Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
102	0.008	4.00	4.350	450	28572.360	27065.942	0.450
101	0.006	4.00	4.350	450	28572.360	27074.321	0.450
103			4.350		28572.360	27070.157	0.451
104			4.350		28573.594	27070.157	0.464

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)
102.000	102	103	4.215	0.600	3.900	3.899	0.001	4215.0	150	4.48	50.0
101.000	101	103	4.164	0.600	3.900	3.899	0.001	4164.0	150	4.47	50.0
1.001	103	104	1.234	0.600	3.899	3.886	0.013	94.9	150	4.50	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)
102.000	0.146	2.6	1.1	0.300	0.301	0.008	0.0	68	0.139
101.000	0.147	2.6	0.8	0.300	0.301	0.006	0.0	58	0.130
1.001	1.031	18.2	1.9	0.301	0.314	0.014	0.0	33	0.667

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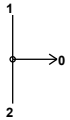
Pipeline Schedule

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)
102.000	4.215	4215.0	150	Circular	4.350	3.900	0.300	4.350	3.899	0.301
101.000	4.164	4164.0	150	Circular	4.350	3.900	0.300	4.350	3.899	0.301
1.001	1.234	94.9	150	Circular	4.350	3.899	0.301	4.350	3.886	0.314

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Node Type
102.000	102	450	Manhole	Private_1	103	Junction
101.000	101	450	Manhole	Private_1	103	Junction
1.001	103		Junction		104	Junction

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
102	28572.360	27065.942	4.350	0.450	450	 0	102.000	3.900	150
101	28572.360	27074.321	4.350	0.450	450	 0	101.000	3.900	150
103	28572.360	27070.157	4.350	0.451		 1 2 0	101.000 102.000 1.001	3.899 3.899 3.899	150 150 150
104	28573.594	27070.157	4.350	0.464		 1	1.001	3.886	150

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Simulation Settings

Rainfall Methodology	FEH-13	Analysis Speed	Detailed	Drain Down Time (mins)	240	Check Discharge Rate(s)	x
Summer CV	0.750	Skip Steady State	x	Additional Storage (m³/ha)	20.0	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
30	0	10	0	100	40	10	0

Node 104 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.90000	Porosity	0.30	Width (m)	6.500	Depth (m)	
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	3.900	Length (m)	10.000	Inf Depth (m)	
Safety Factor	4.0	Time to half empty (mins)	6	Slope (1:X)	9999.0		

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Results for 30 year +10% A 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	102	10	3.975	0.075	3.6	0.0413	0.0000	OK
15 minute summer	101	10	3.970	0.070	2.7	0.0315	0.0000	OK
15 minute summer	103	10	3.960	0.061	6.3	0.0000	0.0000	OK
15 minute summer	104	12	3.949	0.063	6.3	0.9372	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	102	102.000	103	3.6	0.465	1.392	0.0326
15 minute summer	101	101.000	103	2.7	0.368	1.036	0.0305
15 minute summer	103	1.001	104	6.3	1.146	0.344	0.0079
15 minute summer	104	Infiltration		3.9			

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Results for 100 year +40% CC +10% A 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
30 minute summer	102	21	4.007	0.107	5.8	0.0590	0.0000	OK
30 minute summer	101	21	4.007	0.107	4.4	0.0482	0.0000	OK
30 minute summer	103	21	4.006	0.107	9.9	0.0000	0.0000	OK
30 minute summer	104	21	4.007	0.121	9.6	2.0693	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	102	102.000	103	5.7	0.531	2.194	0.0568
30 minute summer	101	101.000	103	4.3	0.414	1.641	0.0559
30 minute summer	103	1.001	104	9.6	1.107	0.527	0.0177
30 minute summer	104	Infiltration		4.1			

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