

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	10	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	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	Area (ha)	T of E (mins)	Cover Level (m)	Manhole Type	Diameter (mm)	Depth (m)
S1	0.024	5.00	4.650	Adoptable	600	1.570
S2	0.000		4.635	Adoptable	600	1.615

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)	Rain (mm/hr)
1.000	S1	S2	4.781	0.600	3.080	3.020	0.060	79.7	100	5.09	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	0.863	6.8	3.3	1.470	1.515	0.024	0.0	49	0.854

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	1440
Ratio-R	0.400	Additional Storage (m³/ha)	0.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440
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Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
10	0	0	0

Node S2 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00493	Invert Level (m)	2.650	Depth (m)	0.500
Side Inf Coefficient (m/hr)	0.00493	Time to half empty (mins)	1139	Inf Depth (m)	0.500
Safety Factor	1.5	Pit Width (m)	3.000	Number Required	1
Porosity	0.30	Pit Length (m)	14.000		

Results for 10 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	S1	1320	4.012	0.932	0.3	0.2639	0.0000	SURCHARGED
1440 minute winter	S2	1320	4.012	0.992	0.3	6.5873	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 winter	S1	1.000	S2	0.3	0.429	0.045	0.0374
1440 minute winter	S2	Infiltration		0.1			