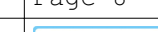


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Riverside Offices Mountbatten Way Congleton, CW12 1DY	CHEADLE BUSINESS PARK ALL STORM EVENTS				
Date 14/05/2024 File CALC 14.05.24.MDX	Designed by HB Checked by GS				
Innovyze	Network 2020.1.3				
Storage Structures for Surface Network 1 Porous Car Park Manhole: S8, DS/PN: 1.004 Infiltration Coefficient Base (m/hr) 0.00000 Width (m) 21.0 Membrane Percolation (mm/hr) 1000 Length (m) 12.0 Max Percolation (l/s) 70.0 Slope (1:X) 22.0 Safety Factor 2.0 Depression Storage (mm) 5 Porosity 0.30 Evaporation (mm/day) 3 Invert Level (m) 150.400 Membrane Depth (mm) 0 Porous Car Park Manhole: S11, DS/PN: 3.001 Infiltration Coefficient Base (m/hr) 0.00000 Width (m) 32.0 Membrane Percolation (mm/hr) 1000 Length (m) 5.0 Max Percolation (l/s) 44.4 Slope (1:X) 20.0 Safety Factor 2.0 Depression Storage (mm) 5 Porosity 0.30 Evaporation (mm/day) 3 Invert Level (m) 148.200 Membrane Depth (mm) 0 Cellular Storage Manhole: S19, DS/PN: 1.007 Invert Level (m) 147.150 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 Depth (m)Area (m²)Inf. Area (m²) 0.000300.00.0 1.000300.00.0 Depth (m)Area (m²)Inf. Area (m²) 1.0010.00.0 <tr><td colspan="3">©1982-2020 Innovyze</td></tr>			©1982-2020 Innovyze		
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Riverside Offices Mountbatten Way Congleton, CW12 1DY	CHEADLE BUSINESS PARK ALL STORM EVENTS	
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Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

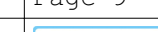
Simulation Criteria

Number of Input Hydrographs	0	Number of Storage Structures	3
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Rainfall Model	FSR	Ratio R	0.400
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	17.000	Cv (Winter)	0.840

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	1, 2, 30, 100
Climate Change (%)	0, 0, 0, 40

	US/MH		Return		Climate	First (X)		First (Y)	First (Z)	Overflow
PN	Name	Storm	Period	Change		Surcharge		Flood	Overflow	Act.
1.000	S3	15	Winter	100	+40%	100/15	Summer			
1.001	S2	15	Winter	100	+40%	100/15	Summer			
1.002	S1	15	Winter	100	+40%	100/15	Summer			
1.003	S9	15	Winter	100	+40%	100/15	Summer			
1.004	S8	30	Winter	100	+40%	100/15	Winter			
2.000	S25	30	Winter	100	+40%	100/15	Summer			
1.005	S4	30	Winter	100	+40%	30/30	Winter			
3.000	S10	15	Winter	100	+40%	100/15	Summer			
3.001	S11	60	Winter	100	+40%	100/30	Winter			
4.000	S13	30	Winter	100	+40%	30/30	Winter	100/15	Winter	
3.002	S12	30	Winter	100	+40%	30/15	Summer			
5.000	S23	30	Winter	100	+40%	100/15	Summer			
1.006	S18	30	Winter	100	+40%	30/15	Summer			
6.000	S24	15	Winter	100	+40%					
1.007	S19	360	Winter	100	+40%	30/30	Summer			

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Riverside Offices Mountbatten Way Congleton, CW12 1DY	CHEADLE BUSINESS PARK ALL STORM EVENTS	
Date 14/05/2024 File CALC 14.05.24.MDX	Designed by HB Checked by GS	
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Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

		Water	Surcharged	Flooded			Half Drain	Pipe	
	US/MH	Level	Depth	Volume	Flow /	Overflow	Time	Flow	
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status
1.000	S3	152.436	0.336	0.000	1.22			22.4	FLOOD RISK
1.001	S2	151.976	0.176	0.000	1.17			23.6	SURCHARGED
1.002	S1	151.592	0.067	0.000	0.69			39.0	SURCHARGED
1.003	S9	151.459	0.234	0.000	1.46			77.7	SURCHARGED
1.004	S8	151.076	0.051	0.000	0.82		12	63.6	SURCHARGED
2.000	S25	150.375	0.425	0.000	0.44			15.3	FLOOD RISK
1.005	S4	150.277	1.052	0.000	0.56			66.6	FLOOD RISK
3.000	S10	150.049	0.249	0.000	1.41			24.9	SURCHARGED
3.001	S11	149.727	0.102	0.000	0.52			25.9	SURCHARGED
4.000	S13	150.050	0.825	0.098	0.19			17.4	FLOOD
3.002	S12	150.023	1.348	0.000	0.72			34.8	FLOOD RISK
5.000	S23	150.266	0.298	0.000	0.44			29.4	SURCHARGED
1.006	S18	150.075	1.625	0.000	2.54			70.4	FLOOD RISK
6.000	S24	148.708	-0.079	0.000	0.45			17.6	OK
1.007	S19	147.978	0.678	0.000	0.49			6.0	SURCHARGED

PN	US/MH Name	Level Exceeded
1.000	S3	
1.001	S2	
1.002	S1	
1.003	S9	
1.004	S8	
2.000	S25	
1.005	S4	
3.000	S10	
3.001	S11	
4.000	S13	2
3.002	S12	
5.000	S23	
1.006	S18	
6.000	S24	
1.007	S19	

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Riverside Offices
Mountbatten Way
Congleton, CW12 1DY

CHEADLE BUSINESS PARK
ALL STORM EVENTS

Date 14/05/2024
File CALC 14.05.24.MDX

Designed by HB
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Network 2020.1.3

Micro Drainage

Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

								Water
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Level Act.
1.008	S21	360 Winter	100	+40%	1/60 Winter			147.962
		Surcharged	Flooded	Half Drain		Pipe		
PN	US/MH Name	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Level Exceeded
1.008	S21	0.762	0.000	0.11			5.7	SURCHARGED

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Appendix 5 GIS Report