

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	CAR PARKING	REAR 1I UNIT	30.287
1.001	REAR 1I UNIT	REAR 1J&K UNITS	75.000
2.000	G&M YARD	REAR 1J&K UNITS	17.725
1.002	REAR 1J&K UNITS	REAR 1L UNIT	46.957

US Node	Σ Area (ha)
CAR PARKING	0.049
REAR 1I UNIT	0.298
G&M YARD	0.014
REAR 1J&K UNITS	0.427

Node REAR 1L UNIT Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	11.198	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	0	Depth (m)	0.250
Safety Factor	2.0	Width (m)	10.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	50.000		

Node REAR 1I UNIT Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	11.320	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	18	Depth (m)	0.250
Safety Factor	2.0	Width (m)	19.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	30.000		

Node REAR 1J&K UNITS Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.40000	Invert Level (m)	11.245	Slope (1:X)	1000.0
Side Inf Coefficient (m/hr)	0.40000	Time to half empty (mins)	13	Depth (m)	0.250
Safety Factor	2.0	Width (m)	10.000	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	70.000		

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	CAR PARKING	10	11.442	0.092	7.3	0.2011	0.0000	OK
15 minute winter	REAR 1I UNIT	12	11.366	0.046	44.3	5.8429	0.0000	OK
15 minute winter	G&M YARD	11	11.318	0.068	2.1	0.0423	0.0000	OK
15 minute winter	REAR 1J&K UNITS	12	11.275	0.030	20.1	1.4649	0.0000	OK
15 minute winter	REAR 1L UNIT	12	11.198	0.000	0.2	0.0002	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	CAR PARKING	1.000	REAR 1I UNIT	7.1	0.744	0.443	0.3094	
15 minute winter	REAR 1I UNIT	1.001	REAR 1J&K UNITS	1.4	0.253	0.023	0.4360	
15 minute winter	REAR 1I UNIT	Infiltration		29.1				
15 minute winter	G&M YARD	2.000	REAR 1J&K UNITS	2.0	0.481	0.718	0.0895	
15 minute winter	REAR 1J&K UNITS	1.002	REAR 1L UNIT	0.2	0.130	0.003	0.0944	
15 minute winter	REAR 1J&K UNITS	Infiltration		16.5				
15 minute winter	REAR 1L UNIT	Head/Flow		0.0				0.0
15 minute winter	REAR 1L UNIT	Infiltration		0.2				

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	CAR PARKING	11	11.525	0.175	19.8	0.3822	0.0000	OK
15 minute winter	REAR 1I UNIT	14	11.471	0.151	118.6	25.2881	0.0000	OK
15 minute winter	G&M YARD	11	11.362	0.112	5.7	0.0698	0.0000	OK
15 minute winter	REAR 1J&K UNITS	14	11.318	0.073	59.9	8.3190	0.0000	OK
15 minute winter	REAR 1L UNIT	16	11.205	0.007	4.3	0.0834	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	CAR PARKING	1.000	REAR 1I UNIT	18.8	0.885	1.171	0.8649	
15 minute winter	REAR 1I UNIT	1.001	REAR 1J&K UNITS	21.9	0.824	0.351	2.1224	
15 minute winter	REAR 1I UNIT	Infiltration		32.4				
15 minute winter	G&M YARD	2.000	REAR 1J&K UNITS	5.5	0.550	1.927	0.1881	
15 minute winter	REAR 1J&K UNITS	1.002	REAR 1L UNIT	4.3	0.698	0.069	0.3608	
15 minute winter	REAR 1J&K UNITS	Infiltration		39.2				
15 minute winter	REAR 1L UNIT	Head/Flow		0.0				0.0
15 minute winter	REAR 1L UNIT	Infiltration		4.1				

Results for 100 year +20% CC Critical Storm Duration. Lowest mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	CAR PARKING	12	11.610	0.260	30.4	0.5670	0.0000	FLOOD RISK
15 minute winter	REAR 1I UNIT	14	11.559	0.239	183.9	41.3723	0.0000	OK
15 minute winter	G&M YARD	10	11.397	0.147	8.7	0.0916	0.0000	OK
30 minute winter	REAR 1J&K UNITS	25	11.386	0.141	97.1	22.8873	0.0000	OK
30 minute winter	REAR 1L UNIT	28	11.234	0.036	21.7	1.8939	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	CAR PARKING	1.000	REAR 1I UNIT	29.6	0.911	1.845	1.2045	
15 minute winter	REAR 1I UNIT	1.001	REAR 1J&K UNITS	51.1	0.956	0.819	4.0312	
15 minute winter	REAR 1I UNIT	Infiltration		32.9				
15 minute winter	G&M YARD	2.000	REAR 1J&K UNITS	8.5	0.607	2.996	0.2925	
30 minute winter	REAR 1J&K UNITS	1.002	REAR 1L UNIT	21.7	1.135	0.348	0.9915	
30 minute winter	REAR 1J&K UNITS	Infiltration		39.8				
30 minute winter	REAR 1L UNIT	Head/Flow		0.0				0.0
30 minute winter	REAR 1L UNIT	Infiltration		19.8				

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	CAR PARKING	13	11.763	0.413	35.4	0.9004	0.0000	FLOOD RISK
15 minute winter	REAR 1I UNIT	13	11.700	0.380	213.6	45.2493	0.0000	FLOOD RISK
30 minute winter	G&M YARD	23	11.439	0.189	7.9	0.1176	0.0000	FLOOD RISK
30 minute winter	REAR 1J&K UNITS	24	11.434	0.189	143.6	33.2456	0.0000	OK
30 minute winter	REAR 1L UNIT	31	11.268	0.070	40.8	6.7699	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	CAR PARKING	1.000	REAR 1I UNIT	33.6	0.931	2.096	1.2045	
15 minute winter	REAR 1I UNIT	1.001	REAR 1J&K UNITS	94.8	1.131	1.520	5.7255	
15 minute winter	REAR 1I UNIT	Infiltration		32.9				
30 minute winter	G&M YARD	2.000	REAR 1J&K UNITS	7.8	0.547	2.761	0.3120	
30 minute winter	REAR 1J&K UNITS	1.002	REAR 1L UNIT	40.8	1.363	0.654	1.5117	
30 minute winter	REAR 1J&K UNITS	Infiltration		40.3				
30 minute winter	REAR 1L UNIT	Head/Flow		0.0				0.0
30 minute winter	REAR 1L UNIT	Infiltration		28.1				