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Ampney Park

Surface and Foul Water Drainage Strategy

Project Number: 12005

Issue Date: 25 September 2023

Revision: P1

Suitability: S4 (Approval)

Contents

Appendices

Quality Assurance

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P1	25 Sept 2023	S4 - Approval	DTM

Prepared	Checked	Approved	Date
JP	DJ	DJ	25 Sept 2023

1.0 Introduction

1.1.1 Mann Williams have been appointed by Simon Morray Jones to advise on a surface water and foul water drainage strategy to serve the development located at Ampney Park, Ampney Crucis. The strategy will consider the requirements of the National Planning Policy Framework (NPPF) and the policies in the Cotswold District Councils Local Plan.

1.1.2 In line with good practice the proposed drainage design has been made to develop a scheme which targets the most sustainable disposal techniques identified in the sustainable drainage hierarchy relevant to this site.

2.0 Site Location & Setting

2.1.1 The site is located at Ampney Park, London Road, Ampney Crucis, GL7 5RY.

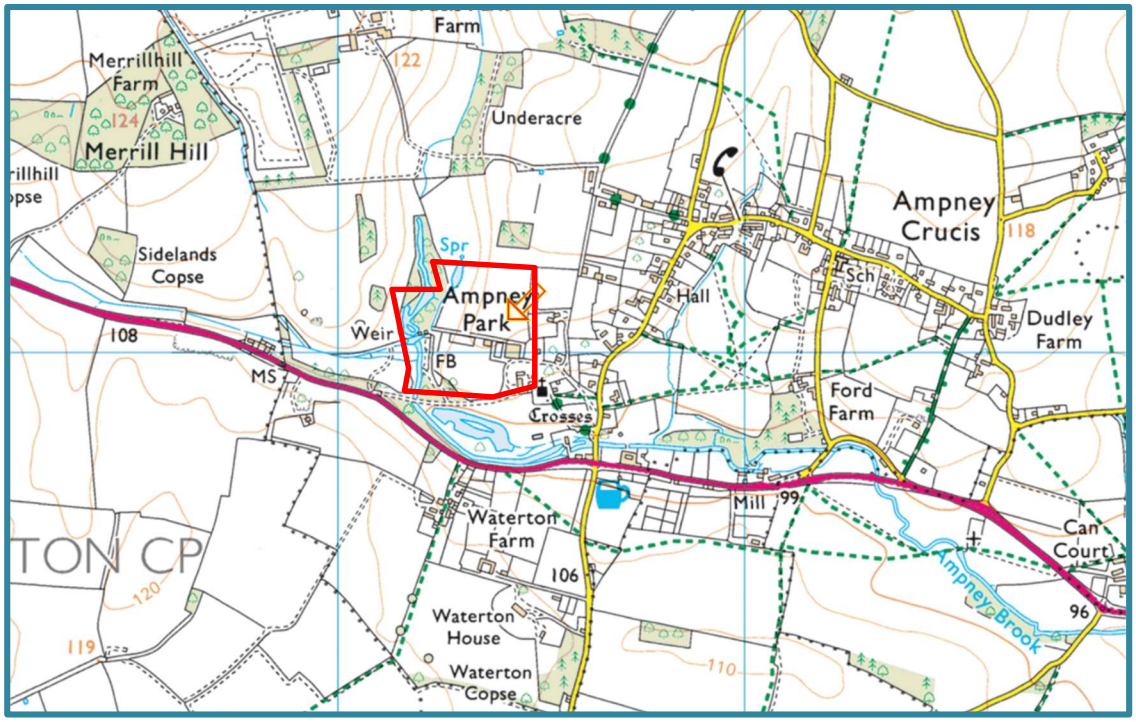


Figure 1 Ampney Park location within the wider landholding and context with Ampney Crucis (Streetmap).

2.1.2 The Ampney Park site is in the following setting:

- To the north landform rises into extended parkland and meadows, and a spring situated outside the development boundary to the north west.
- To the west, land falls away to Ampney Brook which flows southwards before changing to an easterly direction adjacent to London Road.
- South of the site is London Road, Ampney Brook and further meadows and mixed agricultural use.
- East of the site is village of Ampney Crucis with mixed residential and commercial buildings with rear gardens at a similar elevation.

2.1.3 Generally, the site falls from the North East to the South West towards Ampney Brook and a connected lake which lies with the property redline boundary.

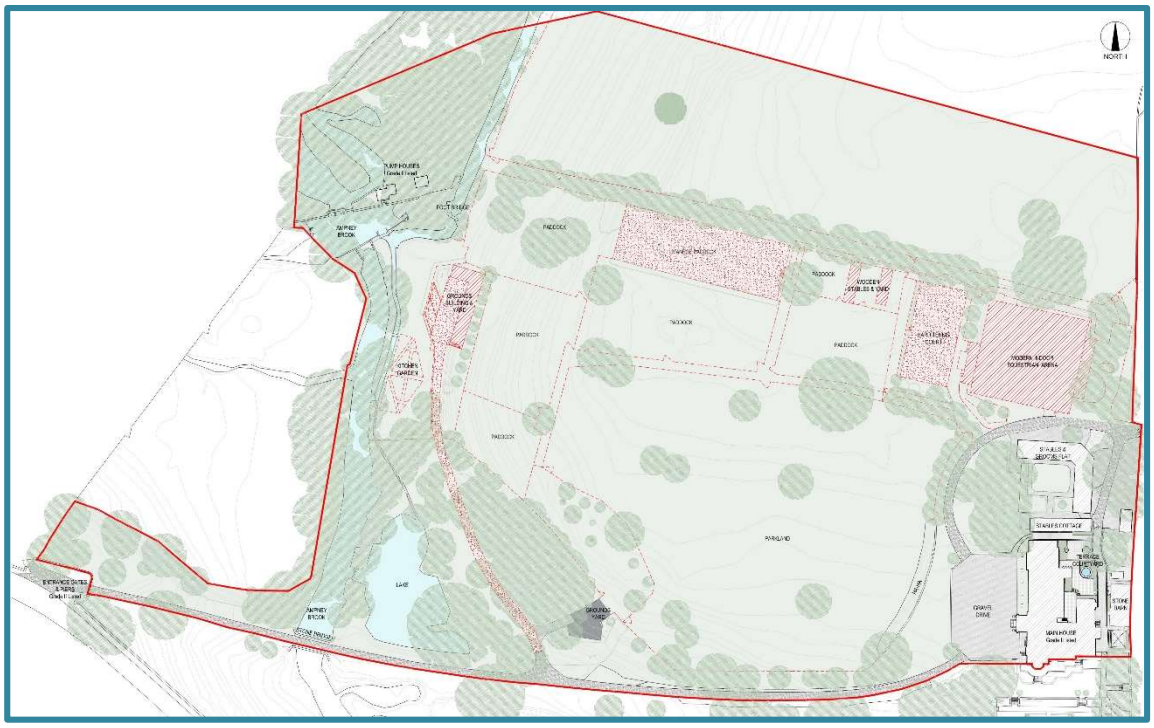


Figure 2 Existing site plan showing full extents of the redline boundary.

3.0 Existing Site, Ground Conditions, Infiltration Characteristics

3.1.1 The Ampney Park site comprises an historic Grade II listed Main House, Stone Barn, Service building, Stables Cottage, Stables and Grooms Flat, Modern indoor equestrian arena, Paddocks, Tennis court, Wooden Stables and yards and a Grounds building kitchen and yard.

3.1.2 The stables, arena and menage paddock indicate previous equestrian use within the grounds.

3.1.3 Topographic surveys have been undertaken and show that the site has the highest levels towards the North and West of the redline boundary. The land then declines to the west and to the south. Before falling sharply immediately before Ampney Brook

3.1.4 To the west of the main house is an extensive gravel drive which then connects the main house to the rest of the property via an existing tarmac track.

3.1.5 Other than the existing structures, other areas of hard landscaping comprise of tarmac, gravel and rubber chippings.

3.1.6 Further west of the main house and gravel track is an area of meadowlands which slopes gently away from the property towards Ampney Brook and the connected Lake.

3.1.7 Existing records indicate that the Main house, Stables Cottage and Stables and Grooms Flats are connected to a below ground surface water drainage network that discharges unattenuated into the Lake and further onto Ampney brook, this has been illustrated in Figure 3.

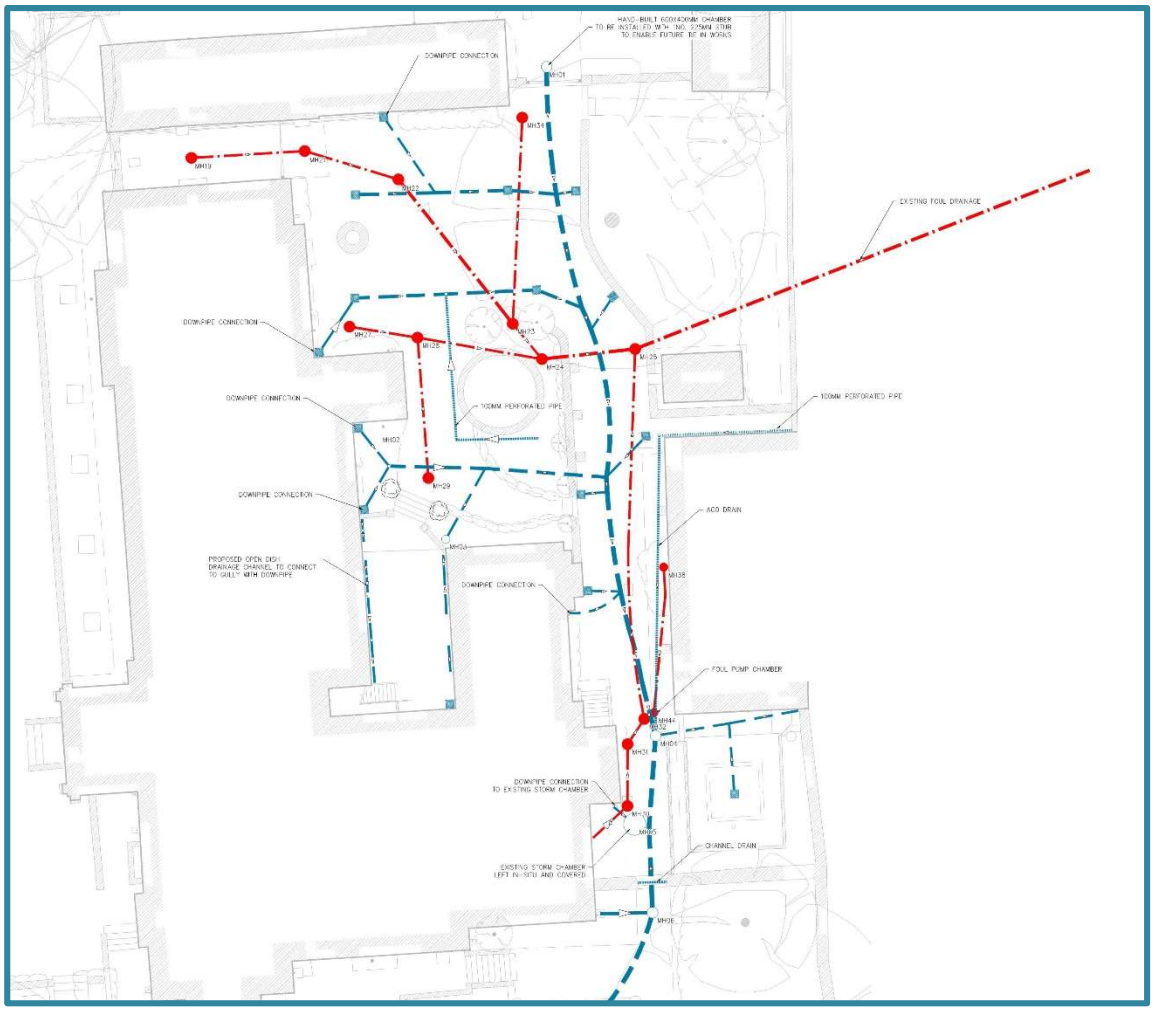


Figure 3 Existing drainage layout (Ridge)

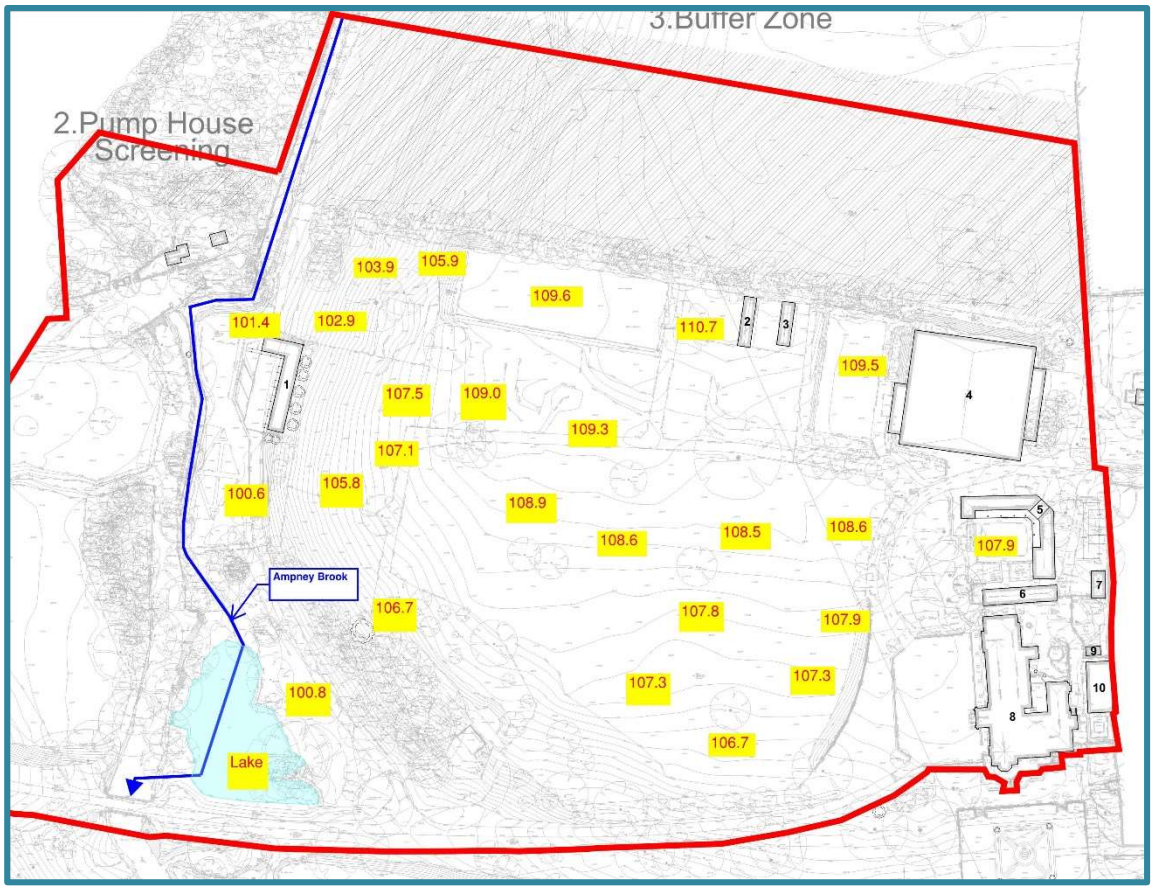


Figure 4 The Ampney Park topographic survey with red line boundary, key features and annotated levels All to m AOD.

3.1.8 The total site area is approximately 7.2ha.

3.1.9 The location of the Ampney Park development will be located on previously developed (brownfield) land.

3.1.10 The superficial geology is not recorded on the British Geology Survey Viewer, but the underlying geology is Forest Marble Formation – Limestone. The Cranfield University Soilscapes Viewer shows the soils to be loamy and freely draining, surface water is recorded to drain to the stream network.

3.1.11 Infiltration testing has not been undertaken at the site, however the proposals for collecting and discharging surface water will assume that infiltration is currently achievable.

3.1.12 The greenfield run-off rate has been estimated using the uksuds.com 'Greenfield runoff tool' (Refer to Appendix 3) and is shown to be as follows for a notional 0.1ha (1000m^2) site:

a) 1 in 1yr 0.27 l/s
b) Q_{BAR} 0.31 l/s
c) 1 in 30yr 0.72 l/s
d) 1 in 100yr 1 l/s

3.1.13 The rates above are used for comparison and adjusted according to the size of the development being considered.

3.1.14 At present all surface water that is generated by the site freely discharges unattenuated via the existing below ground drainage network into the lake then onwards into the Ampney Brook river network or through infiltration.

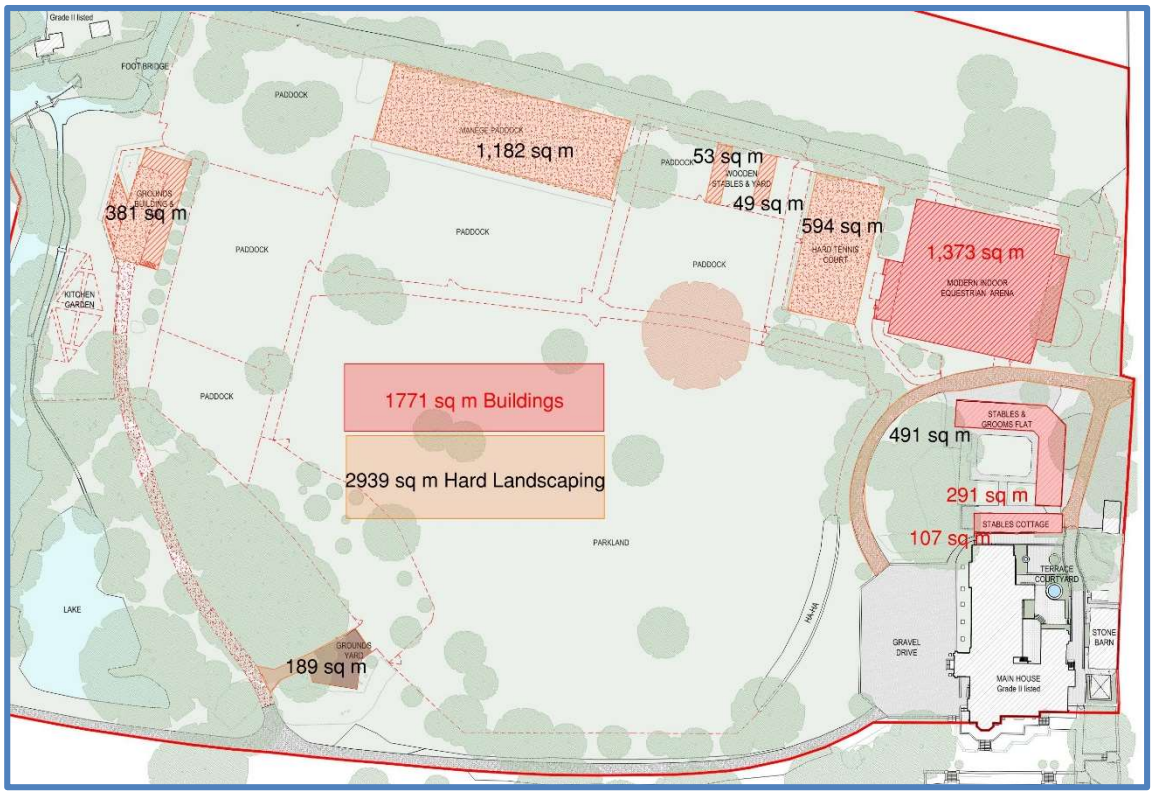


Figure 5 Existing impermeable surfaces.

4.0 Existing Development

4.1 Existing buildings - General

4.1.1 It is proposed to remove various existing outbuildings along with associated existing hard landscaping. All existing drainage infrastructure will either be grubbed out or removed to allow for a new system to be installed site wide apart from the system serving the Main House.

4.2 Existing buildings – Main House

4.2.1 Above ground management of surface water will remain as existing, with repairs carried out as necessary. Traditional gutters and rainwater pipes convey surface water from existing building roofs to the existing below ground network which will remain in situ.

4.2.2 The existing below ground drainage network will continue to operate as at present.

5.0 Proposed Development

5.1 Proposed buildings – Wedding Venue & Parking

5.1.1 It is proposed to construct a new wedding venue and associated parking.

5.1.2 The wedding venue will be of modern construction with tall sloping impermeable roof. The parking and associated access paths will be permeable hard landscaping with intertwined with soft landscaping for amenity benefit. Where possible green infrastructure e.g swales and bio-retention swale will be used for conveyance providing enhanced biodiversity and water quality improvement.

5.1.3 The proposed impermeable surfaces for the site have been calculated as 4741m^2 and have been illustrated in Figure 6.

5.1.4 It is approximated that 4255m^2 of impermeable surfaces will be directed to the proposed soakaway within the car park.

5.1.5 As is good practice it is recommended that all new buildings are designed with finished floor levels 150mm above the surrounding external ground.

	Boundary Area (m^2)	Existing Impermeable (m^2)	Proposed Impermeable (m^2)	Percentage Difference
Buildings		1771	1140	-36%
Hard Landscaping		2939	3737	+27.2%
Total		4710	4877	+3.5%

Table 1 Existing & Proposed Impermeable surfaces comparison.

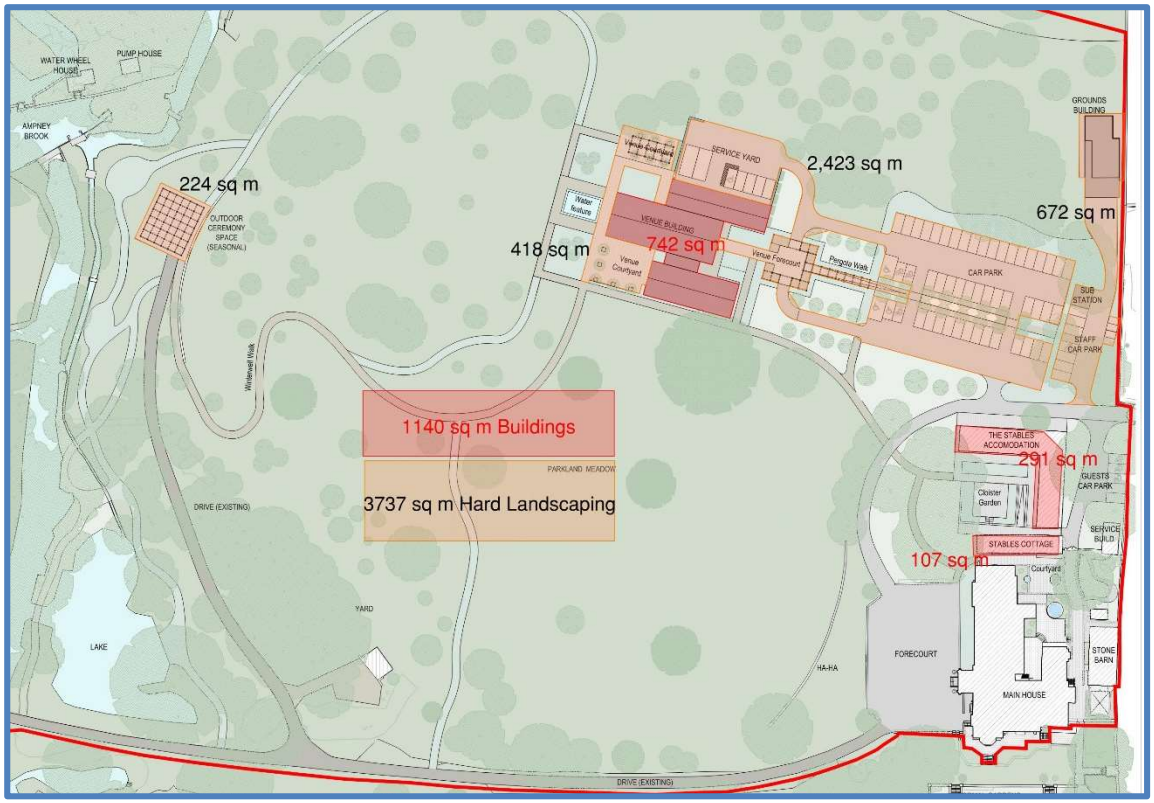


Figure 6 Proposed impermeable surfaces.

6.0 Surface Water Drainage

6.1 Site wide strategy

6.1.1 Defra and the SuDS manual recommend a sustainable approach to managing runoff from impermeable areas.

6.1.2 Surface water is to be discharge at source the most sustainable method identified in the drainage hierarchy and preferred by the Lead Local Flood Authority (LLFA), minimising the risk of flooding.

6.1.3 Runoff from the proposed wedding venue and parking area will be discharged to the proposed soakaway via a combination of traditional and sustainable drainage features. A permeable paving system is proposed for the parking area which is to be underlain by crate attenuation to provide adequate volume to store run-off from the development prior to infiltration.

6.1.4 The extents of the proposed soakaway is illustrated in Figure 7.

6.1.5 The pavement system proposed will be type A – total infiltration with additional crate storage. The final depth of attenuation crates is to be determined based on the rate of infiltration to be confirmed.

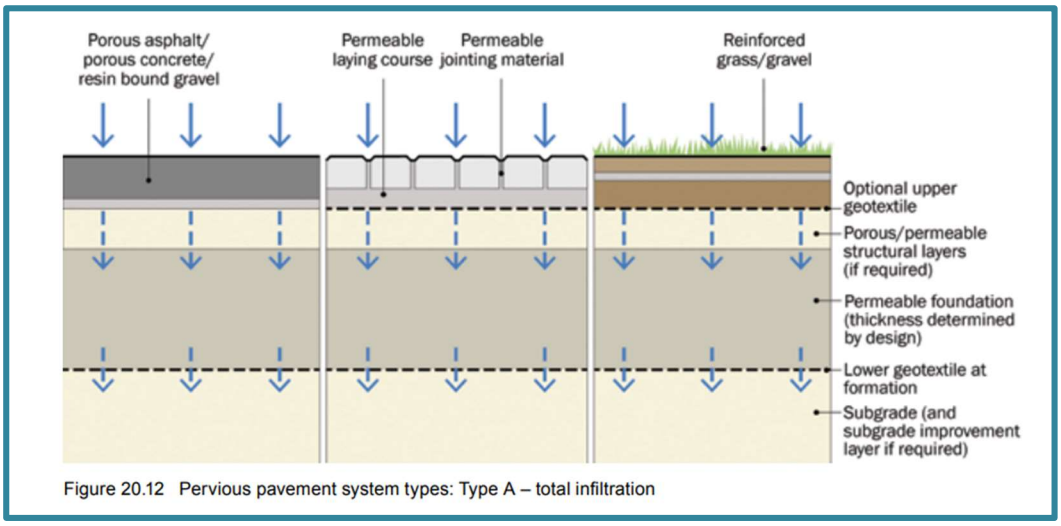


Figure 7 Permeable pavement system Type A – total infiltration (CIRIA SuDS manual)

6.1.6 Inlets and outlets from green drainage infrastructure will utilise large ballast filled mesh baskets to prevent erosion and minimise the risk of blockage from debris.

6.1.7 Based on the desk study and understanding of the ground likely to be encountered at the development site, an infiltration rate of $7.0x10^{-5}$ m/s is assumed.

6.1.8 With reference to Appendix 1 the required storage volume of approximately $360m^3$ can be adequately located within the proposed car park area with an assumed depth of approximately 0.6m. This is proposed to take all the surface water runoff from the Wedding venue, associated areas of hard landscaping and the car park as illustrated in Figure 8.

6.1.9 This has been calculated to account for the 1 in 100 year + 45% climate change event.

6.1.10 The strategy also seeks to improve the current drainage infrastructure for the existing building at the site. A second soakaway to infiltrate surface water from the Stables Cottage and Stables accommodation which had previously discharged unattenuated into the existing below ground drainage network is proposed. It is estimated that a further volume of 10-$15m^3$ will be required, located to the West of the refurbished buildings within the landscape gardens. Upon confirmation of the infiltration rate the storage volumes within the soakaways can be adjusted without detrimental impact.

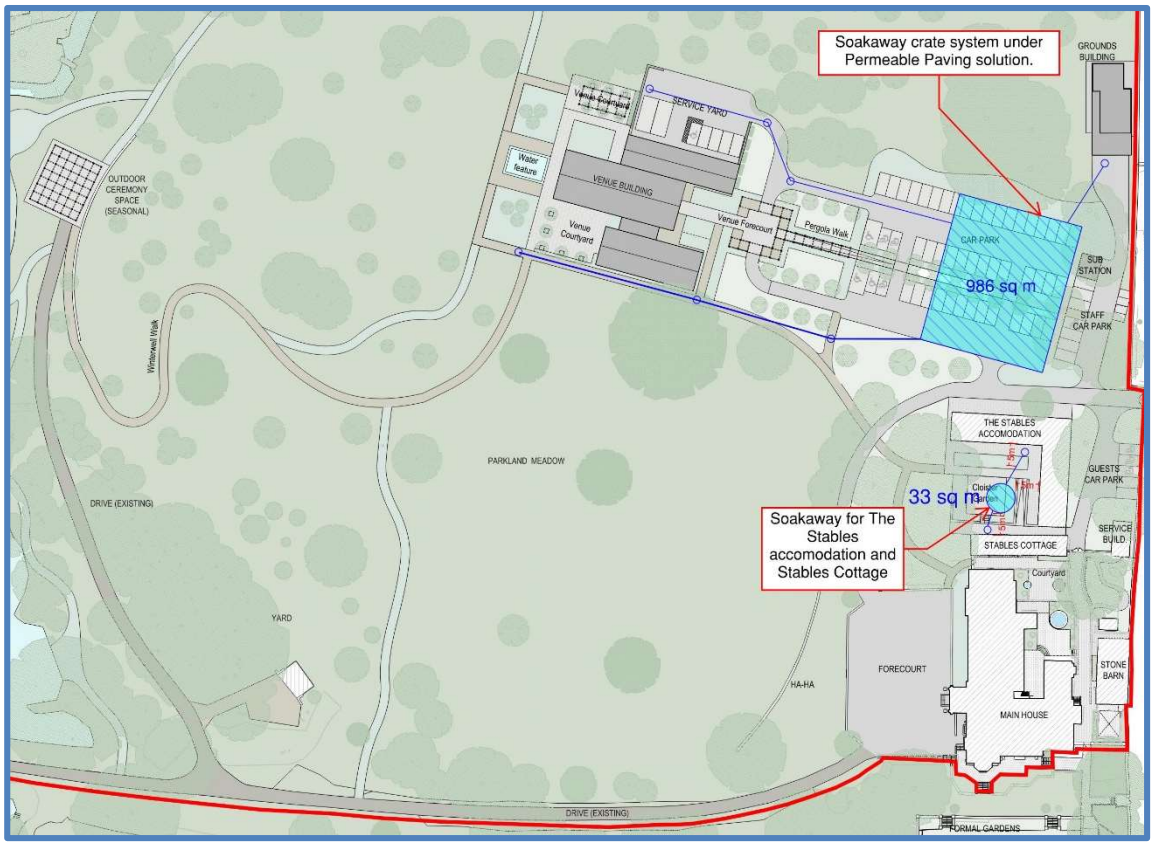


Figure 8 Proposed drainage strategy

7.0 Exceedance flows

7.1.1 In the event of site exceedance, flows will follow the landscaped and natural topography directing the storm water away from the proposed development, towards the West of the site and Ampney Brook. Given the large surrounding landscaped areas, surface water from exceedance events will be given every opportunity to infiltrate if conditions are favourable, otherwise they will follow their natural overground flow paths towards Ampney Brook.

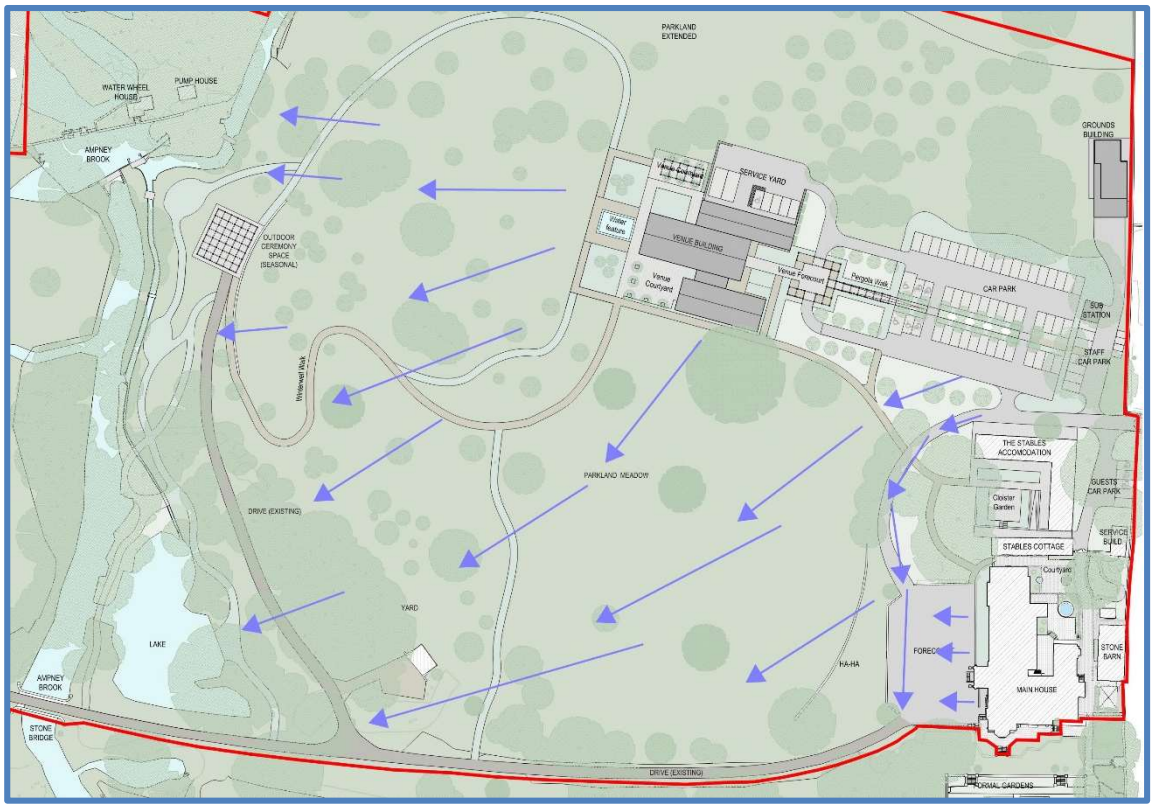


Figure 9 Exceedance flows

8.0 Foul Drainage

8.1.1 A pre-planning enquiry application has been sent to Thames Water to confirm the capacity of the foul sewer connection point.

8.1.2 A foul drainage assessment has been undertaken for the site using The British Waters Table of Loadings for Sewage Treatment Systems. The foul drainage strategy has been designed assuming that Thames Water confirms that the development will not cause or increase local sewer flooding.

8.1.3 A copy of the anticipated flows and loads calculation can be found in Appendix 4.

9.0 Management & Maintenance

9.1.1 The owners of Ampney Park will be responsible for the maintenance and operation of the drainage systems at the proposed development site.

9.1.2 The surface water drainage system comprises various elements including conventional rainwater goods, rainwater pipes and gullies. The volumes and flows will be controlled through a combination of green infrastructure and flow control devices prior to discharge.

9.1.3 A maintenance schedule will be prepared to identify the maintenance intervals for the various elements and identify the maintenance requirements dependant on the specific products installed.

9.2 Permeable Paving

9.2.1 The permeable pavements are intended to be water quality and attenuation storage features. These features are intended to be dry except during rainfall events. The permeable pavements

may also be utilised as an infiltration area or soakaway for other areas of the development (where permissible).

9.2.2 The surface has been designed to be porous or to contain gaps where rain can flow through the upper construction layers into the voided stone / specialist void former which makes up the subbase. Where these features are intended to be used as infiltration devices or soakaways any capping also needs to be permeable to permit the flows to the formation.

10.0 Conclusions

10.1.1 It is proposed to construct a new wedding venue and associated parking as well as redeveloping existing buildings and infrastructure within the planning boundary.

10.1.2 In line with good practice the proposed drainage design has been made to develop a scheme which targets the most sustainable disposal techniques identified in the sustainable drainage hierarchy relevant to this site.

10.1.3 Green SuDS infrastructure is proposed to ensure that surface water implements the biodiversity and amenity, water quantity and water quality aims of the SuDS 4 pillars of design objectives.

10.1.4 This proposal is based on a site-specific assessment and targets the most sustainable options available in the SuDS hierarchy for this development. The proposal delivers a sustainable solution to minimise the rate and volume of run-off for the lifetime of the development. The prosed development will not increase flood risk off site and therefore complies with the NPPF and Cotswold District Councils Local Plan.

11.0 Glossary

General terms	
BGS	British Geological Survey
EA	Environmental Agency
Flood risk	A combination of the probability and the potential consequences of flooding.
Flood Zone 1	The zone has less than 0.1% annual probability of river flooding
Flood Zone 2	The zone has between 0.1% and 1% annual probability of river flooding and between 0.1% and 0.5% annual probability of sea flooding
Flood Zone 3	This zone has more than 1% annual probability of river flooding and between 0.1% and 0.5% annual probability sea flooding
SFRA	Strategic Flood Risk Assessment, a strategic document provided by the local council which assesses and maps all forms of flood risk from tidal, river, groundwater, surface water and sewer sources, considering future climate change predictions.
SuDS	Sustainable drainage systems (SuDS) are drainage solutions that provide an alternative to the direct channelling of surface water through networks of pipes and sewers to nearby watercourses
NNAMS	Nutrient Neutrality Assessment and Mitigation Strategy
DEFRA	Department for Environment, Food & Rural Affairs
NPPF terms	
Exception test	Applied once sequential test has been passed. For the exception test to be passed it must demonstrate that the development provides wider sustainability benefits to the community that outweigh flood risk. A site-specific FRA must demonstrate the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere and where possible reduce flood risk overall.
Sequential test	Aims to steer new developments into areas with the lowest probability of flooding.
Less vulnerable	Less vulnerable land uses include police/ambulance/fire stations which are not required to be operational during flooding and buildings used for shops/financial/professional/other services.
More vulnerable	More vulnerable land uses include hospitals, residential institutions, buildings used for dwelling houses/student halls/drinking establishments/hotels and sites used for holiday or short-let caravans and camping.
Highly vulnerable	Highly vulnerable land uses include police/ambulance/fire stations which are required to be operational during flooding, basement dwellings and caravans/mobile homes/park homes intended for permanent residential use.

Appendix 1 – Soakaway for 4255m^2 and 398m^2

Tekla Tedds	Project				Job no.	
	Calcs for				Start page no./Revision 1	
	Calcs by J	Calcs date 26/09/2023	Checked by	Checked date	Approved by	Approved date

SOAKAWAY DESIGN

In accordance with BRE Digest 365 - Soakaway design

Tedds calculation version 2.0.05

Design rainfall intensity

Location of catchment area	Bristol
Impermeable area drained to the system	A = **4255.0** m^2
Return period	Period = **100** yr
Ratio 60 min to 2 day rainfall of 5 yr return period	r = **0.350**
5-year return period rainfall of 60 minutes duration	M5_60min = **20.0** mm
Increase of rainfall intensity due to global warming	$p_{climate}$ = **45** %

Soakaway / infiltration trench details

Soakaway type	Rectangular
Minimum depth of pit (below incoming invert)	d = **600** mm
Width of pit	w = **30000** mm
Length of pit	l = **21000** mm
Percentage free volume	V_{free} = **95** %
Soil infiltration rate	f = **70.0**×**10**$^{-6}$ m/s
Wetted area of pit 50% full	a_{s50} = l × d + w × d = **30600000** mm^2

Table equations

Inflow (cl.3.3.1)	I = M100 × A
Outflow (cl.3.3.2)	O = a_{s50} × f × D
Storage (cl.3.3.3)	S = I - O

Duration, D (min)	Growth factor Z1	M5 rainfalls (mm)	Growth factor Z2	100 year rainfall, M100 (mm)	Inflow (m^3)	Outflow (m^3)	Storage required (m^3)
5	0.36;	10.3;	1.92;	19.8;	84.30;	0.64;	83.66
10	0.51;	14.7;	1.99;	29.2;	124.11;	1.29;	122.82
15	0.62;	17.9;	2.01;	36.0;	153.18;	1.93;	151.25
30	0.79;	22.8;	2.02;	46.1;	195.96;	3.86;	192.11
60	1.00;	29.0;	1.98;	57.4;	244.08;	7.71;	236.36
120	1.22;	35.5;	1.93;	68.3;	290.76;	15.42;	275.34
240	1.50;	43.4;	1.86;	80.9;	344.02;	30.84;	313.17
360	1.69;	49.0;	1.82;	89.1;	379.10;	46.27;	332.84
600	1.95;	56.5;	1.77;	99.7;	424.24;	77.11;	347.13
1440	2.48;	71.9;	1.66;	119.5;	508.28;	185.07;	323.21

Required storage volume — S_{req} = **347.13** m^3

Soakaway storage volume — S_{act} = l × d × w × V_{free} = **359.10** m^3

PASS - Soakaway storage volume

Time for emptying soakaway to half volume — t_{s50} = S_{req} × 0.5 / (a_{s50} × f) = 22hr 30min 30s

PASS - Soakaway discharge time less than or equal to 24 hours

Tekla Tedds	Project				Job no.	
	Calcs for				Start page no./Revision 1	
	Calcs by J	Calcs date 25/09/2023	Checked by	Checked date	Approved by	Approved date

SOAKAWAY DESIGN

In accordance with BRE Digest 365 - Soakaway design

Tedds calculation version 2.0.05

Design rainfall intensity

Location of catchment area	Bristol
Impermeable area drained to the system	A = **398.0** m^2
Return period	Period = **100** yr
Ratio 60 min to 2 day rainfall of 5 yr return period	r = **0.350**
5-year return period rainfall of 60 minutes duration	M5_60min = **20.0** mm
Increase of rainfall intensity due to global warming	$p_{climate}$ = **45** %

Soakaway / infiltration trench details

Soakaway type	Rectangular
Minimum depth of pit (below incoming invert)	d = **800** mm
Width of pit	w = **5700** mm
Length of pit	l = **5700** mm
Percentage free volume	V_{free} = **95** %
Soil infiltration rate	f = **70.0**×**10**$^{-6}$ m/s
Wetted area of pit 50% full	a_{s50} = l × d + w × d = **9120000** mm^2

Table equations

Inflow (cl.3.3.1)	I = M100 × A
Outflow (cl.3.3.2)	O = a_{s50} × f × D
Storage (cl.3.3.3)	S = I - O

Duration, D (min)	Growth factor Z1	M5 rainfalls (mm)	Growth factor Z2	100 year rainfall, M100 (mm)	Inflow (m^3)	Outflow (m^3)	Storage required (m^3)
5	0.36;	10.3;	1.92;	19.8;	7.89;	0.19;	7.69
10	0.51;	14.7;	1.99;	29.2;	11.61;	0.38;	11.23
15	0.62;	17.9;	2.01;	36.0;	14.33;	0.57;	13.75
30	0.79;	22.8;	2.02;	46.1;	18.33;	1.15;	17.18
60	1.00;	29.0;	1.98;	57.4;	22.83;	2.30;	20.53
120	1.22;	35.5;	1.93;	68.3;	27.20;	4.60;	22.60
240	1.50;	43.4;	1.86;	80.9;	32.18;	9.19;	22.99
360	1.69;	49.0;	1.82;	89.1;	35.46;	13.79;	21.67
600	1.95;	56.5;	1.77;	99.7;	39.68;	22.98;	16.70
1440	2.48;	71.9;	1.66;	119.5;	47.54;	55.16;	0.00

Required storage volume S_{req} = **22.99** m^3

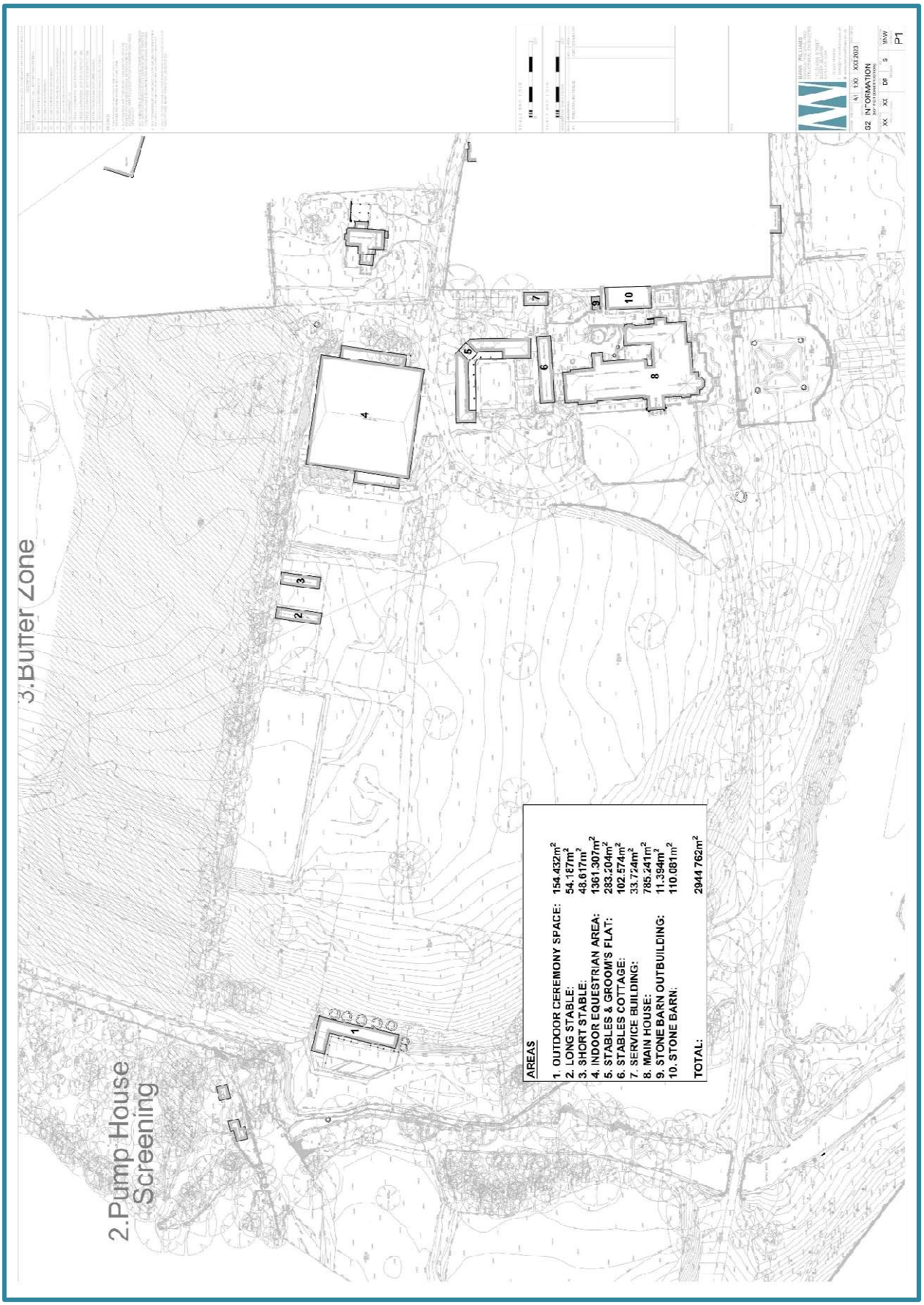
Soakaway storage volume S_{act} = l × d × w × V_{free} = **24.69** m^3

PASS - Soakaway storage volume

Time for emptying soakaway to half volume t_{s50} = S_{req} × 0.5 / (a_{s50} × f) = 5hr 6s

PASS - Soakaway discharge time less than or equal to 24 hours

Appendix 2 – Topographical Survey



Appendix 3 – Greenfield Runoff Calculator

hrwallingford

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by:	James Parker
Site name:	Ampney Park
Site location:	Ampney Crucis

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	51.71774° N
Longitude:	1.9072° W
Reference:	1541976127
Date:	Sep 06 2023 13:55

Runoff estimation approach

IH124

Site characteristics

Total site area (ha): 0.1

Methodology

Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	3	3
HOST class:	N/A	N/A
SPR/SPRHOST:	0.37	0.37

Hydrological characteristics

	Default	Edited
SAAR (mm):	753	753
Hydrological region:	6	6
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited

Q_{BAR} (l/s):	0.31	0.31
1 in 1 year (l/s):	0.27	0.27
1 in 30 years (l/s):	0.72	0.72
1 in 100 year (l/s):	1	1
1 in 200 years (l/s):	1.17	1.17

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement , which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

Appendix 4 – British Water Foul Loads & Flows

Calculation Spreadsheet PTP Enquiry Sizing Sheet

Project: Ampney Park
Project No: 12005
Sheet:

Site: Ampney Park

Site Summary

Proposed Development Foul Water

In accordance with British Water Flows and Loads the anticipated flows directed to

Design Pop	Activity	Flow (Litres) Per Head	Flow (Litres) Total	BOD (Grams/Day) Per Head	BOD (Grams/Day) Total	Ammonia as N (Grams/Day) Per Head	Ammonia as N (Grams/Day) Total
150	HOTELS, PUBS & CLUBS - Events Venue	60	9000	N/A	N/A	N/A	N/A
12	Hotel Guests (Prestige Hotels)	300	3600	N/A	N/A	N/A	N/A
1	Bride & Groom Suite	300	300	N/A	N/A	N/A	N/A
5	Full time Day Staff	90	450				
	Total		**13350**		**0**		**0**

Calculate average flow leaving the development for purposes of public sewer connection application.

Daily Total 13350 Litres/day

Average Flow Rate: 13350 / (8 x 60 x 60) 0.46 l/s
Peaking Factor: x 6 2.78 l/s

Peak discharge rate to Public foul sewer is 2.78 l/s

Additional Notes:

Prepared: JP

Checked: DJ

Mann Williams Consulting Civil and Structural Engineers 7 Old King St Queen Square Bath BA1 2JW T 01225 464419 E bath@mannwilliams.co.uk

Calculation Spreadsheet PTP Enquiry Sizing Sheet

Project: Ampney Park
Project No: 12005
Sheet:

BRITISH WATER
expertise worldwide

Table of Loadings for Sewage Treatment Systems

Per person / activity / day (unless otherwise specified)	FLOW (Litres)	BOD (Grams)	Ammonia as N (Grams)
DOMESTIC DWELLINGS			
Standard residential	150	60	8
Mobile home type caravans with full services	150	60	8
INDUSTRIAL			
Office / Factory without canteen	50	25	5
Office / Factory with canteen	100	38	5
Open industrial site, e.g. construction, quarry, without canteen	60	25	5
*Full-time Day Staff	90	38	5
*Part-time Staff (4 hr shift)	45	25	3
SCHOOLS			
Non-residential with canteen cooking on site	90	38	5
Non-residential without a canteen	50	25	5
Boarding school (i) residents	175	60	8
(ii) day staff (inc. mid-day meal)	90	38	5
HOTELS, PUBS & CLUBS			
Hotel Guests (Prestige hotels)	300	105	12
Hotel Guests (3* & 4* hotels)	250	94	10
Guests (Bedroom only – no meals)	80	50	6
Residential Training/Conference Guest (inclusive all meals)	350	150	15
Non residential Conference Guest	60	25	2.5
Drinkers	12	15	5
Holiday camp chalet resident	150	94	10
Resident Staff	180	75	10
Restaurants - Full Meals - luxury catering	30	38	4
- pre-prepared catering	25	30	2.5
- Snack Bars & bar meals	15	19	2.5
- Function Rooms including buffets	15	19	2.5
- Fast Food i.e. (roadside restaurants)	12	12	2.5
- Fast Food Meal (burger chain and similar)	12	15	4
Students (Accommodation only)	100	60	8
AMENITY SITES			
Toilet Blocks (per use)	10	12	2.5
Toilet (WC) (per use)	10	12	2.5
Toilet (Urinal) (per use)	5	12	2.5
Toilet Blocks in long stay car parks/lorry parks (per use)	10	19	4
Shower (per use)	40	19	2
Golf Club	20	19	5
Local community sports club, e.g. squash, rugby & football	40	25	6
Swimming (where a separate pool exists without an associated sports centre)	10	12	2.5
Health Club/Sports Centre	50	19	4
Tent sites	75	44	8
Caravan Sites - (i) Touring not serviced	100	44	8
(ii) Static not serviced	100	44	8
(iii) Static fully serviced	150	60	8
HOSPITALS & RESIDENTIAL CARE HOMES			
Residential old people / nursing	350	110	13
Small hospitals	450	140	Assess
Large hospitals	Assess individually		

*Staff figures also apply to other applications

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Prepared: JP

Checked: DJ