

Design Settings

Rainfall Methodology	FSR	CV	0.750	Minimum Backdrop Height (m)	0.000
Return Period (years)	1	Time of Entry (mins)	5.00	Preferred Cover Depth (m)	1.200
Additional Flow (%)	0	Maximum Time of Concentration (mins)	30.00	Include Intermediate Ground	✓
FSR Region	England and Wales	Maximum Rainfall (mm/hr)	50.0	Enforce best practice design rules	x
M5-60 (mm)	20.000	Minimum Velocity (m/s)	1.00		
Ratio-R	0.400	Connection Type	Level Soffits		

1 STANDARD Link Type

Shape Circular | Barrels 1 | Auto Increment (mm) 75 | Follow Ground x

Available Diameters (mm)

100 | 150

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
STORAGE			137.300	1	1.040
S1	0.030	5.00	137.540	1200	0.840
S2			137.220	1200	0.750
S3	0.030	5.00	137.680	1200	1.085
S4			137.400	1200	1.005
S5			137.300	1200	1.070
S6			137.300	1200	1.290
FCC			137.300	1200	1.046
OUTFALL			137.300	1	1.305

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	36.000	0.600	136.700	136.470	0.230	156.5	225	5.58	50.0
1.001	S2	STORAGE	13.000	0.600	136.470	136.385	0.085	152.9	225	5.78	50.0
2.000	S3	S4	32.500	0.600	136.595	136.395	0.200	162.5	225	5.53	50.0
2.001	S4	STORAGE	1.000	0.600	136.395	136.385	0.010	100.0	225	5.54	50.0
1.002	STORAGE	FCC	1.000	0.600	136.260	136.254	0.006	167.0	225	5.80	50.0
1.003	FCC	S5	4.000	0.600	136.254	136.230	0.024	167.0	225	5.86	50.0
1.004	S5	S6	38.000	0.600	136.230	136.010	0.220	172.7	225	6.50	48.5
1.005	S6	OUTFALL	1.000	0.600	136.010	135.995	0.015	66.7	225	6.51	48.4

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	1.042	41.4	4.1	0.615	0.525	0.030	0.0	47	0.663
1.001	1.055	41.9	4.1	0.525	0.690	0.030	0.0	47	0.671
2.000	1.023	40.7	4.1	0.860	0.780	0.030	0.0	48	0.658
2.001	1.307	52.0	4.1	0.780	0.690	0.030	0.0	43	0.786
1.002	1.009	40.1	8.1	0.815	0.821	0.060	0.0	68	0.791
1.003	1.009	40.1	8.1	0.821	0.845	0.060	0.0	68	0.791
1.004	0.992	39.4	7.9	0.845	1.065	0.060	0.0	68	0.778
1.005	1.604	63.8	7.9	1.065	1.080	0.060	0.0	53	1.098

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)
1.000	36.000	156.5	225	1 STANDARD	137.540	136.700	0.615	137.220	136.470	0.525
1.001	13.000	152.9	225	1 STANDARD	137.220	136.470	0.525	137.300	136.385	0.690
2.000	32.500	162.5	225	1 STANDARD	137.680	136.595	0.860	137.400	136.395	0.780
2.001	1.000	100.0	225	1 STANDARD	137.400	136.395	0.780	137.300	136.385	0.690
1.002	1.000	167.0	225	1 STANDARD	137.300	136.260	0.815	137.300	136.254	0.821
1.003	4.000	167.0	225	1 STANDARD	137.300	136.254	0.821	137.300	136.230	0.845
1.004	38.000	172.7	225	1 STANDARD	137.300	136.230	0.845	137.300	136.010	1.065
1.005	1.000	66.7	225	1 STANDARD	137.300	136.010	1.065	137.300	135.995	1.080

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	S1	1200	Manhole	1 STANDARD	S2	1200	Manhole	1 STANDARD
1.001	S2	1200	Manhole	1 STANDARD	STORAGE	1	Manhole	1 STANDARD
2.000	S3	1200	Manhole	1 STANDARD	S4	1200	Manhole	1 STANDARD
2.001	S4	1200	Manhole	1 STANDARD	STORAGE	1	Manhole	1 STANDARD
1.002	STORAGE	1	Manhole	1 STANDARD	FCC	1200	Manhole	1 STANDARD
1.003	FCC	1200	Manhole	1 STANDARD	S5	1200	Manhole	1 STANDARD
1.004	S5	1200	Manhole	1 STANDARD	S6	1200	Manhole	1 STANDARD
1.005	S6	1200	Manhole	1 STANDARD	OUTFALL	1	Manhole	1 STANDARD



Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
STORAGE	137.300	1.040	1	1 2 0	2.001 1.001 1.002	136.385 136.385 136.260	225 225 225
S1	137.540	0.840	1200	0	1.000	136.700	225
S2	137.220	0.750	1200	1 0	1.000 1.001	136.470 136.470	225 225
S3	137.680	1.085	1200	0	2.000	136.595	225
S4	137.400	1.005	1200	1 0	2.000 2.001	136.395 136.395	225 225
S5	137.300	1.070	1200	1 0	1.003 1.004	136.230 136.230	225 225
S6	137.300	1.290	1200	1 0	1.004 1.005	136.010 136.010	225 225
FCC	137.300	1.046	1200	1 0	1.002 1.003	136.254 136.254	225 225
OUTFALL	137.300	1.305	1	1	1.005	135.995	225

Simulation Settings

Rainfall Methodology	FSR	Summer CV	0.750	Drain Down Time (mins)	240
FSR Region	England and Wales	Winter CV	0.840	Additional Storage (m³/ha)	0.0
M5-60 (mm)	20.000	Analysis Speed	Normal	Check Discharge Rate(s)	x
Ratio-R	0.400	Skip Steady State	x	Check Discharge Volume	x

Storm Durations

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0	100	60	0	0
30	0	0	0	100	70	0	0
100	40	0	0	100	80	0	0
100	50	0	0				

Node FCC Online Orifice Control

Flap Valve	x	Invert Level (m)	136.254	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.029		

Node STORAGE Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	136.260
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	9
Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	35.0	0.0	0.320	35.0	0.0
			0.321	0.0	0.0

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	109.521	30.991	1 year 240 minute winter	12.274	4.882
1 year 15 minute winter	76.857	30.991	1 year 360 minute summer	14.169	3.646
1 year 30 minute summer	71.439	20.215	1 year 360 minute winter	9.210	3.646
1 year 30 minute winter	50.133	20.215	1 year 480 minute summer	11.185	2.956
1 year 60 minute summer	48.435	12.800	1 year 480 minute winter	7.431	2.956
1 year 60 minute winter	32.179	12.800	1 year 600 minute summer	9.182	2.511
1 year 120 minute summer	30.053	7.942	1 year 600 minute winter	6.274	2.511
1 year 120 minute winter	19.966	7.942	1 year 720 minute summer	8.203	2.199
1 year 180 minute summer	23.233	5.979	1 year 720 minute winter	5.513	2.199
1 year 180 minute winter	15.102	5.979	1 year 960 minute summer	6.768	1.782
1 year 240 minute summer	18.475	4.882	1 year 960 minute winter	4.483	1.782

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 1440 minute summer	4.949	1.326	100 year +50% CC 1440 minute winter	13.001	5.185
1 year 1440 minute winter	3.326	1.326	100 year +60% CC 15 minute summer	557.981	157.889
30 year 15 minute summer	268.706	76.035	100 year +60% CC 15 minute winter	391.566	157.889
30 year 15 minute winter	188.566	76.035	100 year +60% CC 30 minute summer	366.344	103.663
30 year 30 minute summer	174.929	49.499	100 year +60% CC 30 minute winter	257.084	103.663
30 year 30 minute winter	122.757	49.499	100 year +60% CC 60 minute summer	245.261	64.815
30 year 60 minute summer	116.589	30.811	100 year +60% CC 60 minute winter	162.946	64.815
30 year 60 minute winter	77.459	30.811	100 year +60% CC 120 minute summer	148.099	39.138
30 year 120 minute summer	70.438	18.615	100 year +60% CC 120 minute winter	98.393	39.138
30 year 120 minute winter	46.797	18.615	100 year +60% CC 180 minute summer	111.690	28.742
30 year 180 minute summer	53.298	13.715	100 year +60% CC 180 minute winter	72.601	28.742
30 year 180 minute winter	34.645	13.715	100 year +60% CC 240 minute summer	86.830	22.947
30 year 240 minute summer	41.604	10.995	100 year +60% CC 240 minute winter	57.688	22.947
30 year 240 minute winter	27.641	10.995	100 year +60% CC 360 minute summer	64.774	16.668
30 year 360 minute summer	31.221	8.034	100 year +60% CC 360 minute winter	42.105	16.668
30 year 360 minute winter	20.295	8.034	100 year +60% CC 480 minute summer	50.262	13.283
30 year 480 minute summer	24.324	6.428	100 year +60% CC 480 minute winter	33.393	13.283
30 year 480 minute winter	16.160	6.428	100 year +60% CC 600 minute summer	40.690	11.130
30 year 600 minute summer	19.756	5.404	100 year +60% CC 600 minute winter	27.802	11.130
30 year 600 minute winter	13.498	5.404	100 year +60% CC 720 minute summer	35.924	9.628
30 year 720 minute summer	17.490	4.687	100 year +60% CC 720 minute winter	24.143	9.628
30 year 720 minute winter	11.754	4.687	100 year +60% CC 960 minute summer	29.065	7.654
30 year 960 minute summer	14.215	3.743	100 year +60% CC 960 minute winter	19.253	7.654
30 year 960 minute winter	9.416	3.743	100 year +60% CC 1440 minute summer	20.634	5.530
30 year 1440 minute summer	10.161	2.723	100 year +60% CC 1440 minute winter	13.867	5.530
30 year 1440 minute winter	6.829	2.723	100 year +70% CC 15 minute summer	592.855	167.757
100 year +40% CC 15 minute summer	488.233	138.153	100 year +70% CC 15 minute winter	416.038	167.757
100 year +40% CC 15 minute winter	342.620	138.153	100 year +70% CC 30 minute summer	389.241	110.142
100 year +40% CC 30 minute summer	320.551	90.705	100 year +70% CC 30 minute winter	273.151	110.142
100 year +40% CC 30 minute winter	224.948	90.705	100 year +70% CC 60 minute summer	260.590	68.866
100 year +40% CC 60 minute summer	214.603	56.713	100 year +70% CC 60 minute winter	173.130	68.866
100 year +40% CC 60 minute winter	142.577	56.713	100 year +70% CC 120 minute summer	157.355	41.584
100 year +40% CC 120 minute summer	129.587	34.246	100 year +70% CC 120 minute winter	104.543	41.584
100 year +40% CC 120 minute winter	86.094	34.246	100 year +70% CC 180 minute summer	118.671	30.538
100 year +40% CC 180 minute summer	97.729	25.149	100 year +70% CC 180 minute winter	77.139	30.538
100 year +40% CC 180 minute winter	63.526	25.149	100 year +70% CC 240 minute summer	92.257	24.381
100 year +40% CC 240 minute summer	75.977	20.078	100 year +70% CC 240 minute winter	61.294	24.381
100 year +40% CC 240 minute winter	50.477	20.078	100 year +70% CC 360 minute summer	68.822	17.710
100 year +40% CC 360 minute summer	56.677	14.585	100 year +70% CC 360 minute winter	44.736	17.710
100 year +40% CC 360 minute winter	36.841	14.585	100 year +70% CC 480 minute summer	53.404	14.113
100 year +40% CC 480 minute summer	43.979	11.622	100 year +70% CC 480 minute winter	35.480	14.113
100 year +40% CC 480 minute winter	29.219	11.622	100 year +70% CC 600 minute summer	43.233	11.825
100 year +40% CC 600 minute summer	35.604	9.738	100 year +70% CC 600 minute winter	29.539	11.825
100 year +40% CC 600 minute winter	24.327	9.738	100 year +70% CC 720 minute summer	38.169	10.230
100 year +40% CC 720 minute summer	31.433	8.424	100 year +70% CC 720 minute winter	25.652	10.230
100 year +40% CC 720 minute winter	21.125	8.424	100 year +70% CC 960 minute summer	30.882	8.132
100 year +40% CC 960 minute summer	25.432	6.697	100 year +70% CC 960 minute winter	20.457	8.132
100 year +40% CC 960 minute winter	16.847	6.697	100 year +70% CC 1440 minute summer	21.924	5.876
100 year +40% CC 1440 minute summer	18.055	4.839	100 year +70% CC 1440 minute winter	14.734	5.876
100 year +40% CC 1440 minute winter	12.134	4.839	100 year +80% CC 15 minute summer	627.728	177.625
100 year +50% CC 15 minute summer	523.107	148.021	100 year +80% CC 15 minute winter	440.511	177.625
100 year +50% CC 15 minute winter	367.093	148.021	100 year +80% CC 30 minute summer	412.137	116.621
100 year +50% CC 30 minute summer	343.448	97.184	100 year +80% CC 30 minute winter	289.219	116.621
100 year +50% CC 30 minute winter	241.016	97.184	100 year +80% CC 60 minute summer	275.919	72.917
100 year +50% CC 60 minute summer	229.932	60.764	100 year +80% CC 60 minute winter	183.314	72.917
100 year +50% CC 60 minute winter	152.761	60.764	100 year +80% CC 120 minute summer	166.611	44.030
100 year +50% CC 120 minute summer	138.843	36.692	100 year +80% CC 120 minute winter	110.693	44.030
100 year +50% CC 120 minute winter	92.244	36.692	100 year +80% CC 180 minute summer	125.651	32.334
100 year +50% CC 180 minute summer	104.709	26.945	100 year +80% CC 180 minute winter	81.677	32.334
100 year +50% CC 180 minute winter	68.064	26.945	100 year +80% CC 240 minute summer	97.684	25.815
100 year +50% CC 240 minute summer	81.404	21.513	100 year +80% CC 240 minute winter	64.899	25.815
100 year +50% CC 240 minute winter	54.083	21.513	100 year +80% CC 360 minute summer	72.870	18.752
100 year +50% CC 360 minute summer	60.725	15.627	100 year +80% CC 360 minute winter	47.368	18.752
100 year +50% CC 360 minute winter	39.473	15.627	100 year +80% CC 480 minute summer	56.545	14.943
100 year +50% CC 480 minute summer	47.121	12.453	100 year +80% CC 480 minute winter	37.567	14.943
100 year +50% CC 480 minute winter	31.306	12.453	100 year +80% CC 600 minute summer	45.776	12.521
100 year +50% CC 600 minute summer	38.147	10.434	100 year +80% CC 600 minute winter	31.277	12.521
100 year +50% CC 600 minute winter	26.064	10.434	100 year +80% CC 720 minute summer	40.414	10.831
100 year +50% CC 720 minute summer	33.678	9.026	100 year +80% CC 720 minute winter	27.161	10.831
100 year +50% CC 720 minute winter	22.634	9.026	100 year +80% CC 960 minute summer	32.699	8.610
100 year +50% CC 960 minute summer	27.249	7.175	100 year +80% CC 960 minute winter	21.660	8.610
100 year +50% CC 960 minute winter	18.050	7.175	100 year +80% CC 1440 minute summer	23.213	6.221
100 year +50% CC 1440 minute summer	19.345	5.185	100 year +80% CC 1440 minute winter	15.601	6.221



Results for 1 year Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	STORAGE	136	136.414	0.154	2.0	5.1240	0.0000	OK
15 minute winter	S1	10	136.749	0.049	4.2	0.0549	0.0000	OK
15 minute winter	S2	11	136.519	0.049	4.1	0.0551	0.0000	OK
15 minute winter	S3	10	136.644	0.049	4.2	0.0553	0.0000	OK
15 minute winter	S4	11	136.445	0.050	4.1	0.0564	0.0000	OK
180 minute winter	S5	140	136.251	0.021	0.7	0.0237	0.0000	OK
180 minute winter	S6	140	136.028	0.018	0.7	0.0202	0.0000	OK
120 minute winter	FCC	106	136.414	0.160	1.4	0.1808	0.0000	OK
180 minute winter	OUTFALL	140	136.011	0.016	0.7	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)
180 minute winter	STORAGE	1.002	FCC	1.6	0.175	0.039	0.0296	
15 minute winter	S1	1.000	S2	4.1	0.671	0.100	0.2244	
15 minute winter	S2	1.001	STORAGE	4.1	0.661	0.097	0.0801	
15 minute winter	S3	2.000	S4	4.1	0.651	0.101	0.2071	
15 minute winter	S4	2.001	STORAGE	4.1	0.702	0.079	0.0059	
180 minute winter	S5	1.004	S6	0.7	0.407	0.017	0.0628	
180 minute winter	S6	1.005	OUTFALL	0.7	0.490	0.010	0.0014	8.9
120 minute winter	FCC	Orifice	S5	0.7				



Results for 30 year Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	STORAGE	168	136.606	0.346	13.5	10.6566	0.0000	SURCHARGED
15 minute winter	S1	10	136.778	0.077	10.4	0.0876	0.0000	OK
120 minute winter	S2	82	136.595	0.125	3.2	0.1410	0.0000	OK
15 minute winter	S3	10	136.673	0.078	10.4	0.0886	0.0000	OK
120 minute winter	S4	82	136.599	0.204	9.2	0.2303	0.0000	OK
120 minute winter	S5	84	136.255	0.025	1.0	0.0286	0.0000	OK
120 minute winter	S6	84	136.032	0.022	1.0	0.0249	0.0000	OK
120 minute winter	FCC	82	136.609	0.355	9.4	0.4014	0.0000	SURCHARGED
120 minute winter	OUTFALL	84	136.015	0.020	1.0	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)
240 minute winter	STORAGE	1.002	FCC	-8.0	0.221	-0.198	0.0398	
15 minute winter	S1	1.000	S2	10.2	0.846	0.247	0.4354	
120 minute winter	S2	1.001	STORAGE	6.4	0.592	0.153	0.3906	
15 minute winter	S3	2.000	S4	10.2	0.821	0.252	0.4049	
120 minute winter	S4	2.001	STORAGE	18.7	0.633	0.359	0.0377	
120 minute winter	S5	1.004	S6	1.0	0.456	0.026	0.0840	
120 minute winter	S6	1.005	OUTFALL	1.0	0.548	0.016	0.0018	14.8
120 minute winter	FCC	Orifice	S5	1.0				



Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE	74	137.192	0.932	271.7	10.6566	41.9729	FLOOD
30 minute winter	S1	23	137.155	0.455	14.6	0.5147	0.0000	SURCHARGED
30 minute winter	S2	23	137.133	0.663	16.4	0.7499	0.0000	FLOOD RISK
60 minute winter	S3	47	137.115	0.520	14.5	0.5878	0.0000	SURCHARGED
60 minute summer	S4	38	137.325	0.930	72.7	1.0521	0.0000	FLOOD RISK
60 minute winter	S5	39	136.261	0.031	1.7	0.0352	0.0000	OK
60 minute winter	S6	40	136.038	0.028	1.6	0.0313	0.0000	OK
60 minute winter	FCC	42	137.287	1.033	200.1	1.1681	12.9163	FLOOD
60 minute winter	OUTFALL	40	136.019	0.024	1.6	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)
120 minute summer	STORAGE	1.002	FCC	-169.3	-4.258	-4.221	0.0398	
30 minute winter	S1	1.000	S2	14.6	0.922	0.352	1.4318	
30 minute winter	S2	1.001	STORAGE	-16.3	0.892	-0.388	0.5170	
60 minute winter	S3	2.000	S4	26.6	0.737	0.654	1.2926	
60 minute summer	S4	2.001	STORAGE	42.2	1.060	0.811	0.0398	
60 minute winter	S5	1.004	S6	1.6	0.519	0.040	0.1161	
60 minute winter	S6	1.005	OUTFALL	1.6	0.616	0.024	0.0025	9.6
60 minute winter	FCC	Orifice	S5	1.7				



Results for 100 year +50% CC Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE	138	137.262	1.002	266.4	10.6566	0.0000	FLOOD RISK
120 minute summer	S1	70	137.199	0.499	10.0	0.5642	0.0000	SURCHARGED
120 minute summer	S2	80	137.108	0.638	29.7	0.7221	0.0000	FLOOD RISK
30 minute winter	S3	26	137.082	0.487	17.0	0.5506	0.0000	SURCHARGED
120 minute winter	S4	64	137.062	0.667	50.7	0.7548	0.0000	SURCHARGED
120 minute summer	S5	76	136.262	0.032	1.6	0.0357	0.0000	OK
30 minute winter	S6	31	136.038	0.028	1.6	0.0313	0.0000	OK
120 minute summer	FCC	74	137.221	0.967	133.0	1.0939	0.0000	FLOOD RISK
120 minute summer	OUTFALL	82	136.019	0.024	1.6	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)
120 minute summer	STORAGE	1.002	FCC	-112.9	-2.838	-2.814	0.0398	
120 minute summer	S1	1.000	S2	17.9	0.763	0.431	1.4318	
120 minute summer	S2	1.001	STORAGE	49.5	1.249	1.181	0.5170	
30 minute winter	S3	2.000	S4	25.5	0.919	0.628	1.2926	
120 minute winter	S4	2.001	STORAGE	72.1	1.814	1.388	0.0398	
120 minute summer	S5	1.004	S6	1.6	0.518	0.040	0.1166	
30 minute winter	S6	1.005	OUTFALL	1.6	0.616	0.024	0.0025	12.9
120 minute summer	FCC	Orifice	S5	1.6				



Results for 100 year +60% CC Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	STORAGE	132	137.270	1.010	85.2	10.6566	69.9558	FLOOD
30 minute winter	S1	23	137.211	0.511	16.7	0.5777	0.0000	SURCHARGED
30 minute winter	S2	24	137.153	0.683	34.1	0.7723	0.0000	FLOOD RISK
30 minute winter	S3	21	137.111	0.516	16.7	0.5833	0.0000	SURCHARGED
120 minute summer	S4	70	137.141	0.746	78.1	0.8433	0.0000	FLOOD RISK
30 minute winter	S5	23	136.262	0.032	1.6	0.0359	0.0000	OK
30 minute winter	S6	24	136.038	0.028	1.6	0.0317	0.0000	OK
120 minute summer	FCC	66	137.230	0.976	162.0	1.1041	0.0000	FLOOD RISK
30 minute winter	OUTFALL	24	136.020	0.025	1.6	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)
240 minute summer	STORAGE	1.002	FCC	52.3	1.315	1.304	0.0398	
30 minute winter	S1	1.000	S2	30.2	0.941	0.729	1.4318	
30 minute winter	S2	1.001	STORAGE	24.7	1.119	0.588	0.5170	
30 minute winter	S3	2.000	S4	26.5	0.884	0.652	1.2926	
120 minute summer	S4	2.001	STORAGE	-45.4	-1.143	-0.874	0.0398	
30 minute winter	S5	1.004	S6	1.6	0.524	0.041	0.1176	
30 minute winter	S6	1.005	OUTFALL	1.6	0.620	0.025	0.0026	9.2
120 minute summer	FCC	Orifice	S5	1.6				



Results for 100 year +70% CC Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	STORAGE	44	137.298	1.038	195.0	10.6566	35.8137	FLOOD
30 minute winter	S1	20	137.173	0.473	17.7	0.5349	0.0000	SURCHARGED
30 minute winter	S2	23	137.144	0.674	18.2	0.7620	0.0000	FLOOD RISK
30 minute winter	S3	23	137.204	0.609	17.7	0.6890	0.0000	SURCHARGED
30 minute winter	S4	23	137.260	0.865	145.1	0.9784	0.0000	FLOOD RISK
30 minute winter	S5	23	136.262	0.032	1.7	0.0359	0.0000	OK
30 minute winter	S6	24	136.038	0.028	1.6	0.0316	0.0000	OK
60 minute winter	FCC	37	137.300	1.046	136.3	1.1830	14.7393	FLOOD
30 minute winter	OUTFALL	24	136.020	0.025	1.6	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)
60 minute winter	STORAGE	1.002	FCC	-192.7	-4.845	-4.804	0.0398	
30 minute winter	S1	1.000	S2	18.2	0.955	0.439	1.4318	
30 minute winter	S2	1.001	STORAGE	33.9	0.901	0.808	0.5170	
30 minute winter	S3	2.000	S4	22.7	0.898	0.558	1.2926	
30 minute winter	S4	2.001	STORAGE	222.3	5.591	4.278	0.0398	
30 minute winter	S5	1.004	S6	1.6	0.524	0.041	0.1181	
30 minute winter	S6	1.005	OUTFALL	1.6	0.620	0.025	0.0026	21.0
60 minute winter	FCC	Orifice	S5	1.7				



Results for 100 year +80% CC Critical Storm Duration. Lowest mass balance: -12.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	STORAGE	72	137.207	0.947	330.3	10.6566	57.5276	FLOOD
60 minute summer	S1	38	137.199	0.499	15.5	0.5648	0.0000	SURCHARGED
60 minute summer	S2	36	137.220	0.750	26.2	0.8478	0.0000	FLOOD RISK
60 minute summer	S3	36	137.302	0.707	15.5	0.7998	0.0000	SURCHARGED
60 minute summer	S4	36	137.295	0.900	137.1	1.0179	0.0000	FLOOD RISK
60 minute summer	S5	36	136.262	0.032	1.7	0.0366	0.0000	OK
60 minute summer	S6	37	136.039	0.028	1.7	0.0322	0.0000	OK
60 minute summer	FCC	36	137.300	1.046	48.9	1.1828	0.0000	FLOOD RISK
60 minute summer	OUTFALL	37	136.020	0.025	1.7	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)
120 minute summer	STORAGE	1.002	FCC	-207.8	-5.226	-5.182	0.0398	
60 minute summer	S1	1.000	S2	26.2	0.926	0.633	1.4318	
60 minute summer	S2	1.001	STORAGE	36.9	0.982	0.879	0.5170	
60 minute summer	S3	2.000	S4	33.9	0.854	0.833	1.2926	
60 minute summer	S4	2.001	STORAGE	-120.8	-3.037	-2.324	0.0398	
60 minute summer	S5	1.004	S6	1.7	0.531	0.042	0.1198	
60 minute summer	S6	1.005	OUTFALL	1.7	0.625	0.026	0.0026	12.2
60 minute summer	FCC	Orifice	S5	1.7				