

1. Introduction

- 1.1. This Technical Note has been produced on behalf of Harvey Farms (Winterbourne) Ltd in connection with proposals for the conversion of existing agriculture buildings to commercial buildings on Manor Farm in Winterbourne Earls, Salisbury, Wiltshire. It has been produced in order to discharge Condition 7 attached to the decision notice.
- 1.2. Planning permission was granted by Wiltshire Council on 17th July 2025, under Application No. PL/2025/05302, subject to a number of conditions. Condition 7 states:

No conversion of the 8 agricultural buildings shall commence until a surface water drainage strategy has been submitted to and approved in writing by the Local Planning Authority, including the following:

- Evidence that demonstrates that there will be no runoff from the upgraded access track onto the public highway.
- Within the calculations, the MADD factor must be set to zero. If a value other than 0m³/ha is selected for the MADD value, the applicant will need to provide quantitative evidence to demonstrate that this is appropriate.
- Overland exceedance routes are to be shown on the drainage plan for flows in excess of the 1 in 100 year plus climate change (40%) rainfall event.

None of the converted commercial buildings shall be occupied until provision for surface water disposal (including the proposed swale on the southern side of the new access track) has been completed in accordance with the details to be agreed. The scheme shall be maintained for the lifetime of the development

REASON: To ensure that the development can be adequately drained of surface water.

- 1.3. This Surface Water Drainage Statement deals with the on-site surface water drainage, which includes the SuDS scheme. Its main purpose is to demonstrate that the proposals contained within the Planning Application ensure the proposed development is served by a satisfactory system of surface water drainage.

2. Surface Water Drainage Strategy

Runoff from access track onto the public highway

- 2.1. The works required on the A30 to improve the site access arrangements is subject to a separate Section 278 agreement with Wiltshire Council. The works consist on a new ghost island right turn lane, and bellmouth geometry.
- 2.2. A copy of the proposed drainage plan for the S278 works, drawing reference W645/28 Revision C, is reproduced in **Appendix 1**. At the limit of the S278 works, a dished channel, directed towards a gully with a connection to the private swale is proposed. This will prevent the discharge of runoff from the private access track onto public highway.

Drainage Calculations

- 2.3. The proposed surface water strategy utilises an infiltration basin located to the west of the development to discharge runoff to ground, as set out the approved Flood Risk Assessment (document reference W645/DOC01 FRA Issue 5), and as shown on drawing number W645/03 Revision, reproduced in **Appendix 2**. The MicroDrainage calculation have been amended to utilise a MADD factor of 0, and are reproduced in **Appendix 3**.

- 2.4. As can be seen in the MicroDrainage outputs in Appendix 3, with a MADD factor of 0, the basin is actually sized to accommodate the runoff, with the maximum water level below the freeboard level.

Exceedance Flow Routes

- 2.5. Standard 3.7 of the 'National Standards for Sustainable Drainage Systems' states that the risks (both on and off the development) associated with flooding from the surface water drainage system for exceedance events greater than the 1% AEP event shall be appropriately managed.
- 2.6. In event of the drainage system being overwhelmed by a rainfall event greater than the design standard or as a result of blockage or failure overland flood flow paths would follow the natural topography of the site, in line with the current situation.
- 2.7. The proposed surface water drainage system and infiltration basin would reduce uncontrolled overland flows compared to the current situation, providing a betterment to the existing flood risk, both on and off site. Indicative overland flow paths for an extreme event are shown on Drawing No. W645/09 in **Appendix 4**.

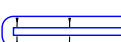
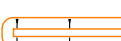
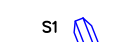
3. Summary of Surface Water Drainage

- 3.1. As set out in this technical note, and as part of the surface water drainage details previously submitted and approved, a suitable means of drainage is provided for the development in accordance with the guidance and standards laid down. On this basis, the development would be appropriately safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere and would reduce flood risk overall.

NOTES

1. This drawing is based on Topographical Survey Information drawing numbers 70065YOLS-01, 2 & 3 from survey solutions dated 18/9/2024.
2. All adoptable highway works to be constructed in accordance with the current version of the Specification for Highway Works (SHW), published by The Stationery Office as Volume 1 of the Manual of Contract Documents, as amended and Wiltshire Council's (WC) Specification and Notes for Guidance for Highway Works by Developers Under Agreement, Eighth Edition, dated May 2003.
3. The works shown on this drawing could affect Statutory Undertaker's apparatus and the location and depth of all such apparatus should be verified prior to commencement of the works and to take any precautions necessary when working in the vicinity of any such apparatus.
4. All dimensions shown in metres (m) unless otherwise stated, and all levels relate to Ordnance Datum.
5. Proposed site layout shown in accordance with Paul Basham Associates drawing numbers 252.0001-0001 Rev P08.
6. Contribution to the proposed gully catchment area from the highway verge is assumed to be 20% of the total verge area. As specified in CD 526 section 5.16.1.

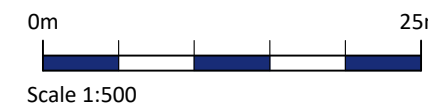
KEY

-  Proposed gully catchment area
-  Highway Drainage Swale to be adopted by Wiltshire Council
-  Private Swale
-  Swale Check Dam locations
-  Grip/Dropped kerb locations
-  Dished Channel

Status

FOR TECHNICAL APPROVAL

This drawing is intended to provide the contractor/ developer with sufficient information to identify materials and to estimate quantities for the purposes of cost estimates. It should not be relied upon for construction purposes.



Rev	Date	Description	Drawn	Check
#	18/11/24	First Issue	RCI	PMC
A	04/02/25	Drawing amended to show proposed swale and required dropped kerb locations.	RW	RCI
B	27/05/25	Plan amended in accordance with PBA drawing number 252.0001-0001-P08.	RCI	PMC
C	25/09/25	Private swale shown on southern side of access road with dished channel.	NML	RML



Stratton Park House, Wanborough Road, Swindon, SN3 4HG

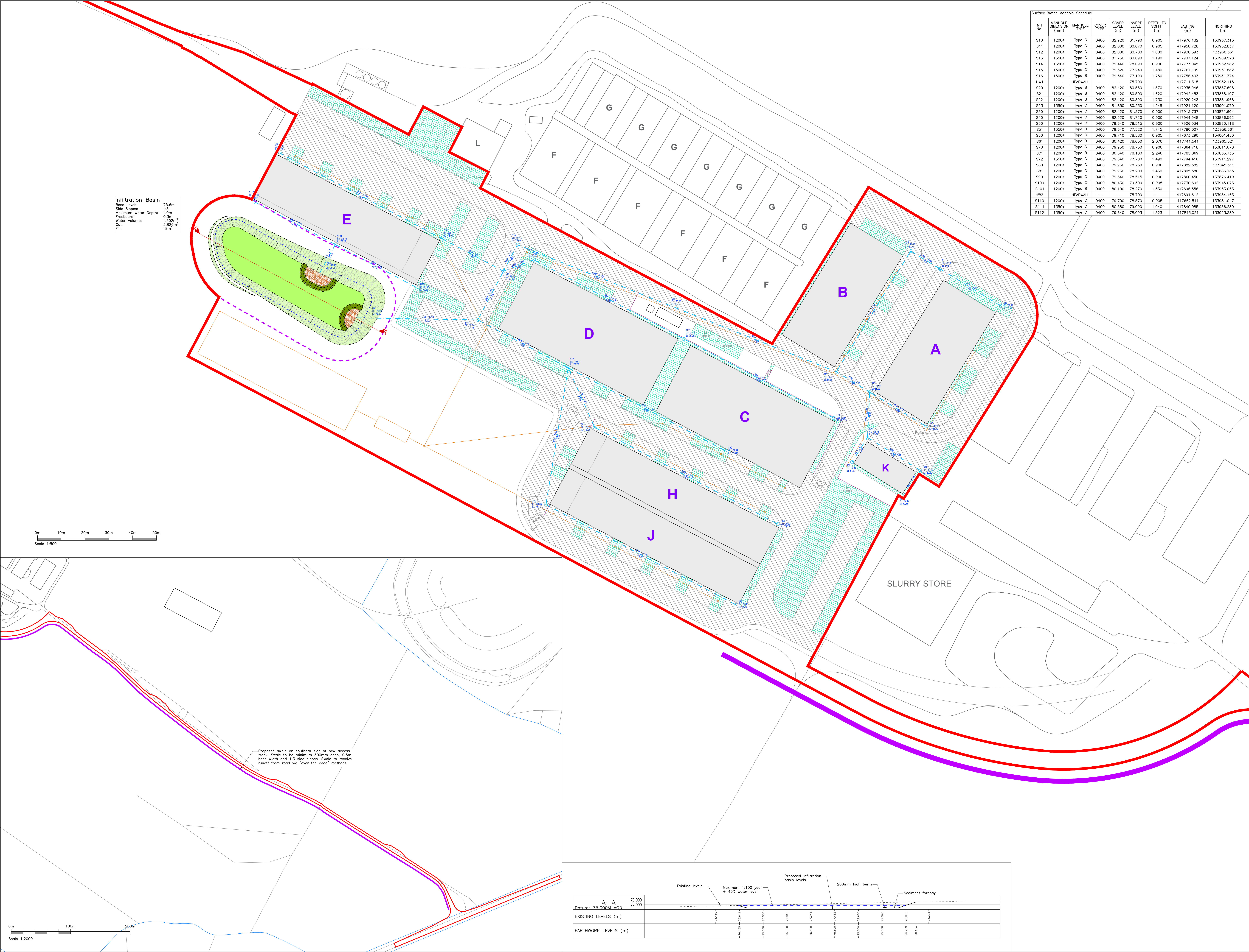
Client
**Harvey Farms
(Winterbourne)
Limited**

Project
**Manor Farm Diversification
Winterbourne Earls
Sailsbury**

Drawing Title
**S278
Highway Drainage**

Sheet 1 of 1	
Drawing No. W645/28	Rev C
E-Mail: ringram@pfaconsulting.co.uk	A1

Check Dam Dimensions		
No.	Height	Length
S1	350mm	1200mm
S2	350mm	1200mm
S3	350mm	1200mm
S4	350mm	1200mm
S5	350mm	1200mm
S6	350mm	1200mm
S7	350mm	1200mm
S8	350mm	1200mm
S9	300mm	1100mm
S10	300mm	1100mm
S11	300mm	1100mm
S12	300mm	1100mm
S13	300mm	1100mm
S14	300mm	1100mm
S15	300mm	1100mm
S16	300mm	1100mm



Infiltration Basin
Base Level: 75.6m
Side Slopes: 1:3
Maximum Water Depth: 1.0m
Freeboard: 0.3m
Water Volume: 1,302m³
Cut: 2,825m³
Fill: 16m³

Surface Water Manhole Schedule								
MH No.	MANHOLE DIMENSION (mm)	MANHOLE TYPE	COVER TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S10	1200ø	Type C	D400	82.920	81.790	0.905	417976.182	133937.315
S11	1200ø	Type C	D400	82.000	80.870	0.905	417950.728	133952.837
S12	1200ø	Type C	D400	82.000	80.700	1.000	417938.393	133960.361
S13	1350ø	Type C	D400	81.730	80.090	1.190	417907.124	133909.578
S14	1350ø	Type C	D400	79.440	78.090	0.900	417773.045	133962.982
S15	1500ø	Type C	D400	79.320	77.240	1.480	417767.199	133951.882
S16	1500ø	Type B	D400	79.540	77.190	1.750	417756.403	133931.374
HW1	----	HEADWALL	----	----	75.700	----	417714.315	133932.115
S20	1200ø	Type B	D400	82.420	80.550	1.570	417935.946	133857.695
S21	1200ø	Type B	D400	82.420	80.500	1.620	417942.453	133868.107
S22	1200ø	Type B	D400	82.420	80.390	1.730	417920.243	133881.968
S23	1350ø	Type C	D400	81.850	80.230	1.245	417921.120	133901.070
S30	1200ø	Type C	D400	82.420	81.370	0.900	417913.737	133871.604
S40	1200ø	Type C	D400	82.920	81.720	0.900	417944.948	133886.592
S50	1200ø	Type C	D400	79.640	78.515	0.900	417906.034	133890.118
S51	1350ø	Type B	D400	79.640	77.520	1.745	417780.007	133956.661
S60	1200ø	Type C	D400	79.710	78.580	0.905	417673.290	134001.450
S61	1200ø	Type B	D400	80.420	78.050	2.070	417741.541	133965.521
S70	1200ø	Type C	D400	79.930	78.730	0.900	417864.718	133811.678
S71	1200ø	Type B	D400	80.640	78.100	2.240	417785.069	133853.733
S72	1350ø	Type C	D400	79.640	77.700	1.490	417794.416	133911.297
S80	1200ø	Type C	D400	79.930	78.730	0.900	417882.582	133845.511
S81	1200ø	Type C	D400	79.930	78.200	1.430	417805.586	133886.165
S90	1200ø	Type C	D400	79.640	78.515	0.900	417860.450	133876.419
S100	1200ø	Type C	D400	80.430	79.300	0.905	417730.602	133945.073
S101	1200ø	Type B	D400	80.100	78.270	1.530	417866.556	133963.063
HW2	----	HEADWALL	----	----	75.700	----	417691.612	133954.163
S110	1200ø	Type C	D400	79.700	78.570	0.905	417662.511	133981.047
S111	1350ø	Type C	D400	80.580	79.090	1.040	417840.065	133936.280
S112	1350ø	Type C	D400	79.640	78.093	1.323	417843.021	133923.389

Status

FOR PLANNING

This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

SCALE AS SHOWN

NOTES

- This drawing is based on the Proposed Site Plan by Dolman Surveys, dated April 2024, reference 4186-01E.
- The works shown on this drawing could affect Statutory Undertaker's apparatus and the Contractor is required to verify the location and depth of all such apparatus prior to commencement of the works and to take any precautions necessary when working in the vicinity of any such apparatus.
- Sewers and drains of different diameters should be laid soffit to soffit unless specified otherwise.
- All dimensions shown in millimetres (mm) unless otherwise stated, and all levels relate to Ordnance Datum.
- The backfilling of drainage trenches which are in close proximity to foundations must be in accordance with any special requirements set out by the Structural Engineer.

KEY

- Proposed surface water drainage network
- Detention basin with 1:3 side slopes, designed in accordance with the SuDS Manual
- Sediment forebay
- Detention basin base - flat
- Berm, 200mm high
- 1:3 side slopes
- Existing buildings contributing to proposed drainage network
- Proposed hardstanding contributing to proposed drainage network
- Permeable paving to car parking areas
- Infiltration basin max water level
- 10m offset from wetted area of infiltration basin
- Site boundary
- Proposed infiltration swale
- Foul drainage (by others - refer to Dolman's drawing for details)

Rev	Date	Description	Drawn	Check
#	24/05/24	First Issue	J5	RML
A	05/06/24	Amended to accord with Architect proposals	J5	RML
B	02/12/24	Red line amended to include detention basin, and drainage field	J5	RML
C	07/01/24	Red line amended as requested by the Planning Consultant	J5	RML
D	10/01/24	Red line amended as requested by the Client	J5	RML
E	25/09/25	Manhole schedule added	ML	RML

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Stratton Park House, Warborough Road, Swindon, SN3 4HG

Client

**Harvey Farms
(Winterbourne) Ltd**

Project

Manor Farm Diversification

Drawing Title

**Preliminary Drainage
Strategy Plan**

Sheet 1 of 1

Drawing No. **W645/03**

E-Mail: jspicer@pfaconsulting.co.uk

Rev **E**

A0

PFA Consulting		Page 1
Stratton Park House Wanborough Road Swindon SN3 4HG	W645 Land at London Road, Wheatley Infiltration Basin Network	
Date 30/09/2025 12:33 File W645 - Storm Network Ma...	Designed by JS Checked by RML	
Causeway	Network 2020.1.3	

Existing Network Details for Surface Network 1

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
S1.000	29.814	0.920	32.4	0.071	5.00	0.0	0.600	o	225	Pipe/Conduit
S1.001	14.449	0.095	152.1	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S1.002	59.638	0.460	129.6	0.071	0.00	0.0	0.600	o	300	Pipe/Conduit
S2.000	12.277	0.050	245.5	0.013	5.00	0.0	0.600	o	300	Pipe/Conduit
S2.001	26.181	0.110	238.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit
S3.000	12.237	0.830	14.7	0.013	5.00	0.0	0.600	o	150	Pipe/Conduit
S2.002	19.122	0.085	225.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit
S4.000	27.881	1.415	19.7	0.297	5.00	0.0	0.600	o	300	Pipe/Conduit
S2.003	16.379	0.065	252.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit
S1.003	72.162	1.000	72.2	0.533	0.00	0.0	0.600	o	450	Pipe/Conduit
S1.004	72.162	1.000	72.2	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit
S1.005	12.545	0.700	17.9	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit
S5.000	71.258	0.422	168.9	0.109	5.00	0.0	0.600	o	225	Pipe/Conduit
S5.001	71.258	0.423	168.5	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit
S5.002	13.671	0.055	248.6	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S1.000	81.790	0.071	0.0	2.31	91.7
S1.001	80.870	0.071	0.0	1.06	42.1
S1.002	80.700	0.143	0.0	1.38	97.5
S2.000	80.550	0.013	0.0	1.00	70.6
S2.001	80.500	0.013	0.0	1.01	71.7
S3.000	81.370	0.013	0.0	2.64	46.6
S2.002	80.390	0.026	0.0	1.04	73.8
S4.000	81.720	0.297	0.0	3.56	251.5
S2.003	80.230	0.323	0.0	1.14	125.6
S1.003	80.090	0.998	0.0	2.40	381.0
S1.004	79.090	0.998	0.0	2.40	381.0
S1.005	78.090	0.998	0.0	4.82	766.6
S5.000	78.515	0.109	0.0	1.00	39.9
S5.001	78.093	0.109	0.0	1.00	39.9
S5.002	77.520	0.217	0.0	1.14	126.4

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Stratton Park House Wanborough Road Swindon SN3 4HG	W645 Land at London Road, Wheatley Infiltration Basin Network	
Date 30/09/2025 12:33 File W645 - Storm Network Ma...	Designed by JS Checked by RML	
Causeway	Network 2020.1.3	

Existing Network Details for Surface Network 1

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
S6.000	77.130	0.455	169.5	0.041	5.00	0.0	0.600	o	225	Pipe/Conduit
S6.001	29.058	0.510	57.0	0.235	0.00	0.0	0.600	o	300	Pipe/Conduit
S1.006	23.176	0.050	463.5	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit
S7.000	90.070	0.630	143.0	0.262	5.00	0.0	0.600	o	300	Pipe/Conduit
S7.001	58.318	0.250	233.3	0.142	0.00	0.0	0.600	o	300	Pipe/Conduit
S8.000	87.070	0.530	164.3	0.331	5.00	0.0	0.600	o	300	Pipe/Conduit
S8.001	27.502	0.200	137.5	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit
S9.000	74.678	0.590	126.6	0.107	5.00	0.0	0.600	o	225	Pipe/Conduit
S7.002	42.989	0.360	119.4	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit
S1.007	42.095	1.490	28.3	0.151	0.00	0.0	0.600	o	600	Pipe/Conduit
S1.008	34.840	0.100	348.4	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit
S10.000	38.506	0.955	40.3	0.041	5.00	0.0	0.600	o	225	Pipe/Conduit
S11.000	38.503	0.225	171.1	0.041	5.00	0.0	0.600	o	225	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S6.000	78.580	0.041	0.0	1.00	39.8
S6.001	78.050	0.276	0.0	2.09	147.5
S1.006	77.240	1.492	0.0	1.12	317.9
S7.000	78.730	0.262	0.0	1.31	92.8
S7.001	78.100	0.404	0.0	1.03	72.5
S8.000	78.730	0.331	0.0	1.22	86.5
S8.001	78.200	0.331	0.0	1.34	94.6
S9.000	78.515	0.107	0.0	1.16	46.2
S7.002	77.700	0.841	0.0	1.86	295.7
S1.007	77.190	2.484	0.0	4.59	1298.7
S1.008	75.700	2.484	0.0	1.49	659.8
S10.000	79.300	0.041	0.0	2.07	82.2
S11.000	78.570	0.041	0.0	1.00	39.6

PFA Consulting		Page 3
Stratton Park House Wanborough Road Swindon SN3 4HG	W645 Land at London Road, Wheatley Infiltration Basin Network	
Date 30/09/2025 12:33 File W645 - Storm Network Ma...	Designed by JS Checked by RML	
Causeway	Network 2020.1.3	

Existing Network Details for Surface Network 1

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
S10.001	10.180	2.570	4.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit
S10.002	13.164	0.100	131.6	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit
S1.009	21.962	0.200	109.8	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
S10.001	78.270	0.082	0.0	7.95	562.1
S10.002	75.700	0.082	0.0	1.37	96.8
S1.009	76.600	2.566	0.0	0.96	16.9

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Stratton Park House Wanborough Road Swindon SN3 4HG	W645 Land at London Road, Wheatley Infiltration Basin Network	
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Causeway	Network 2020.1.3	

PIPELINE SCHEDULES for Surface Network 1

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	o	225	S10	82.920	81.790	0.905	Open Manhole	1200
S1.001	o	225	S11	82.000	80.870	0.905	Open Manhole	1200
S1.002	o	300	S12	82.000	80.700	1.000	Open Manhole	1200
S2.000	o	300	S20	82.420	80.550	1.570	Open Manhole	1200
S2.001	o	300	S21	82.420	80.500	1.620	Open Manhole	1200
S3.000	o	150	S30	82.420	81.370	0.900	Open Manhole	1200
S2.002	o	300	S22	82.420	80.390	1.730	Open Manhole	1200
S4.000	o	300	S40	82.920	81.720	0.900	Open Manhole	1200
S2.003	o	375	S23	81.850	80.230	1.245	Open Manhole	1350
S1.003	o	450	S13	81.730	80.090	1.190	Open Manhole	1350
S1.004	o	450	S14	80.580	79.090	1.040	Open Manhole	1350
S1.005	o	450	S15	79.440	78.090	0.900	Open Manhole	1350
S5.000	o	225	S50	79.640	78.515	0.900	Open Manhole	1200
S5.001	o	225	S51	79.640	78.093	1.322	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	29.814	32.4	S11	82.000	80.870	0.905	Open Manhole	1200
S1.001	14.449	152.1	S12	82.000	80.775	1.000	Open Manhole	1200
S1.002	59.638	129.6	S13	81.730	80.240	1.190	Open Manhole	1350
S2.000	12.277	245.5	S21	82.420	80.500	1.620	Open Manhole	1200
S2.001	26.181	238.0	S22	82.420	80.390	1.730	Open Manhole	1200
S3.000	12.237	14.7	S22	82.420	80.540	1.730	Open Manhole	1200
S2.002	19.122	225.0	S23	81.850	80.305	1.245	Open Manhole	1350
S4.000	27.881	19.7	S23	81.850	80.305	1.245	Open Manhole	1350
S2.003	16.379	252.0	S13	81.730	80.165	1.190	Open Manhole	1350
S1.003	72.162	72.2	S14	80.580	79.090	1.040	Open Manhole	1350
S1.004	72.162	72.2	S15	79.440	78.090	0.900	Open Manhole	1350
S1.005	12.545	17.9	S16	79.320	77.390	1.480	Open Manhole	1500
S5.000	71.258	168.9	S51	79.640	78.093	1.322	Open Manhole	1350
S5.001	71.258	168.5	S52	79.640	77.670	1.745	Open Manhole	1350

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Causeway	Network 2020.1.3	

PIPELINE SCHEDULES for Surface Network 1

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S5.002	o	375	S52	79.640	77.520	1.745	Open Manhole	1350
S6.000	o	225	S60	79.710	78.580	0.905	Open Manhole	1200
S6.001	o	300	S61	80.420	78.050	2.070	Open Manhole	1200
S1.006	o	600	S16	79.320	77.240	1.480	Open Manhole	1500
S7.000	o	300	S70	79.930	78.730	0.900	Open Manhole	1200
S7.001	o	300	S71	80.640	78.100	2.240	Open Manhole	1200
S8.000	o	300	S80	79.930	78.730	0.900	Open Manhole	1200
S8.001	o	300	S81	79.930	78.200	1.430	Open Manhole	1200
S9.000	o	225	S90	79.640	78.515	0.900	Open Manhole	1200
S7.002	o	450	S72	79.640	77.700	1.490	Open Manhole	1350
S1.007	o	600	S17	79.540	77.190	1.750	Open Manhole	1500
S1.008	o	750	SHW1	76.900	75.700	0.450	Open Manhole	1500
S10.000	o	225	S100	80.430	79.300	0.905	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S5.002	13.671	248.6	S16	79.320	77.465	1.480	Open Manhole	1500
S6.000	77.130	169.5	S61	80.420	78.125	2.070	Open Manhole	1200
S6.001	29.058	57.0	S16	79.320	77.540	1.480	Open Manhole	1500
S1.006	23.176	463.5	S17	79.540	77.190	1.750	Open Manhole	1500
S7.000	90.070	143.0	S71	80.640	78.100	2.240	Open Manhole	1200
S7.001	58.318	233.3	S72	79.640	77.850	1.490	Open Manhole	1350
S8.000	87.070	164.3	S81	79.930	78.200	1.430	Open Manhole	1200
S8.001	27.502	137.5	S72	79.640	78.000	1.340	Open Manhole	1350
S9.000	74.678	126.6	S72	79.640	77.925	1.490	Open Manhole	1350
S7.002	42.989	119.4	S17	79.540	77.340	1.750	Open Manhole	1500
S1.007	42.095	28.3	SHW1	76.900	75.700	0.600	Open Manhole	1500
S1.008	34.840	348.4	SBasin	76.900	75.600	0.550	Open Manhole	1350
S10.000	38.506	40.3	S101	80.100	78.345	1.530	Open Manhole	1200

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PIPELINE SCHEDULES for Surface Network 1

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S11.000	o	225	S110	79.700	78.570	0.905	Open Manhole	1200
S10.001	o	300	S101	80.100	78.270	1.530	Open Manhole	1200
S10.002	o	300	SHW2	76.900	75.700	0.900	Open Manhole	1200
S1.009	o	150	SBasin	76.900	76.600	0.150	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S11.000	38.503	171.1	S101	80.100	78.345	1.530	Open Manhole	1200
S10.001	10.180	4.0	SHW2	76.900	75.700	0.900	Open Manhole	1200
S10.002	13.164	131.6	SBasin	76.900	75.600	1.000	Open Manhole	1350
S1.009	21.962	109.8	SSDummy	76.780	76.400	0.230	Open Manhole	1350

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Storage Structures for Surface Network 1

Infiltration Basin Manhole: SBasin, DS/PN: S1.009

Invert Level (m) 75.600 Safety Factor 5.0
Infiltration Coefficient Base (m/hr) 0.43560 Porosity 1.00
Infiltration Coefficient Side (m/hr) 0.43560

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	1061.2	0.400	1250.4	0.800	1449.5	1.200	1657.7
0.100	1106.9	0.500	1299.3	0.900	1500.7	1.300	1711.2
0.200	1154.2	0.600	1348.8	1.000	1552.5	1.301	1711.2
0.300	1202.0	0.700	1398.9	1.100	1604.8		

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10 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
for Surface Network 1

PN	US/MH Name	US/CL (m)	Water			Flow / Cap.	Maximum Vol (m³)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
S7.000	S70	79.930	78.907	-0.123	0.000	0.62	0.195	55.9	OK
S7.001	S71	80.640	78.487	0.087	0.000	1.16	2.748	79.6	SURCHARGED
S8.000	S80	79.930	78.950	-0.080	0.000	0.84	0.243	70.4	OK
S8.001	S81	79.930	78.408	-0.092	0.000	0.82	0.969	70.1	OK
S9.000	S90	79.640	78.632	-0.108	0.000	0.53	0.127	23.7	OK
S7.002	S72	79.640	77.965	-0.185	0.000	0.65	0.721	171.2	OK
S1.007	S17	79.540	77.470	-0.320	0.000	0.44	2.731	486.4	OK
S1.008	SHW1	76.900	76.270	-0.180	0.000	0.92	3.054	485.3	OK
S10.000	S100	80.430	79.351	-0.174	0.000	0.12	0.052	9.2	OK
S11.000	S110	79.700	78.645	-0.150	0.000	0.25	0.080	9.2	OK
S10.001	S101	80.100	78.311	-0.259	0.000	0.05	0.043	18.4	OK
S10.002	SHW2	76.900	75.997	-0.003	0.000	0.09	0.366	7.0	OK
S1.009	SBasin	76.900	75.996	-0.754	0.000	0.00	464.771	0.0	OK

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Wanborough Road
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Causeway

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

Simulation Criteria

Areal Reduction Factor 1.000

Additional Flow - % of Total Flow 0.000

Hot Start (mins) 0

MADD Factor * 10m³/ha Storage 0.000

Hot Start Level (mm) 0

Inlet Coeffiecient 0.800

Manhole Headloss Coeff (Global) 0.500

Flow per Person per Day (l/per/day) 0.000

Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0

Number of Storage Structures 1

Number of Online Controls 0

Number of Time/Area Diagrams 0

Number of Offline Controls 0

Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH

FEH Rainfall Version 2013

Site Location GB 417907 133907 SU 17907 33907

Data Type Point

Cv (Summer) 0.750

Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0

DVD Status OFF

Analysis Timestep Fine

Inertia Status OFF

DTS Status OFF

Profile(s) Summer and Winter

Duration(s) (mins) 30, 60, 120, 240, 360, 480, 960, 1440

Return Period(s) (years) 10, 100

Climate Change (%) 0, 45

				Water	Surcharged	Flooded			Pipe	
	US/MH	US/CL	Level	Depth	Volume	Flow /	Maximum	Flow		
PN	Name	(m)	(m)	(m)	(m³)	Cap.	Vol (m³)	(l/s)	Status	
S1.000	S10	82.920	81.896	-0.119	0.000	0.46	0.115	39.0	OK	
S1.001	S11	82.000	81.642	0.547	0.000	0.91	1.679	33.6	SURCHARGED	
S1.002	S12	82.000	81.576	0.576	0.000	0.71	1.512	66.1	SURCHARGED	
S2.000	S20	82.420	81.514	0.664	0.000	0.16	1.085	9.0	SURCHARGED	
S2.001	S21	82.420	81.511	0.711	0.000	0.27	1.921	17.2	SURCHARGED	
S3.000	S30	82.420	81.525	0.005	0.000	0.17	0.169	7.1	SURCHARGED	
S2.002	S22	82.420	81.509	0.819	0.000	0.57	3.216	36.3	SURCHARGED	
S4.000	S40	82.920	82.065	0.045	0.000	0.70	0.384	159.8	SURCHARGED	
S2.003	S23	81.850	81.508	0.903	0.000	1.38	4.475	140.9	SURCHARGED	
S1.003	S13	81.730	81.384	0.844	0.000	1.22	7.630	433.4	SURCHARGED	
S1.004	S14	80.580	79.979	0.439	0.000	1.16	8.699	411.4	SURCHARGED	
S1.005	S15	79.440	78.638	0.098	0.000	0.88	4.356	416.3	SURCHARGED	
S5.000	S50	79.640	79.438	0.698	0.000	1.37	1.038	53.2	FLOOD RISK	
S5.001	S51	79.640	78.826	0.508	0.000	1.18	3.825	45.7	SURCHARGED	
S5.002	S52	79.640	78.159	0.264	0.000	0.88	3.271	87.5	SURCHARGED	
S6.000	S60	79.710	78.859	0.054	0.000	0.53	0.310	20.7	SURCHARGED	
S6.001	S61	80.420	78.723	0.373	0.000	1.08	3.651	144.1	SURCHARGED	
S1.006	S16	79.320	78.116	0.276	0.000	2.41	5.735	595.0	SURCHARGED	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

PN	US/MH Name	US/CL (m)	Water			Flow / Cap.	Maximum Vol (m³)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m³)				
S7.000	S70	79.930	79.942	0.912	12.331	1.19	13.683	106.7	FLOOD
S7.001	S71	80.640	79.576	1.176	0.000	2.20	7.946	151.7	SURCHARGED
S8.000	S80	79.930	79.939	0.909	9.468	1.53	10.820	128.2	FLOOD
S8.001	S81	79.930	78.729	0.229	0.000	1.49	4.862	126.7	SURCHARGED
S9.000	S90	79.640	79.134	0.394	0.000	1.21	0.694	54.3	SURCHARGED
S7.002	S72	79.640	78.284	0.134	0.000	1.19	6.831	316.0	SURCHARGED
S1.007	S17	79.540	77.760	-0.030	0.000	0.85	9.902	945.4	OK
S1.008	SHW1	76.900	76.679	0.229	0.000	1.80	6.909	945.8	FLOOD RISK
S10.000	S100	80.430	79.382	-0.143	0.000	0.29	0.087	22.4	OK
S11.000	S110	79.700	78.695	-0.100	0.000	0.60	0.136	22.4	OK
S10.001	S101	80.100	78.337	-0.233	0.000	0.11	0.073	44.8	OK
S10.002	SHW2	76.900	76.584	0.584	0.000	0.12	1.175	9.8	SURCHARGED
S1.009	SBasin	76.900	76.583	-0.167	0.000	0.00	1292.013	0.0	OK



Status

FOR PLANNING

This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

0m25m

Scale 1:500

NOTES

1. This drawing is based on the Proposed Site Plan by Dolman Surveyors, dated April 2024, reference 4186-01E.

2. The Contractor shall seek clarification from the Engineer regarding any construction issue arising from this drawing, or any discrepancy between this drawing and any issued drawing or the Specification, prior to construction.

3. All dimensions shown in metres (m) unless otherwise stated, and all levels relate to Ordnance Datum.

KEY

Exceedance Flow Route

Site boundary

Rev	Date	Description	Drawn	Check
#	25/09/25	First Issue	ML	RML

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Stratton Park House, Warburton Road, Swindon, SN3 4HG

Client

Harvey Farms
(Winterbourne) Ltd

Project

Manor Farm Diversification

Drawing Title

Preliminary Drainage
Strategy Plan

Drawing No.

W645/09

E-Mail: mldodwick@pfaconsulting.co.uk

Sheet 1 of 1

Rev

#

AO