

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	0.75
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.600	Minimum Backdrop Height (m)	0.500
Ratio-R	0.350	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)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
201	0.029	5.00	16.319	1200	507628.259	104271.834	1.300
202	0.018	5.00	16.111	1200	507646.777	104271.709	1.350
205	0.029	5.00	15.750	1200	507671.282	104262.343	1.300
203	0.010	5.00	15.906	1200	507664.654	104271.542	1.616
204			15.868		507667.883	104271.491	1.596

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	201	202	18.518	0.600	15.019	14.811	0.208	89.0	100	5.38	50.0
1.001	202	203	17.878	0.600	14.761	14.290	0.471	38.0	150	5.56	50.0
2.000	205	203	11.339	0.600	14.450	14.340	0.110	103.1	100	5.25	50.0
1.002	203	204	3.230	0.600	14.290	14.272	0.019	174.6	150	5.63	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)
1.000	0.815	6.4	3.9	1.200	1.200	0.029	0.0
1.001	1.638	29.0	6.4	1.200	1.466	0.047	0.0
2.000	0.757	5.9	3.9	1.200	1.466	0.029	0.0
1.002	0.757	13.4	11.7	1.466	1.446	0.086	0.0

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	19.500	Drain Down Time (mins)	240
Ratio-R	0.350	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

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Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	40	0	0

Results for 1 year +40% CC 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
15 minute winter	201	10	15.089	0.070	5.3	0.1108	0.0000	OK
15 minute winter	202	10	14.816	0.055	8.4	0.0768	0.0000	OK
15 minute winter	205	10	14.526	0.076	5.3	0.1195	0.0000	OK
15 minute winter	203	11	14.440	0.150	15.3	0.1881	0.0000	OK
15 minute winter	204	11	14.386	0.114	15.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	201	1.000	202	5.1	0.892	0.800	0.1064	
15 minute winter	202	1.001	203	8.3	0.668	0.287	0.2093	
15 minute winter	205	2.000	203	5.2	0.764	0.872	0.0797	
15 minute winter	203	1.002	204	15.2	0.927	1.138	0.0517	7.2