Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	0.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	0.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	8.000	Minimum Backdrop Height (m)	0.000
Ratio-R	0.001	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Diameter (mm)	Depth (m)
F7	5.00	1.3	125.500	450	1.000
F8			125.500		1.001

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)
F7 - F8	F7	F8	126.000	0.600	124.500	124.499	0.001	126000.0	150	0.00

Name	Vel (m/s)	Cap (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
F7 - F8	0.023	0.4	0.850	0.851	0.000	1.3	0	0.000

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Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
F7 - F8	126.000	126000.0	150	Circular	125.500	124.500	0.850	125.500	124.499	0.851

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Node Type
F7 - F8	F7	450	Manhole	Private	F8	Junction

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
F7	125.500	1.000	450	0	F7 - F8	124.500	150
F8	125.500	1.001		1	F7 - F8	124.499	150

Simulation Settings

Rainfall Methodology	FSR	Summer CV	0.750	Drain Down Time (mins)	60
FSR Region	England and Wales	Winter CV	0.840	Additional Storage (m³/ha)	0.0
M5-60 (mm)	8.000	Analysis Speed	Normal	Check Discharge Rate(s)	x
Ratio-R	0.001	Skip Steady State	x	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0

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Node F7 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.02770	Safety Factor	2.0	Invert Level (m)	124.200
Side Inf Coefficient (m/hr)	0.02770	Porosity	0.30	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	126.9	0.0	0.001	126.9	126.9	0.450	126.9	126.9	0.451	0.0	126.9

Node F8 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.02770	Safety Factor	2.0	Invert Level (m)	124.200
Side Inf Coefficient (m/hr)	0.02770	Porosity	0.30	Time to half empty (mins)	261

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	126.9	0.0	0.001	126.9	126.9	0.450	126.9	126.9	0.451	0.0	126.9

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Results for 1 year Critical Storm Duration. Lowest mass balance: 98.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	F7	1500	125.209	0.709	1.3	17.2634	0.0000	FLOOD RISK
1440 minute summer	F8	1500	125.207	0.708	0.9	17.1505	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	F7	F7 - F8	F8	0.9	0.159	2.151	2.2182
1440 minute summer	F7	Infiltration		0.5			
1440 minute summer	F8	Infiltration		0.5			

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