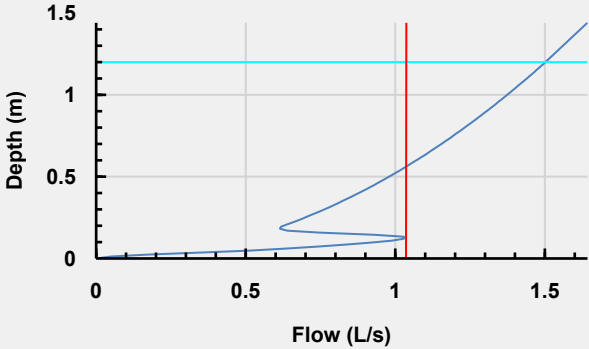


Project: 15 Porte Marsh Estate Calne Wiltshire		Date: 20/01/2026		 Cole Easdon	
Report Details: Type: Junctions Storm Phase: Phase		Designed by: ZW	Checked by: RB		Approved By:
		Company Address: Unit 2 York House Dorcan Way Swindon			

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
FC	Manhole	351.783	190.606	79.400	1.850	77.550	Circular	1.200
S5	Manhole	350.204	213.993	79.500	2.190	77.310	Circular	1.200
S6	Manhole	315.803	219.792	79.260	2.300	76.960	Circular	1.200
Outfall	Manhole	299.476	220.391	79.080	2.260	76.820	Circular	1.200
S1	Manhole	314.547	197.599	79.650	0.950	78.700	Circular	1.200
S2	Manhole	312.114	178.062	79.400	0.840	78.560	Circular	1.200
S4	Manhole	348.975	172.680	79.420	1.120	78.300	Circular	1.200

Name	Lock
FC	None
S5	None
S6	None
Outfall	None
S1	None
S2	None
S4	None

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
FC	Outlet	Pipe (1)	Hydro-Brake®
	Invert Level (m)	77.550	
	Design Depth (m)	1.200	
	Design Flow (L/s)	1.5	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☐	
	Unit Reference	CHE-0053-1500-1200-1500	
			
S5	Outlet	Pipe (5)	Free Discharge
S6	Outlet	Pipe (6)	Free Discharge
Outfall	Outlet	(None)	Orifice
	Diameter (m)	0.150	
	Coefficient of Discharge	0.600	
	Invert Level (m)	76.970	
S1	Outlet	Pipe (2)	Free Discharge
S2	Outlet	Pipe (3)	Free Discharge
S4	Outlet	Pipe (4)	Free Discharge

Project: 15 Porte Marsh Estate Calne Wiltshire	Date: 20/01/2026			 Cole Easdon
Report Details: Type: Stormwater Controls Storm Phase: Phase	Designed by: ZW	Checked by: RB	Approved By:	
	Company Address: Unit 2 York House Dorcan Way Swindon			



Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	79.350
Depth (m)	1.200
Base Level (m)	77.550
Number of Crates Long	14
Number of Crates Wide	9
Number of Crates High	3
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	0.5
Crate Height (m)	0.4
Total Volume (m³)	72.420

Outlets

Outlet

Outgoing Connection	Pipe
Outlet Type	Free Discharge

Project: 15 Porte Marsh Estate Calne Wiltshire		Date: 20/01/2026		 Cole Easdon	
		Designed by: ZW	Checked by: RB		Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase		Company Address: Unit 2 York House Dorcan Way Swindon			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	S1		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (1)	Cellular Storage		Time of Concentration	0.026	100	0	100	0.026
Catchment Area (2)	Cellular Storage		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (3)	S4		Time of Concentration	0.011	100	0	100	0.011
Catchment Area (4)	S2		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (5)	Cellular Storage		Time of Concentration	0.020	100	0	100	0.020
TOTAL		0.0		0.101				0.101

Project: 15 Porte Marsh Estate Calne Wiltshire		Date: 20/01/2026		 Cole Easdon	
Report Details: Type: Outfall Details Storm Phase: Phase		Designed by: ZW	Checked by: RB		Approved By:
		Company Address: Unit 2 York House Dorcan Way Swindon			

Outfalls

Outfall	Outfall Type	Gated	Fixed Surcharged Level (m)	Level Curve
Outfall	Fixed Surcharged Level	☐	76.820	
FEH : 100 years: +45 %: 15 mins: Summer			76.820	
FEH : 100 years: +45 %: 15 mins: Winter			76.820	
FEH : 100 years: +45 %: 30 mins: Summer			76.820	
FEH : 100 years: +45 %: 30 mins: Winter			76.820	
FEH : 100 years: +45 %: 60 mins: Summer			76.820	
FEH : 100 years: +45 %: 60 mins: Winter			76.820	
FEH : 100 years: +45 %: 120 mins: Summer			76.820	
FEH : 100 years: +45 %: 120 mins: Winter			76.820	
FEH : 100 years: +45 %: 240 mins: Summer			76.820	
FEH : 100 years: +45 %: 240 mins: Winter			76.820	
FEH : 100 years: +45 %: 360 mins: Summer			76.820	
FEH : 100 years: +45 %: 360 mins: Winter			76.820	
FEH : 100 years: +45 %: 480 mins: Summer			76.820	
FEH : 100 years: +45 %: 480 mins: Winter			76.820	
FEH : 100 years: +45 %: 960 mins: Summer			76.820	
FEH : 100 years: +45 %: 960 mins: Winter			76.820	
FEH : 100 years: +45 %: 1440 mins: Summer			76.820	
FEH : 100 years: +45 %: 1440 mins: Winter			76.820	

Project: 15 Porte Marsh Estate Calne Wiltshire	Date: 20/01/2026	 Cole Easdon
Report Title: Rainfall Analysis Criteria	Designed by: ZW Checked by: RB Approved By:	
	Company Address: Unit 2 York House Dorcan Way Swindon	

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FEH	Type: FEH
Site Location	GB 400100 171800 SU 00100 71800
Rainfall Version	1999
C (1km)	-0.024
D1 (1km)	0.368
D2 (1km)	0.325
D3 (1km)	0.276
E (1km)	0.285
F (1km)	2.461
Summer	☒
Winter	☒

Return Period

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

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880

Project: 15 Porte Marsh Estate Calne Wiltshire		Date: 20/01/2026		 Cole Easdon	
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Designed by: ZW	Checked by: RB		Approved By:
		Company Address: Unit 2 York House Dorcan Way Swindon			



Critical Storm Per Item: Rank By: Max. Avg. Depth

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. Residual 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 (%)
Cellular Storage	FEH: 100 years: +45 %: 360 mins: Winter	78.600	78.600	1.050	1.050	9.9	62.846	0.000	0.000	1.4	47.861		13.220

Project: 15 Porte Marsh Estate Calne Wiltshire	Date: 20/01/2026			 Cole Easdon
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Designed by: ZW	Checked by: RB	Approved By:	
	Company Address: Unit 2 York House Dorcan Way Swindon			

Status
OK