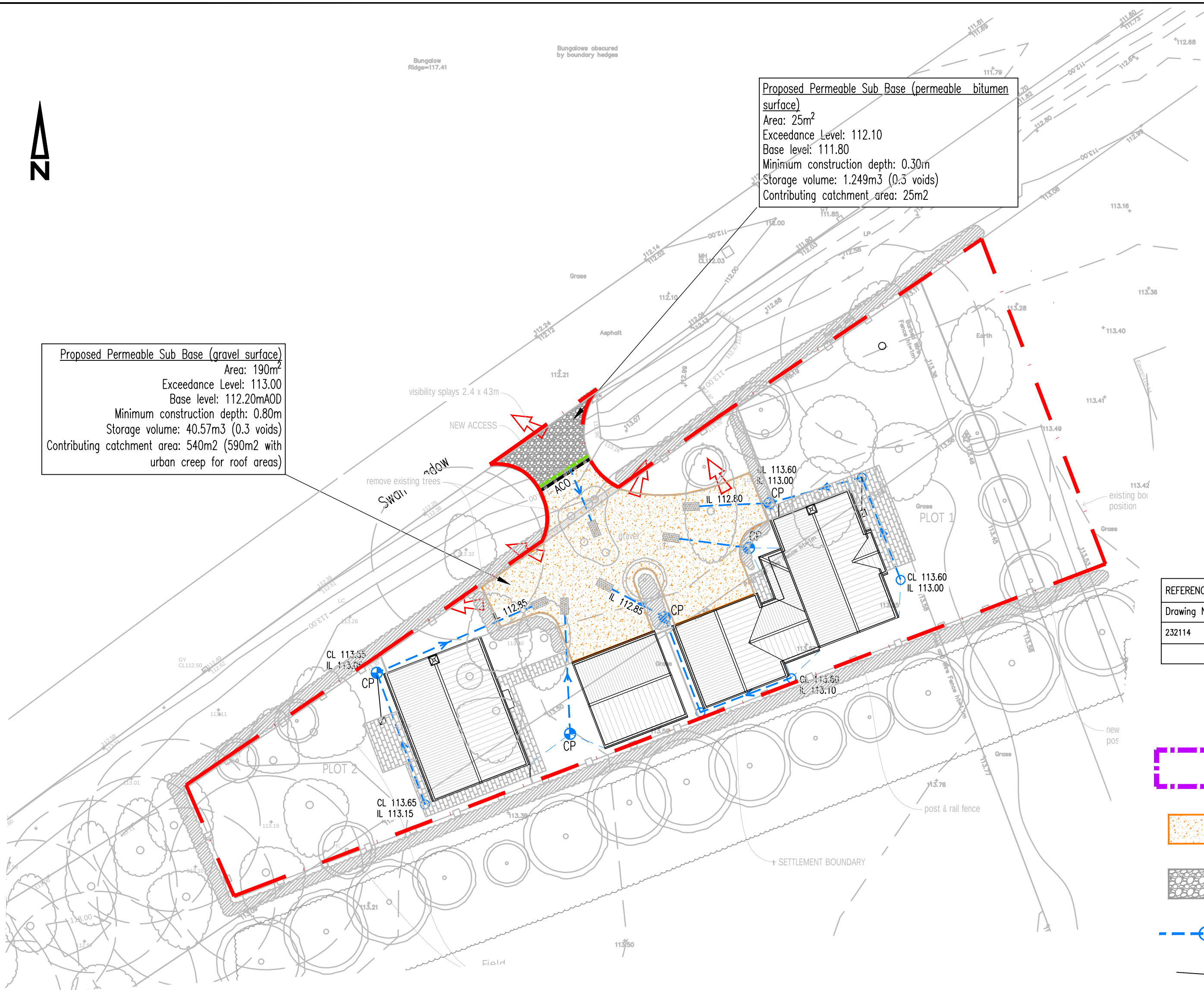
CONSTRUCTION AT CLIENT AND/OR CONTRACTOR RISK	FOR COMMENT	
	FOR PLANNING	
	FOR TENDER	
	FOR APPROVAL	
	FOR CONSTRUCTION AS BUILT	

Scale

As Shown (A4)

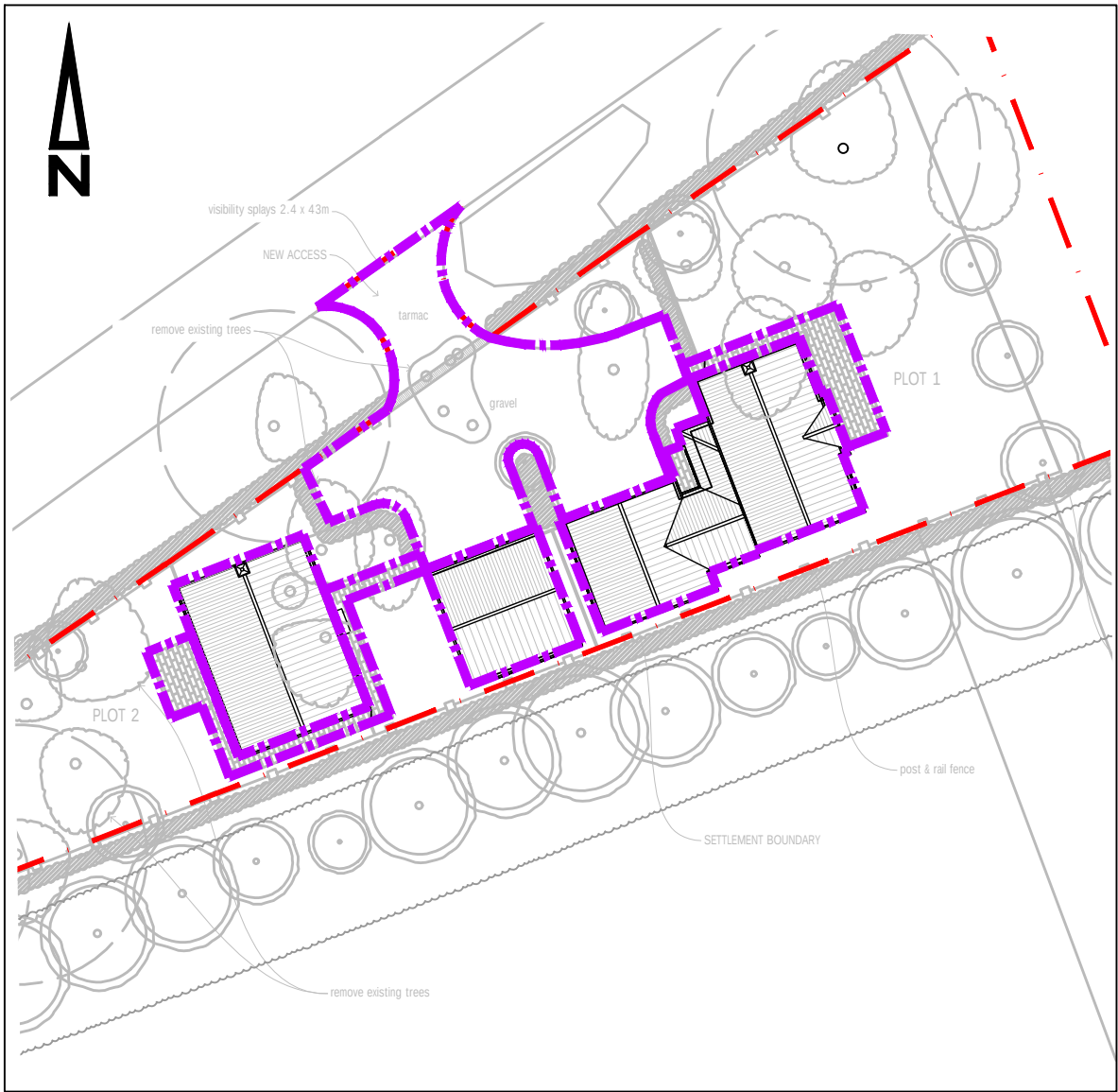
Revision

-



Proposed Permeable Sub Base (gravel surface)
Area: 190m²
Exceedance Level: 113.00
Base level: 112.20m AOD
Minimum construction depth: 0.80m
Storage volume: 40.57m³ (0.3 voids)
Contributing catchment area: 540m² (590m² with urban creep for roof areas)

Proposed Permeable Sub Base (permeable bitumen surface)
Area: 25m²
Exceedance Level: 112.10
Base level: 111.80
Minimum construction depth: 0.30m
Storage volume: 1.249m³ (0.5 voids)
Contributing catchment area: 25m²

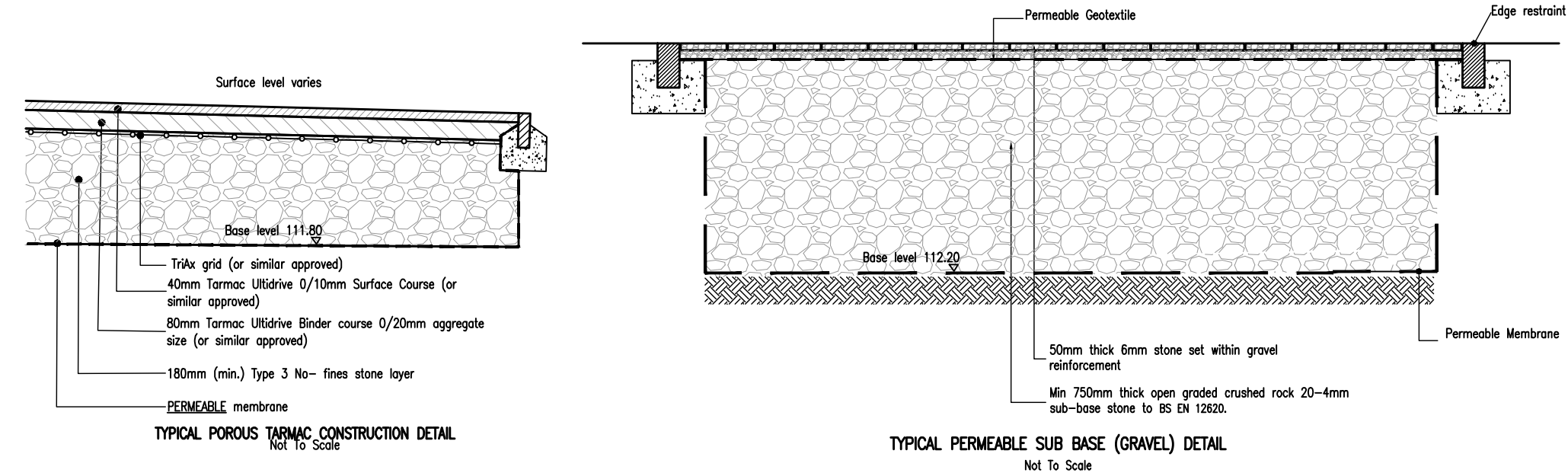


INSET SHOWING AREA DRAINING TO SUDS
SCALE: NTS

REFERENCE DRAWINGS:				
Drawing No.	Drawing Title	Revision	Date	Company
232114	Site Plan	F	Oct 2025	FAAP Ltd

- Key:
- Area draining to proposed SuDS: 540m² (595 with 10% urban creep)
 - Proposed permeable sub base (gravel surface)
 - Proposed permeable sub base (permeable bitumen surface)
 - Proposed surface water drain and inspection chamber.
 - Proposed gully
 - Proposed catchpit
 - Proposed linear drain
 - Proposed concrete full height restraint
 - Design exceedance route
 - Existing ground level

- NOTES
- All levels are in metres above Ordnance datum
 - Surface water drainage systems designed to accommodate the 1 in 100 year critical storm including a 45% allowance for climate change
 - SuDS design based on tested rate of 2.87 x 10-5 m/s



A	SS	20.03.26	Layout updated
---	----	----------	----------------

No.	By	Date	Revision	Details
© Copyright				

01793 619 965 | cec@ColeEasdon.com | www.ColeEasdon.com

Client	
Rebecca Middleton	

Job Title	
Swan Meadow Pewsey Wiltshire SN9 5DF	

Drawing Title	
Proposed Surface Water Drainage Strategy	

Drawing Status:				
FOR COMMENT	FOR TENDER	FOR APPROVAL	FOR CONSTRUCTION	AS BUILT
CONSTRUCTION AT CLIENT / CONTRACTOR RISK				

Designed by:	Drawn by:	Checked by:
SS	SS	RB

Date	Scale
March 2026	1:250 @A2

Dwg. No.	Rev.
10915 - 501	A

Appendix 2

KEY

New tree

Existing tree

Tree to be removed

Root Protection Area

New hedge

Grante/cobble setts

Close boarded fence 1.75m high

Post and rail fence 1m high

NB:

REFER TO LANDSCAPE PLAN BY EARTHWISE GARDEN DESIGN

The site plan illustrates the layout of Swan Orchard, divided into Plot 1 and Plot 2. Plot 1 contains a large building and a gravel area, while Plot 2 features a smaller building. The plan shows existing trees (circles with dots) and trees to be removed (circles with red outlines). A new boundary fence (red dashed line) and a new access point (NEW ACCESS) are proposed. The plan also shows the settlement boundary, a private drive, and an orchard. A scale bar at the bottom left indicates 0m, 5m, and 10m. A north arrow is located in the bottom right corner.

F	Landscaping amended	BL	23.04.26
E	Landscaping amended	BL	16.04.26
D	Landscaping amended	BL	14.04.26
C	Red line boundary added	BL	19.03.26
B	Tracking added	BL	03.02.26
A	Boundary amendments	BL	29.01.26
revisions		initial	date

Contractors, Sub Contractors and Suppliers are to check all relevant dimensions and levels of site and buildings before commencing any shop drawings or building work.

This drawing is copyright and may not be reproduced in any part of form without the written consent of Fowler Architecture and Planning

project
SWAN ORCHARD
Pewsey, Wiltshire

drawing
Site Plan

scale
1:200 @A1

drawn by
BL

date
Oct 2025

231214-02
drawing no

F
rev

The logo for Fowler Architecture & Planning features a stylized 'N' inside a circle, with the text 'FOWLER' at the top and 'ARCHITECTURE & PLANNING' at the bottom.

39 High Street
Pewsey
Wiltshire
SN9 5AF
tel (01672) 569444
fax (01672) 569488
enquiries@faap.co.uk

Appendix 3

To:	Adrian Smith	From:	James Playfair
------------	---------------------	--------------	----------------

Planning App Ref:	PL/2025/09744
Service Ref:	Drainage
Date:	5 th January 2025

PROPOSAL

Full planning permission

Erection of 2 no. detached dwellings; with associated garaging, parking, turning, landscaping, private amenity space and the creation of a new access point.

SITE LOCATION

Land to the south of Swan Meadow, Pewsey, Wiltshire, SN9 5DF

SUMMARY OF THE CONSULTEE POSITION

Object	
Holding Objection: Further information required	X
Support	
No comment	
No objection	
No objection subject to conditions	
Consultation not required	

APPLICATION DOCUMENTS REVIEWED

- Proposed Site Plan
- Planning Design and Access statement
- Covering Letter

ASSESSMENT OF THE PROPOSAL

Context

In planning terms, flood risk refers to the potential for development to increase the likelihood or severity of flooding on-site or elsewhere, while drainage considerations relate to the capacity of the site and surrounding infrastructure to manage surface water runoff in a sustainable and effective manner.

The local planning authority must be satisfied that the proposed development will not increase flood risk, either on-site or elsewhere, and that surface water will be managed in a sustainable and coordinated manner.

Where necessary, planning conditions or legal agreements may be used to secure the implementation, maintenance, and monitoring of SuDS and other drainage infrastructure.

Assessment

The applicant has not provided any drainage information at this stage; we would advise the applicant to submit a concept drainage plan at this stage so as we can provide direction ahead of subsequent planning stages.

RECOMMENDATION

Holding objection as further information required

At this stage, a full assessment cannot be completed due to insufficient information. The following documents/information are required to enable a proper review of the drainage and flood risk aspects of the proposal:

The developer should provide the following information as part of future planning applications in accordance with Wiltshire Council requirements, NPPF, PPG and Non-Statutory Technical Standards for SuDS:

- Evidence that the [surface water disposal hierarchy](#) has been applied.
- The strategy mimics the existing drainage characteristics of the site by retaining and utilising any existing drainage features.
- Soakaway testing in accordance with BRE365, and groundwater level monitoring (taking into account seasonal variations).
- If infiltration is proposed, it is implemented in manner that does not create an offsite impact, particularly if there are reports of groundwater flooding in the area.
- Existing pre and post development runoff rates for the site, in accordance with Wiltshire Council's betterment policy update, which can be found [here](#).
- Calculations that demonstrate the sizing of any attenuation/ SuDS features and cross section drawings of these features.
- Pre and post development exceedance routing that demonstrates flood risk is not increased elsewhere.
- Evidence that the finished floor levels are above the maximum predicted 100-year flood level or if no flooding is predicted, at a sufficient height above the SW drainage cover levels.
- Evidence that the proposed drainage design provides a sufficient level of water treatment.
- Consent for any outfalls from the proposed drainage systems into a public sewer or other drainage system not owned by the applicant.
- Details of how the proposed and existing drainage features on the site will be maintained and managed after completion with confirmation from the relevant authority that they will adopt any systems that are being offered for adoption.
- If access to the site is predicted to flood, an emergency plan must be agreed with Wiltshire Council. Guidance on the preparation of an emergency plan can be found [here](#).

INFORMATIVES

The applicant is reminded of their riparian responsibilities for maintaining flows within ordinary watercourses. Guidance on riparian ownership can be found here [Owning a watercourse - GOV.UK \(www.gov.uk\)](#)

Prior to any works commencing on the upstream drainage network, the approved outfall structure and flow control device shall be fully constructed, tested, and commissioned. No discharge to the receiving system (including watercourses, waterbodies, sewers, or drains) shall occur until these measures are operational to ensure compliance with agreed discharge rates and prevent an increase in flood risk elsewhere.

To aid in the development of compliant drainage strategies, the following are recommended without prejudice. These are based on the [National Standards for SuDS](#). We would recommend also utilising the best practice guidance within *The SuDS Manual*, and *Getting SuDS Right from the Start*:

Standard	Best Practice Considerations
Standard 1 – Drainage Hierarchy	• Retain and enhance existing natural drainage features where possible. • Use site layout to maximize opportunities for infiltration and above-ground conveyance. • Identify how communal rainwater harvesting can be utilised to help improve viability of inclusion. • Identify whole-life cost-benefits such as water bill reductions for implementing rainwater harvesting.
Standard 2: Interception	• Use green roofs, permeable paving, rain gardens, and bioretention to maximize interception. • Distribute source control features throughout the site for maximum effectiveness. • Provide a maintenance plan to ensure interception features remain effective.
Standard 3: Management of Extreme Rainfall and Flooding	• Use topographical surveys to identify and preserve natural overland flow routes. • Design SuDS features with freeboard and overflow routes. • Ensure safe access and egress during extreme events. • Consider overland flows originating from outside redline boundary • Consider how the drainage systems will perform in the event of blockage and failure
Standard 4: Water Quality	• Use vegetated SuDS (swales, ponds, wetlands) for effective pollutant removal. • Include forebays or sediment traps upstream of main SuDS features. • Provide a maintenance plan for regular removal of silt and debris.
Standard 5: Amenity	• Use gentle side slopes, accessible paths, and seating to make SuDS features usable and attractive. • Involve local communities in the design of SuDS spaces.
Standard 6: Biodiversity	• Design SuDS to create wetland mosaics, wildlife corridors, and habitat connectivity. • Consider how SuDS can help provide wider BNG benefits / credits to the site
Standard 7: Construction, Operation, Maintenance, Decommissioning, and Structural Integrity	• Plan for safe access for maintenance. • Include decommissioning plans for temporary features.

Appendix 4

WATER MAINS		SEWERS		PUBLIC	PRIVATE	SECTION 104	OTHER WESSEX PIPES		NON-WESSEX / UNKNOWN	
	Distribution Main		Foul					Rising Mains		Private Rising Mains
	Washout Main		Surface					Standby Rising Mains		Culverted Watercourse
	Raw Water Main		Combined					Effluent Disposal		Highway Drain
	Abandoned Main		Abandoned					Overflow		Use Unknown
	Private Main							Syphon		Status Unknown

Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow) styles of line are shown on the key in sample/typical colours.

SITES		STRUCTURES		OTHER STRUCTURES	
	Source		Manhole - Foul		Pumping Station - Surface
	Reservoir		Manhole - Surface		Pumping Stn - Foul/Combined
	Pump		Manhole - Combined		Gully
	Treatment Works		Outfall		Vent Column
			Inlet		Rodding Eye
			Lamphole		Catchpit
			Bifurcation - Foul		Flushing Chamber
			Bifurcation - Surface		Soakaway
			Bifurcation - Combined		Non Return Valve
			Combined Sewage Overflow		Washout
					Air Valve
					Hatch Box

Information in this plan is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. Building over or near Wessex Water's apparatus is not normally permitted.

Date: 09/02/2026

Centre: 416861E, 159478N

Scale: 1:1,768
(when printed at A1 size)

Appendix 5



British
Geological
Survey

HYDROGEOLOGY RESEARCH GROUP

202

WELL BOREHOLE RECORD

SU15/41

SU15 NE/22

Form WR-38 (BGS)

SOUTHWEST EA

A SITE DETAILS	
Borehole drilled for	Tony P.H.M. (owner)
Location	MURLET STREAM COTTAGE, SOUTHCOTT, PENSET
NGR (8 fig.)	SU 169 594 (approx) Please attach site plan
Ground Level (if known)	
Drilling Company	
Date of Drilling	Commenced <u> </u> Completed <u> </u>
B CONSTRUCTION DETAILS	
Borehole Datum (if not ground level)	<u> </u> above <u> </u> m below GL <u> </u> 5.03 m
(point from which all measurements of depth are taken e.g. flange, edge of chamber, etc.) <u> </u> APPROX 16 1/2' deep.	
Borehole drilled diameter	<u> </u> mm from <u> </u> to <u> </u> m/depth <u> </u> LINED WITH
INTERNAL DIAMETER OF WELL APPROX 2'	<u> </u> mm from <u> </u> to <u> </u> m/depth <u> </u> STONE, TOP
	<u> </u> mm from <u> </u> to <u> </u> m/depth <u> </u> PART BRICK.
Casing material <u> </u> diameter	<u> </u> mm from <u> </u> to <u> </u> m/depth
and type (e.g. if plain steel, plastic slotted)	
<u> </u> diameter	<u> </u> mm from <u> </u> to <u> </u> m/depth
<u> </u> diameter	<u> </u> mm from <u> </u> to <u> </u> m/depth
<u> </u> diameter	<u> </u> mm from <u> </u> to <u> </u> m/depth
Grouting details	<u> </u>
Water struck at	<u> </u> m (depth below datum — mbd)
	<u> </u> m (depth below datum — mbd)
Rest water level on completion	<u> </u> mbd
C TEST PUMPING SUMMARY (Please supply full details on Forms WR-39)	
Test Pumping Datum (if different from borehole datum)	<u> </u> m above <u> </u> below borehole datum (mbd)
Pump Suction depth	<u> </u> mbd
Water Level (Start of Test)	<u> </u> mbd <u> </u> R.W.L. approx 16' below
Water Level (End of Test)	<u> </u> mbd <u> </u> surface Nov 2003
Pumping rate	<u> </u> m ³ /d./l./s
for	<u> </u> days/hours
Recovery to (from end of pumping)	<u> </u> mbd in <u> </u> mins: hrs: days
Date(s) of measurements	<u> </u>
Please supply chemical Analysis if available.	

[illegible]

FOR OFFICIAL USE ONLY		
FILE	CONSENT NO.	NGS REF NO.
LIC NO.	PURPOSE	NRA REF NO.
DATE REC:	COPY TO:	ENTERED BY:



British
Geological
Survey

Ac. 47493

HYDROGEOLOGY RESEARCH GROUP

WHATLEY & Co (Pewsey) Ltd
HIGHTREES
SALISBURY ROAD
PEWSEY
SN9 5NZ
TEL: 01672 562404
FAX: 01672 563091

SU15/43

Form WR-38 (BGS)

BOREHOLE RECORD

A SITE DETAILS	
Borehole drilled for	A.G. BUILDERS LTD
Location	THE OLD RECTORY PEWSEY WILTSHIRE
NGR (8 fig.)	SU 166 599
Ground Level (if known)	115m AOD
Drilling Company	WHATLEY + CO (PEWSEY) LTD
Date of Drilling	Commenced 5/3/08 Completed 5/3/08
B CONSTRUCTION DETAILS	
Borehole Datum (if not ground level) _____ above m below GL	
(point from which all measurements of depth are taken e.g. flange, edge of chamber, etc.)	
Borehole drilled diameter	200 mm from 0 to 15 m/depth
	_____ mm from _____ to _____ m/depth
	_____ mm from _____ to _____ m/depth
Casing material	PVC FILTER 125mm diameter
and type (e.g. if plain steel, plastic slotted)	125 mm from 0 to 15 m/depth
	_____ diameter _____ mm from _____ to _____ m/depth
	_____ diameter _____ mm from _____ to _____ m/depth
	_____ diameter _____ mm from _____ to _____ m/depth
Grouting details	Gravel packed + cement grout
Water struck at	4 m (depth below datum — mbd)
	_____ m (depth below datum — mbd)
Rest water level on completion	2 mbd
C TEST PUMPING SUMMARY (Please supply full details on Forms WR-39)	
Test Pumping Datum	_____ m above (if different from borehole datum) below borehole datum (mbd)
Pump Suction depth	_____ mbd
Water Level (Start of Test)	_____ mbd
Water Level (End of Test)	_____ mbd
Pumping rate	_____ m ³ /d./s
for	_____ days/hours
Recovery to	_____ mbd in _____ mins: hrs: days
(from end of pumping)	
Date(s) of measurements	_____
Please supply chemical Analysis if available.	



D STRATA LOG			
Geological Classification	Description of strata	Thickness	Depth
(BGS only)		m	m
	0 - 1M TOPSOIL INTERBEDDED GRAVEL.	1	1
	1 - 15M UPPER GREENSAND + SANDSTONE	14	15
(continue on separate page if necessary)			
Other comments (e.g. gas encountered, saline water intercepted, etc.)			

FOR OFFICIAL USE ONLY		
FILE	CONSENT NO.	NGS REF NO.
LIC NO.	PURPOSE	NRA REF NO.
DATE REC:	COPY TO:	ENTERED BY:



British
Geological
Survey

GeoIndex Onshore

🔍 SN9 5DF



Data



Borehole records



Superficial deposits 1:50,000



scale



Bedrock geology 1:50,000

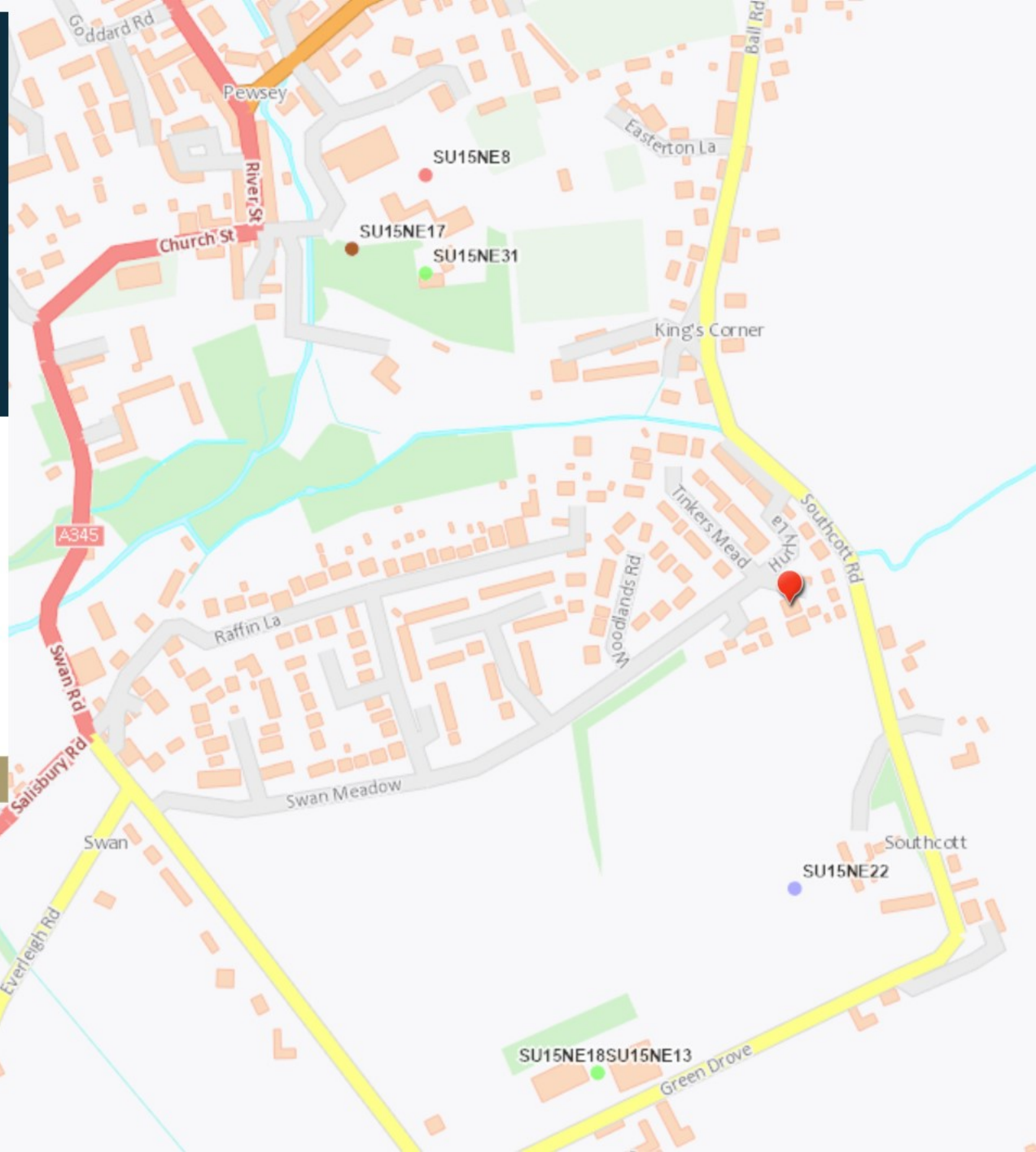


scale



Add Data

Show Legend



Appendix 6

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.43 m
Width	0.64 m
Depth	1.68 m

Depth to Water Level

Start of test	0.66
End of test	1.68

Depth to Water Level

75% full	0.915 m
50% full	1.17 m
25% full	1.425 m

Time to empty (from graph)

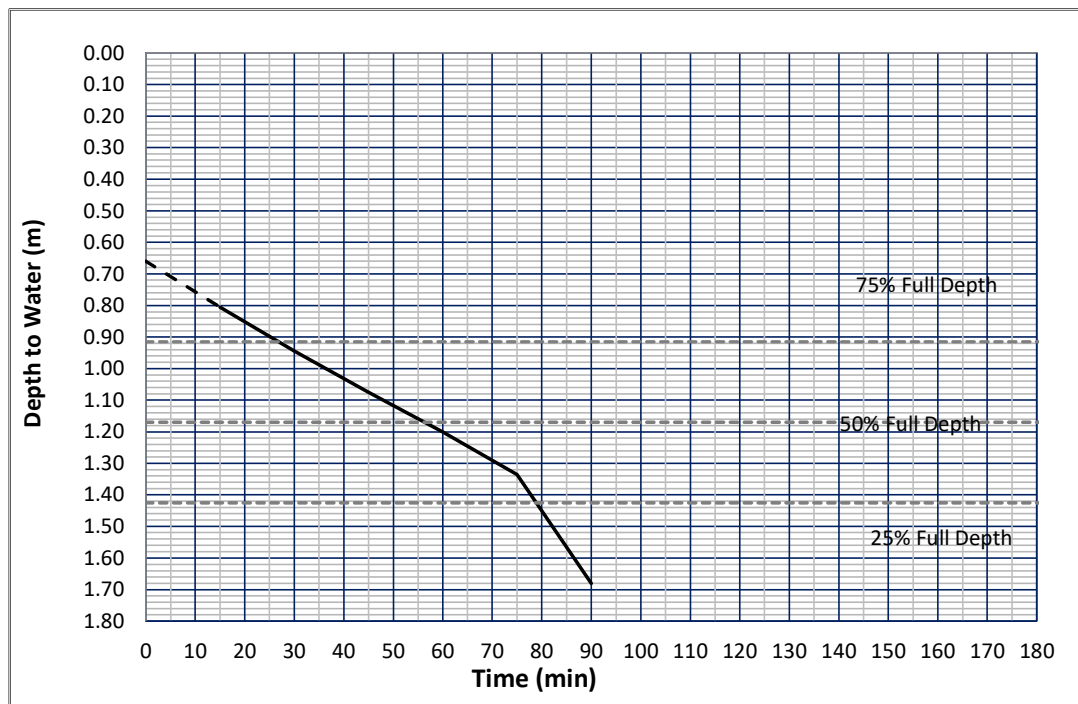
t_{p25}	25 min
t_{p50}	57 min
t_{p75}	78 min

Effective Storage Volume and Area

V_{p75-25} 0.466752

a_{p50} 3.0266

Soil Infiltration Rate 4.850E-05 m/s
0.175 m/hr





Site: **Swan Orchard Pit 1 Test 1**

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.43 m
Width	0.64 m
Depth	1.68 m

Depth to Water Level

Start of test	0.53
End of test	1.68

Depth to Water Level

75% full	0.82 m
50% full	1.11 m
25% full	1.4 m

Time to empty (from graph)

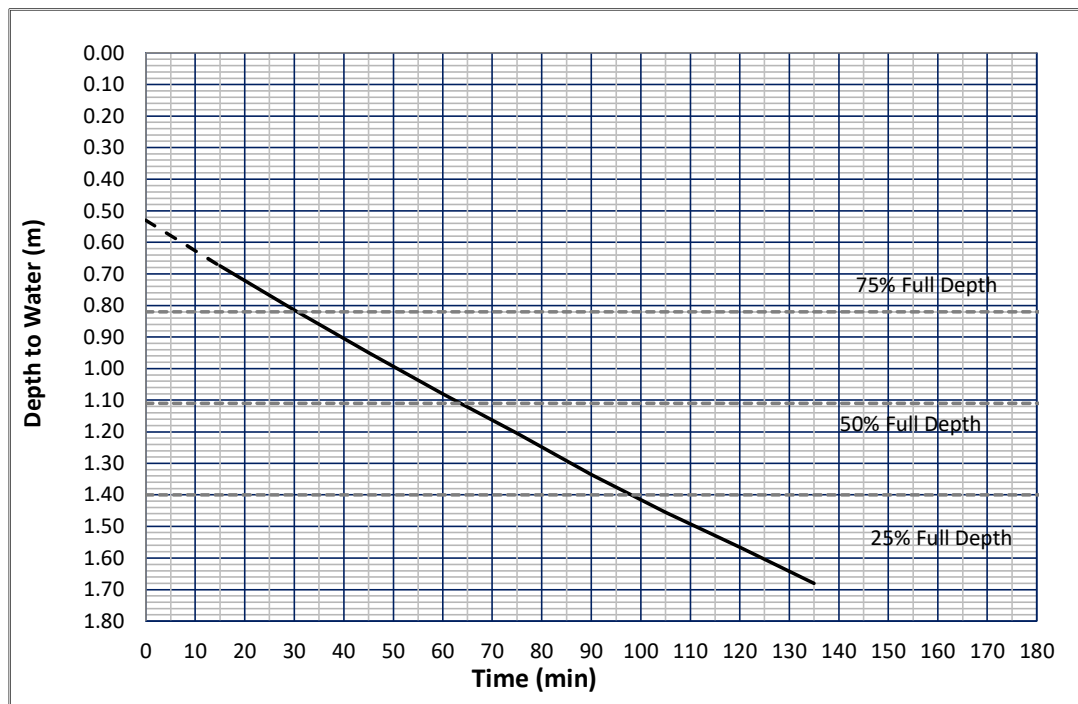
t_{p25}	30 min
t_{p50}	62 min
t_{p75}	98 min

Effective Storage Volume and Area

V_{p75-25} 0.530816

a_{p50} 3.275

Soil Infiltration Rate 3.973E-05 m/s
0.143 m/hr





Site: **Swan Orchard Pit 1 Test 2**

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.43 m
Width	0.64 m
Depth	1.68 m

Depth to Water Level

Start of test	0.635
End of test	1.68

Depth to Water Level

75% full	0.9 m
50% full	1.16 m
25% full	1.42 m

Time to empty (from graph)

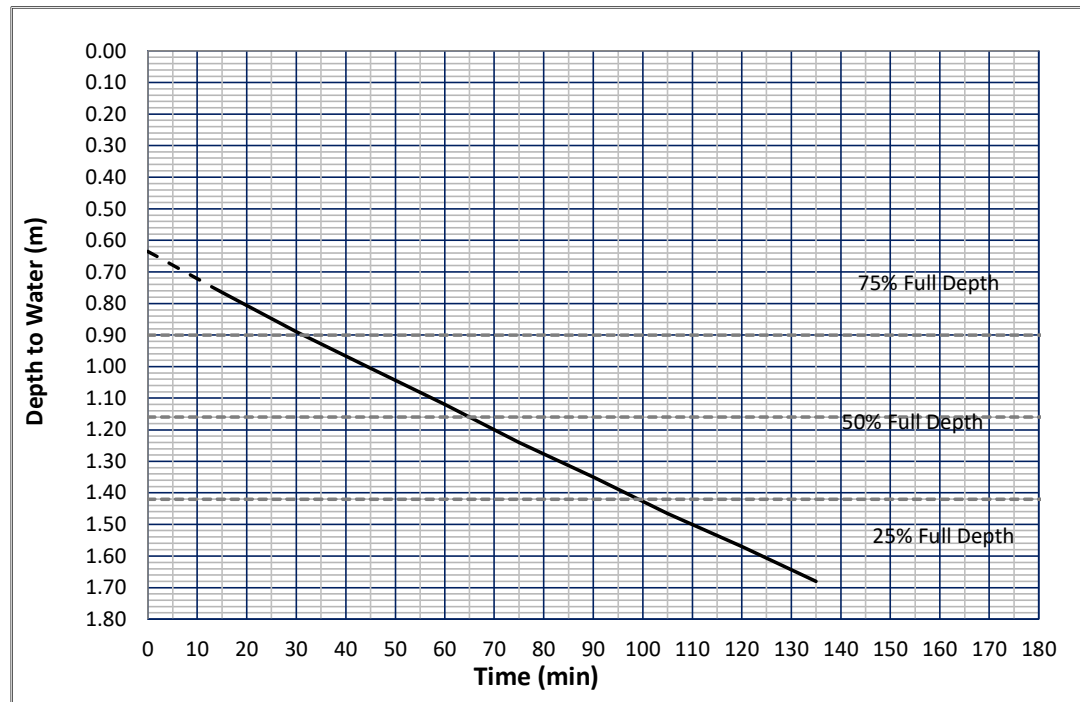
t_{p25}	30 min
t_{p50}	65 min
t_{p75}	99 min

Effective Storage Volume and Area

V_{p75-25} 0.475904

a_{p50} 3.068

Soil Infiltration Rate 3.747E-05 m/s
0.135 m/hr





Site: **Swan Orchard Pit 1 Test 3**

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.52 m
Width	0.63 m
Depth	1.71 m

Depth to Water Level

Start of test	0.61
End of test	1.71

Depth to Water Level

75% full	0.885 m
50% full	1.16 m
25% full	1.435 m

Time to empty (from graph)

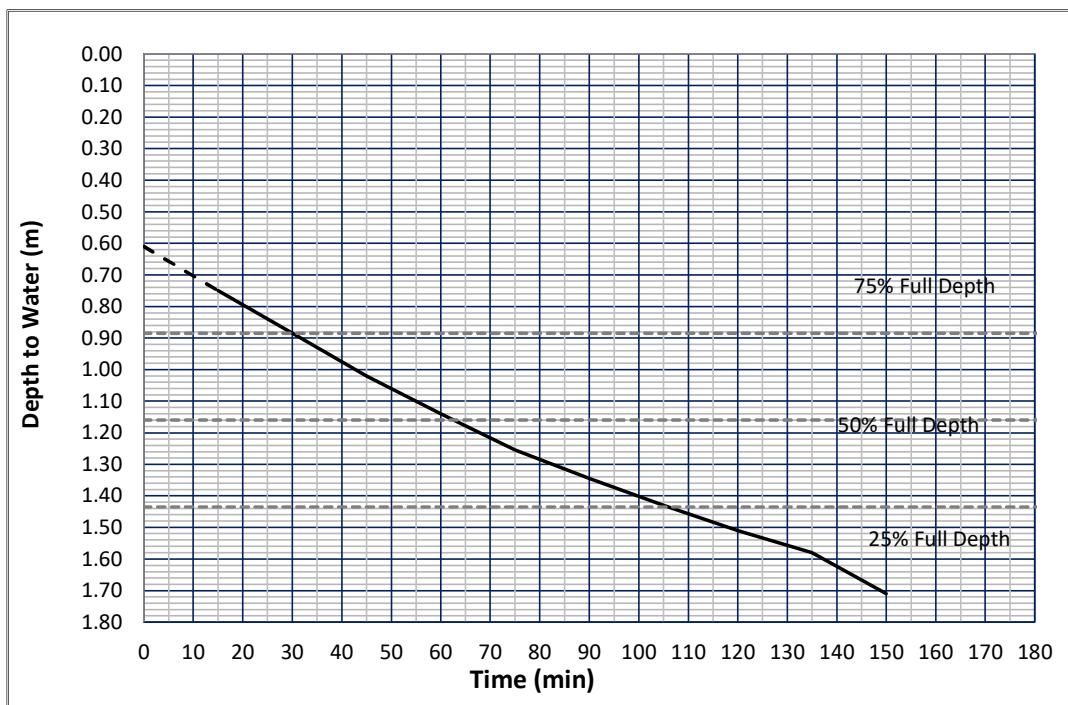
t_{p25}	30 min
t_{p50}	62 min
t_{p75}	105 min

Effective Storage Volume and Area

V_{p75-25} 0.52668

a_{p50} 3.3226

Soil Infiltration Rate 3.523E-05 m/s
0.127 m/hr





Site: **Swan Orchard Pit 2 Test 2**

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.52 m
Width	0.63 m
Depth	1.71 m

Depth to Water Level

Start of test	0.57
End of test	1.71

Depth to Water Level

75% full	0.855 m
50% full	1.14 m
25% full	1.425 m

Time to empty (from graph)

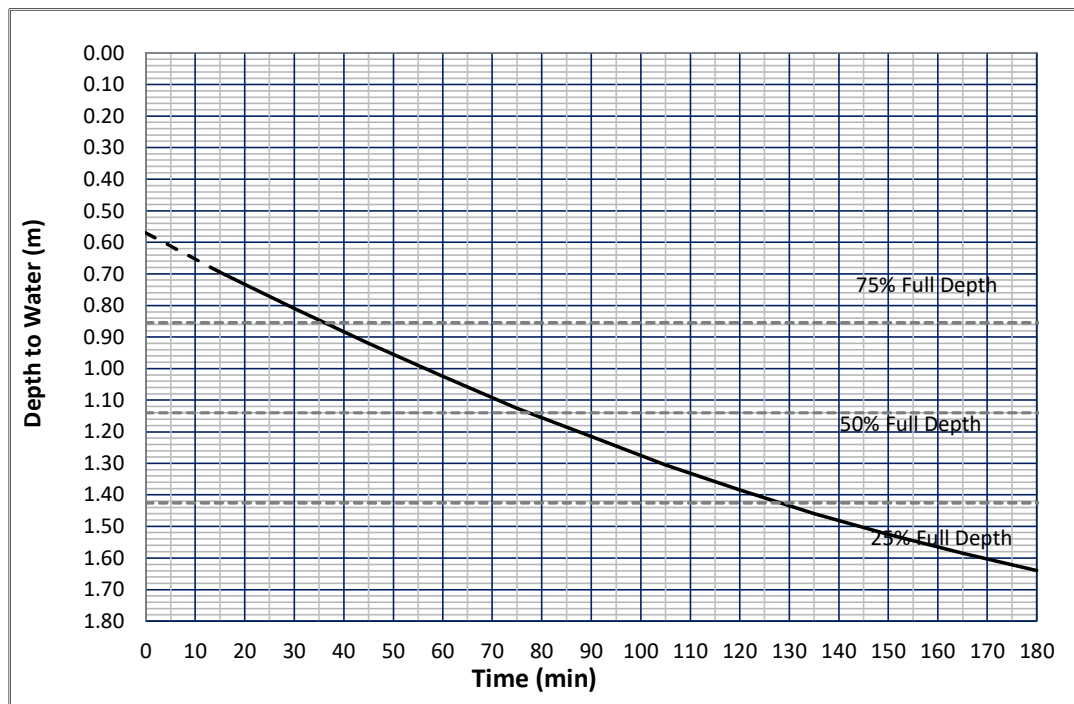
t_{p25}	35 min
t_{p50}	76 min
t_{p75}	128 min

Effective Storage Volume and Area

V_{p75-25} 0.545832

a_{p50} 3.4086

Soil Infiltration Rate 2.870E-05 m/s
0.103 m/hr





Site: **Swan Orchard Pit 2 Test 2**

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.52 m
Width	0.63 m
Depth	1.71 m

Depth to Water Level

Start of test	0.67
End of test	1.71

Depth to Water Level

75% full	0.93 m
50% full	1.19 m
25% full	1.45 m

Time to empty (from graph)

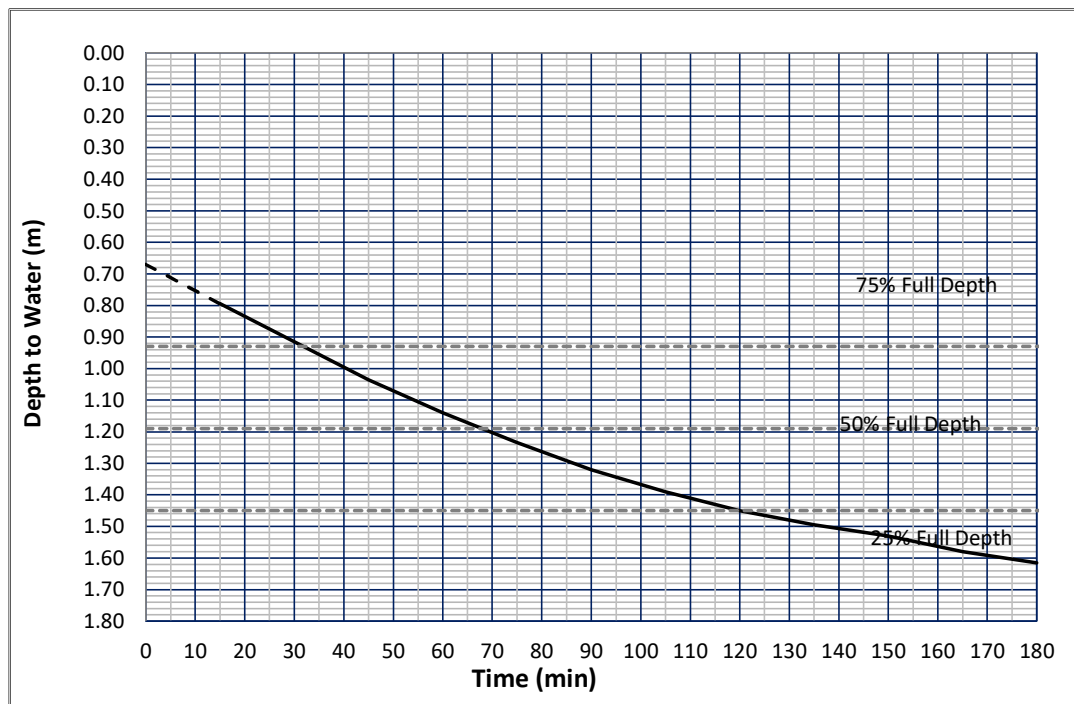
t_{p25}	32 min
t_{p50}	70 min
t_{p75}	118 min

Effective Storage Volume and Area

V_{p75-25} 0.497952

a_{p50} 3.1936

Soil Infiltration Rate 3.022E-05 m/s
0.109 m/hr





Site: **Swan Orchard Pit 2 Test 3**

Appendix 7

FEH Statistical Method: Catchment Descriptor Equation (InfoDrainage)

Area (m2)	540	Area(Km2)	0.00054
SAAR	770	1000/SAAR	1.298701
FARL	1		
BFIHOST19	0.739	BFIHOST2	0.546121
Region	7		

QMED	x 1.07 =	QBAR
m3/s	l/s	l/s
0.000225	0.22477	0.240504



1yr	0.20
2yr	0.21
QBAR	0.24
10yr	0.39
30yr	0.55
100yr	0.77
200yr	0.90

Job: 10915

Project:	Date: 18/03/2026		
	Designed by: AWasiljew	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address:		





Roof & Pavement

Type : Porous Paving

Dimensions

Exceedance Level (m)	113.000
Depth (m)	0.800
Base Level (m)	112.200
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	19.000
Long. Slope (1:X)	1000.00
Width (m)	10.000
Total Volume (m³)	42.750

Advanced

Base Infiltration Rate (m/hr)	0.103
Side Infiltration Rate (m/hr)	0.103
Safety Factor	10.0
Conductivity (m/hr)	400.0



Road

Type : Porous Paving

Dimensions

Exceedance Level (m)	112.100
Depth (m)	0.300
Base Level (m)	111.800
Paving Layer Depth (mm)	120
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	5.000
Long. Slope (1:X)	1000.00
Width (m)	5.000
Total Volume (m³)	1.350

Advanced

Base Infiltration Rate (m/hr)	0.103
Side Infiltration Rate (m/hr)	0.103
Safety Factor	10.0
Conductivity (m/hr)	400.0

Project:	Date: 18/03/2026		
	Designed by: AWasiljew	Checked by:	Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase	Company Address:		



Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Road	Road		Time of Concentration	0.003	100	0	100	0.003
Roof+Pavement	Roof & Pavement		Time of Concentration	0.054	100	10	110	0.059
TOTAL		0.0		0.057				0.062

Project:	Date: 18/03/2026			
	Designed by: AWasiljew	Checked by:	Approved By:	
Report Title: Rainfall Analysis Criteria	Company Address:			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Use Catchment Values
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FEH		Type: FEH
Site Location	GB 416350 159650 SU 16350 59650	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	20160
30	20160
60	20160
120	20160
180	20160
240	20160
360	20160
480	20160
600	20160
720	20160
960	20160
1440	20160
2160	20160
2880	20160
4320	20160
5760	20160
7200	20160
8640	20160
10080	20160

Project:	Date: 18/03/2026		
	Designed by: AWasiljew	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address:		





Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Roof & Pavement	FEH: 100 years: +45 %: 360 mins: Winter	112.943	112.907	0.724	0.707	6.0	40.571	0.000	51.778	0.0	0.000	510	5.096
Road	FEH: 100 years: +45 %: 120 mins: Winter	111.976	111.965	0.171	0.165	0.6	1.249	0.000	1.729	0.0	0.000	125	7.454

Project:	Date: 18/03/2026			
	Designed by:	Checked by:	Approved By:	
	AWasiljew			
Report Details:	Company Address:			
Type: Stormwater Controls Summary				
Storm Phase: Phase				

Status
OK
OK