

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)	200.0		

Links

Name	US Node	DS Node	Length (m)
1.000	UNIT 1G a	UNIT 1G a.1	14.158
1.001	UNIT 1G a.1	UNIT 1I a.1	8.162
2.000	UNIT 1I a	UNIT 1I a.1	12.264
1.002	UNIT 1I a.1	UNIT 1G b.1	9.652
3.000	UNIT 1G b	UNIT 1G b.1	14.245
1.003	UNIT 1G b.1	ROAD	2.810

US Node	Σ Area (ha)
UNIT 1G a	0.047
UNIT 1G a.1	0.064
UNIT 1I a	0.038
UNIT 1I a.1	0.118
UNIT 1G b	0.047
UNIT 1G b.1	0.165

Node UNIT 1G a.1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.236	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	3	Depth (m)	0.250
Safety Factor	2.0	Width (m)	7.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	15.000		

Node UNIT 1I a.1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.228	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	4	Depth (m)	0.250
Safety Factor	2.0	Width (m)	7.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	7.000		

Node ROAD Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.215	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	2	Depth (m)	0.250
Safety Factor	2.0	Width (m)	7.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	10.000		

Node UNIT 1G b.1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.218	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	2	Depth (m)	0.250
Safety Factor	2.0	Width (m)	7.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	9.000		

Node UNIT 1G b Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.250	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	4	Depth (m)	0.250
Safety Factor	2.0	Width (m)	18.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	12.000		

Node UNIT 1I a Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.250	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	4	Depth (m)	0.250
Safety Factor	2.0	Width (m)	19.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	10.000		

Node UNIT 1G a Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	13.250	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	4	Depth (m)	0.250
Safety Factor	2.0	Width (m)	13.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	17.500		

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 winter	UNIT 1G a	12	13.270	0.020	7.0	0.7742	0.0000	OK
15 minute winter	UNIT 1G a.1	13	13.253	0.017	2.7	0.3073	0.0000	OK
15 minute winter	UNIT 1I a	12	13.268	0.018	5.7	0.7681	0.0000	OK
15 minute winter	UNIT 1I a.1	12	13.254	0.026	2.6	0.3441	0.0000	OK
15 minute winter	UNIT 1G b	12	13.270	0.020	7.0	0.9240	0.0000	OK
15 minute winter	UNIT 1G b.1	14	13.227	0.009	0.9	0.0783	0.0000	OK
15 minute winter	ROAD	15	13.216	0.001	0.1	0.0005	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	UNIT 1G a	1.000	UNIT 1G a.1	0.2	0.154	0.014	0.0212	
15 minute winter	UNIT 1G a	Infiltration		5.0				
15 minute winter	UNIT 1G a.1	1.001	UNIT 1I a.1	-0.1	0.069	-0.006	0.0156	
15 minute winter	UNIT 1G a.1	Infiltration		2.0				
15 minute winter	UNIT 1I a	2.000	UNIT 1I a.1	0.2	0.146	0.031	0.0195	
15 minute winter	UNIT 1I a	Infiltration		3.8				
15 minute winter	UNIT 1I a.1	1.002	UNIT 1G b.1	0.6	0.403	0.017	0.0159	
15 minute winter	UNIT 1I a.1	Infiltration		1.4				
15 minute winter	UNIT 1G b	3.000	UNIT 1G b.1	0.3	0.343	0.032	0.0121	
15 minute winter	UNIT 1G b	Infiltration		4.8				
15 minute winter	UNIT 1G b.1	1.003	ROAD	0.1	0.237	0.001	0.0008	
15 minute winter	UNIT 1G b.1	Infiltration		0.6				
15 minute winter	ROAD	Head/Flow		0.0				0.0
15 minute winter	ROAD	Infiltration		0.1				

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
15 minute winter	UNIT 1G a	12	13.297	0.047	19.0	2.7140	0.0000	OK
15 minute winter	UNIT 1G a.1	13	13.283	0.047	8.6	1.2721	0.0000	OK
15 minute winter	UNIT 1I a	12	13.295	0.045	15.4	2.3414	0.0000	OK
15 minute winter	UNIT 1I a.1	13	13.281	0.053	7.4	0.7619	0.0000	OK
15 minute winter	UNIT 1G b	12	13.299	0.049	19.0	2.8604	0.0000	OK
15 minute winter	UNIT 1G b.1	14	13.253	0.035	5.2	0.5774	0.0000	OK
15 minute winter	ROAD	17	13.230	0.015	1.7	0.2033	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	UNIT 1G a	1.000	UNIT 1G a.1	1.5	0.255	0.095	0.0846	
15 minute winter	UNIT 1G a	Infiltration		12.1				
15 minute winter	UNIT 1G a.1	1.001	UNIT 1I a.1	0.7	-0.138	0.044	0.0532	
15 minute winter	UNIT 1G a.1	Infiltration		5.6				
15 minute winter	UNIT 1I a	2.000	UNIT 1I a.1	1.4	0.275	0.184	0.0607	
15 minute winter	UNIT 1I a	Infiltration		9.6				
15 minute winter	UNIT 1I a.1	1.002	UNIT 1G b.1	3.3	0.629	0.093	0.0616	
15 minute winter	UNIT 1I a.1	Infiltration		2.8				
15 minute winter	UNIT 1G b	3.000	UNIT 1G b.1	1.9	0.550	0.234	0.0560	
15 minute winter	UNIT 1G b	Infiltration		11.8				
15 minute winter	UNIT 1G b.1	1.003	ROAD	1.7	0.698	0.049	0.0076	
15 minute winter	UNIT 1G b.1	Infiltration		2.5				
15 minute winter	ROAD	Head/Flow		0.0				0.0
15 minute winter	ROAD	Infiltration		1.2				

Results for 100 year +20% 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
15 minute winter	UNIT 1G a	13	13.329	0.079	29.1	4.9469	0.0000	OK
15 minute winter	UNIT 1G a.1	14	13.318	0.082	13.9	2.3923	0.0000	OK
15 minute winter	UNIT 1I a	13	13.325	0.075	23.6	4.0899	0.0000	OK
15 minute winter	UNIT 1I a.1	13	13.314	0.086	12.9	1.2784	0.0000	OK
15 minute winter	UNIT 1G b	13	13.332	0.082	29.1	5.0740	0.0000	OK
15 minute winter	UNIT 1G b.1	15	13.286	0.068	12.5	1.2053	0.0000	OK
15 minute winter	ROAD	17	13.274	0.059	7.5	1.1379	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	UNIT 1G a	1.000	UNIT 1G a.1	3.8	0.309	0.240	0.1794	
15 minute winter	UNIT 1G a	Infiltration		12.9				
15 minute winter	UNIT 1G a.1	1.001	UNIT 1I a.1	2.8	0.217	0.175	0.1100	
15 minute winter	UNIT 1G a.1	Infiltration		6.0				
15 minute winter	UNIT 1I a	2.000	UNIT 1I a.1	2.9	0.319	0.392	0.1180	
15 minute winter	UNIT 1I a	Infiltration		10.8				
15 minute winter	UNIT 1I a.1	1.002	UNIT 1G b.1	7.8	0.708	0.222	0.1375	
15 minute winter	UNIT 1I a.1	Infiltration		2.9				
15 minute winter	UNIT 1G b	3.000	UNIT 1G b.1	4.6	0.643	0.559	0.1223	
15 minute winter	UNIT 1G b	Infiltration		12.3				
15 minute winter	UNIT 1G b.1	1.003	ROAD	7.5	0.998	0.210	0.0300	
15 minute winter	UNIT 1G b.1	Infiltration		3.6				
15 minute winter	ROAD	Head/Flow		0.0				0.0
15 minute winter	ROAD	Infiltration		4.0				

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 (m ³)	Flood (m ³)	Status
15 minute winter	UNIT 1G a	13	13.347	0.097	34.0	6.1791	0.0000	OK
15 minute winter	UNIT 1G a.1	14	13.337	0.101	16.3	3.0214	0.0000	OK
15 minute winter	UNIT 1I a	13	13.342	0.092	27.5	5.1142	0.0000	OK
15 minute winter	UNIT 1I a.1	14	13.332	0.104	16.5	1.5483	0.0000	OK
15 minute winter	UNIT 1G b	13	13.350	0.100	34.0	6.2706	0.0000	OK
15 minute winter	UNIT 1G b.1	17	13.316	0.098	17.3	1.7682	0.0000	OK
15 minute winter	ROAD	17	13.315	0.100	11.1	1.9925	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	UNIT 1G a	1.000	UNIT 1G a.1	5.3	0.330	0.328	0.2360	
15 minute winter	UNIT 1G a	Infiltration		12.9				
15 minute winter	UNIT 1G a.1	1.001	UNIT 1I a.1	4.6	0.262	0.289	0.1436	
15 minute winter	UNIT 1G a.1	Infiltration		6.1				
15 minute winter	UNIT 1I a	2.000	UNIT 1I a.1	3.8	0.339	0.509	0.1490	
15 minute winter	UNIT 1I a	Infiltration		10.8				
15 minute winter	UNIT 1I a.1	1.002	UNIT 1G b.1	10.9	0.738	0.310	0.1916	
15 minute winter	UNIT 1I a.1	Infiltration		2.9				
15 minute winter	UNIT 1G b	3.000	UNIT 1G b.1	6.4	0.676	0.767	0.1633	
15 minute winter	UNIT 1G b	Infiltration		12.3				
15 minute winter	UNIT 1G b.1	1.003	ROAD	11.1	1.118	0.312	0.0569	
15 minute winter	UNIT 1G b.1	Infiltration		3.7				
15 minute winter	ROAD	Head/Flow		0.0				0.0
15 minute winter	ROAD	Infiltration		4.1				