

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	1.200
Return Period (years)	10	Maximum Rainfall (mm/hr)	100.0	Include Intermediate Ground	✓
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00	Enforce best practice design rules	x
CV	1.000	Connection Type	Level Soffits		
Time of Entry (mins)	6.00	Minimum Backdrop Height (m)	0.200		

Name	Area (ha)	T of E (mins)	Cover Level (m)	Depth (m)	Invert Level (m)
CP	0.039	6.00	49.750	1.300	48.450
SA01			49.550	1.150	48.400

Name	US	DS	Length	ks (mm) /	US IL	DS IL	Fall	Slope	Dia	T of C	Rain
	Node	Node	(m)	n	(m)	(m)	(m)	(1:X)	(mm)	(mins)	(mm/hr)
1.000	CP	SA01	3.931	0.600	48.450	48.400	0.050	78.6	150	6.06	100.0

Name	Vel	Cap	Flow	US	DS	Σ Area	Σ Add	Pro	Pro
	(m/s)	(l/s)	(l/s)	Depth	Depth	(ha)	Inflow	Depth	Velocity
				(m)	(m)		(l/s)	(mm)	(m/s)
1.000	1.135	20.0	14.1	1.150	1.000	0.039	0.0	93	1.227

Link	Length	Slope	Dia	Link	US CL	US IL	US Depth	DS CL	DS IL	DS Depth
	(m)	(1:X)	(mm)	Type	(m)	(m)	(m)	(m)	(m)	(m)
1.000	3.931	78.6	150	Circular_Default Sewer Type	49.750	48.450	1.150	49.550	48.400	1.000

Link	US	Node	DS	Node
	Node	Type	Node	Type
1.000	CP	Junction	SA01	Junction

Node	CL (m)	Depth (m)	Connections	Link	IL (m)	Dia (mm)
CP	49.750	1.300	 0	1.000	48.450	150
SA01	49.550	1.150	 1	1.000	48.400	150

Rainfall Methodology	FEH-22	Winter CV	1.000	Drain Down Time (mins)	1440	Check Discharge Rate(s)	x
Rainfall Events	Singular	Analysis Speed	Detailed	Additional Storage (m³/ha)	0.0	Check Discharge Volume	x
Summer CV	1.000	Skip Steady State	x	Starting Level (m)			

15	30	60	120	180	240	360	480	600	720	960	1440
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Return Period	Climate Change	Additional Area	Additional Flow	Return Period	Climate Change	Additional Area	Additional Flow
(years)	(CC %)	(A %)	(Q %)	(years)	(CC %)	(A %)	(Q %)
2	0	0	0	100	40	0	0
30	35	0	0				

Node SA01 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.09216	Safety Factor	1.5	Invert Level (m)	48.400
Side Inf Coefficient (m/hr)	0.09216	Porosity	0.95	Time to half empty (mins)	147

Depth	Area	Inf Area	Depth	Area	Inf Area	Depth	Area	Inf Area
(m)	(m²)	(m²)	(m)	(m²)	(m²)	(m)	(m²)	(m²)
0.000	60.0	60.0	0.400	60.0	71.0	0.401	0.0	71.0

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	CP	10	48.505	0.055	5.7	0.0000	0.0000	OK
180 minute summer	SA01	116	48.462	0.062	2.6	3.5077	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	CP	1.000	SA01	5.7	1.793	0.284	0.0159
180 minute summer	SA01	Infiltration		1.0			

Results for 30 year +35% CC 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
120 minute winter	CP	116	48.681	0.231	7.8	0.0000	0.0000	SURCHARGED
120 minute winter	SA01	116	48.681	0.281	7.7	16.0363	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	CP	1.000	SA01	7.7	1.152	0.382	0.0692
120 minute winter	SA01	Infiltration		1.1			

Results for 100 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 (m³)	Flood (m³)	Status
120 minute winter	CP	118	48.797	0.347	10.3	0.0000	0.0000	SURCHARGED
120 minute winter	SA01	118	48.797	0.397	10.1	22.6149	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	CP	1.000	SA01	10.1	1.244	0.506	0.0692
120 minute winter	SA01	Infiltration		1.2			