

Design Settings

Rainfall Methodology	FEH-13	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	1.000
CV	0.750	Preferred Cover Depth (m)	0.450
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	✓
Maximum Rainfall (mm/hr)	50.0		

Circular Link Type

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

Available Diameters (mm)

100 | 150

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
RE01	0.006	5.00	47.300	150	5005.139	6986.346	0.600
S02			48.690	450	5006.066	7010.351	2.150
RE03	0.009	5.00	47.300	150	4998.307	6986.598	0.600
S04	0.013	5.00	48.640	450	4999.147	7010.605	2.146
S05	0.003	5.00	48.960	450	4990.275	7016.061	2.000
S06	0.017	5.00	48.450	450	4991.336	7010.919	2.008
S07FC			48.000	1200	4991.128	7005.511	1.612
OUTFALL			47.840		4991.077	7004.200	1.465

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	RE01	S02	24.023	0.600	46.700	46.540	0.160	150.1	150	5.49	48.6
1.001	S02	S04	6.924	0.600	46.540	46.494	0.046	150.5	150	5.63	48.1
2.000	RE03	S04	24.022	0.600	46.700	46.540	0.160	150.1	150	5.49	48.6
1.002	S04	S06	7.817	0.600	46.494	46.442	0.052	150.3	150	5.79	47.5
3.000	S05	S06	5.250	0.600	46.960	46.442	0.518	10.1	150	5.03	50.0
1.003	S06	S07FC	5.412	0.600	46.442	46.388	0.054	100.0	150	5.88	47.1
1.004	S07FC	OUTFALL	1.312	0.600	46.388	46.375	0.013	100.0	150	5.90	47.1

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	0.818	14.4	0.8	0.450	2.000	0.006	0.0	24	0.442
1.001	0.817	14.4	0.8	2.000	1.996	0.006	0.0	24	0.441
2.000	0.818	14.4	1.2	0.450	1.950	0.009	0.0	30	0.498
1.002	0.817	14.4	3.7	1.996	1.858	0.029	0.0	52	0.686
3.000	3.183	56.2	0.4	1.850	1.858	0.003	0.0	10	0.949
1.003	1.005	17.8	6.4	1.858	1.462	0.050	0.0	62	0.921
1.004	1.005	17.8	6.3	1.462	1.315	0.050	0.0	62	0.921

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	24.023	150.1	150	Circular	47.300	46.700	0.450	48.690	46.540	2.000
1.001	6.924	150.5	150	Circular	48.690	46.540	2.000	48.640	46.494	1.996
2.000	24.022	150.1	150	Circular	47.300	46.700	0.450	48.640	46.540	1.950
1.002	7.817	150.3	150	Circular	48.640	46.494	1.996	48.450	46.442	1.858
3.000	5.250	10.1	150	Circular	48.960	46.960	1.850	48.450	46.442	1.858
1.003	5.412	100.0	150	Circular	48.450	46.442	1.858	48.000	46.388	1.462
1.004	1.312	100.0	150	Circular	48.000	46.388	1.462	47.840	46.375	1.315

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	RE01	150	Manhole	Manhole	S02	450	Manhole	Manhole
1.001	S02	450	Manhole	Manhole	S04	450	Manhole	Manhole
2.000	RE03	150	Manhole	Manhole	S04	450	Manhole	Manhole
1.002	S04	450	Manhole	Manhole	S06	450	Manhole	Manhole
3.000	S05	450	Manhole	Manhole	S06	450	Manhole	Manhole
1.003	S06	450	Manhole	Manhole	S07FC	1200	Manhole	Manhole
1.004	S07FC	1200	Manhole	Manhole	OUTFALL		Junction	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
RE01	5005.139	6986.346	47.300	0.600	150				
						0	1.000	46.700	150
S02	5006.066	7010.351	48.690	2.150	450		1	1.000	46.540
						0	1.001	46.540	150
RE03	4998.307	6986.598	47.300	0.600	150				
						0	2.000	46.700	150
S04	4999.147	7010.605	48.640	2.146	450		1	2.000	46.540
						2	1.001	46.494	150
						0	1.002	46.494	150
S05	4990.275	7016.061	48.960	2.000	450				
						0	3.000	46.960	150
S06	4991.336	7010.919	48.450	2.008	450		1	3.000	46.442
						2	1.002	46.442	150
						0	1.003	46.442	150
S07FC	4991.128	7005.511	48.000	1.612	1200		1	1.003	46.388
						0	1.004	46.388	150

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
OUTFALL	4991.077	7004.200	47.840	1.465		1	1.004	46.375	150

Simulation Settings

Rainfall Methodology	FEH-13	Skip Steady State	x	100 year (l/s)	5.9
Summer CV	0.750	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	0.840	Additional Storage (m ³ /ha)	0.0		
Analysis Speed	Detailed	Check Discharge Rate(s)	✓		

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 %)
2	0	0	0
5	0	0	0
10	0	0	0
30	0	0	0
30	40	0	0
100	0	0	0
100	45	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	1.95
Greenfield Method	IH124	Growth Factor 100 year	2.48
Positively Drained Area (ha)		Betterment (%)	0
SAAR (mm)		QBar	
Soil Index	1	Q 1 year (l/s)	
SPR	0.10	Q 30 year (l/s)	
Region	1	Q 100 year (l/s)	
Growth Factor 1 year	0.85		

Node S07FC Online Orifice Control

Flap Valve	x	Design Depth (m)	0.750	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Design Flow (l/s)	5.9		
Invert Level (m)	46.388	Diameter (m)	0.057		

Node S06 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	46.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	26

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	10.0	0.0	0.750	10.0	0.0	0.751	0.0	0.0

Node S06 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	46.442
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	28

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	5.0	0.0	0.800	5.0	0.0	0.801	0.0	0.0

Approval Settings

Node Size	✓	Minimum Full Bore Velocity (m/s)	
Node Losses	✓	Maximum Full Bore Velocity (m/s)	3.000
Link Size	✓	Proportional Velocity	✓
Minimum Diameter (mm)	150	Return Period (years)	
Link Length	✓	Minimum Proportional Velocity (m/s)	0.750
Maximum Length (m)	100.000	Maximum Proportional Velocity (m/s)	3.000
Coordinates	✓	Surcharged Depth	✓
Accuracy (m)	1.000	Return Period (years)	
Crossings	✓	Maximum Surcharged Depth (m)	0.100
Cover Depth	✓	Flooding	✓
Minimum Cover Depth (m)		Return Period (years)	30
Maximum Cover Depth (m)	3.000	Time to Half Empty	x
Backdrops	✓	Discharge Rates	✓
Minimum Backdrop Height (m)		Discharge Volume	✓
Maximum Backdrop Height (m)	1.500	100 year 360 minute (m ³)	
Full Bore Velocity	✓		

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
2 year 15 minute summer	102.811	29.092	5 year 15 minute summer	153.071	43.314
2 year 15 minute winter	72.148	29.092	5 year 15 minute winter	107.418	43.314
2 year 30 minute summer	67.853	19.200	5 year 30 minute summer	101.287	28.661
2 year 30 minute winter	47.616	19.200	5 year 30 minute winter	71.079	28.661
2 year 60 minute summer	46.543	12.300	5 year 60 minute summer	69.160	18.277
2 year 60 minute winter	30.922	12.300	5 year 60 minute winter	45.949	18.277
2 year 120 minute summer	31.429	8.306	5 year 120 minute summer	44.133	11.663
2 year 120 minute winter	20.881	8.306	5 year 120 minute winter	29.321	11.663
2 year 180 minute summer	25.415	6.540	5 year 180 minute summer	34.717	8.934
2 year 180 minute winter	16.520	6.540	5 year 180 minute winter	22.567	8.934
2 year 240 minute summer	20.823	5.503	5 year 240 minute summer	27.971	7.392
2 year 240 minute winter	13.834	5.503	5 year 240 minute winter	18.584	7.392
2 year 360 minute summer	16.700	4.297	5 year 360 minute summer	22.024	5.667
2 year 360 minute winter	10.855	4.297	5 year 360 minute winter	14.316	5.667
2 year 480 minute summer	13.584	3.590	5 year 480 minute summer	17.711	4.680
2 year 480 minute winter	9.025	3.590	5 year 480 minute winter	11.767	4.680
2 year 600 minute summer	11.384	3.114	5 year 600 minute summer	14.730	4.029
2 year 600 minute winter	7.778	3.114	5 year 600 minute winter	10.065	4.029
2 year 720 minute summer	10.327	2.768	5 year 720 minute summer	13.289	3.562
2 year 720 minute winter	6.940	2.768	5 year 720 minute winter	8.931	3.562
2 year 960 minute summer	8.696	2.290	5 year 960 minute summer	11.120	2.928
2 year 960 minute winter	5.761	2.290	5 year 960 minute winter	7.366	2.928
2 year 1440 minute summer	6.513	1.746	5 year 1440 minute summer	8.249	2.211
2 year 1440 minute winter	4.377	1.746	5 year 1440 minute winter	5.544	2.211

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
10 year 15 minute summer	189.206	53.539	30 year +40% CC 60 minute summer	159.334	42.107
10 year 15 minute winter	132.776	53.539	30 year +40% CC 60 minute winter	105.858	42.107
10 year 30 minute summer	125.784	35.593	30 year +40% CC 120 minute summer	97.004	25.635
10 year 30 minute winter	88.270	35.593	30 year +40% CC 120 minute winter	64.447	25.635
10 year 60 minute summer	85.883	22.696	30 year +40% CC 180 minute summer	75.104	19.327
10 year 60 minute winter	57.059	22.696	30 year +40% CC 180 minute winter	48.820	19.327
10 year 120 minute summer	53.325	14.092	30 year +40% CC 240 minute summer	60.062	15.873
10 year 120 minute winter	35.428	14.092	30 year +40% CC 240 minute winter	39.904	15.873
10 year 180 minute summer	41.537	10.689	30 year +40% CC 360 minute summer	46.945	12.080
10 year 180 minute winter	27.000	10.689	30 year +40% CC 360 minute winter	30.515	12.080
10 year 240 minute summer	33.285	8.796	30 year +40% CC 480 minute summer	37.704	9.964
10 year 240 minute winter	22.114	8.796	30 year +40% CC 480 minute winter	25.049	9.964
10 year 360 minute summer	26.015	6.695	30 year +40% CC 600 minute summer	31.345	8.574
10 year 360 minute winter	16.911	6.695	30 year +40% CC 600 minute winter	21.417	8.574
10 year 480 minute summer	20.858	5.512	30 year +40% CC 720 minute summer	28.268	7.576
10 year 480 minute winter	13.857	5.512	30 year +40% CC 720 minute winter	18.998	7.576
10 year 600 minute summer	17.315	4.736	30 year +40% CC 960 minute summer	23.596	6.213
10 year 600 minute winter	11.831	4.736	30 year +40% CC 960 minute winter	15.630	6.213
10 year 720 minute summer	15.599	4.181	30 year +40% CC 1440 minute summer	17.331	4.645
10 year 720 minute winter	10.483	4.181	30 year +40% CC 1440 minute winter	11.648	4.645
10 year 960 minute summer	13.012	3.426	100 year 15 minute summer	322.707	91.315
10 year 960 minute winter	8.620	3.426	100 year 15 minute winter	226.461	91.315
10 year 1440 minute summer	9.612	2.576	100 year 30 minute summer	218.604	61.857
10 year 1440 minute winter	6.460	2.576	100 year 30 minute winter	153.407	61.857
30 year 15 minute summer	247.746	70.103	100 year 60 minute summer	151.032	39.913
30 year 15 minute winter	173.857	70.103	100 year 60 minute winter	100.342	39.913
30 year 30 minute summer	165.619	46.865	100 year 120 minute summer	92.301	24.392
30 year 30 minute winter	116.224	46.865	100 year 120 minute winter	61.322	24.392
30 year 60 minute summer	113.810	30.077	100 year 180 minute summer	71.956	18.517
30 year 60 minute winter	75.613	30.077	100 year 180 minute winter	46.773	18.517
30 year 120 minute summer	69.289	18.311	100 year 240 minute summer	57.870	15.293
30 year 120 minute winter	46.034	18.311	100 year 240 minute winter	38.447	15.293
30 year 180 minute summer	53.646	13.805	100 year 360 minute summer	45.502	11.709
30 year 180 minute winter	34.871	13.805	100 year 360 minute winter	29.578	11.709
30 year 240 minute summer	42.902	11.338	100 year 480 minute summer	36.629	9.680
30 year 240 minute winter	28.503	11.338	100 year 480 minute winter	24.335	9.680
30 year 360 minute summer	33.532	8.629	100 year 600 minute summer	30.441	8.326
30 year 360 minute winter	21.797	8.629	100 year 600 minute winter	20.799	8.326
30 year 480 minute summer	26.931	7.117	100 year 720 minute summer	27.402	7.344
30 year 480 minute winter	17.892	7.117	100 year 720 minute winter	18.416	7.344
30 year 600 minute summer	22.390	6.124	100 year 960 minute summer	22.724	5.984
30 year 600 minute winter	15.298	6.124	100 year 960 minute winter	15.053	5.984
30 year 720 minute summer	20.191	5.411	100 year 1440 minute summer	16.480	4.417
30 year 720 minute winter	13.570	5.411	100 year 1440 minute winter	11.075	4.417
30 year 960 minute summer	16.854	4.438	100 year +45% CC 15 minute summer	467.925	132.407
30 year 960 minute winter	11.164	4.438	100 year +45% CC 15 minute winter	328.369	132.407
30 year 1440 minute summer	12.379	3.318	100 year +45% CC 30 minute summer	316.976	89.693
30 year 1440 minute winter	8.320	3.318	100 year +45% CC 30 minute winter	222.440	89.693
30 year +40% CC 15 minute summer	346.844	98.145	100 year +45% CC 60 minute summer	218.997	57.874
30 year +40% CC 15 minute winter	243.399	98.145	100 year +45% CC 60 minute winter	145.496	57.874
30 year +40% CC 30 minute summer	231.867	65.610	100 year +45% CC 120 minute summer	133.836	35.369
30 year +40% CC 30 minute winter	162.714	65.610	100 year +45% CC 120 minute winter	88.917	35.369

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +45% CC 180 minute summer	104.337	26.849	100 year +45% CC 600 minute summer	44.140	12.073
100 year +45% CC 180 minute winter	67.822	26.849	100 year +45% CC 600 minute winter	30.159	12.073
100 year +45% CC 240 minute summer	83.911	22.175	100 year +45% CC 720 minute summer	39.733	10.649
100 year +45% CC 240 minute winter	55.748	22.175	100 year +45% CC 720 minute winter	26.703	10.649
100 year +45% CC 360 minute summer	65.979	16.979	100 year +45% CC 960 minute summer	32.950	8.677
100 year +45% CC 360 minute winter	42.888	16.979	100 year +45% CC 960 minute winter	21.827	8.677
100 year +45% CC 480 minute summer	53.111	14.036	100 year +45% CC 1440 minute summer	23.896	6.404
100 year +45% CC 480 minute winter	35.286	14.036	100 year +45% CC 1440 minute winter	16.059	6.404

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 (m ³)	Flood (m ³)	Status
15 minute summer	RE01	10	46.724	0.024	0.8	0.0004	0.0000	OK
15 minute winter	S02	14	46.571	0.031	0.8	0.0050	0.0000	OK
15 minute winter	RE03	11	46.729	0.029	1.2	0.0005	0.0000	OK
15 minute winter	S04	14	46.570	0.076	3.7	0.0121	0.0000	OK
15 minute summer	S05	11	46.969	0.009	0.4	0.0015	0.0000	OK
15 minute winter	S06	15	46.568	0.126	6.3	0.8652	0.0000	OK
15 minute winter	S07FC	15	46.567	0.179	3.2	0.2026	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	2.6	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
15 minute summer	RE01	1.000	S02	0.8	0.456	0.056	0.0434	
15 minute winter	S02	1.001	S04	0.8	0.222	0.054	0.0401	
15 minute winter	RE03	2.000	S04	1.2	0.494	0.082	0.0577	
15 minute winter	S04	1.002	S06	3.6	0.476	0.247	0.0968	
15 minute summer	S05	3.000	S06	0.4	0.134	0.007	0.0397	
15 minute winter	S06	1.003	S07FC	3.2	0.472	0.183	0.0905	
15 minute winter	S07FC	Orifice	OUTFALL	2.6				3.0

Results for 5 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	RE01	10	46.730	0.030	1.2	0.0005	0.0000	OK
30 minute winter	S02	24	46.631	0.091	1.1	0.0145	0.0000	OK
15 minute winter	RE03	10	46.736	0.036	1.9	0.0007	0.0000	OK
30 minute winter	S04	24	46.631	0.137	4.1	0.0218	0.0000	OK
15 minute summer	S05	11	46.971	0.011	0.6	0.0018	0.0000	OK
30 minute winter	S06	24	46.630	0.188	6.9	1.5514	0.0000	SURCHARGED
30 minute winter	S07FC	24	46.627	0.239	3.2	0.2708	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	3.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
15 minute winter	RE01	1.000	S02	1.2	0.505	0.084	0.1431	
30 minute winter	S02	1.001	S04	0.8	0.211	0.053	0.0972	
15 minute winter	RE03	2.000	S04	1.8	0.555	0.128	0.1497	
30 minute winter	S04	1.002	S06	3.7	0.436	0.257	0.1347	
15 minute summer	S05	3.000	S06	0.6	0.141	0.011	0.0476	
30 minute winter	S06	1.003	S07FC	3.2	0.493	0.180	0.0953	
30 minute winter	S07FC	Orifice	OUTFALL	3.1				6.0

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 (m ³)	Flood (m ³)	Status
15 minute summer	RE01	10	46.733	0.033	1.5	0.0006	0.0000	OK
30 minute winter	S02	24	46.684	0.144	1.4	0.0230	0.0000	OK
15 minute winter	RE03	10	46.740	0.040	2.3	0.0007	0.0000	OK
30 minute winter	S04	24	46.684	0.190	4.4	0.0303	0.0000	SURCHARGED
15 minute winter	S05	10	46.972	0.012	0.8	0.0020	0.0000	OK
30 minute winter	S06	25	46.683	0.241	7.6	2.1418	0.0000	SURCHARGED
30 minute winter	S07FC	25	46.680	0.292	3.6	0.3299	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	3.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
15 minute summer	RE01	1.000	S02	1.5	0.529	0.102	0.1799	
30 minute winter	S02	1.001	S04	0.8	0.210	0.058	0.1212	
15 minute winter	RE03	2.000	S04	2.3	0.561	0.158	0.2208	
30 minute winter	S04	1.002	S06	3.8	0.433	0.264	0.1376	
15 minute winter	S05	3.000	S06	0.8	0.157	0.014	0.0480	
30 minute winter	S06	1.003	S07FC	3.6	0.517	0.202	0.0953	
30 minute winter	S07FC	Orifice	OUTFALL	3.5				7.4

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
30 minute winter	RE01	25	46.771	0.071	1.6	0.0013	0.0000	OK
30 minute winter	S02	25	46.770	0.230	1.7	0.0366	0.0000	SURCHARGED
30 minute winter	RE03	25	46.771	0.071	2.4	0.0013	0.0000	OK
30 minute winter	S04	25	46.770	0.276	6.2	0.0439	0.0000	SURCHARGED
15 minute winter	S05	10	46.974	0.014	1.0	0.0022	0.0000	OK
30 minute winter	S06	25	46.768	0.326	10.1	3.0958	0.0000	SURCHARGED
30 minute winter	S07FC	25	46.764	0.376	4.2	0.4254	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	3.7	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
30 minute winter	RE01	1.000	S02	1.6	0.483	0.110	0.3093	
30 minute winter	S02	1.001	S04	0.9	0.214	0.061	0.1219	
30 minute winter	RE03	2.000	S04	2.4	0.523	0.166	0.3096	
30 minute winter	S04	1.002	S06	5.1	0.426	0.355	0.1376	
15 minute winter	S05	3.000	S06	1.0	0.153	0.018	0.0484	
30 minute winter	S06	1.003	S07FC	4.2	0.516	0.238	0.0953	
30 minute winter	S07FC	Orifice	OUTFALL	4.0				9.8

Results for 30 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 (m ³)	Flood (m ³)	Status
30 minute winter	RE01	25	46.931	0.231	2.2	0.0042	0.0000	SURCHARGED
30 minute winter	S02	25	46.930	0.390	2.3	0.0621	0.0000	SURCHARGED
30 minute winter	RE03	25	46.931	0.231	3.3	0.0042	0.0000	SURCHARGED
30 minute winter	S04	25	46.930	0.436	8.5	0.0694	0.0000	SURCHARGED
15 minute winter	S05	10	46.977	0.017	1.5	0.0027	0.0000	OK
30 minute winter	S06	26	46.927	0.485	14.2	4.8689	0.0000	SURCHARGED
30 minute winter	S07FC	26	46.921	0.533	5.1	0.6031	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	4.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
30 minute winter	RE01	1.000	S02	2.2	0.480	0.149	0.4229	
30 minute winter	S02	1.001	S04	-1.0	0.204	-0.068	0.1219	
30 minute winter	RE03	2.000	S04	3.2	0.542	0.223	0.4229	
30 minute winter	S04	1.002	S06	7.0	0.446	0.482	0.1376	
15 minute winter	S05	3.000	S06	1.5	0.156	0.026	0.0491	
30 minute winter	S06	1.003	S07FC	5.1	0.543	0.288	0.0953	
30 minute winter	S07FC	Orifice	OUTFALL	4.8				13.6

Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
30 minute winter	RE01	25	46.897	0.197	2.1	0.0035	0.0000	SURCHARGED
30 minute winter	S02	25	46.897	0.357	2.1	0.0567	0.0000	SURCHARGED
30 minute winter	RE03	25	46.897	0.197	3.1	0.0035	0.0000	SURCHARGED
30 minute winter	S04	25	46.897	0.403	8.1	0.0640	0.0000	SURCHARGED
15 minute winter	S05	10	46.976	0.016	1.4	0.0026	0.0000	OK
30 minute winter	S06	25	46.894	0.452	13.5	4.5009	0.0000	SURCHARGED
30 minute winter	S07FC	25	46.889	0.500	4.9	0.5661	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	4.1	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
30 minute winter	RE01	1.000	S02	2.1	0.487	0.142	0.4229	
30 minute winter	S02	1.001	S04	0.8	0.205	0.059	0.1219	
30 minute winter	RE03	2.000	S04	3.1	0.537	0.212	0.4229	
30 minute winter	S04	1.002	S06	6.6	0.433	0.460	0.1376	
15 minute winter	S05	3.000	S06	1.4	0.157	0.025	0.0489	
30 minute winter	S06	1.003	S07FC	4.9	0.534	0.275	0.0953	
30 minute winter	S07FC	Orifice	OUTFALL	4.7				12.9

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
60 minute winter	RE01	45	47.171	0.471	2.1	0.0085	0.0000	FLOOD RISK
60 minute winter	S02	45	47.171	0.631	1.5	0.1003	0.0000	SURCHARGED
60 minute winter	RE03	45	47.172	0.472	3.1	0.0085	0.0000	FLOOD RISK
60 minute winter	S04	45	47.171	0.677	7.6	0.1076	0.0000	SURCHARGED
60 minute winter	S05	45	47.167	0.207	1.4	0.0329	0.0000	SURCHARGED
60 minute winter	S06	45	47.167	0.725	13.9	7.5430	0.0000	SURCHARGED
60 minute winter	S07FC	45	47.158	0.770	6.0	0.8707	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	46.375	0.000	5.1	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
60 minute winter	RE01	1.000	S02	1.5	0.429	0.107	0.4229	
60 minute winter	S02	1.001	S04	-1.0	0.192	-0.066	0.1219	
60 minute winter	RE03	2.000	S04	2.5	0.471	0.173	0.4229	
60 minute winter	S04	1.002	S06	7.0	0.448	0.482	0.1376	
60 minute winter	S05	3.000	S06	1.1	0.153	0.020	0.0924	
60 minute winter	S06	1.003	S07FC	6.0	0.533	0.339	0.0953	
60 minute winter	S07FC	Orifice	OUTFALL	5.8				24.2