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)	0.600
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	0.003	5.00	3.000	600	137.008	113.407	0.750
2	0.005		3.000	600	141.866	125.194	0.835

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	2	12.749	0.600	2.250	2.165	0.085	150.0	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	0.818	14.5	0.5	0.600	0.685	0.003	0.0	20	0.393

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	✓	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	2880	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m³/ha)	20.0		

Storm Durations

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

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	45	0	0

Node 1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.01040	Invert Level (m)	2.150	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	1392	Depth (m)	0.650
Safety Factor	2.0	Width (m)	0.900	Inf Depth (m)	
Porosity	0.30	Length (m)	8.000		

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Node 2 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.01040	Invert Level (m)	2.150	Slope (1:X)	300.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	952	Depth (m)	0.650
Safety Factor	2.0	Width (m)	4.800	Inf Depth (m)	
Porosity	0.30	Length (m)	5.000		

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Results for 2 year Critical Storm Duration. Lowest mass balance: 99.37%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	420	2.295	0.045	0.1	0.3019	0.0000	OK
600 minute winter	2	420	2.295	0.130	0.2	1.0374	0.0000	OK

Link Event (Velocity)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	1	1.000	2	0.2	0.102	0.016	0.0452
600 minute winter	1	Infiltration		0.0			
600 minute winter	2	Infiltration		0.0			

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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.37%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	344	2.514	0.264	0.2	0.8554	0.0000	SURCHARGED
360 minute winter	2	344	2.514	0.349	0.5	2.7053	0.0000	OK

Link Event (Velocity)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	1	1.000	2	1.3	0.225	0.092	0.1518
360 minute winter	1	Infiltration		0.0			
360 minute winter	2	Infiltration		0.0			

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Results for 100 year Critical Storm Duration. Lowest mass balance: 99.37%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	368	2.643	0.393	0.4	1.1805	0.0000	SURCHARGED
360 minute summer	2	368	2.643	0.478	0.8	3.6851	0.0000	OK

Link Event (Velocity)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	1	1.000	2	1.8	0.252	0.122	0.1911
360 minute summer	1	Infiltration		0.0			
360 minute summer	2	Infiltration		0.0			

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.37%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	352	3.000	0.750	0.3	1.6497	0.8329	FLOOD
600 minute summer	2	465	3.000	0.835	0.8	4.9610	0.7135	FLOOD

Link Event (Velocity)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	1	1.000	2	2.2	0.296	0.149	0.2244
480 minute winter	1	Infiltration		0.0			
600 minute summer	2	Infiltration		0.0			

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