

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)	0.200
CV	0.750	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	✓
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	0.056	5.00	55.690	600	468700.712	173314.275	0.790
2	0.025	5.00	55.570	600	468677.864	173346.146	1.350
3			55.680	600	468682.665	173339.276	1.535
4	0.005	5.00	55.440	600	468662.041	173338.480	1.350
5			55.350	600	468669.939	173335.101	1.335
6			55.390	600	468672.318	173331.577	1.475
7	0.016	5.00	56.200	600	468684.768	173302.662	1.350
8			55.390	600	468666.357	173327.851	1.540
9	0.004	5.00	55.400	600	468664.407	173348.420	1.350
10	0.008	5.00	55.640	600	468651.271	173345.970	1.690
11	0.010	5.00	55.780	600	468644.007	173340.141	1.905
12	0.005	5.00	55.630	600	468651.820	173330.934	1.855
13			55.780	600	468656.632	173323.056	2.105
14			55.620	600	468660.524	173324.056	1.995
14_OUT			55.510	600	468658.327	173331.080	1.960

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	1	3	30.834	0.600	54.900	54.145	0.755	40.8	150	5.33	50.0
2.000	2	3	8.381	0.600	54.220	54.145	0.075	111.8	150	5.15	50.0
1.001	3	6	12.897	0.600	54.145	53.915	0.230	56.1	150	5.49	50.0
3.000	4	5	8.590	0.600	54.090	54.015	0.075	114.5	150	5.15	50.0
3.001	5	6	4.252	0.600	54.015	53.915	0.100	42.5	150	5.20	50.0
1.002	6	8	7.030	0.600	53.915	53.850	0.065	108.1	150	5.61	50.0
4.000	7	8	31.200	0.600	54.850	53.850	1.000	31.2	150	5.29	50.0
1.003	8	14	6.959	0.600	53.850	53.625	0.225	30.9	150	5.67	50.0
5.000	9	10	13.363	0.600	54.050	53.950	0.100	133.6	150	5.26	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)
1.000	1.579	27.9	7.6	0.640	1.385	0.056	0.0	54	1.350
2.000	0.950	16.8	3.4	1.200	1.385	0.025	0.0	45	0.743
1.001	1.346	23.8	11.0	1.385	1.325	0.081	0.0	72	1.321
3.000	0.938	16.6	0.7	1.200	1.185	0.005	0.0	21	0.459
3.001	1.547	27.3	0.7	1.185	1.325	0.005	0.0	16	0.646
1.002	0.966	17.1	11.7	1.325	1.390	0.086	0.0	91	1.038
4.000	1.808	32.0	2.2	1.200	1.390	0.016	0.0	27	1.040
1.003	1.816	32.1	13.8	1.390	1.845	0.102	0.0	69	1.751
5.000	0.867	15.3	0.5	1.200	1.540	0.004	0.0	20	0.409

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)
5.001	10	11	9.314	0.600	53.950	53.875	0.075	124.2	150	5.43	50.0
5.002	11	12	12.075	0.600	53.875	53.775	0.100	120.8	150	5.65	50.0
5.003	12	13	9.231	0.600	53.775	53.675	0.100	92.3	150	5.80	49.7
5.004	13	14	4.018	0.600	53.675	53.625	0.050	80.4	150	5.86	49.4
1.004	14	14_OUT	7.360	0.600	53.625	53.550	0.075	98.1	150	5.98	48.9

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)
5.001	0.900	15.9	1.6	1.540	1.755	0.012	0.0	33	0.581
5.002	0.913	16.1	3.0	1.755	1.705	0.022	0.0	44	0.699
5.003	1.046	18.5	3.6	1.705	1.955	0.027	0.0	45	0.812
5.004	1.122	19.8	3.6	1.955	1.845	0.027	0.0	43	0.853
1.004	1.014	17.9	17.1	1.845	1.810	0.129	0.0	117	1.151

Simulation Settings

Rainfall Methodology	FEH-13	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Skip Steady State	✓	Check Discharge Rate(s)	x
Winter CV	0.840	Drain Down Time (mins)	480	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160
30	120	240	480	720	1440	2880

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

Node 14_OUT Online Orifice Control

Flap Valve	x	Invert Level (m)	53.550	Discharge Coefficient	0.600
Replaces Downstream Link	✓	Diameter (m)	0.027		

Node 14 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	54.220
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	18.0	0.0	0.800	18.0	0.0	0.801	0.0	0.0

Node 1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	55.240	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.300
Safety Factor	2.0	Width (m)	12.000	Inf Depth (m)	
Porosity	0.30	Length (m)	28.000		

Node 2 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	55.120	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.300
Safety Factor	2.0	Width (m)	10.000	Inf Depth (m)	
Porosity	0.30	Length (m)	20.000		

Node 9 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	54.950	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.300
Safety Factor	2.0	Width (m)	9.000	Inf Depth (m)	
Porosity	0.30	Length (m)	6.000		

Node 10 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	55.190	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.300
Safety Factor	2.0	Width (m)	5.000	Inf Depth (m)	
Porosity	0.30	Length (m)	6.000		

Node 11 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	55.330	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.300
Safety Factor	2.0	Width (m)	6.000	Inf Depth (m)	
Porosity	0.30	Length (m)	5.000		

Node 12 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	55.180	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.300
Safety Factor	2.0	Width (m)	2.000	Inf Depth (m)	
Porosity	0.30	Length (m)	10.000		