

Design Settings

Rainfall Methodology FSR
Return Period (years) 5
Additional Flow (%) 0
FSR Region England and Wales
M5-60 (mm) 19.500
Ratio-R 0.350
CV 0.750
Time of Entry (mins) 5.00
Maximum Time of Concentration (mins) 30.00
Maximum Rainfall (mm/hr) 50.0
Minimum Velocity (m/s) 1.00
Connection Type Level Soffits
Minimum Backdrop Height (m) 0.200
Preferred Cover Depth (m) 1.200
Include Intermediate Ground ✓
Enforce best practice design rules ✓

Nodes

Name	Area (ha)	Cover Level (m)	Easting (m)	Northing (m)	Depth (m)
1	0.113	17.850	507580.244	104485.628	1.630

Simulation Settings

Rainfall Methodology	FEH-13	Drain Down Time (mins)	240
Summer CV	0.750	Additional Storage (m³/ha)	20.0
Winter CV	0.840	Check Discharge Rate(s)	x
Analysis Speed	Detailed	Check Discharge Volume	x
Skip Steady State	✓		

Storm Durations

60	180	360	600	960	2160	4320	7200	10080
120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
10	10	0	0
100	40	0	0

Node 1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	17.450
Safety Factor	5.0	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	37.5	0.0	0.400	224.7	0.0

Node 1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.02012	Porosity	0.30
Side Inf Coefficient (m/hr)	0.02012	Invert Level (m)	16.220
Safety Factor	5.0	Time to half empty (mins)	2437

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	337.3	337.3	0.350	337.3	411.7	1.100	337.3	411.7	1.101	0.0	411.7

Results for 10 year +10% CC Critical Storm Duration. Lowest mass balance: 99.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	464	16.591	0.371	4.2	38.0365	0.0000	OK
Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)					
480 minute winter	1	Infiltration	0.5					

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	930	17.047	0.827	4.7	84.8342	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)
960 minute winter	1	Infiltration	0.5