Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.045	5.00	15.840	1200	492772.920	106475.028	1.442
2	0.014	5.00	15.624	1050	492756.706	106446.291	0.974
3	0.027	5.00	15.624	1050	492761.839	106444.403	1.107
4			15.624	1200	492764.180	106450.833	1.278
PB1	0.004	5.00	15.870	1200	492774.966	106462.220	0.371
PB2	0.003	5.00	15.870	1200	492772.641	106454.457	0.371
PB3	0.006	5.00	15.700	1200	492766.405	106442.478	0.370
PB4	0.047	5.00	15.540	1200	492758.702	106453.584	0.630
PB5	0.010	5.00	15.435	1200	492753.274	106441.831	0.630
PB6	0.006	5.00	15.870	1200	492772.746	106482.432	0.350
SAT1			15.682	1200	492769.042	106460.178	1.462
3.1			15.900	475	492787.011	106469.898	0.563
3.2		5.00	15.924	475	492793.692	106464.378	0.480
Dummy			15.692	1200	492753.914	106461.647	0.192

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)
1.001	1	SAT1	2.700	0.600	14.398	14.220	0.178	15.2	150	5.37	50.0
1.003	2	3	5.470	0.600	14.654	14.517	0.137	39.9	150	5.12	50.0
1.004	3	4	8.120	0.600	14.517	14.346	0.171	47.5	150	5.22	50.0
1.005	4	SAT1	2.040	0.600	14.346	14.220	0.126	16.2	150	5.23	50.0
2.001	PB1	PB2	3.000	0.600	15.499	15.499	0.000	0.0	150	5.05	50.0
2.002	PB2	PB3	3.000	0.600	15.499	15.330	0.169	17.8	150	5.07	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)
1.001	2.599	45.9	9.2	1.292	1.312	0.051	0.0	45	2.037
1.003	1.597	28.2	12.8	0.820	0.957	0.071	0.0	71	1.562
1.004	1.464	25.9	20.1	0.957	1.128	0.111	0.0	99	1.613
1.005	2.516	44.5	20.1	1.128	1.312	0.111	0.0	71	2.452
2.001	1.000	17.7	0.7	0.221	0.221	0.004	0.0	0	∞
2.002	2.402	42.4	1.3	0.221	0.220	0.007	0.0	18	1.076

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)
2.003	PB3	3	4.000	0.600	15.330	15.230	0.100	40.0	150	5.11	50.0
2.004	PB5	2	5.000	0.600	14.805	14.650	0.155	32.3	150	5.05	50.0
2.005	PB4	2	7.560	0.600	14.910	14.654	0.256	29.5	150	5.07	50.0
2.006	PB6	1	10.000	6.000	15.520	15.040	0.480	20.8	150	5.11	50.0
3.001	3.2	3.1	8.670	0.600	15.444	15.337	0.107	81.0	150	5.13	50.0
3.002	3.1	1	15.000	0.600	15.337	15.149	0.188	79.8	150	5.35	50.0
4.001	SAT1	Dummy	15.199	0.600	14.220	15.500	-1.280	-11.9	100	30.00	21.4

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)
2.003	1.596	28.2	2.3	0.220	0.244	0.013	0.0	29	0.965
2.004	1.778	31.4	1.8	0.480	0.824	0.010	0.0	24	0.966
2.005	1.859	32.9	8.5	0.480	0.820	0.047	0.0	52	1.562
2.006	1.476	26.1	1.1	0.200	0.650	0.006	0.0	22	0.690
3.001	1.117	19.7	0.0	0.330	0.413	0.000	0.0	0	0.000
3.002	1.126	19.9	0.0	0.413	0.541	0.000	0.0	0	0.000
4.001	0.005	0.0	12.5	1.362	0.092	0.162	0.0	100	0.000

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)
1.001	2.700	15.2	150	Circular	15.840	14.398	1.292	15.682	14.220	1.312
1.003	5.470	39.9	150	Circular	15.624	14.654	0.820	15.624	14.517	0.957
1.004	8.120	47.5	150	Circular	15.624	14.517	0.957	15.624	14.346	1.128
1.005	2.040	16.2	150	Circular	15.624	14.346	1.128	15.682	14.220	1.312
2.001	3.000	0.0	150	Circular	15.870	15.499	0.221	15.870	15.499	0.221
2.002	3.000	17.8	150	Circular	15.870	15.499	0.221	15.700	15.330	0.220
2.003	4.000	40.0	150	Circular	15.700	15.330	0.220	15.624	15.230	0.244
2.004	5.000	32.3	150	Circular	15.435	14.805	0.480	15.624	14.650	0.824
2.005	7.560	29.5	150	Circular	15.540	14.910	0.480	15.624	14.654	0.820
2.006	10.000	20.8	150	Circular	15.870	15.520	0.200	15.840	15.040	0.650

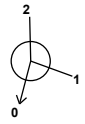
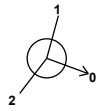
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.001	1	1200	Manhole	Adoptable	SAT1	1200	Manhole	Adoptable
1.003	2	1050	Manhole	Adoptable	3	1050	Manhole	Adoptable
1.004	3	1050	Manhole	Adoptable	4	1200	Manhole	Adoptable
1.005	4	1200	Manhole	Adoptable	SAT1	1200	Manhole	Adoptable
2.001	PB1	1200	Manhole	Adoptable	PB2	1200	Manhole	Adoptable
2.002	PB2	1200	Manhole	Adoptable	PB3	1200	Manhole	Adoptable
2.003	PB3	1200	Manhole	Adoptable	3	1050	Manhole	Adoptable
2.004	PB5	1200	Manhole	Adoptable	2	1050	Manhole	Adoptable
2.005	PB4	1200	Manhole	Adoptable	2	1050	Manhole	Adoptable
2.006	PB6	1200	Manhole	Adoptable	1	1200	Manhole	Adoptable

Pipeline Schedule

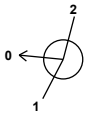
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
3.001	8.670	81.0	150	Circular	15.924	15.444	0.330	15.900	15.337	0.413
3.002	15.000	79.8	150	Circular	15.900	15.337	0.413	15.840	15.149	0.541
4.001	15.199	-11.9	100	Circular	15.682	14.220	1.362	15.692	15.500	0.092

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
3.001	3.2	475	Manhole	Adoptable	3.1	475	Manhole	Adoptable
3.002	3.1	475	Manhole	Adoptable	1	1200	Manhole	Adoptable
4.001	SAT1	1200	Manhole	Adoptable	Dummy	1200	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	492772.920	106475.028	15.840	1.442	1200		3.002	15.149	150
						1	2.006	15.040	150
						0	1.001	14.398	150
2	492756.706	106446.291	15.624	0.974	1050		2.005	14.654	150
						2	2.004	14.650	150
						0	1.003	14.654	150
3	492761.839	106444.403	15.624	1.107	1050		2.003	15.230	150
						2	1.003	14.517	150
						0	1.004	14.517	150
4	492764.180	106450.833	15.624	1.278	1200		1.004	14.346	150
						0	1.005	14.346	150
PB1	492774.966	106462.220	15.870	0.371	1200				
						0	2.001	15.499	150
PB2	492772.641	106454.457	15.870	0.371	1200		2.001	15.499	150
						0	2.002	15.499	150
PB3	492766.405	106442.478	15.700	0.370	1200		2.002	15.330	150
						0	2.003	15.330	150
PB4	492758.702	106453.584	15.540	0.630	1200				
						0	2.005	14.910	150

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
PB5	492753.274	106441.831	15.435	0.630	1200		0	2.004	14.805	150
PB6	492772.746	106482.432	15.870	0.350	1200		0	2.006	15.520	150
SAT1	492769.042	106460.178	15.682	1.462	1200		1	1.005	14.220	150
							2	1.001	14.220	150
							0	4.001	14.220	100
3.1	492787.011	106469.898	15.900	0.563	475		1	3.001	15.337	150
							0	3.002	15.337	150
3.2	492793.692	106464.378	15.924	0.480	475		0	3.001	15.444	150
Dummy	492753.914	106461.647	15.692	0.192	1200		1	4.001	15.500	100

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m³/ha)	20.0		

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	0	0	0
100	0	0	0
100	40	0	0
100	45	0	0

Node PB1 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.350	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	15.499	Diameter (m)	0.028		

Node PB2 Online Orifice Control

Flap Valve	x	Design Depth (m)	0.400	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.0		
Invert Level (m)	15.499	Diameter (m)	0.027		

Node PB1 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.499	Depth (m)	0.200
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	148	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.30	Pit Length (m)	7.600		

Node PB2 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.499	Depth (m)	0.200
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	142	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.30	Pit Length (m)	6.200		

Node PB3 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.330	Depth (m)	0.200
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	4	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.30	Pit Length (m)	12.000		

Node PB4 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	14.910	Depth (m)	0.500
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	34	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.30	Pit Length (m)	21.600		

Node PB5 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	14.805	Depth (m)	0.500
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	74	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.30	Pit Length (m)	20.300		

Node PB6 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	15.520	Depth (m)	0.200
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	5	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.800	Number Required	1
Porosity	0.30	Pit Length (m)	12.000		

Node SAT1 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.31600	Invert Level (m)	14.220	Depth (m)	0.800
Side Inf Coefficient (m/hr)	0.31600	Time to half empty (mins)	160	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	4.000	Number Required	1
Porosity	0.95	Pit Length (m)	21.000		

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
2 year 15 minute summer	115.483	32.678
2 year 15 minute winter	81.040	32.678
2 year 30 minute summer	75.628	21.400
2 year 30 minute winter	53.072	21.400
2 year 60 minute summer	51.275	13.550
2 year 60 minute winter	34.066	13.550
2 year 120 minute summer	35.817	9.465
2 year 120 minute winter	23.796	9.465
2 year 180 minute summer	28.799	7.411
2 year 180 minute winter	18.720	7.411
2 year 240 minute summer	23.225	6.138
2 year 240 minute winter	15.430	6.138
2 year 360 minute summer	17.896	4.605
2 year 360 minute winter	11.633	4.605
2 year 480 minute summer	14.070	3.718
2 year 480 minute winter	9.348	3.718
2 year 600 minute summer	11.477	3.139
2 year 600 minute winter	7.842	3.139
2 year 720 minute summer	10.184	2.729
2 year 720 minute winter	6.844	2.729
2 year 960 minute summer	8.302	2.186
2 year 960 minute winter	5.499	2.186
2 year 1440 minute summer	5.980	1.603
2 year 1440 minute winter	4.019	1.603
2 year 2160 minute summer	4.291	1.186
2 year 2160 minute winter	2.957	1.186
2 year 2880 minute summer	3.609	0.967
2 year 2880 minute winter	2.425	0.967
2 year 4320 minute summer	2.844	0.744
2 year 4320 minute winter	1.873	0.744
2 year 5760 minute summer	2.451	0.628
2 year 5760 minute winter	1.587	0.628
2 year 7200 minute summer	2.181	0.556
2 year 7200 minute winter	1.408	0.556
2 year 8640 minute summer	1.991	0.508
2 year 8640 minute winter	1.285	0.508
2 year 10080 minute summer	1.854	0.473
2 year 10080 minute winter	1.197	0.473
30 year 15 minute summer	289.567	81.937
30 year 15 minute winter	203.205	81.937
30 year 30 minute summer	192.811	54.559
30 year 30 minute winter	135.306	54.559
30 year 60 minute summer	131.726	34.811
30 year 60 minute winter	87.515	34.811
30 year 120 minute summer	80.702	21.327
30 year 120 minute winter	53.617	21.327
30 year 180 minute summer	61.398	15.800
30 year 180 minute winter	39.910	15.800
30 year 240 minute summer	48.020	12.690
30 year 240 minute winter	31.903	12.690
30 year 360 minute summer	35.860	9.228
30 year 360 minute winter	23.310	9.228

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
30 year 480 minute summer	27.689	7.317
30 year 480 minute winter	18.396	7.317
30 year 600 minute summer	22.293	6.098
30 year 600 minute winter	15.232	6.098
30 year 720 minute summer	19.576	5.247
30 year 720 minute winter	13.157	5.247
30 year 960 minute summer	15.687	4.131
30 year 960 minute winter	10.392	4.131
30 year 1440 minute summer	11.025	2.955
30 year 1440 minute winter	7.409	2.955
30 year 2160 minute summer	7.692	2.126
30 year 2160 minute winter	5.300	2.126
30 year 2880 minute summer	6.322	1.694
30 year 2880 minute winter	4.249	1.694
30 year 4320 minute summer	4.790	1.252
30 year 4320 minute winter	3.155	1.252
30 year 5760 minute summer	4.001	1.024
30 year 5760 minute winter	2.590	1.024
30 year 7200 minute summer	3.469	0.885
30 year 7200 minute winter	2.239	0.885
30 year 8640 minute summer	3.099	0.791
30 year 8640 minute winter	2.000	0.791
30 year 10080 minute summer	2.832	0.722
30 year 10080 minute winter	1.828	0.722
100 year 15 minute summer	362.722	102.638
100 year 15 minute winter	254.542	102.638
100 year 30 minute summer	244.132	69.081
100 year 30 minute winter	171.321	69.081
100 year 60 minute summer	167.828	44.352
100 year 60 minute winter	111.501	44.352
100 year 120 minute summer	100.849	26.651
100 year 120 minute winter	67.001	26.651
100 year 180 minute summer	76.259	19.624
100 year 180 minute winter	49.570	19.624
100 year 240 minute summer	59.525	15.731
100 year 240 minute winter	39.547	15.731
100 year 360 minute summer	44.478	11.446
100 year 360 minute winter	28.912	11.446
100 year 480 minute summer	34.377	9.085
100 year 480 minute winter	22.839	9.085
100 year 600 minute summer	27.700	7.577
100 year 600 minute winter	18.927	7.577
100 year 720 minute summer	24.341	6.524
100 year 720 minute winter	16.359	6.524
100 year 960 minute summer	19.525	5.141
100 year 960 minute winter	12.934	5.141
100 year 1440 minute summer	13.699	3.671
100 year 1440 minute winter	9.207	3.671
100 year 2160 minute summer	9.498	2.625
100 year 2160 minute winter	6.545	2.625
100 year 2880 minute summer	7.754	2.078
100 year 2880 minute winter	5.211	2.078

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year 4320 minute summer	5.795	1.515
100 year 4320 minute winter	3.816	1.515
100 year 5760 minute summer	4.780	1.224
100 year 5760 minute winter	3.094	1.224
100 year 7200 minute summer	4.102	1.046
100 year 7200 minute winter	2.647	1.046
100 year 8640 minute summer	3.631	0.926
100 year 8640 minute winter	2.344	0.926
100 year 10080 minute summer	3.292	0.840
100 year 10080 minute winter	2.124	0.840
100 year +40% CC 15 minute summer	507.810	143.693
100 year +40% CC 15 minute winter	356.358	143.693
100 year +40% CC 30 minute summer	341.785	96.713
100 year +40% CC 30 minute winter	239.849	96.713
100 year +40% CC 60 minute summer	234.960	62.093
100 year +40% CC 60 minute winter	156.102	62.093
100 year +40% CC 120 minute summer	141.188	37.312
100 year +40% CC 120 minute winter	93.802	37.312
100 year +40% CC 180 minute summer	106.763	27.474
100 year +40% CC 180 minute winter	69.398	27.474
100 year +40% CC 240 minute summer	83.335	22.023
100 year +40% CC 240 minute winter	55.366	22.023
100 year +40% CC 360 minute summer	62.269	16.024
100 year +40% CC 360 minute winter	40.476	16.024
100 year +40% CC 480 minute summer	48.128	12.719
100 year +40% CC 480 minute winter	31.975	12.719
100 year +40% CC 600 minute summer	38.780	10.607
100 year +40% CC 600 minute winter	26.497	10.607
100 year +40% CC 720 minute summer	34.078	9.133
100 year +40% CC 720 minute winter	22.902	9.133
100 year +40% CC 960 minute summer	27.335	7.198
100 year +40% CC 960 minute winter	18.107	7.198
100 year +40% CC 1440 minute summer	19.179	5.140
100 year +40% CC 1440 minute winter	12.889	5.140
100 year +40% CC 2160 minute summer	13.298	3.675
100 year +40% CC 2160 minute winter	9.163	3.675
100 year +40% CC 2880 minute summer	10.856	2.910
100 year +40% CC 2880 minute winter	7.296	2.910
100 year +40% CC 4320 minute summer	8.112	2.121
100 year +40% CC 4320 minute winter	5.342	2.121
100 year +40% CC 5760 minute summer	6.692	1.713
100 year +40% CC 5760 minute winter	4.331	1.713
100 year +40% CC 7200 minute summer	5.742	1.465
100 year +40% CC 7200 minute winter	3.706	1.465
100 year +40% CC 8640 minute summer	5.084	1.297
100 year +40% CC 8640 minute winter	3.281	1.297
100 year +40% CC 10080 minute summer	4.608	1.176
100 year +40% CC 10080 minute winter	2.974	1.176
100 year +45% CC 15 minute summer	525.947	148.825
100 year +45% CC 15 minute winter	369.085	148.825
100 year +45% CC 30 minute summer	353.991	100.167
100 year +45% CC 30 minute winter	248.415	100.167

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +45% CC 60 minute summer	243.351	64.310
100 year +45% CC 60 minute winter	161.677	64.310
100 year +45% CC 120 minute summer	146.231	38.644
100 year +45% CC 120 minute winter	97.152	38.644
100 year +45% CC 180 minute summer	110.575	28.455
100 year +45% CC 180 minute winter	71.877	28.455
100 year +45% CC 240 minute summer	86.312	22.810
100 year +45% CC 240 minute winter	57.343	22.810
100 year +45% CC 360 minute summer	64.492	16.596
100 year +45% CC 360 minute winter	41.922	16.596
100 year +45% CC 480 minute summer	49.847	13.173
100 year +45% CC 480 minute winter	33.117	13.173
100 year +45% CC 600 minute summer	40.165	10.986
100 year +45% CC 600 minute winter	27.443	10.986
100 year +45% CC 720 minute summer	35.295	9.459
100 year +45% CC 720 minute winter	23.720	9.459
100 year +45% CC 960 minute summer	28.311	7.455
100 year +45% CC 960 minute winter	18.754	7.455
100 year +45% CC 1440 minute summer	19.863	5.324
100 year +45% CC 1440 minute winter	13.350	5.324
100 year +45% CC 2160 minute summer	13.773	3.806
100 year +45% CC 2160 minute winter	9.490	3.806
100 year +45% CC 2880 minute summer	11.244	3.013
100 year +45% CC 2880 minute winter	7.557	3.013
100 year +45% CC 4320 minute summer	8.402	2.197
100 year +45% CC 4320 minute winter	5.533	2.197
100 year +45% CC 5760 minute summer	6.931	1.774
100 year +45% CC 5760 minute winter	4.486	1.774
100 year +45% CC 7200 minute summer	5.947	1.517
100 year +45% CC 7200 minute winter	3.838	1.517
100 year +45% CC 8640 minute summer	5.265	1.343
100 year +45% CC 8640 minute winter	3.398	1.343
100 year +45% CC 10080 minute summer	4.773	1.218
100 year +45% CC 10080 minute winter	3.080	1.218

Results for 2 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
15 minute summer	1	9	14.452	0.054	8.8	0.0955	0.0000	OK
15 minute summer	2	12	14.721	0.071	9.8	0.0822	0.0000	OK
15 minute summer	3	11	14.607	0.090	14.8	0.1214	0.0000	OK
15 minute summer	4	11	14.422	0.076	14.6	0.0865	0.0000	OK
180 minute summer	PB1	112	15.536	0.037	0.3	0.4517	0.0000	OK
180 minute summer	PB2	124	15.531	0.032	0.3	0.3243	0.0000	OK
60 minute summer	PB3	37	15.347	0.017	0.9	0.3141	0.0000	OK
15 minute summer	PB4	12	14.957	0.047	8.9	1.5850	0.0000	OK
30 minute summer	PB5	21	14.823	0.018	1.7	0.5544	0.0000	OK
30 minute summer	PB6	20	15.536	0.016	1.0	0.2968	0.0000	OK
120 minute summer	SAT1	86	14.385	0.165	14.1	13.3240	0.0000	SURCHARGED
15 minute summer	3.1	1	15.337	0.000	0.0	0.0000	0.0000	OK
15 minute summer	3.2	1	15.444	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Dummy	1	15.500	0.000	0.0	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)
15 minute summer	1	1.001	SAT1	8.8	2.148	0.192	0.0185	
15 minute summer	2	1.003	3	9.8	1.070	0.348	0.0508	
15 minute summer	3	1.004	4	14.6	1.473	0.563	0.0812	
15 minute summer	4	1.005	SAT1	14.7	2.140	0.330	0.0175	
180 minute summer	PB1	2.001	PB2	0.1	0.057	0.007	0.0082	
180 minute summer	PB2	2.002	PB3	0.2	0.432	0.005	0.0018	
60 minute summer	PB3	2.003	3	0.7	0.658	0.024	0.0042	
15 minute summer	PB4	2.005	2	6.9	1.129	0.210	0.0467	
30 minute summer	PB5	2.004	2	1.0	0.280	0.031	0.0232	
30 minute summer	PB6	2.006	1	0.6	0.619	0.023	0.0098	
120 minute summer	SAT1	4.001	Dummy	0.0	0.000	0.000	0.0595	0.0
120 minute summer	SAT1	Infiltration		4.0				
15 minute summer	3.1	3.002	1	0.0	0.000	0.000	0.0000	
15 minute summer	3.2	3.001	3.1	0.0	0.000	0.000	0.0000	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	106	14.712	0.314	7.5	0.5507	0.0000	SURCHARGED
30 minute summer	2	22	14.902	0.252	21.7	0.2909	0.0000	SURCHARGED
30 minute summer	3	19	14.830	0.313	30.0	0.4239	0.0000	SURCHARGED
120 minute winter	4	104	14.713	0.367	15.3	0.4153	0.0000	SURCHARGED
120 minute summer	PB1	80	15.587	0.088	0.9	1.0787	0.0000	OK
120 minute summer	PB2	82	15.571	0.072	0.7	0.7321	0.0000	OK
30 minute summer	PB3	20	15.361	0.031	2.8	0.5834	0.0000	OK
15 minute summer	PB4	12	15.004	0.094	22.2	3.1574	0.0000	OK
30 minute summer	PB5	22	14.904	0.099	9.8	3.0397	0.0000	OK
30 minute summer	PB6	20	15.549	0.029	2.6	0.5447	0.0000	OK
120 minute winter	SAT1	106	14.711	0.491	21.9	39.7711	0.0000	SURCHARGED
15 minute summer	3.1	1	15.337	0.000	0.0	0.0000	0.0000	OK
15 minute summer	3.2	1	15.444	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Dummy	1	15.500	0.000	0.0	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)
120 minute winter	1	1.001	SAT1	7.3	1.583	0.158	0.0475	
30 minute summer	2	1.003	3	18.3	1.038	0.648	0.0963	
30 minute summer	3	1.004	4	29.4	1.672	1.137	0.1430	
120 minute winter	4	1.005	SAT1	15.0	1.474	0.338	0.0359	
120 minute summer	PB1	2.001	PB2	0.2	0.050	0.012	0.0249	
120 minute summer	PB2	2.002	PB3	0.4	0.570	0.009	0.0035	
30 minute summer	PB3	2.003	3	2.3	0.928	0.083	0.0101	
15 minute summer	PB4	2.005	2	17.0	1.054	0.518	0.1102	
30 minute summer	PB5	2.004	2	9.1	0.680	0.288	0.0749	
30 minute summer	PB6	2.006	1	2.1	0.898	0.081	0.0237	
120 minute winter	SAT1	4.001	Dummy	0.0	0.000	0.000	0.0595	0.0
120 minute winter	SAT1	Infiltration		4.8				
15 minute summer	3.1	3.002	1	0.0	0.000	0.000	0.0000	
15 minute summer	3.2	3.001	3.1	0.0	0.000	0.000	0.0000	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	114	14.857	0.458	9.4	0.8047	0.0000	SURCHARGED
30 minute summer	2	23	14.977	0.327	24.5	0.3772	0.0000	SURCHARGED
30 minute summer	3	19	14.908	0.391	31.5	0.5289	0.0000	SURCHARGED
120 minute winter	4	114	14.858	0.512	18.3	0.5791	0.0000	SURCHARGED
120 minute summer	PB1	84	15.607	0.108	1.1	1.3253	0.0000	OK
60 minute summer	PB2	53	15.587	0.088	1.4	0.8973	0.0000	OK
30 minute summer	PB3	19	15.366	0.036	3.6	0.6675	0.0000	OK
30 minute summer	PB4	20	15.039	0.129	25.7	4.3556	0.0000	OK
30 minute summer	PB5	23	14.979	0.174	16.2	5.3419	0.0000	SURCHARGED
30 minute summer	PB6	19	15.553	0.033	3.3	0.6247	0.0000	OK
120 minute winter	SAT1	116	14.856	0.636	26.9	51.4783	0.0000	SURCHARGED
15 minute summer	3.1	1	15.337	0.000	0.0	0.0000	0.0000	OK
15 minute summer	3.2	1	15.444	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Dummy	1	15.500	0.000	0.0	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)
120 minute winter	1	1.001	SAT1	8.9	1.559	0.193	0.0475	
30 minute summer	2	1.003	3	18.1	1.036	0.641	0.0963	
30 minute summer	3	1.004	4	30.3	1.720	1.171	0.1430	
120 minute winter	4	1.005	SAT1	18.0	1.526	0.405	0.0359	
120 minute summer	PB1	2.001	PB2	0.2	0.051	0.014	0.0320	
60 minute summer	PB2	2.002	PB3	0.4	0.607	0.010	0.0050	
30 minute summer	PB3	2.003	3	3.0	0.992	0.107	0.0122	
30 minute summer	PB4	2.005	2	17.3	1.112	0.526	0.1275	
30 minute summer	PB5	2.004	2	-10.9	-0.689	-0.348	0.0880	
30 minute summer	PB6	2.006	1	2.8	0.970	0.107	0.0287	
120 minute winter	SAT1	4.001	Dummy	0.0	0.000	0.000	0.0595	0.0
120 minute winter	SAT1	Infiltration		5.1				
15 minute summer	3.1	3.002	1	0.0	0.000	0.000	0.0000	
15 minute summer	3.2	3.001	3.1	0.0	0.000	0.000	0.0000	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	116	15.132	0.734	13.1	1.2885	0.0000	SURCHARGED
120 minute winter	2	118	15.140	0.490	15.4	0.5644	0.0000	SURCHARGED
120 minute winter	3	118	15.138	0.621	21.9	0.8410	0.0000	SURCHARGED
120 minute winter	4	116	15.133	0.787	20.9	0.8906	0.0000	SURCHARGED
120 minute summer	PB1	88	15.657	0.158	1.5	1.9378	0.0000	FLOOD RISK
120 minute summer	PB2	84	15.626	0.127	1.2	1.2990	0.0000	OK
30 minute summer	PB3	19	15.374	0.044	4.9	0.8163	0.0000	OK
30 minute summer	PB4	22	15.168	0.258	36.0	8.7123	0.0000	SURCHARGED
120 minute winter	PB5	118	15.140	0.335	7.1	10.2663	0.0000	FLOOD RISK
15 minute summer	PB6	12	15.561	0.041	5.0	0.7613	0.0000	OK
120 minute winter	SAT1	116	15.132	0.912	31.6	64.9109	0.0000	SURCHARGED
15 minute summer	3.1	1	15.337	0.000	0.0	0.0000	0.0000	OK
15 minute summer	3.2	1	15.444	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Dummy	1	15.500	0.000	0.0	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)
120 minute winter	1	1.001	SAT1	12.5	1.665	0.273	0.0475	
120 minute winter	2	1.003	3	14.1	1.058	0.501	0.0963	
120 minute winter	3	1.004	4	20.9	1.428	0.808	0.1430	
120 minute winter	4	1.005	SAT1	20.4	1.625	0.459	0.0359	
120 minute summer	PB1	2.001	PB2	0.3	0.062	0.017	0.0477	
120 minute summer	PB2	2.002	PB3	0.5	0.646	0.012	0.0050	
30 minute summer	PB3	2.003	3	4.4	1.090	0.154	0.0160	
30 minute summer	PB4	2.005	2	15.7	1.104	0.477	0.1331	
120 minute winter	PB5	2.004	2	-4.5	0.284	-0.143	0.0880	
15 minute summer	PB6	2.006	1	4.1	1.083	0.157	0.0379	
120 minute winter	SAT1	4.001	Dummy	0.0	0.000	0.000	0.0595	0.0
120 minute winter	SAT1	Infiltration		5.4				
15 minute summer	3.1	3.002	1	0.0	0.000	0.000	0.0000	
15 minute summer	3.2	3.001	3.1	0.0	0.000	0.000	0.0000	

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	116	15.187	0.789	13.6	1.3841	0.0000	SURCHARGED
120 minute winter	2	118	15.194	0.544	15.5	0.6270	0.0000	SURCHARGED
120 minute winter	3	118	15.193	0.676	20.9	0.9147	0.0000	SURCHARGED
120 minute winter	4	116	15.188	0.842	20.8	0.9520	0.0000	SURCHARGED
120 minute summer	PB1	90	15.664	0.165	1.6	2.0247	0.0000	FLOOD RISK
120 minute summer	PB2	86	15.633	0.134	1.3	1.3650	0.0000	OK
30 minute summer	PB3	19	15.375	0.045	5.1	0.8345	0.0000	OK
120 minute winter	PB4	118	15.195	0.285	12.6	9.5969	0.0000	SURCHARGED
120 minute winter	PB5	118	15.194	0.389	7.4	11.9309	0.0000	FLOOD RISK
15 minute summer	PB6	12	15.561	0.041	5.2	0.7780	0.0000	OK
120 minute winter	SAT1	116	15.186	0.966	32.0	64.9724	0.0000	SURCHARGED
15 minute summer	3.1	1	15.337	0.000	0.0	0.0000	0.0000	OK
15 minute summer	3.2	1	15.444	0.000	0.0	0.0000	0.0000	OK
15 minute summer	Dummy	1	15.500	0.000	0.0	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)
120 minute winter	1	1.001	SAT1	13.0	1.677	0.283	0.0475	
120 minute winter	2	1.003	3	13.5	1.067	0.478	0.0963	
120 minute winter	3	1.004	4	20.8	1.433	0.805	0.1430	
120 minute winter	4	1.005	SAT1	20.6	1.642	0.463	0.0359	
120 minute summer	PB1	2.001	PB2	0.3	0.063	0.017	0.0497	
120 minute summer	PB2	2.002	PB3	0.5	0.654	0.012	0.0052	
30 minute summer	PB3	2.003	3	4.5	1.102	0.161	0.0165	
120 minute winter	PB4	2.005	2	11.8	1.107	0.360	0.1331	
120 minute winter	PB5	2.004	2	-4.7	-0.292	-0.151	0.0880	
15 minute summer	PB6	2.006	1	4.3	1.096	0.164	0.0391	
120 minute winter	SAT1	4.001	Dummy	0.0	0.000	0.000	0.0595	0.0
120 minute winter	SAT1	Infiltration		5.4				
15 minute summer	3.1	3.002	1	0.0	0.000	0.000	0.0000	
15 minute summer	3.2	3.001	3.1	0.0	0.000	0.000	0.0000	