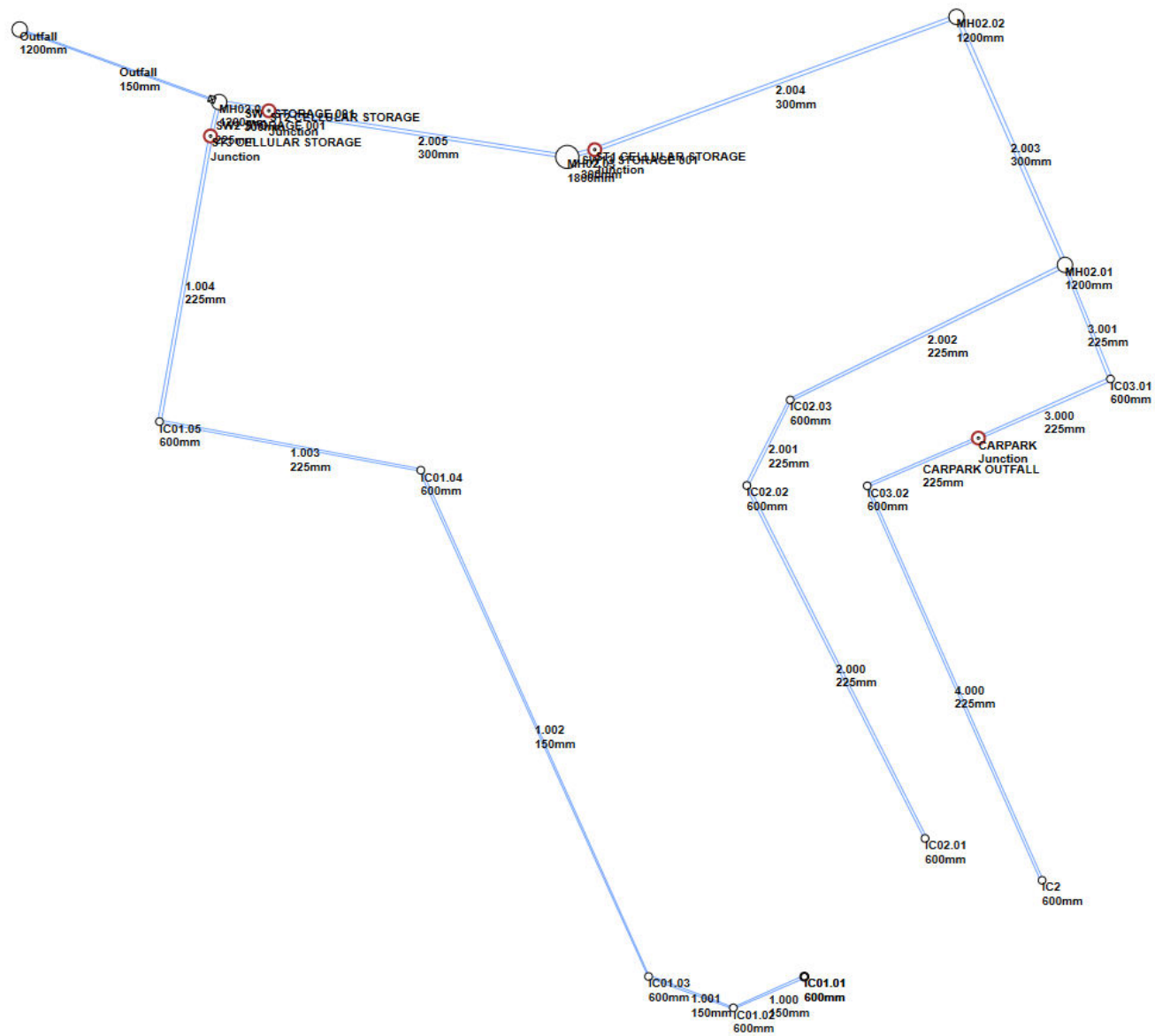
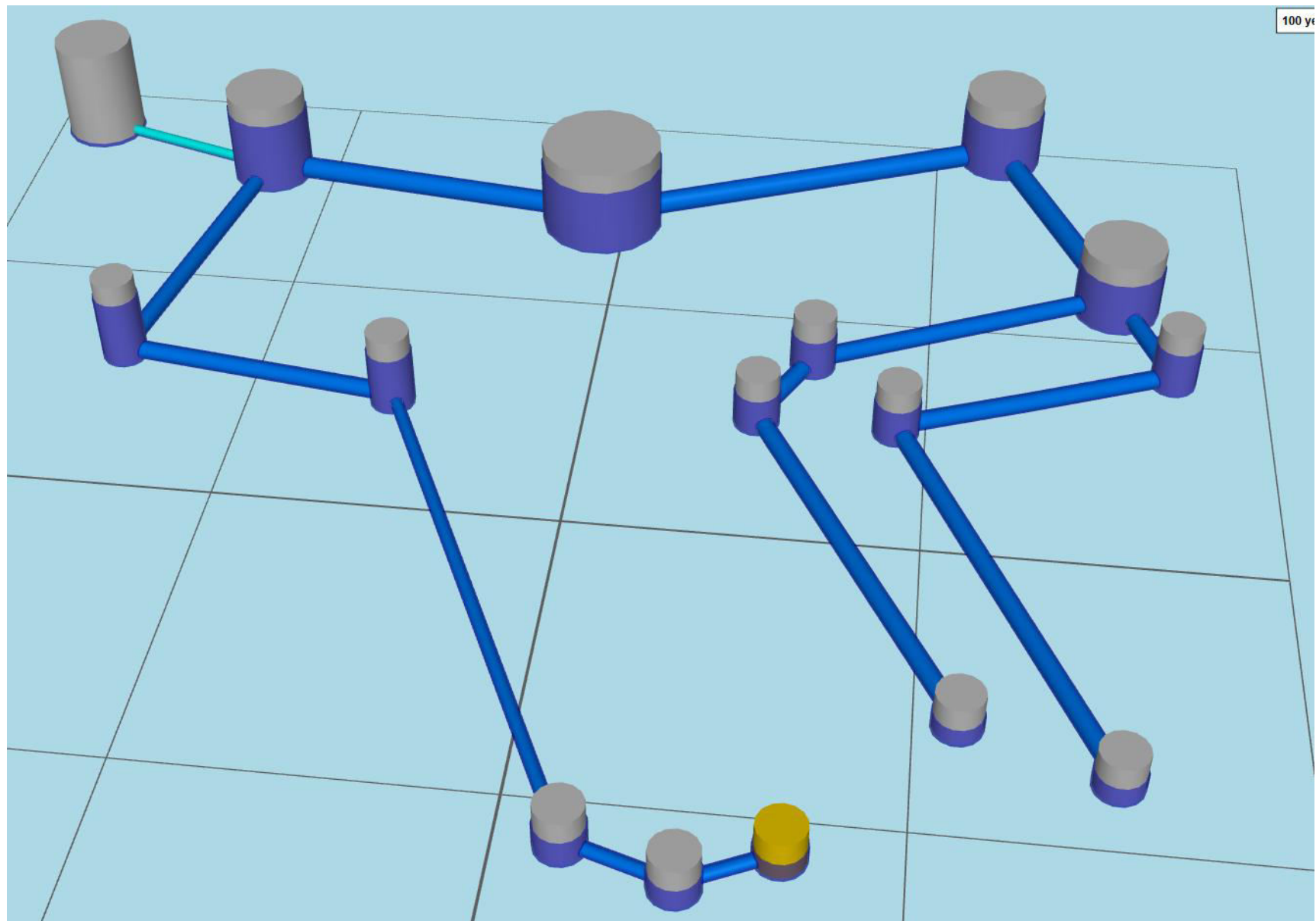


Appendix B

Revised Calculations for 1.89 l/s discharge



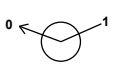
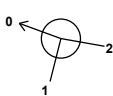


Pipeline Schedule

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)
1.000	6.015	100.0	150	Circular	6.050	5.500	0.400	6.050	5.440	0.460
1.001	7.009	100.0	150	Circular	6.050	5.440	0.460	6.050	5.370	0.530
1.002	43.227	100.0	150	Circular	6.050	5.370	0.530	6.050	4.938	0.962
1.003	20.604	125.0	225	Circular	6.050	4.863	0.962	6.050	4.698	1.127
1.004	22.607	200.0	225	Circular	6.050	4.698	1.127	6.050	4.585	1.240
2.000	30.782	100.0	225	Circular	6.050	5.500	0.325	6.050	5.192	0.633
3.001	9.569	180.0	225	Circular	6.050	5.047	0.778	6.050	4.994	0.831
2.001	7.464	150.0	225	Circular	6.050	5.192	0.633	6.050	5.142	0.683
2.002	23.754	180.0	225	Circular	6.050	5.142	0.683	6.050	5.010	0.815
2.003	21.081	200.0	300	Circular	6.050	4.919	0.831	6.050	4.814	0.936
2.004	29.881	240.0	300	Circular	6.050	4.814	0.936	6.050	4.689	1.061
2.005	23.396	240.0	300	Circular	6.050	4.680	1.070	6.050	4.583	1.167
4.000	33.596	116.0	225	Circular	6.050	5.475	0.350	6.050	5.185	0.640
3.000	11.222	150.0	225	Circular	6.050	5.122	0.703	6.050	5.047	0.778
Outfall	16.463	115.0	150	Circular	6.050	4.567	1.333	6.050	4.424	1.476
SW1 STORAGE 001	3.913	240.0	300	Circular	6.050	4.583	1.167	6.050	4.567	1.183
SW13 STORAGE 001	2.206	240.0	300	Circular	6.050	4.689	1.061	6.050	4.680	1.070
SW2 STORAGE 001	2.732	200.0	225	Circular	6.050	4.585	1.240	6.050	4.571	1.254
CARPARK OUTFALL	9.381	150.0	225	Circular	6.050	5.185	0.640	6.050	5.122	0.703

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	IC01.01	600	Manhole	Adoptable	IC01.02	600	Manhole	Adoptable
1.001	IC01.02	600	Manhole	Adoptable	IC01.03	600	Manhole	Adoptable
1.002	IC01.03	600	Manhole	Adoptable	IC01.04	600	Manhole	Adoptable
1.003	IC01.04	600	Manhole	Adoptable	IC01.05	600	Manhole	Adoptable
1.004	IC01.05	600	Manhole	Adoptable	ST3 CELLULAR STORAGE		Junction	
2.000	IC02.01	600	Manhole	Adoptable	IC02.02	600	Manhole	Adoptable
3.001	IC03.01	600	Manhole	Adoptable	MH02.01	1200	Manhole	Adoptable
2.001	IC02.02	600	Manhole	Adoptable	IC02.03	600	Manhole	Adoptable
2.002	IC02.03	600	Manhole	Adoptable	MH02.01	1200	Manhole	Adoptable
2.003	MH02.01	1200	Manhole	Adoptable	MH02.02	1200	Manhole	Adoptable
2.004	MH02.02	1200	Manhole	Adoptable	ST1 CELLULAR STORAGE		Junction	
2.005	MH02.03	1800	Manhole	Adoptable	ST2 CELLULAR STORAGE		Junction	
4.000	IC2	600	Manhole	Adoptable	IC03.02	600	Manhole	Adoptable
3.000	CARPARK		Junction		IC03.01	600	Manhole	Adoptable
Outfall	MH02.04	1200	Manhole	Adoptable	Outfall	1200	Manhole	Adoptable
SW1 STORAGE 001	ST2 CELLULAR STORAGE		Junction		MH02.04	1200	Manhole	Adoptable
SW13 STORAGE 001	ST1 CELLULAR STORAGE		Junction		MH02.03	1800	Manhole	Adoptable
SW2 STORAGE 001	ST3 CELLULAR STORAGE		Junction		MH02.04	1200	Manhole	Adoptable
CARPARK OUTFALL	IC03.02	600	Manhole	Adoptable	CARPARK		Junction	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
IC01.01	489416.234	98874.676	6.050	0.550	600				
						0	1.000	5.500	150
IC01.02	489410.733	98872.244	6.050	0.610	600				
						0	1.001	5.440	150
IC01.03	489404.164	98874.687	6.050	0.680	600				
						0	1.002	5.370	150
IC01.04	489386.516	98914.147	6.050	1.187	600				
						0	1.003	4.863	225
IC01.05	489366.264	98917.938	6.050	1.352	600				
						0	1.004	4.698	225
MH02.04	489370.891	98942.845	6.050	1.483	1200				
						1	SW2 STORAGE 001	4.571	225
						2	SW1 STORAGE 001	4.567	300
						0	Outfall	4.567	150
IC02.01	489425.590	98885.449	6.050	0.550	600				
						0	2.000	5.500	225
IC02.02	489411.777	98912.958	6.050	0.858	600				
						1	2.000	5.192	225
						0	2.001	5.192	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
IC03.02	489421.113	98912.929	6.050	0.865	600	1 0	4.000	5.185	225
IC02.03	489415.139	98919.622	6.050	0.908	600	1 0	CARPARK OUTFALL 2.001	5.185 5.142	225 225
MH02.01	489436.432	98930.151	6.050	1.131	1200	1 0 2	2.002 2.002 3.001	5.142 5.010 4.994	225 225 225
MH02.02	489428.026	98949.484	6.050	1.236	1200	1 0	2.003 2.003	4.919 4.814	300 300
MH02.03	489397.862	98938.570	6.050	1.370	1800	1 0	2.004 SW13 STORAGE 001	4.814 4.680	300 300
IC03.01	489439.958	98921.255	6.050	1.003	600	1 0	3.000 3.001	5.047 5.047	225 225
IC2	489434.658	98882.184	6.050	0.575	600	1 0	4.000 Outfall	5.475 4.424	225 150
ST1 CELLULAR STORAGE	489399.996	98939.130	6.050	1.361		1 0	2.004 SW13 STORAGE 001	4.689 4.689	300 300
ST3 CELLULAR STORAGE	489370.222	98940.196	6.050	1.465		1 0	1.004 SW2 STORAGE 001	4.585 4.585	225 225
ST2 CELLULAR STORAGE	489374.744	98942.165	6.050	1.467		1 0	2.005 SW1 STORAGE 001	4.583 4.583	300 300
CARPARK	489429.724	98916.651	6.050	0.928		1 0	CARPARK OUTFALL 3.000	5.122 5.122	225 225

Simulation Settings

Rainfall Methodology	FEH-22	Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Rate(s)	x
Rainfall Events	Singular	Analysis Speed	Normal	Additional Storage (m³/ha)	0.0	Check Discharge Volume	x
Summer CV	1.000	Skip Steady State	x	Starting Level (m)			

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
100	45	0	0

Node MH02.04 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	4.567	Product Number	CTL-SHE-0065-1900-1000-1900
Design Depth (m)	1.000	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	1.9	Min Node Diameter (mm)	1200

Node ST1 CELLULAR STORAGE Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	4.689
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	51.8	0.0	0.610	51.8	0.0	0.611	0.0	0.0

Node ST3 CELLULAR STORAGE Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	4.585
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	35.0	0.0	0.610	35.0	0.0	0.611	0.0	0.0

Node ST2 CELLULAR STORAGE Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	4.583
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	77.8	0.0	0.610	77.8	0.0	0.611	0.0	0.0

Node CARPARK Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Width (m)	26.000	Depth (m)
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	5.122	Length (m)	25.000	Inf Depth (m)
Safety Factor	2.0	Time to half empty (mins)		Slope (1:X)	250.0	

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 98.68%

Node Event		US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	
480 minute winter	IC01.01		472	5.739	0.239	0.6	0.0675	0.0000	SURCHARGED	
480 minute winter	IC01.02		472	5.739	0.299	1.1	0.0846	0.0000	SURCHARGED	
480 minute winter	IC01.03		472	5.739	0.369	1.7	0.1045	0.0000	SURCHARGED	
480 minute winter	IC01.04		472	5.742	0.879	4.3	0.2486	0.0000	SURCHARGED	
480 minute winter	IC01.05		472	5.742	1.044	5.5	0.2953	0.0000	SURCHARGED	
480 minute winter	MH02.04		472	5.742	1.175	8.0	1.3288	0.0000	SURCHARGED	
480 minute winter	IC02.01		464	5.740	0.240	0.5	0.0678	0.0000	SURCHARGED	
480 minute winter	IC02.02		464	5.741	0.549	3.1	0.1552	0.0000	SURCHARGED	
480 minute winter	IC03.02		472	5.740	0.555	5.2	0.1570	0.0000	SURCHARGED	
480 minute winter	IC02.03		472	5.741	0.599	4.7	0.1694	0.0000	SURCHARGED	
480 minute winter	MH02.01		472	5.740	0.821	14.4	0.9284	0.0000	SURCHARGED	
480 minute winter	MH02.02		472	5.740	0.926	10.9	1.0478	0.0000	SURCHARGED	
480 minute winter	MH02.03		472	5.740	1.060	8.8	2.6970	0.0000	SURCHARGED	
480 minute winter	IC03.01		472	5.740	0.693	15.1	0.1961	0.0000	SURCHARGED	
480 minute winter	IC2		472	5.740	0.265	0.9	0.0749	0.0000	SURCHARGED	
480 minute winter	Outfall		472	4.459	0.035	2.0	0.0000	0.0000	OK	
480 minute winter	ST1 CELLULAR STORAGE		480	5.740	1.051	10.7	30.0427	0.0000	SURCHARGED	
480 minute winter	ST3 CELLULAR STORAGE		472	5.740	1.155	5.5	20.2991	0.0000	SURCHARGED	
480 minute winter	ST2 CELLULAR STORAGE		464	5.739	1.156	8.2	45.1221	0.0000	SURCHARGED	
480 minute winter	CARPARK		472	5.740	0.618	19.3	110.7243	0.0000	SURCHARGED	

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	IC01.01	1.000	IC01.02	0.6	0.369	0.034	0.1059	74.1
480 minute winter	IC01.02	1.001	IC01.03	1.1	0.475	0.062	0.1234	
480 minute winter	IC01.03	1.002	IC01.04	1.7	0.572	0.096	0.7610	
480 minute winter	IC01.04	1.003	IC01.05	4.2	0.383	0.091	0.8194	
480 minute winter	IC01.05	1.004	ST3 CELLULAR STORAGE	5.5	0.531	0.150	0.8991	
480 minute winter	MH02.04	Outfall	Outfall	2.0	0.630	0.122	0.0528	
480 minute winter	IC02.01	2.000	IC02.02	0.5	0.176	0.010	1.2242	
480 minute winter	IC02.02	2.001	IC02.03	3.0	0.499	0.071	0.2969	
480 minute winter	IC03.02	CARPARK OUTFALL	CARPARK	5.2	0.715	0.122	0.3731	
480 minute winter	IC02.03	2.002	MH02.01	4.7	0.622	0.121	0.9447	
480 minute winter	MH02.01	2.003	MH02.02	10.1	0.641	0.129	1.4845	
480 minute winter	MH02.02	2.004	ST1 CELLULAR STORAGE	10.7	0.623	0.149	2.1042	
480 minute winter	MH02.03	2.005	ST2 CELLULAR STORAGE	6.8	0.553	0.095	1.6475	
480 minute winter	IC03.01	3.001	MH02.01	-14.3	0.639	-0.369	0.3806	
480 minute winter	IC2	4.000	IC03.02	0.9	0.210	0.019	1.3361	
480 minute winter	ST1 CELLULAR STORAGE	SW13 STORAGE 001	MH02.03	-8.6	0.433	-0.121	0.1553	
480 minute winter	ST3 CELLULAR STORAGE	SW2 STORAGE 001	MH02.04	5.4	0.180	0.147	0.1087	
480 minute winter	ST2 CELLULAR STORAGE	SW1 STORAGE 001	MH02.04	-6.3	-0.182	-0.089	0.2756	
480 minute winter	CARPARK	3.000	IC03.01	-15.0	0.612	-0.354	0.4463	

Design Settings

Rainfall Methodology	FEH-22	Maximum Time of Concentration (mins)	30.00	Preferred Cover Depth (m)	0.450
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0	Include Intermediate Ground	✓
Additional Flow (%)	45	Minimum Velocity (m/s)	1.00	Enforce best practice design rules	x
CV	1.000	Connection Type	Level Soffits		
Time of Entry (mins)	5.00	Minimum Backdrop Height (m)	0.010		

Results for 1 year +45% CC Critical Storm Duration. Lowest mass balance: 99.88%									
Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	
15 minute summer	IC01.01	10	5.527	0.027	1.3	0.0077	0.0000	OK	
15 minute summer	IC01.02	10	5.478	0.038	2.4	0.0109	0.0000	OK	
15 minute summer	IC01.03	11	5.416	0.046	3.7	0.0130	0.0000	OK	
15 minute summer	IC01.04	11	4.930	0.067	8.9	0.0190	0.0000	OK	
360 minute summer	IC01.05	280	4.929	0.231	3.5	0.0653	0.0000	SURCHARGED	
360 minute summer	MH02.04	280	4.929	0.362	4.0	0.4093	0.0000	SURCHARGED	
15 minute summer	IC02.01	11	5.523	0.023	1.1	0.0064	0.0000	OK	
15 minute summer	IC02.02	10	5.256	0.064	6.6	0.0181	0.0000	OK	
15 minute summer	IC03.02	10	5.263	0.078	11.0	0.0220	0.0000	OK	
15 minute summer	IC02.03	11	5.223	0.081	10.2	0.0228	0.0000	OK	
15 minute summer	MH02.01	11	5.023	0.104	18.7	0.1177	0.0000	OK	
360 minute summer	MH02.02	280	4.929	0.115	7.4	0.1300	0.0000	OK	
360 minute summer	MH02.03	280	4.929	0.249	5.4	0.6335	0.0000	OK	
30 minute summer	IC03.01	20	5.109	0.062	5.9	0.0177	0.0000	OK	
15 minute summer	IC2	11	5.505	0.030	1.8	0.0084	0.0000	OK	
180 minute winter	Outfall	208	4.458	0.034	1.8	0.0000	0.0000	OK	
360 minute summer	ST1 CELLULAR STORAGE	280	4.929	0.240	7.3	11.8070	0.0000	OK	
360 minute summer	ST3 CELLULAR STORAGE	280	4.929	0.344	3.1	11.4343	0.0000	SURCHARGED	
360 minute summer	ST2 CELLULAR STORAGE	280	4.929	0.346	5.3	25.5650	0.0000	SURCHARGED	
30 minute summer	CARPARK	22	5.175	0.053	9.7	2.7023	0.0000	OK	
Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)	
15 minute summer	IC01.01	1.000	IC01.02	1.3	0.449	0.072	0.0173		
15 minute summer	IC01.02	1.001	IC01.03	2.4	0.608	0.133	0.0283		
15 minute summer	IC01.03	1.002	IC01.04	3.6	0.785	0.200	0.1960		
15 minute summer	IC01.04	1.003	IC01.05	8.9	0.737	0.191	0.2492		
360 minute summer	IC01.05	1.004	ST3 CELLULAR STORAGE	3.1	0.456	0.085	0.8991		
360 minute summer	MH02.04	Outfall	Outfall	1.8	0.614	0.111	0.0494	53.0	
15 minute summer	IC02.01	2.000	IC02.02	1.1	0.207	0.021	0.1745		
15 minute summer	IC02.02	2.001	IC02.03	6.5	0.593	0.153	0.0820		
15 minute summer	IC03.02	CARPARK OUTFALL	CARPARK	10.8	1.335	0.256	0.0829		
15 minute summer	IC02.03	2.002	MH02.01	10.1	0.811	0.262	0.2960		
15 minute summer	MH02.01	2.003	MH02.02	18.6	0.826	0.237	0.4739		
360 minute summer	MH02.02	2.004	ST1 CELLULAR STORAGE	7.3	0.584	0.102	1.2734		
360 minute summer	MH02.03	2.005	ST2 CELLULAR STORAGE	5.3	0.435	0.075	1.5548		
30 minute summer	IC03.01	3.001	MH02.01	5.9	0.687	0.154	0.0828		
15 minute summer	IC2	4.000	IC03.02	1.8	0.251	0.037	0.2547		
360 minute summer	ST1 CELLULAR STORAGE	SW13 STORAGE 001	MH02.03	4.3	0.488	0.060	0.1356		
360 minute summer	ST3 CELLULAR STORAGE	SW2 STORAGE 001	MH02.04	1.7	0.103	0.046	0.1087		
360 minute summer	ST2 CELLULAR STORAGE	SW1 STORAGE 001	MH02.04	2.3	-0.110	0.033	0.2756		
30 minute summer	CARPARK	3.000	IC03.01	4.9	0.635	0.116	0.0892		

Results for 10 year +45% CC Critical Storm Duration. Lowest mass balance: 99.07%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	IC01.01	10	5.547	0.047	3.6	0.0134	0.0000	OK
15 minute summer	IC01.02	10	5.510	0.070	6.7	0.0199	0.0000	OK
15 minute summer	IC01.03	11	5.453	0.083	10.3	0.0234	0.0000	OK
480 minute winter	IC01.04	464	5.319	0.456	2.8	0.1290	0.0000	SURCHARGED
480 minute winter	IC01.05	464	5.317	0.619	3.8	0.1753	0.0000	SURCHARGED
480 minute winter	MH02.04	464	5.315	0.748	4.5	0.8461	0.0000	SURCHARGED
15 minute summer	IC02.01	10	5.537	0.037	3.1	0.0104	0.0000	OK
480 minute winter	IC02.02	464	5.318	0.126	2.0	0.0357	0.0000	OK
15 minute summer	IC03.02	10	5.325	0.140	31.1	0.0397	0.0000	OK
480 minute winter	IC02.03	464	5.318	0.176	3.1	0.0499	0.0000	OK
480 minute winter	MH02.01	464	5.318	0.399	8.0	0.4513	0.0000	SURCHARGED
480 minute winter	MH02.02	464	5.317	0.503	8.3	0.5691	0.0000	SURCHARGED
480 minute winter	MH02.03	456	5.318	0.638	6.4	1.6232	0.0000	SURCHARGED
480 minute winter	IC03.01	464	5.318	0.271	4.6	0.0767	0.0000	SURCHARGED
15 minute summer	IC2	10	5.524	0.049	5.2	0.0139	0.0000	OK
30 minute summer	Outfall	21	4.458	0.034	1.8	0.0000	0.0000	OK
480 minute winter	ST1 CELLULAR STORAGE	480	5.320	0.631	7.9	30.0427	0.0000	SURCHARGED
480 minute winter	ST3 CELLULAR STORAGE	456	5.318	0.733	4.0	20.2991	0.0000	SURCHARGED
480 minute summer	ST2 CELLULAR STORAGE	472	5.323	0.740	9.1	45.1221	0.0000	SURCHARGED
480 minute winter	CARPARK	464	5.318	0.196	6.8	28.4156	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	IC01.01	1.000	IC01.02	3.6	0.559	0.202	0.0388	
15 minute summer	IC01.02	1.001	IC01.03	6.7	0.757	0.375	0.0628	
15 minute summer	IC01.03	1.002	IC01.04	10.1	1.031	0.570	0.4245	
480 minute winter	IC01.04	1.003	IC01.05	3.0	0.421	0.065	0.8194	
480 minute winter	IC01.05	1.004	ST3 CELLULAR STORAGE	3.8	0.469	0.103	0.8991	
480 minute winter	MH02.04	Outfall	Outfall	1.8	0.614	0.111	0.0494	62.6
15 minute summer	IC02.01	2.000	IC02.02	3.1	0.238	0.059	0.4169	
480 minute winter	IC02.02	2.001	IC02.03	2.0	0.446	0.047	0.2102	
15 minute summer	IC03.02	CARPARK OUTFALL	CARPARK	30.7	1.754	0.725	0.1770	
480 minute winter	IC02.03	2.002	MH02.01	3.1	0.583	0.080	0.8692	
480 minute winter	MH02.01	2.003	MH02.02	7.7	0.631	0.098	1.4845	
480 minute winter	MH02.02	2.004	ST1 CELLULAR STORAGE	7.9	0.577	0.111	2.1042	
480 minute winter	MH02.03	2.005	ST2 CELLULAR STORAGE	6.2	0.528	0.087	1.6475	
480 minute winter	IC03.01	3.001	MH02.01	-4.2	0.613	-0.108	0.3806	
15 minute summer	IC2	4.000	IC03.02	5.1	0.324	0.106	0.5441	
480 minute winter	ST1 CELLULAR STORAGE	SW13 STORAGE 001	MH02.03	5.0	0.414	0.070	0.1553	
480 minute winter	ST3 CELLULAR STORAGE	SW2 STORAGE 001	MH02.04	2.5	0.159	0.068	0.1087	
480 minute summer	ST2 CELLULAR STORAGE	SW1 STORAGE 001	MH02.04	3.0	-0.151	0.042	0.2756	
480 minute winter	CARPARK	3.000	IC03.01	-4.5	0.584	-0.106	0.4290	

Results for 30 year +45% CC Critical Storm Duration. Lowest mass balance: 99.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	IC01.01	10	5.556	0.056	4.7	0.0157	0.0000	OK
15 minute summer	IC01.02	10	5.523	0.083	8.7	0.0235	0.0000	OK
480 minute summer	IC01.03	480	5.496	0.126	2.0	0.0358	0.0000	OK
480 minute winter	IC01.04	472	5.497	0.634	3.5	0.1794	0.0000	SURCHARGED
480 minute winter	IC01.05	472	5.496	0.798	4.5	0.2260	0.0000	SURCHARGED
480 minute summer	MH02.04	488	5.495	0.928	9.0	1.0497	0.0000	SURCHARGED
15 minute summer	IC02.01	10	5.542	0.042	4.0	0.0118	0.0000	OK
480 minute summer	IC02.02	480	5.497	0.305	3.7	0.0863	0.0000	SURCHARGED
360 minute winter	IC03.02	360	5.496	0.311	5.3	0.0881	0.0000	SURCHARGED
480 minute summer	IC02.03	480	5.497	0.355	5.8	0.1004	0.0000	SURCHARGED
360 minute winter	MH02.01	360	5.497	0.578	12.3	0.6539	0.0000	SURCHARGED
360 minute winter	MH02.02	360	5.496	0.682	12.2	0.7715	0.0000	SURCHARGED
360 minute winter	MH02.03	352	5.497	0.817	8.2	2.0805	0.0000	SURCHARGED
360 minute winter	IC03.01	352	5.498	0.451	11.1	0.1275	0.0000	SURCHARGED
15 minute summer	IC2	10	5.531	0.056	6.7	0.0158	0.0000	OK
15 minute summer	Outfall	13	4.458	0.034	1.8	0.0000	0.0000	OK
480 minute winter	ST1 CELLULAR STORAGE	480	5.503	0.814	9.4	30.0427	0.0000	SURCHARGED
360 minute winter	ST3 CELLULAR STORAGE	352	5.498	0.913	5.3	20.2991	0.0000	SURCHARGED
360 minute winter	ST2 CELLULAR STORAGE	360	5.497	0.914	10.5	45.1221	0.0000	SURCHARGED
360 minute winter	CARPARK	360	5.496	0.374	15.5	63.2375	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	IC01.01	1.000	IC01.02	4.7	0.587	0.263	0.0479	
15 minute summer	IC01.02	1.001	IC01.03	8.6	0.792	0.485	0.0772	
480 minute summer	IC01.03	1.002	IC01.04	2.0	0.611	0.113	0.7230	
480 minute winter	IC01.04	1.003	IC01.05	3.5	0.384	0.075	0.8194	
480 minute winter	IC01.05	1.004	ST3 CELLULAR STORAGE	4.5	0.505	0.123	0.8991	
480 minute summer	MH02.04	Outfall	Outfall	1.8	0.614	0.111	0.0494	68.1
15 minute summer	IC02.01	2.000	IC02.02	3.9	0.241	0.076	0.5377	
480 minute summer	IC02.02	2.001	IC02.03	3.7	0.527	0.087	0.2969	
360 minute winter	IC03.02	CARPARK OUTFALL	CARPARK	5.3	0.735	0.125	0.3731	
480 minute summer	IC02.03	2.002	MH02.01	5.8	0.666	0.150	0.9447	
360 minute winter	MH02.01	2.003	MH02.02	11.3	0.674	0.144	1.4845	
360 minute winter	MH02.02	2.004	ST1 CELLULAR STORAGE	12.0	0.646	0.168	2.1042	
360 minute winter	MH02.03	2.005	ST2 CELLULAR STORAGE	7.8	0.568	0.109	1.6475	
360 minute winter	IC03.01	3.001	MH02.01	-10.4	0.658	-0.270	0.3806	
15 minute summer	IC2	4.000	IC03.02	6.6	0.333	0.137	0.6674	
480 minute winter	ST1 CELLULAR STORAGE	SW13 STORAGE 001	MH02.03	-5.8	0.415	-0.081	0.1553	
360 minute winter	ST3 CELLULAR STORAGE	SW2 STORAGE 001	MH02.04	5.1	0.165	0.138	0.1087	
360 minute winter	ST2 CELLULAR STORAGE	SW1 STORAGE 001	MH02.04	-6.5	-0.202	-0.091	0.2756	
360 minute winter	CARPARK	3.000	IC03.01	-11.1	0.612	-0.261	0.4463	

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 98.68%

Node Event		US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	IC01.01		472	5.739	0.239	0.6	0.0675	0.0000	SURCHARGED
480 minute winter	IC01.02		472	5.739	0.299	1.1	0.0846	0.0000	SURCHARGED
480 minute winter	IC01.03		472	5.739	0.369	1.7	0.1045	0.0000	SURCHARGED
480 minute winter	IC01.04		472	5.742	0.879	4.3	0.2486	0.0000	SURCHARGED
480 minute winter	IC01.05		472	5.742	1.044	5.5	0.2953	0.0000	SURCHARGED
480 minute winter	MH02.04		472	5.742	1.175	8.0	1.3288	0.0000	SURCHARGED
480 minute winter	IC02.01		464	5.740	0.240	0.5	0.0678	0.0000	SURCHARGED
480 minute winter	IC02.02		464	5.741	0.549	3.1	0.1552	0.0000	SURCHARGED
480 minute winter	IC03.02		472	5.740	0.555	5.2	0.1570	0.0000	SURCHARGED
480 minute winter	IC02.03		472	5.741	0.599	4.7	0.1694	0.0000	SURCHARGED
480 minute winter	MH02.01		472	5.740	0.821	14.4	0.9284	0.0000	SURCHARGED
480 minute winter	MH02.02		472	5.740	0.926	10.9	1.0478	0.0000	SURCHARGED
480 minute winter	MH02.03		472	5.740	1.060	8.8	2.6970	0.0000	SURCHARGED
480 minute winter	IC03.01		472	5.740	0.693	15.1	0.1961	0.0000	SURCHARGED
480 minute winter	IC2		472	5.740	0.265	0.9	0.0749	0.0000	SURCHARGED
480 minute winter	Outfall		472	4.459	0.035	2.0	0.0000	0.0000	OK
480 minute winter	ST1 CELLULAR STORAGE		480	5.740	1.051	10.7	30.0427	0.0000	SURCHARGED
480 minute winter	ST3 CELLULAR STORAGE		472	5.740	1.155	5.5	20.2991	0.0000	SURCHARGED
480 minute winter	ST2 CELLULAR STORAGE		464	5.739	1.156	8.2	45.1221	0.0000	SURCHARGED
480 minute winter	CARPARK		472	5.740	0.618	19.3	110.7243	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	IC01.01	1.000	IC01.02	0.6	0.369	0.034	0.1059	
480 minute winter	IC01.02	1.001	IC01.03	1.1	0.475	0.062	0.1234	
480 minute winter	IC01.03	1.002	IC01.04	1.7	0.572	0.096	0.7610	
480 minute winter	IC01.04	1.003	IC01.05	4.2	0.383	0.091	0.8194	
480 minute winter	IC01.05	1.004	ST3 CELLULAR STORAGE	5.5	0.531	0.150	0.8991	
480 minute winter	MH02.04	Outfall	Outfall	2.0	0.630	0.122	0.0528	74.1
480 minute winter	IC02.01	2.000	IC02.02	0.5	0.176	0.010	1.2242	
480 minute winter	IC02.02	2.001	IC02.03	3.0	0.499	0.071	0.2969	
480 minute winter	IC03.02	CARPARK OUTFALL	CARPARK	5.2	0.715	0.122	0.3731	
480 minute winter	IC02.03	2.002	MH02.01	4.7	0.622	0.121	0.9447	
480 minute winter	MH02.01	2.003	MH02.02	10.1	0.641	0.129	1.4845	
480 minute winter	MH02.02	2.004	ST1 CELLULAR STORAGE	10.7	0.623	0.149	2.1042	
480 minute winter	MH02.03	2.005	ST2 CELLULAR STORAGE	6.8	0.553	0.095	1.6475	
480 minute winter	IC03.01	3.001	MH02.01	-14.3	0.639	-0.369	0.3806	
480 minute winter	IC2	4.000	IC03.02	0.9	0.210	0.019	1.3361	
480 minute winter	ST1 CELLULAR STORAGE	SW13 STORAGE 001	MH02.03	-8.6	0.433	-0.121	0.1553	
480 minute winter	ST3 CELLULAR STORAGE	SW2 STORAGE 001	MH02.04	5.4	0.180	0.147	0.1087	
480 minute winter	ST2 CELLULAR STORAGE	SW1 STORAGE 001	MH02.04	-6.3	-0.182	-0.089	0.2756	
480 minute winter	CARPARK	3.000	IC03.01	-15.0	0.612	-0.354	0.4463	