

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:20

File Area West 1 100 year 15-03-06...

Designed By UKVXJ002

Checked By

Micro Drainage AREA SOUTH

Simulation W.10.1 net



## NETWORK No. 1

Global Variables

Region	FSR - England & Wales
Return Period (yrs)	100
M5-60 (mm)	20.000
Ratio R	0.400
Volumetric Runoff Coef	0.750
Profile Type	Summer
PIMP (%)	100
Areal Reduction Factor	1.000
Storm Duration (mins)	15
Hot Start (mins)	0
Manhole Headloss Coefficient	0.500
MADD Factor * 10m <sup>3</sup> /ha Storage	2.000
Foul Sewage/Hectare (l/s)	0.00
Additional Flow - % of Total Flow	0
Number of Input Hydrographs	0
Number of Time/Area Diagrams	0
Number of Bifurcations	0
Number of Overflows	0
Number of Off-Line Controls	14
Number of On-Line Controls	8

Freely Discharging Outfalls

Outfall Pipe Number	Outfall MH/No	C.Level (m)	I.Level (m)	D,L (mm)	B (mm)
1.007	O/F 1	67.050	65.517	1200	0

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Network Details

\* - Indicates pipe has been modified outside of WinDes's Storm/Foul & Schedules

PN	Length (m)	Fall (m)	Slope (1:x)	Area (ha)	T.E. (mins)	Rain Pro	k (mm)	Hyd Sect	Dia (mm)
1.000	10.00	0.050	200.0	0.960	5.00	1	0.600	o	375
2.000	10.00	0.050	200.0	1.270	5.00	1	0.600	o	375
1.001	150.00	0.775	193.5	2.780	0.00	1	0.600	o	750
3.000	10.00	0.150	66.7	0.240	5.00	1	0.600	o	225
4.000	10.00	0.150	66.7	0.220	5.00	1	0.600	o	225
1.002	185.00	1.800	102.8	0.580	0.00	1	0.600	o	750
5.000	10.00	0.350	28.6	0.540	5.00	1	0.600	o	225
6.000	10.00	0.350	28.6	0.500	5.00	1	0.600	o	225
1.003	55.00	0.800	68.7	0.620	0.00	1	0.600	oo	45
1.004	95.00	1.700	55.9	0.170	0.00	1	0.600	oo	45
7.000	10.00	0.001	10005.5	0.000	5.00	1	0.600	o	100
* 7.001	95.00	0.003	30000.0	0.000	0.00	1	0.600	o	300
8.000	10.00	0.050	200.0	0.680	5.00	1	0.600	o	100
9.000	10.00	0.050	200.0	0.620	5.00	1	0.600	o	100
1.005	300.00	0.800	375.0	1.040	0.00	1	0.600	oo	45
10.000	10.00	0.200	50.0	0.220	5.00	1	0.600	o	225
* 10.001	105.00	1.000	105.0	1.190	0.00	1	0.600	o	450

PN	USMH No.	US/CL (m)	US/IL (m)	US/Dep (m)	DS/CL (m)	DS/IL (m)	DS/Dep (m)	Ctrl No.	US/MH (mm)
1.000	1	73.400	71.950	1.075	73.400	71.900	1.125		1350
2.000	3	73.400	71.950	1.075	73.400	71.900	1.125		1350
1.001	4	73.400	71.525	1.125	73.030	70.750	1.530		1800
3.000	5	73.030	71.425	1.380	73.030	71.275	1.530		1200
4.000	6	73.030	71.425	1.380	73.030	71.275	1.530		1200
1.002	7	73.030	70.750	1.530	71.030	68.950	1.330		1800
5.000	8	71.600	69.675	1.700	71.030	69.325	1.480		1050
6.000	9	71.600	69.675	1.700	71.030	69.325	1.480		1050
1.003	10	71.030	68.950	1.480	69.900	68.150	1.150		1800
1.004	10	69.900	68.150	1.150	67.900	66.450	0.850		1800
7.000	11	68.200	67.000	1.100	67.699	66.999	0.600		1050
* 7.001	11	67.699	66.699	0.700	67.900	66.698	0.902	3	1050
8.000	11	68.300	66.948	1.252	67.900	66.898	0.902		1050
9.000	11	68.300	66.948	1.252	67.900	66.898	0.902		1050
1.005	11	67.900	66.398	0.902	67.200	65.598	1.002		3000
10.000	11	73.100	70.225	2.650	72.900	70.025	2.650		1050
* 10.001	11	72.900	69.800	2.650	71.700	68.800	2.450		1350

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Simulation W.10.1 net

Network Details

PN	Length (m)	Fall (m)	Slope (1:x)	Area (ha)	T.E. (mins)	Rain Pro	k (mm)	Hyd Sect	Dia (mm)
11.000	10.00	0.600	16.7	0.470	5.00	1	0.600	o	375
* 10.002	212.00	2.100	101.0	2.000	0.00	1	0.600	o	750
* 10.003	62.00	0.700	88.6	0.000	0.00	1	0.600	o	750
* 12.000	10.00	0.277	36.1	0.870	5.00	1	0.600	o	375
* 13.000	10.00	0.252	39.7	1.360	5.00	1	0.600	o	450
* 1.006	20.00	0.080	250.0	2.390	0.00	1	0.600	oo	45
* 1.007	10.00	0.001	10005.5	0.000	0.00	1	0.600	oo	45

PN	USMH No.	US/CL (m)	US/IL (m)	US/Dep (m)	DS/CL (m)	DS/IL (m)	DS/Dep (m)	Ctrl No.	US/MH (mm)
11.000	13	72.300	69.475	2.450	71.700	68.875	2.450		1350
* 10.002	13	71.700	68.500	2.450	67.800	66.400	0.650	1	2100
* 10.003	18	67.800	66.298	0.752	67.200	65.598	0.852		1800
* 12.000	18	67.310	66.100	0.835	67.200	65.823	1.002		1800
* 13.000	18	67.310	66.000	0.860	67.200	65.748	1.002		1800
* 1.006	18	67.200	65.598	1.002	67.050	65.518	0.932	9	1800
* 1.007	21	67.050	65.518	0.932	67.050	65.517	0.933	9	1800

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On-Line Controls (Orifice)

US/PN	Volume (m <sup>3</sup> )	Ctrl MH Name	Invert (m)	Dia (m)	Discharge Coefficient
10.001	16.425	13	68.500	0.598	0.600
11.000	0.914	13	68.500	0.598	0.600

On-Line Controls (Non Return Valve)

US/PN	Volume (m <sup>3</sup> )	Ctrl MH Name
7.000	0.070	11

On-Line Controls (Hydro-Brake®)

US/PN	Volume (m <sup>3</sup> )	Ctrl MH Name	Invert (m)	Type	Dia (m)	D.Head (m)	D.Flow (l/s)	Headloss (m)	Flow (l/s)
1.005	168.144	18	65.598	Md1	0.583	2.100	550	0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
								0.6	343.4
								0.7	410.6
								0.8	462.5
								0.9	495.8
								1.0	521.3
10.003	26.596	18	65.598	Md1	0.583	2.100	550	1.2	523.0
								1.4	498.7
								1.6	497.0
								1.8	513.8
								0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
								0.6	343.4
0.7	410.6								
0.8	462.5								
0.9	495.8								
1.0	521.3								
1.2	523.0								
1.4	498.7								
1.6	497.0								
1.8	513.8								
12.000	0.906	18	65.598	Md1	0.583	2.100	550	1.0	521.3
								1.2	523.0
								1.4	498.7
								1.6	497.0
								1.8	513.8
								0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
0.6	343.4								
0.7	410.6								
0.8	462.5								
0.9	495.8								
1.0	521.3								
1.2	523.0								
1.4	498.7								
1.6	497.0								
1.8	513.8								
13.000	1.304	18	65.598	Md1	0.583	2.100	550	0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
								0.6	343.4
								0.7	410.6
								0.8	462.5
								0.9	495.8
								1.0	521.3

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On-Line Controls (Hydro-Brake®)

US/PN	Volume (m <sup>3</sup> )	Ctrl MH Name	Invert (m)	Type	Dia (m)	D.Head (m)	D.Flow (l/s)	Headloss (m)	Flow (l/s)
								1.2	523.0
								1.4	498.7
								1.6	497.0
								1.8	513.8
1.006	10.283	21	65.518	Md1	0.439	1.600	272	0.1	11.7
								0.2	45.0
								0.3	91.9
								0.4	143.3
								0.5	190.7
								0.6	226.7
								0.7	248.0
								0.8	260.2
								0.9	257.4
								1.0	248.6
								1.2	244.2
								1.4	255.9
								1.6	271.9

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Off-line Weir Controls

DS/PN	Loop PN	MH Loss	Height above outgoing PN (m)	Width (m)	Discharge Coefficient
1.005	7.001	0.150	0.600	1.500	0.544
1.006	7.001	0.150	0.600	1.500	0.544

Infiltration Systems

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier.

DS/PN	MH Loss	Height above outgoing PN (m)	Filename	Type	Include Volume
1.000	0.500	0.450	Cellular Storage 1 100y.src	Cellular Storage	Yes
2.000	0.500	0.850	Porous pavements 2.000 100y.src	Porous Car Park	Yes
3.000	0.500	0.605	Cellular Storage 3.000 100y.src	Cellular Storage	Yes
4.000	0.500	1.005	Porous pavements 4.000 100y.src	Porous Car Park	Yes
5.000	0.500	0.925	Cellular Storage 5.000 100y.src	Cellular Storage	Yes
6.000	0.500	1.325	Porous pavements 6.000 100y.src	Porous Car Park	Yes
8.000	0.500	0.352	Cellular Storage 11.000 100y.src	Cellular Storage	Yes
9.000	0.500	0.852	Porous pavements 12.000 100y.src	Porous Car Park	Yes
10.000	0.500	2.275	Porous pavements 7.000 100y.src	Porous Car Park	Yes
11.000	0.500	2.225	Porous pavements 8.000 100y.src	Porous Car Park	Yes
12.000	0.500	0.210	Cellular Storage 9.000 100y.src	Cellular Storage	Yes
13.000	0.500	0.710	Porous pavements 10.000 100y.src	Porous Car Park	Yes

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Storage Pond at pipe 7.001 USMH 11

Storage Pond Invert Level (m) 66.699

Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )
0.0	10000.0	0.6	10000.0	1.2	10000.0	1.8	10000.0	2.4	10000.0
0.1	10000.0	0.7	10000.0	1.3	10000.0	1.9	10000.0	2.5	10000.0
0.2	10000.0	0.8	10000.0	1.4	10000.0	2.0	10000.0		
0.3	10000.0	0.9	10000.0	1.5	10000.0	2.1	10000.0		
0.4	10000.0	1.0	10000.0	1.6	10000.0	2.2	10000.0		
0.5	10000.0	1.1	10000.0	1.7	10000.0	2.3	10000.0		

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Summary Wizard of "CRITICAL" (Rank 1 by Max Level)  
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status ON  
 DVD Status ON Analysis Time Step Fine

Profile(s) Summer and Winter  
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440  
 Return Period(s) (years) 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	30 Winter	100	1	100/15 Summer			0	
2.000	15 Winter	100	1	100/15 Summer			0	
1.001	15 Winter	100	1	100/15 Summer				
3.000	15 Summer	100	1	100/15 Summer			0	
4.000	15 Winter	100	1	100/15 Summer			0	
1.002	15 Winter	100	1	100/15 Summer				
5.000	15 Winter	100	1	100/15 Summer			0	
6.000	15 Winter	100	1	100/15 Summer			0	
1.003	15 Winter	100	1	100/15 Summer				
1.004	30 Winter	100	1	100/15 Summer				
7.000	240 Winter	100	1					
7.001	240 Winter	100	1	100/120 Summer				
8.000	120 Winter	100	1	100/15 Summer			0	
9.000	120 Winter	100	1	100/15 Summer			0	
1.005	30 Winter	100	1	100/15 Summer		100/15 Summer	18	
10.000	15 Winter	100	1	100/15 Summer			0	
10.001	15 Winter	100	1	100/15 Summer				
11.000	15 Winter	100	1	100/15 Summer			0	
10.002	15 Winter	100	1	100/15 Summer				
10.003	15 Winter	100	1	100/15 Summer				2
12.000	240 Winter	100	1	100/15 Summer			0	
13.000	60 Winter	100	1	100/15 Summer			0	
1.006	30 Winter	100	1	100/15 Summer		100/15 Summer	18	7
1.007	480 Summer	100	1	100/15 Summer				8

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	72.445	0.120	0.000	1.51	0	156	SURCH'ED
2.000	73.008	0.683	0.000	2.75	0	286	SURCH'ED
1.001	72.695	0.420	0.000	1.18	0	986	SURCH'ED
3.000	72.030	0.380	0.000	1.88	0	100	SURCH'ED
4.000	71.998	0.348	0.000	1.78	0	95	SURCH'ED
1.002	71.768	0.268	0.000	1.01	0	1174	SURCH'ED
5.000	70.609	0.709	0.000	1.74	0	142	SURCH'ED
6.000	71.075	1.175	0.000	2.06	0	167	SURCH'ED
1.003	69.943	0.393	0.000	1.06	0	1555	SURCH'ED
1.004	69.062	0.312	0.000	0.92	0	1569	SURCH'ED
7.000	67.072	-0.028	0.000	0.00	0	0	O K
7.001	67.072	0.073	0.000	1.00	0	33	SURCH'ED
8.000	67.529	0.481	0.000	3.23	0	13	SURCH'ED
9.000	68.137	1.089	0.000	4.71	0	19	FLD RISK
1.005	67.633	0.635	0.000	0.76	1283	532	FLD RISK
10.000	72.676	2.226	0.000	2.30	0	141	SURCH'ED
10.001	72.844	2.594	0.000	1.19	0	357	FLD RISK
11.000	71.741	1.891	0.000	0.52	0	158	SURCH'ED
10.002	71.588	2.338	0.000	0.91	0	1075	FLD RISK
10.003	67.736	0.688	0.000	0.93	0	1063	FLD RISK
12.000	67.077	0.602	0.000	0.34	0	69	FLD RISK
13.000	67.160	0.710	0.000	0.25	0	70	FLD RISK
1.006	67.163	0.965	0.000	0.38	1462	263	FLD RISK
1.007	67.040	0.922	0.000	0.83	0	249	FLD RISK



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Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status ON  
 DVD Status ON Analysis Time Step Fine

Profile(s) Summer and Winter  
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440  
 Return Period(s) (years) 100

PN	Storm	Return Period	Rank	First X Surchage	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	30 Winter	100	1	100/15	Summer		0	
2.000	30 Winter	100	1	100/15	Summer		0	
1.001	15 Winter	100	1	100/15	Summer			
3.000	15 Summer	100	1	100/15	Summer		0	
4.000	15 Winter	100	1	100/15	Summer		0	
1.002	15 Winter	100	1	100/15	Summer			
5.000	15 Summer	100	1	100/15	Summer		0	
6.000	15 Summer	100	1	100/15	Summer		0	
1.003	15 Winter	100	1	100/15	Summer			
1.004	15 Winter	100	1	100/15	Summer			
7.000	240 Winter	100	1					
7.001	120 Summer	100	1	100/120	Summer			
8.000	120 Winter	100	1	100/15	Summer		0	
9.000	60 Winter	100	1	100/15	Summer		0	
1.005	15 Summer	100	1	100/15	Summer	100/15 Summer	18	
10.000	15 Winter	100	1	100/15	Summer		0	
10.001	15 Summer	100	1	100/15	Summer			
11.000	15 Summer	100	1	100/15	Summer		0	
10.002	15 Winter	100	1	100/15	Summer			
10.003	15 Winter	100	1	100/15	Summer			2
12.000	15 Summer	100	1	100/15	Summer		0	
13.000	60 Summer	100	1	100/15	Summer		0	
1.006	15 Winter	100	1	100/15	Summer	100/15 Summer	18	7
1.007	30 Summer	100	1	100/15	Summer			8

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	72.445	0.120	0.000	1.51	0	156	SURCH'ED
2.000	72.986	0.661	0.000	2.95	0	307	SURCH'ED
1.001	72.695	0.420	0.000	1.18	0	986	SURCH'ED
3.000	72.030	0.380	0.000	1.88	0	100	SURCH'ED
4.000	71.998	0.348	0.000	1.78	0	95	SURCH'ED
1.002	71.768	0.268	0.000	1.01	0	1174	SURCH'ED
5.000	70.607	0.707	0.000	1.74	0	142	SURCH'ED
6.000	71.055	1.155	0.000	2.06	0	168	SURCH'ED
1.003	69.943	0.393	0.000	1.06	0	1555	SURCH'ED
1.004	69.047	0.297	0.000	0.92	0	1570	SURCH'ED
7.000	67.072	-0.028	0.000	0.00	0	0	O K
7.001	67.008	0.009	0.000	1.00	0	33	SURCH'ED
8.000	67.529	0.481	0.000	3.23	0	13	SURCH'ED
9.000	68.132	1.084	0.000	4.71	0	19	FLD RISK
1.005	67.601	0.603	0.000	0.77	1188	540	FLD RISK
10.000	72.676	2.226	0.000	2.30	0	141	SURCH'ED
10.001	72.609	2.359	0.000	1.22	0	366	FLD RISK
11.000	71.411	1.561	0.000	0.52	0	158	SURCH'ED
10.002	71.588	2.338	0.000	0.91	0	1075	FLD RISK
10.003	67.736	0.688	0.000	0.93	0	1063	FLD RISK
12.000	66.677	0.202	0.000	0.57	0	118	SURCH'ED
13.000	67.128	0.678	0.000	0.25	0	70	FLD RISK
1.006	67.137	0.939	0.000	0.38	1426	266	FLD RISK
1.007	66.652	0.534	0.000	0.87	0	260	SURCH'ED

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Summary Wizard of "CRITICAL"(Rank 1 by Max Level)  
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status ON  
DVD Status ON Analysis Time Step Fine

Profile(s) Summer and Winter  
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440  
Sensitivity flow(s) (%) 0, 20

PN	Storm	Sensitivity Flow (%)	Rank	Surcharge Sensitivity	Flood Sensitivity	Overflow Sensitivity	O/F Act	Lvl Ex.
1.000	30 Winter	+20%	1	0%/15 Summer			0	
2.000	15 Winter	+20%	1	0%/15 Summer			0	
1.001	15 Winter	+20%	1	0%/15 Summer				
3.000	15 Winter	+20%	1	0%/15 Summer			0	
4.000	15 Winter	+20%	1	0%/15 Summer			0	
1.002	15 Winter	+20%	1	0%/15 Summer				
5.000	15 Winter	+20%	1	0%/15 Summer			0	
6.000	15 Winter	+20%	1	0%/15 Summer			0	
1.003	30 Winter	+20%	1	0%/15 Summer				
1.004	30 Winter	+20%	1	0%/15 Summer				
7.000	240 Winter	+20%	1	+20%/240 Summer				
7.001	240 Winter	+20%	1	0%/120 Summer				
8.000	120 Winter	+20%	1	0%/15 Summer			0	
9.000	120 Winter	+20%	1	0%/15 Summer			0	
1.005	30 Winter	+20%	1	0%/15 Summer		0%/15 Summer	36	
10.000	15 Winter	+20%	1	0%/15 Summer			0	
10.001	15 Winter	+20%	1	0%/15 Summer	+20%/15 Summer			4
11.000	15 Winter	+20%	1	0%/15 Summer			0	
10.002	15 Winter	+20%	1	0%/15 Summer	+20%/15 Summer			4
10.003	30 Winter	+20%	1	0%/15 Summer	+20%/30 Summer			7
12.000	240 Winter	+20%	1	0%/15 Summer			0	
13.000	60 Winter	+20%	1	0%/15 Summer			0	
1.006	30 Winter	+20%	1	0%/15 Summer	+20%/60 Summer	0%/15 Summer	36	21
1.007	1440 Summer	+20%	1	0%/15 Summer				19


PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	72.468	0.143	0.000	1.58	0	164	SURCH'ED
2.000	73.080	0.755	0.000	2.96	0	307	SURCH'ED
1.001	72.950	0.675	0.000	1.24	0	1033	SURCH'ED
3.000	72.044	0.394	0.000	1.88	0	100	SURCH'ED
4.000	72.355	0.705	0.000	2.06	0	109	SURCH'ED
1.002	72.061	0.561	0.000	1.04	0	1207	SURCH'ED
5.000	70.617	0.717	0.000	1.74	0	142	SURCH'ED
6.000	71.127	1.227	0.000	2.06	0	168	SURCH'ED
1.003	70.140	0.590	0.000	1.08	0	1589	SURCH'ED
1.004	69.203	0.453	0.000	0.95	0	1625	SURCH'ED
7.000	67.187	0.087	0.000	0.00	0	0	SURCH'ED
7.001	67.187	0.188	0.000	1.34	0	45	SURCH'ED
8.000	67.593	0.545	0.000	3.38	0	13	SURCH'ED
9.000	68.187	1.139	0.000	4.79	0	19	FLD RISK
1.005	67.672	0.674	0.000	0.75	1406	527	FLD RISK
10.000	72.773	2.323	0.000	3.49	0	214	SURCH'ED
10.001	72.919	2.669	18.795	1.24	0	373	FLOOD
11.000	71.845	1.995	0.000	0.59	0	179	SURCH'ED
10.002	71.722	2.472	21.700	0.94	0	1108	FLOOD
10.003	67.808	0.760	8.127	0.94	0	1070	FLOOD
12.000	67.187	0.712	0.000	0.31	0	64	FLD RISK
13.000	67.226	0.776	0.000	0.24	0	69	FLD RISK
1.006	67.204	1.006	4.101	0.38	1636	263	FLOOD
1.007	67.042	0.924	0.000	0.80	0	238	FLD RISK



Summary Wizard of "CRITICAL"(Rank 1 by Max Outflow)  
Results for Design Storms

N	Storm	Sensitivity Flow (%)	Rank	Surcharge Sensitivity	Flood Sensitivity	Overflow Sensitivity	O/F Act
002	15 Winter	+20%	1	0%/15 Summer	+20%/15 Summer		
003	15 Winter	+20%	1	0%/15 Summer	+20%/30 Summer		
000	15 Winter	+20%	1	0%/15 Summer			0
000	120 Summer	+20%	1	0%/15 Summer			0
006	120 Winter	+20%	1	0%/15 Summer	+20%/60 Summer	0%/15 Summer	36
007	120 Winter	+20%	1	0%/15 Summer			

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m <sup>3</sup> )	Flow/Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
10.002	71.722	2.472	21.700	0.94	0	1108	FLOOD
10.003	67.802	0.754	1.947	0.97	0	1109	FLOOD
12.000	66.768	0.293	0.000	0.60	0	124	SURCH'ED
13.000	67.177	0.727	0.000	0.25	0	71	FLD RISK
1.006	67.201	1.003	1.198	0.42	1057	292	FLOOD
1.007	67.038	0.920	0.000	1.03	0	307	FLD RISK

WSP Management Services		Page 3
Mountbatten House Basing View Basingstoke RG21 4HJ		
Date 07 April 2006 08:40 File Cellular Storage 1 100y.src	Designed By UKEXJ004 Checked By	
Micro Drainage	Source Control W.10.1 net	

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.960

Time	(mins)	Area
from:	to:	(ha)
0	4	0.960

Summary of Results for 100 year Return Period

Half Drain Time : 222 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	12.4	0.0	12.4	72.3348	0.0347	164.1	O K
30 Summer	12.5	0.0	12.5	72.3443	0.0443	209.0	O K
60 Summer	12.6	0.0	12.6	72.3518	0.0518	245.6	O K
120 Summer	12.7	0.0	12.7	72.3553	0.0553	262.3	O K
180 Summer	12.6	0.0	12.6	72.3538	0.0538	255.0	O K
240 Summer	12.6	0.0	12.6	72.3513	0.0513	244.5	O K
360 Summer	12.6	0.0	12.6	72.3478	0.0478	227.9	O K
480 Summer	12.5	0.0	12.5	72.3448	0.0447	213.6	O K
600 Summer	12.5	0.0	12.5	72.3418	0.0417	199.5	O K
720 Summer	12.5	0.0	12.5	72.3393	0.0392	185.8	O K
960 Summer	12.4	0.0	12.4	72.3338	0.0337	159.3	O K
1440 Summer	12.3	0.0	12.3	72.3238	0.0237	111.8	O K
2160 Summer	12.2	0.0	12.2	72.3118	0.0118	56.8	O K
2880 Summer	12.1	0.0	12.1	72.3048	0.0048	21.6	O K
4320 Summer	11.1	0.0	11.1	72.3000	0.0000	0.0	O K
5760 Summer	8.8	0.0	8.8	72.3000	0.0000	0.0	O K
7200 Summer	7.3	0.0	7.3	72.3000	0.0000	0.0	O K
8640 Summer	6.3	0.0	6.3	72.3000	0.0000	0.0	O K
10080 Summer	5.6	0.0	5.6	72.3000	0.0000	0.0	O K
15 Winter	12.5	0.0	12.5	72.3393	0.0392	185.6	O K
30 Winter	12.6	0.0	12.6	72.3498	0.0498	237.4	O K
60 Winter	12.7	0.0	12.7	72.3593	0.0593	281.7	O K
120 Winter	12.7	0.0	12.7	72.3648	0.0648	307.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	18
30 Summer	64.79	33
60 Summer	40.51	62
120 Summer	24.46	120
180 Summer	17.96	170
240 Summer	14.34	198
360 Summer	10.42	260
480 Summer	8.30	328
600 Summer	6.96	396
720 Summer	6.02	464
960 Summer	4.78	598
1440 Summer	3.46	852
2160 Summer	2.49	1208
2880 Summer	1.98	1532
4320 Summer	1.42	0
5760 Summer	1.12	0
7200 Summer	0.94	0
8640 Summer	0.81	0
10080 Summer	0.71	0
15 Winter	98.68	18
30 Winter	64.79	32
60 Winter	40.51	62
120 Winter	24.46	118

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Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:40  
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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	12.7	0.0	12.7	72.3643	0.0643	305.5	O K
240 Winter	12.7	0.0	12.7	72.3618	0.0618	293.1	O K
360 Winter	12.7	0.0	12.7	72.3568	0.0568	268.7	O K
480 Winter	12.6	0.0	12.6	72.3523	0.0522	248.5	O K
600 Winter	12.6	0.0	12.6	72.3478	0.0477	227.5	O K
720 Winter	12.5	0.0	12.5	72.3433	0.0432	206.5	O K
960 Winter	12.4	0.0	12.4	72.3348	0.0347	165.8	O K
1440 Winter	12.3	0.0	12.3	72.3198	0.0197	94.7	O K
2160 Winter	12.1	0.0	12.1	72.3043	0.0043	20.4	O K
2880 Winter	11.2	0.0	11.2	72.3000	0.0000	0.0	O K
4320 Winter	8.1	0.0	8.1	72.3000	0.0000	0.0	O K
5760 Winter	6.4	0.0	6.4	72.3000	0.0000	0.0	O K
7200 Winter	5.3	0.0	5.3	72.3000	0.0000	0.0	O K
8640 Winter	4.6	0.0	4.6	72.3000	0.0000	0.0	O K
10080 Winter	4.0	0.0	4.0	72.3000	0.0000	0.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	174
240 Winter	14.34	226
360 Winter	10.42	280
480 Winter	8.30	356
600 Winter	6.96	432
720 Winter	6.02	506
960 Winter	4.78	646
1440 Winter	3.46	898
2160 Winter	2.49	1216
2880 Winter	1.98	0
4320 Winter	1.42	0
5760 Winter	1.12	0
7200 Winter	0.94	0
8640 Winter	0.81	0
10080 Winter	0.71	0

Mountbatten House  
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 Basingstoke RG21 4HJ



Date 07 April 2006 08:41  
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#### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

#### Time / Area Diagram

Total Area (ha) = 0.240

Time	(mins)	Area
from:	to:	(ha)
0	4	0.240



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 Basing View  
 Basingstoke RG21 4HJ  
 Date 07 April 2006 08:41  
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Summary of Results for 100 year Return Period

Half Drain Time : 439 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	0.7	0.0	0.7	72.0388	0.0387	44.1	O K
30 Summer	1.2	0.0	1.2	72.0503	0.0503	57.3	O K
60 Summer	1.8	0.0	1.8	72.0613	0.0613	70.1	O K
120 Summer	2.2	0.0	2.2	72.0708	0.0708	80.9	O K
180 Summer	2.3	0.0	2.3	72.0748	0.0748	85.2	O K
240 Summer	2.4	0.0	2.4	72.0763	0.0763	86.7	O K
360 Summer	2.4	0.0	2.4	72.0773	0.0773	88.3	O K
480 Summer	2.5	0.0	2.5	72.0783	0.0783	89.3	O K
600 Summer	2.5	0.0	2.5	72.0788	0.0788	89.8	O K
720 Summer	2.5	0.0	2.5	72.0788	0.0788	90.0	O K
960 Summer	2.5	0.0	2.5	72.0783	0.0783	89.5	O K
1440 Summer	2.4	0.0	2.4	72.0763	0.0763	87.0	O K
2160 Summer	2.2	0.0	2.2	72.0723	0.0723	82.4	O K
2880 Summer	2.1	0.0	2.1	72.0683	0.0683	77.9	O K
4320 Summer	1.8	0.0	1.8	72.0618	0.0617	70.7	O K
5760 Summer	1.6	0.0	1.6	72.0573	0.0572	65.4	O K
7200 Summer	1.4	0.0	1.4	72.0543	0.0542	61.6	O K
8640 Summer	1.2	0.0	1.2	72.0513	0.0512	58.5	O K
10080 Summer	1.1	0.0	1.1	72.0493	0.0492	56.0	O K
15 Winter	0.9	0.0	0.9	72.0433	0.0432	49.3	O K
30 Winter	1.5	0.0	1.5	72.0563	0.0563	64.1	O K
60 Winter	2.1	0.0	2.1	72.0688	0.0688	78.4	O K
120 Winter	2.5	0.0	2.5	72.0793	0.0793	90.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	34
60 Summer	40.51	62
120 Summer	24.46	122
180 Summer	17.96	180
240 Summer	14.34	234
360 Summer	10.42	286
480 Summer	8.30	346
600 Summer	6.96	412
720 Summer	6.02	482
960 Summer	4.78	616
1440 Summer	3.46	882
2160 Summer	2.49	1276
2880 Summer	1.98	1648
4320 Summer	1.42	2380
5760 Summer	1.12	3120
7200 Summer	0.94	3888
8640 Summer	0.81	4584
10080 Summer	0.71	5344
15 Winter	98.68	19
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	120

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:41  
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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	2.8	0.0	2.8	72.0838	0.0838	95.4	O K
240 Winter	2.9	0.0	2.9	72.0853	0.0853	97.1	O K
360 Winter	2.9	0.0	2.9	72.0863	0.0863	98.1	O K
480 Winter	3.0	0.0	3.0	72.0868	0.0868	98.8	O K
600 Winter	2.9	0.0	2.9	72.0863	0.0863	98.6	O K
720 Winter	2.9	0.0	2.9	72.0858	0.0858	97.9	O K
960 Winter	2.8	0.0	2.8	72.0843	0.0843	95.8	O K
1440 Winter	2.6	0.0	2.6	72.0798	0.0798	90.7	O K
2160 Winter	2.3	0.0	2.3	72.0728	0.0728	83.2	O K
2880 Winter	2.0	0.0	2.0	72.0673	0.0673	76.8	O K
4320 Winter	1.7	0.0	1.7	72.0593	0.0592	67.5	O K
5760 Winter	1.4	0.0	1.4	72.0543	0.0542	61.7	O K
7200 Winter	1.2	0.0	1.2	72.0508	0.0507	57.6	O K
8640 Winter	1.0	0.0	1.0	72.0478	0.0477	54.5	O K
10080 Winter	0.9	0.0	0.9	72.0453	0.0452	51.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	176
240 Winter	14.34	230
360 Winter	10.42	286
480 Winter	8.30	360
600 Winter	6.96	436
720 Winter	6.02	512
960 Winter	4.78	656
1440 Winter	3.46	938
2160 Winter	2.49	1344
2880 Winter	1.98	1732
4320 Winter	1.42	2464
5760 Winter	1.12	3224
7200 Winter	0.94	3960
8640 Winter	0.81	4752
10080 Winter	0.71	5544

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ

Date 07 April 2006 08:41

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.540

Time	(mins)	Area
from:	to:	(ha)
0	4	0.540

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:41

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### Summary of Results for 100 year Return Period

Half Drain Time : 775 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	0.8	0.0	0.8	71.0418	0.0417	99.5	O K
30 Summer	1.4	0.0	1.4	71.0548	0.0548	130.0	O K
60 Summer	2.0	0.0	2.0	71.0678	0.0678	160.7	O K
120 Summer	2.6	0.0	2.6	71.0798	0.0798	189.8	O K
180 Summer	2.9	0.0	2.9	71.0858	0.0858	204.2	O K
240 Summer	3.1	0.0	3.1	71.0893	0.0893	212.1	O K
360 Summer	3.3	0.0	3.3	71.0928	0.0928	219.8	O K
480 Summer	3.4	0.0	3.4	71.0938	0.0938	222.5	O K
600 Summer	3.4	0.0	3.4	71.0948	0.0948	224.5	O K
720 Summer	3.5	0.0	3.5	71.0953	0.0953	226.0	O K
960 Summer	3.5	0.0	3.5	71.0958	0.0958	227.9	O K
1440 Summer	3.5	0.0	3.5	71.0963	0.0963	228.1	O K
2160 Summer	3.4	0.0	3.4	71.0943	0.0943	224.0	O K
2880 Summer	3.3	0.0	3.3	71.0918	0.0918	218.0	O K
4320 Summer	2.9	0.0	2.9	71.0863	0.0863	205.3	O K
5760 Summer	2.7	0.0	2.7	71.0818	0.0818	193.6	O K
7200 Summer	2.4	0.0	2.4	71.0773	0.0773	182.9	O K
8640 Summer	2.3	0.0	2.3	71.0733	0.0733	173.4	O K
10080 Summer	2.1	0.0	2.1	71.0698	0.0698	165.4	O K
15 Winter	1.0	0.0	1.0	71.0468	0.0468	111.4	O K
30 Winter	1.8	0.0	1.8	71.0613	0.0613	145.5	O K
60 Winter	2.4	0.0	2.4	71.0758	0.0758	179.9	O K
120 Winter	3.1	0.0	3.1	71.0893	0.0893	212.3	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	34
60 Summer	40.51	64
120 Summer	24.46	122
180 Summer	17.96	182
240 Summer	14.34	242
360 Summer	10.42	360
480 Summer	8.30	440
600 Summer	6.96	492
720 Summer	6.02	550
960 Summer	4.78	676
1440 Summer	3.46	950
2160 Summer	2.49	1360
2880 Summer	1.98	1756
4320 Summer	1.42	2548
5760 Summer	1.12	3296
7200 Summer	0.94	4040
8640 Summer	0.81	4760
10080 Summer	0.71	5544
15 Winter	98.68	19
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	120

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	3.5	0.0	3.5	71.0963	0.0963	228.1	O K
240 Winter	3.7	0.0	3.7	71.0998	0.0998	236.9	O K
360 Winter	3.9	0.0	3.9	71.1033	0.1033	245.6	O K
480 Winter	4.0	0.0	4.0	71.1048	0.1048	248.8	O K
600 Winter	4.1	0.0	4.1	71.1053	0.1053	249.6	O K
720 Winter	4.1	0.0	4.1	71.1058	0.1058	250.9	O K
960 Winter	4.1	0.0	4.1	71.1058	0.1058	251.2	O K
1440 Winter	4.0	0.0	4.0	71.1043	0.1043	247.1	O K
2160 Winter	3.7	0.0	3.7	71.0998	0.0998	236.7	O K
2880 Winter	3.5	0.0	3.5	71.0953	0.0953	225.9	O K
4320 Winter	3.0	0.0	3.0	71.0868	0.0868	206.4	O K
5760 Winter	2.6	0.0	2.6	71.0803	0.0803	190.3	O K
7200 Winter	2.3	0.0	2.3	71.0743	0.0743	176.0	O K
8640 Winter	2.1	0.0	2.1	71.0693	0.0693	164.2	O K
10080 Winter	1.9	0.0	1.9	71.0653	0.0653	154.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	178
240 Winter	14.34	236
360 Winter	10.42	348
480 Winter	8.30	452
600 Winter	6.96	488
720 Winter	6.02	558
960 Winter	4.78	712
1440 Winter	3.46	1010
2160 Winter	2.49	1448
2880 Winter	1.98	1848
4320 Winter	1.42	2680
5760 Winter	1.12	3464
7200 Winter	0.94	4248
8640 Winter	0.81	4936
10080 Winter	0.71	5656

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ

Date 07 April 2006 08:41

File Cellular Storage 5.000 100y.src

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Micro Drainage

Source Control W.10.1 net

#### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

#### Time / Area Diagram

Total Area (ha) = 0.540

Time	(mins)	Area
from:	to:	(ha)
0	4	0.540

Mountbatten House  
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Basingstoke RG21 4HJ

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### Summary of Results for 100 year Return Period

Half Drain Time : 775 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	0.8	0.0	0.8	71.0418	0.0417	99.5	O K
30 Summer	1.4	0.0	1.4	71.0548	0.0548	130.0	O K
60 Summer	2.0	0.0	2.0	71.0678	0.0678	160.7	O K
120 Summer	2.6	0.0	2.6	71.0798	0.0798	189.8	O K
180 Summer	2.9	0.0	2.9	71.0858	0.0858	204.2	O K
240 Summer	3.1	0.0	3.1	71.0893	0.0893	212.1	O K
360 Summer	3.3	0.0	3.3	71.0928	0.0928	219.8	O K
480 Summer	3.4	0.0	3.4	71.0938	0.0938	222.5	O K
600 Summer	3.4	0.0	3.4	71.0948	0.0948	224.5	O K
720 Summer	3.5	0.0	3.5	71.0953	0.0953	226.0	O K
960 Summer	3.5	0.0	3.5	71.0958	0.0958	227.9	O K
1440 Summer	3.5	0.0	3.5	71.0963	0.0963	228.1	O K
2160 Summer	3.4	0.0	3.4	71.0943	0.0943	224.0	O K
2880 Summer	3.3	0.0	3.3	71.0918	0.0918	218.0	O K
4320 Summer	2.9	0.0	2.9	71.0863	0.0863	205.3	O K
5760 Summer	2.7	0.0	2.7	71.0818	0.0818	193.6	O K
7200 Summer	2.4	0.0	2.4	71.0773	0.0773	182.9	O K
8640 Summer	2.3	0.0	2.3	71.0733	0.0733	173.4	O K
10080 Summer	2.1	0.0	2.1	71.0698	0.0698	165.4	O K
15 Winter	1.0	0.0	1.0	71.0468	0.0468	111.4	O K
30 Winter	1.8	0.0	1.8	71.0613	0.0613	145.5	O K
60 Winter	2.4	0.0	2.4	71.0758	0.0758	179.9	O K
120 Winter	3.1	0.0	3.1	71.0893	0.0893	212.3	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	34
60 Summer	40.51	64
120 Summer	24.46	122
180 Summer	17.96	182
240 Summer	14.34	242
360 Summer	10.42	360
480 Summer	8.30	440
600 Summer	6.96	492
720 Summer	6.02	550
960 Summer	4.78	676
1440 Summer	3.46	950
2160 Summer	2.49	1360
2880 Summer	1.98	1756
4320 Summer	1.42	2548
5760 Summer	1.12	3296
7200 Summer	0.94	4040
8640 Summer	0.81	4760
10080 Summer	0.71	5544
15 Winter	98.68	19
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	120

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

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Micro Drainage

Source Control W.10.1 net

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	3.5	0.0	3.5	71.0963	0.0963	228.1	O K
240 Winter	3.7	0.0	3.7	71.0998	0.0998	236.9	O K
360 Winter	3.9	0.0	3.9	71.1033	0.1033	245.6	O K
480 Winter	4.0	0.0	4.0	71.1048	0.1048	248.8	O K
600 Winter	4.1	0.0	4.1	71.1053	0.1053	249.6	O K
720 Winter	4.1	0.0	4.1	71.1058	0.1058	250.9	O K
960 Winter	4.1	0.0	4.1	71.1058	0.1058	251.2	O K
1440 Winter	4.0	0.0	4.0	71.1043	0.1043	247.1	O K
2160 Winter	3.7	0.0	3.7	71.0998	0.0998	236.7	O K
2880 Winter	3.5	0.0	3.5	71.0953	0.0953	225.9	O K
4320 Winter	3.0	0.0	3.0	71.0868	0.0868	206.4	O K
5760 Winter	2.6	0.0	2.6	71.0803	0.0803	190.3	O K
7200 Winter	2.3	0.0	2.3	71.0743	0.0743	176.0	O K
8640 Winter	2.1	0.0	2.1	71.0693	0.0693	164.2	O K
10080 Winter	1.9	0.0	1.9	71.0653	0.0653	154.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	178
240 Winter	14.34	236
360 Winter	10.42	348
480 Winter	8.30	452
600 Winter	6.96	488
720 Winter	6.02	558
960 Winter	4.78	712
1440 Winter	3.46	1010
2160 Winter	2.49	1448
2880 Winter	1.98	1848
4320 Winter	1.42	2680
5760 Winter	1.12	3464
7200 Winter	0.94	4248
8640 Winter	0.81	4936
10080 Winter	0.71	5656



Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ

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Micro Drainage

Source Control W.10.1 net

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.870

Time	(mins)	Area
from:	to:	(ha)
0	4	0.870

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ



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Micro Drainage

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Summary of Results for 100 year Return Period

Half Drain Time : 458 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	4.4	0.0	4.4	69.1113	0.1113	158.8	O K
30 Summer	6.0	0.0	6.0	69.1443	0.1442	205.7	O K
60 Summer	6.7	0.0	6.7	69.1768	0.1767	251.7	O K
120 Summer	7.2	0.0	7.2	69.2048	0.2047	292.0	O K
180 Summer	7.4	0.0	7.4	69.2168	0.2167	309.0	O K
240 Summer	7.5	0.0	7.5	69.2218	0.2217	316.2	O K
360 Summer	7.5	0.0	7.5	69.2248	0.2247	320.5	O K
480 Summer	7.5	0.0	7.5	69.2263	0.2262	322.7	O K
600 Summer	7.6	0.0	7.6	69.2268	0.2267	323.3	O K
720 Summer	7.5	0.0	7.5	69.2263	0.2262	322.6	O K
960 Summer	7.5	0.0	7.5	69.2233	0.2232	318.4	O K
1440 Summer	7.3	0.0	7.3	69.2138	0.2137	304.6	O K
2160 Summer	7.0	0.0	7.0	69.1968	0.1967	280.1	O K
2880 Summer	6.7	0.0	6.7	69.1798	0.1797	256.5	O K
4320 Summer	6.2	0.0	6.2	69.1533	0.1533	218.3	O K
5760 Summer	5.8	0.0	5.8	69.1348	0.1348	191.7	O K
7200 Summer	5.2	0.0	5.2	69.1233	0.1233	175.5	O K
8640 Summer	4.6	0.0	4.6	69.1148	0.1148	163.2	O K
10080 Summer	4.2	0.0	4.2	69.1073	0.1073	153.0	O K
15 Winter	5.3	0.0	5.3	69.1248	0.1248	177.7	O K
30 Winter	6.4	0.0	6.4	69.1618	0.1617	230.7	O K
60 Winter	7.1	0.0	7.1	69.1983	0.1982	282.7	O K
120 Winter	7.6	0.0	7.6	69.2308	0.2307	328.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	33
60 Summer	40.51	62
120 Summer	24.46	122
180 Summer	17.96	182
240 Summer	14.34	240
360 Summer	10.42	310
480 Summer	8.30	372
600 Summer	6.96	434
720 Summer	6.02	500
960 Summer	4.78	636
1440 Summer	3.46	910
2160 Summer	2.49	1300
2880 Summer	1.98	1696
4320 Summer	1.42	2420
5760 Summer	1.12	3112
7200 Summer	0.94	3824
8640 Summer	0.81	4584
10080 Summer	0.71	5344
15 Winter	98.68	19
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	120

Mountbatten House

Basing View

Basingstoke RG21 4HJ

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	7.9	0.0	7.9	69.2448	0.2447	348.7	O K
240 Winter	8.0	0.0	8.0	69.2513	0.2512	357.8	O K
360 Winter	8.0	0.0	8.0	69.2548	0.2547	363.1	O K
480 Winter	8.0	0.0	8.0	69.2543	0.2542	362.3	O K
600 Winter	8.0	0.0	8.0	69.2538	0.2537	361.3	O K
720 Winter	8.0	0.0	8.0	69.2513	0.2512	358.2	O K
960 Winter	7.9	0.0	7.9	69.2448	0.2447	348.7	O K
1440 Winter	7.6	0.0	7.6	69.2273	0.2272	323.8	O K
2160 Winter	7.1	0.0	7.1	69.2003	0.2002	285.2	O K
2880 Winter	6.7	0.0	6.7	69.1763	0.1763	251.1	O K
4320 Winter	5.9	0.0	5.9	69.1408	0.1408	200.6	O K
5760 Winter	5.1	0.0	5.1	69.1228	0.1228	174.7	O K
7200 Winter	4.4	0.0	4.4	69.1108	0.1108	157.8	O K
8640 Winter	3.9	0.0	3.9	69.1018	0.1018	145.1	O K
10080 Winter	3.4	0.0	3.4	69.0948	0.0948	135.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	178
240 Winter	14.34	234
360 Winter	10.42	340
480 Winter	8.30	388
600 Winter	6.96	462
720 Winter	6.02	538
960 Winter	4.78	690
1440 Winter	3.46	980
2160 Winter	2.49	1388
2880 Winter	1.98	1784
4320 Winter	1.42	2504
5760 Winter	1.12	3176
7200 Winter	0.94	3960
8640 Winter	0.81	4672
10080 Winter	0.71	5440

Mountbatten House

Basing View

Basingstoke RG21 4HJ

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.680

Time	(mins)	Area
from:	to:	(ha)
0	4	0.680

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:42

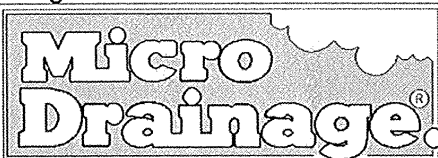
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### Summary of Results for 100 year Return Period

Half Drain Time : 314 minutes

Storm Duration (mins)	Maximum Control (1/s)	Maximum Filtration (1/s)	Maximum Outflow (1/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	5.5	0.0	5.5	69.1293	0.1293	123.0	O K
30 Summer	6.5	0.0	6.5	69.1673	0.1672	158.9	O K
60 Summer	7.1	0.0	7.1	69.2028	0.2027	192.8	O K
120 Summer	7.6	0.0	7.6	69.2313	0.2312	219.8	O K
180 Summer	7.8	0.0	7.8	69.2408	0.2407	228.7	O K
240 Summer	7.8	0.0	7.8	69.2433	0.2432	231.0	O K
360 Summer	7.9	0.0	7.9	69.2453	0.2452	233.0	O K
480 Summer	7.9	0.0	7.9	69.2453	0.2452	232.9	O K
600 Summer	7.8	0.0	7.8	69.2433	0.2432	231.1	O K
720 Summer	7.8	0.0	7.8	69.2403	0.2402	228.3	O K
960 Summer	7.6	0.0	7.6	69.2323	0.2322	220.9	O K
1440 Summer	7.3	0.0	7.3	69.2143	0.2142	203.6	O K
2160 Summer	6.9	0.0	6.9	69.1883	0.1882	179.0	O K
2880 Summer	6.5	0.0	6.5	69.1668	0.1668	158.6	O K
4320 Summer	5.9	0.0	5.9	69.1373	0.1373	130.3	O K
5760 Summer	5.1	0.0	5.1	69.1218	0.1218	115.5	O K
7200 Summer	4.4	0.0	4.4	69.1108	0.1108	105.1	O K
8640 Summer	3.9	0.0	3.9	69.1023	0.1023	97.4	O K
10080 Summer	3.5	0.0	3.5	69.0958	0.0958	91.1	O K
15 Winter	6.0	0.0	6.0	69.1453	0.1452	137.8	O K
30 Winter	6.9	0.0	6.9	69.1878	0.1877	178.3	O K
60 Winter	7.6	0.0	7.6	69.2283	0.2282	216.7	O K
120 Winter	8.1	0.0	8.1	69.2613	0.2612	248.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	33
60 Summer	40.51	62
120 Summer	24.46	122
180 Summer	17.96	180
240 Summer	14.34	210
360 Summer	10.42	272
480 Summer	8.30	338
600 Summer	6.96	406
720 Summer	6.02	472
960 Summer	4.78	608
1440 Summer	3.46	878
2160 Summer	2.49	1256
2880 Summer	1.98	1616
4320 Summer	1.42	2332
5760 Summer	1.12	3056
7200 Summer	0.94	3752
8640 Summer	0.81	4496
10080 Summer	0.71	5240
15 Winter	98.68	18
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	118

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

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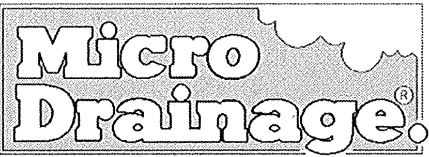
Micro Drainage

Source Control W.10.1 net

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (1/s)	Maximum Filtration (1/s)	Maximum Outflow (1/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	8.3	0.0	8.3	69.2728	0.2727	259.1	O K
240 Winter	8.3	0.0	8.3	69.2758	0.2757	262.0	O K
360 Winter	8.3	0.0	8.3	69.2753	0.2752	261.3	O K
480 Winter	8.3	0.0	8.3	69.2728	0.2727	259.2	O K
600 Winter	8.2	0.0	8.2	69.2683	0.2682	254.7	O K
720 Winter	8.1	0.0	8.1	69.2623	0.2622	249.0	O K
960 Winter	7.9	0.0	7.9	69.2483	0.2482	235.8	O K
1440 Winter	7.4	0.0	7.4	69.2198	0.2197	208.6	O K
2160 Winter	6.8	0.0	6.8	69.1823	0.1822	173.2	O K
2880 Winter	6.2	0.0	6.2	69.1538	0.1538	146.1	O K
4320 Winter	5.2	0.0	5.2	69.1233	0.1233	117.1	O K
5760 Winter	4.2	0.0	4.2	69.1078	0.1078	102.3	O K
7200 Winter	3.6	0.0	3.6	69.0973	0.0973	92.2	O K
8640 Winter	3.1	0.0	3.1	69.0893	0.0893	84.6	O K
10080 Winter	2.8	0.0	2.8	69.0833	0.0833	78.9	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	174
240 Winter	14.34	228
360 Winter	10.42	286
480 Winter	8.30	362
600 Winter	6.96	438
720 Winter	6.02	512
960 Winter	4.78	656
1440 Winter	3.46	938
2160 Winter	2.49	1320
2880 Winter	1.98	1676
4320 Winter	1.42	2376
5760 Winter	1.12	3112
7200 Winter	0.94	3824
8640 Winter	0.81	4576
10080 Winter	0.71	5312

WSP Management Services		Page 3
Mountbatten House Basing View Basingstoke RG21 4HJ		
Date 07 April 2006 08:43 File Porous pavements 2.000 100y.src	Designed By UKEXJ004 Checked By	
Micro Drainage	Source Control W.10.1 net	

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 1.270

Time (mins)	Area (ha)
from: to:	
0	4 1.270

Summary of Results for 100 year Return Period

Half Drain Time : 418 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	7.3	0.0	7.3	72.7143	0.3142	167.2	O
30 Summer	8.3	0.0	8.3	72.7738	0.3737	235.9	O
60 Summer	9.0	0.0	9.0	72.8233	0.4232	303.0	O
120 Summer	9.6	0.0	9.6	72.8628	0.4627	362.0	FLOOD RIS
180 Summer	9.8	0.0	9.8	72.8788	0.4787	387.2	FLOOD RIS
240 Summer	9.9	0.0	9.9	72.8853	0.4852	398.0	FLOOD RIS
360 Summer	9.9	0.0	9.9	72.8888	0.4887	403.6	FLOOD RIS
480 Summer	9.9	0.0	9.9	72.8898	0.4897	405.3	FLOOD RIS
600 Summer	9.9	0.0	9.9	72.8892	0.4892	404.7	FLOOD RIS
720 Summer	9.9	0.0	9.9	72.8877	0.4877	402.4	FLOOD RIS
960 Summer	9.8	0.0	9.8	72.8827	0.4827	394.0	FLOOD RIS
1440 Summer	9.6	0.0	9.6	72.8672	0.4672	369.5	FLOOD RIS
2160 Summer	9.3	0.0	9.3	72.8403	0.4402	327.8	O
2880 Summer	8.9	0.0	8.9	72.8133	0.4132	288.4	O
4320 Summer	8.2	0.0	8.2	72.7638	0.3637	223.8	O
5760 Summer	7.5	0.0	7.5	72.7238	0.3237	177.3	O
7200 Summer	6.9	0.0	6.9	72.6918	0.2917	143.7	O
8640 Summer	6.5	0.0	6.5	72.6663	0.2662	119.7	O
10080 Summer	6.1	0.0	6.1	72.6468	0.2467	102.9	O
15 Winter	7.8	0.0	7.8	72.7398	0.3397	195.0	O
30 Winter	8.7	0.0	8.7	72.8018	0.4017	272.5	O
60 Winter	9.5	0.0	9.5	72.8537	0.4537	348.4	FLOOD RIS
120 Winter	10.0	0.0	10.0	72.8957	0.4957	415.6	FLOOD RIS

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	33
60 Summer	40.51	62
120 Summer	24.46	122
180 Summer	17.96	182
240 Summer	14.34	240
360 Summer	10.42	322
480 Summer	8.30	380
600 Summer	6.96	442
720 Summer	6.02	508
960 Summer	4.78	646
1440 Summer	3.46	912
2160 Summer	2.49	1316
2880 Summer	1.98	1700
4320 Summer	1.42	2424
5760 Summer	1.12	3168
7200 Summer	0.94	3888
8640 Summer	0.81	4576
10080 Summer	0.71	5240
15 Winter	98.68	19
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	120



Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:43

File Porous pavements 2.000 100y.src

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Source Control W.10.1 net

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	10.2	0.0	10.2	72.9133	0.5132	445.4	FLOOD RI
240 Winter	10.3	0.0	10.3	72.9213	0.5212	459.2	FLOOD RI
360 Winter	10.4	0.0	10.4	72.9263	0.5262	467.7	FLOOD RI
480 Winter	10.4	0.0	10.4	72.9243	0.5242	464.8	FLOOD RI
600 Winter	10.3	0.0	10.3	72.9227	0.5227	461.7	FLOOD RI
720 Winter	10.3	0.0	10.3	72.9198	0.5197	456.4	FLOOD RI
960 Winter	10.2	0.0	10.2	72.9103	0.5102	440.5	FLOOD RI
1440 Winter	9.9	0.0	9.9	72.8862	0.4862	399.8	FLOOD RI
2160 Winter	9.4	0.0	9.4	72.8462	0.4462	336.4	O
2880 Winter	8.8	0.0	8.8	72.8068	0.4067	279.9	O
4320 Winter	7.8	0.0	7.8	72.7392	0.3392	194.4	O
5760 Winter	6.9	0.0	6.9	72.6867	0.2867	138.9	O
7200 Winter	6.1	0.0	6.1	72.6488	0.2487	104.5	O
8640 Winter	5.5	0.0	5.5	72.6283	0.2282	88.0	O
0080 Winter	4.8	0.0	4.8	72.6173	0.2172	79.8	O

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	178
240 Winter	14.34	234
360 Winter	10.42	344
480 Winter	8.30	436
600 Winter	6.96	470
720 Winter	6.02	546
960 Winter	4.78	700
1440 Winter	3.46	994
2160 Winter	2.49	1408
2880 Winter	1.98	1812
4320 Winter	1.42	2548
5760 Winter	1.12	3232
7200 Winter	0.94	3888
8640 Winter	0.81	4496
10080 Winter	0.71	5240

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:43

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.220

Time (mins)	Area (ha)
from: to:	
0	4 0.220

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ



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### Summary of Results for 100 year Return Period

Half Drain Time : 55 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	7.0	0.0	7.0	72.6923	0.1922	25.9	O K
30 Summer	7.5	0.0	7.5	72.7228	0.2227	34.8	O K
60 Summer	7.8	0.0	7.8	72.7398	0.2397	40.5	O K
120 Summer	7.9	0.0	7.9	72.7468	0.2467	42.9	O K
180 Summer	7.8	0.0	7.8	72.7438	0.2437	41.9	O K
240 Summer	7.7	0.0	7.7	72.7378	0.2377	39.7	O K
360 Summer	7.5	0.0	7.5	72.7218	0.2217	34.6	O K
480 Summer	7.2	0.0	7.2	72.7063	0.2062	29.9	O K
600 Summer	6.9	0.0	6.9	72.6913	0.1912	25.7	O K
720 Summer	6.7	0.0	6.7	72.6778	0.1777	22.2	O K
960 Summer	6.2	0.0	6.2	72.6553	0.1553	16.9	O K
1440 Summer	5.4	0.0	5.4	72.6273	0.1273	11.4	O K
2160 Summer	4.1	0.0	4.1	72.6063	0.1063	7.9	O K
2880 Summer	3.3	0.0	3.3	72.5933	0.0933	6.1	O K
4320 Summer	2.4	0.0	2.4	72.5768	0.0768	4.2	O K
5760 Summer	1.9	0.0	1.9	72.5653	0.0652	3.0	O K
7200 Summer	1.6	0.0	1.6	72.5578	0.0577	2.3	O K
8640 Summer	1.4	0.0	1.4	72.5538	0.0537	2.0	O K
10080 Summer	1.2	0.0	1.2	72.5508	0.0507	1.8	O K
15 Winter	7.2	0.0	7.2	72.7088	0.2087	30.6	O K
30 Winter	7.8	0.0	7.8	72.7408	0.2407	40.8	O K
60 Winter	8.1	0.0	8.1	72.7593	0.2592	47.2	O K
120 Winter	8.1	0.0	8.1	72.7632	0.2632	48.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	17
30 Summer	64.79	31
60 Summer	40.51	52
120 Summer	24.46	84
180 Summer	17.96	118
240 Summer	14.34	152
360 Summer	10.42	218
480 Summer	8.30	282
600 Summer	6.96	344
720 Summer	6.02	404
960 Summer	4.78	520
1440 Summer	3.46	750
2160 Summer	2.49	1104
2880 Summer	1.98	1472
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4360
10080 Summer	0.71	5120
15 Winter	98.68	17
30 Winter	64.79	31
60 Winter	40.51	58
120 Winter	24.46	92

Mountbatten House

Basing View

Basingstoke RG21 4HJ

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	8.0	0.0	8.0	72.7568	0.2567	46.3	O K
240 Winter	7.9	0.0	7.9	72.7458	0.2457	42.5	O K
360 Winter	7.5	0.0	7.5	72.7223	0.2222	34.8	O K
480 Winter	7.1	0.0	7.1	72.6993	0.1992	28.0	O K
600 Winter	6.7	0.0	6.7	72.6783	0.1782	22.4	O K
720 Winter	6.3	0.0	6.3	72.6598	0.1598	17.9	O K
960 Winter	5.7	0.0	5.7	72.6328	0.1328	12.4	O K
1440 Winter	4.3	0.0	4.3	72.6088	0.1088	8.3	O K
2160 Winter	3.1	0.0	3.1	72.5893	0.0893	5.6	O K
2880 Winter	2.5	0.0	2.5	72.5778	0.0778	4.2	O K
4320 Winter	1.8	0.0	1.8	72.5613	0.0612	2.6	O K
5760 Winter	1.4	0.0	1.4	72.5538	0.0537	2.1	O K
7200 Winter	1.2	0.0	1.2	72.5498	0.0497	1.7	O K
8640 Winter	1.0	0.0	1.0	72.5468	0.0467	1.5	O K
10080 Winter	0.9	0.0	0.9	72.5433	0.0432	1.3	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	128
240 Winter	14.34	166
360 Winter	10.42	234
480 Winter	8.30	298
600 Winter	6.96	358
720 Winter	6.02	414
960 Winter	4.78	520
1440 Winter	3.46	752
2160 Winter	2.49	1120
2880 Winter	1.98	1472
4320 Winter	1.42	2204
5760 Winter	1.12	2936
7200 Winter	0.94	3632
8640 Winter	0.81	4376
10080 Winter	0.71	5064

Mountbatten House

Basing View

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.500

Time	(mins)	Area
from:	to:	(ha)
0	4	0.500

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:43

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### Summary of Results for 100 year Return Period

Half Drain Time : 135 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	7.8	0.0	7.8	71.2438	0.2437	62.9	O K
30 Summer	8.5	0.0	8.5	71.2868	0.2867	87.2	O K
60 Summer	9.0	0.0	9.0	71.3188	0.3187	107.7	O K
120 Summer	9.2	0.0	9.2	71.3348	0.3347	118.9	O K
180 Summer	9.2	0.0	9.2	71.3378	0.3377	121.0	O K
240 Summer	9.2	0.0	9.2	71.3368	0.3367	120.3	O K
360 Summer	9.1	0.0	9.1	71.3308	0.3307	115.9	O K
480 Summer	9.0	0.0	9.0	71.3218	0.3217	109.9	O K
600 Summer	8.9	0.0	8.9	71.3123	0.3122	103.2	O K
720 Summer	8.7	0.0	8.7	71.3018	0.3017	96.5	O K
960 Summer	8.4	0.0	8.4	71.2808	0.2807	83.7	O K
1440 Summer	7.8	0.0	7.8	71.2433	0.2432	62.7	O K
2160 Summer	7.1	0.0	7.1	71.1978	0.1977	41.4	O K
2880 Summer	6.4	0.0	6.4	71.1638	0.1638	28.4	O K
4320 Summer	5.3	0.0	5.3	71.1263	0.1263	16.9	O K
5760 Summer	4.3	0.0	4.3	71.1093	0.1093	12.7	O K
7200 Summer	3.6	0.0	3.6	71.0978	0.0978	10.1	O K
8640 Summer	3.1	0.0	3.1	71.0893	0.0893	8.4	O K
10080 Summer	2.7	0.0	2.7	71.0828	0.0828	7.2	O K
15 Winter	8.2	0.0	8.2	71.2638	0.2637	73.8	O K
30 Winter	8.8	0.0	8.8	71.3093	0.3092	101.4	O K
60 Winter	9.3	0.0	9.3	71.3433	0.3432	124.9	O K
120 Winter	9.6	0.0	9.6	71.3618	0.3617	138.8	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	18
30 Summer	64.79	32
60 Summer	40.51	62
120 Summer	24.46	110
180 Summer	17.96	140
240 Summer	14.34	172
360 Summer	10.42	240
480 Summer	8.30	308
600 Summer	6.96	376
720 Summer	6.02	442
960 Summer	4.78	570
1440 Summer	3.46	822
2160 Summer	2.49	1172
2880 Summer	1.98	1528
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4400
10080 Summer	0.71	5120
15 Winter	98.68	18
30 Winter	64.79	32
60 Winter	40.51	60
120 Winter	24.46	116

Mountbatten House  
Basing View  
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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	9.6	0.0	9.6	71.3628	0.3627	139.4	O K
240 Winter	9.5	0.0	9.5	71.3602	0.3602	137.6	O K
360 Winter	9.4	0.0	9.4	71.3502	0.3502	130.0	O K
480 Winter	9.2	0.0	9.2	71.3368	0.3367	120.3	O K
600 Winter	9.0	0.0	9.0	71.3222	0.3222	110.1	O K
720 Winter	8.8	0.0	8.8	71.3072	0.3072	100.1	O K
960 Winter	8.4	0.0	8.4	71.2778	0.2777	81.7	O K
1440 Winter	7.5	0.0	7.5	71.2243	0.2242	53.4	O K
2160 Winter	6.4	0.0	6.4	71.1633	0.1633	28.3	O K
2880 Winter	5.5	0.0	5.5	71.1293	0.1293	17.7	O K
4320 Winter	4.0	0.0	4.0	71.1038	0.1038	11.5	O K
5760 Winter	3.1	0.0	3.1	71.0898	0.0898	8.5	O K
7200 Winter	2.6	0.0	2.6	71.0803	0.0803	6.8	O K
8640 Winter	2.2	0.0	2.2	71.0718	0.0718	5.4	O K
10080 Winter	1.9	0.0	1.9	71.0648	0.0648	4.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	148
240 Winter	14.34	184
360 Winter	10.42	260
480 Winter	8.30	334
600 Winter	6.96	406
720 Winter	6.02	476
960 Winter	4.78	606
1440 Winter	3.46	852
2160 Winter	2.49	1192
2880 Winter	1.98	1500
4320 Winter	1.42	2208
5760 Winter	1.12	2920
7200 Winter	0.94	3672
8640 Winter	0.81	4384
10080 Winter	0.71	5144

Mountbatten House  
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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.220

Time (mins)	Area (ha)
from: to:	
0	4 0.220



Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ



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Summary of Results for 100 year Return Period

Half Drain Time : 55 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	7.0	0.0	7.0	72.1923	0.1922	25.9	O K
30 Summer	7.5	0.0	7.5	72.2228	0.2227	34.8	O K
60 Summer	7.8	0.0	7.8	72.2398	0.2397	40.5	O K
120 Summer	7.9	0.0	7.9	72.2468	0.2467	42.9	O K
180 Summer	7.8	0.0	7.8	72.2438	0.2437	41.9	O K
240 Summer	7.7	0.0	7.7	72.2378	0.2377	39.7	O K
360 Summer	7.5	0.0	7.5	72.2218	0.2217	34.6	O K
480 Summer	7.2	0.0	7.2	72.2063	0.2062	29.9	O K
600 Summer	6.9	0.0	6.9	72.1913	0.1912	25.7	O K
720 Summer	6.7	0.0	6.7	72.1778	0.1777	22.2	O K
960 Summer	6.2	0.0	6.2	72.1553	0.1553	16.9	O K
1440 Summer	5.4	0.0	5.4	72.1273	0.1273	11.4	O K
2160 Summer	4.1	0.0	4.1	72.1063	0.1063	7.9	O K
2880 Summer	3.3	0.0	3.3	72.0933	0.0933	6.1	O K
4320 Summer	2.4	0.0	2.4	72.0768	0.0768	4.2	O K
5760 Summer	1.9	0.0	1.9	72.0653	0.0652	3.0	O K
7200 Summer	1.6	0.0	1.6	72.0578	0.0577	2.3	O K
8640 Summer	1.4	0.0	1.4	72.0538	0.0537	2.0	O K
10080 Summer	1.2	0.0	1.2	72.0508	0.0507	1.8	O K
15 Winter	7.2	0.0	7.2	72.2088	0.2087	30.6	O K
30 Winter	7.8	0.0	7.8	72.2408	0.2407	40.8	O K
60 Winter	8.1	0.0	8.1	72.2593	0.2592	47.2	O K
120 Winter	8.1	0.0	8.1	72.2632	0.2632	48.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	17
30 Summer	64.79	31
60 Summer	40.51	52
120 Summer	24.46	84
180 Summer	17.96	118
240 Summer	14.34	152
360 Summer	10.42	218
480 Summer	8.30	282
600 Summer	6.96	344
720 Summer	6.02	404
960 Summer	4.78	520
1440 Summer	3.46	750
2160 Summer	2.49	1104
2880 Summer	1.98	1472
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4360
10080 Summer	0.71	5120
15 Winter	98.68	17
30 Winter	64.79	31
60 Winter	40.51	58
120 Winter	24.46	92

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	8.0	0.0	8.0	72.2568	0.2567	46.3	O K
240 Winter	7.9	0.0	7.9	72.2458	0.2457	42.5	O K
360 Winter	7.5	0.0	7.5	72.2223	0.2222	34.8	O K
480 Winter	7.1	0.0	7.1	72.1993	0.1992	28.0	O K
600 Winter	6.7	0.0	6.7	72.1783	0.1782	22.4	O K
720 Winter	6.3	0.0	6.3	72.1598	0.1598	17.9	O K
960 Winter	5.7	0.0	5.7	72.1328	0.1328	12.4	O K
1440 Winter	4.3	0.0	4.3	72.1088	0.1088	8.3	O K
2160 Winter	3.1	0.0	3.1	72.0893	0.0893	5.6	O K
2880 Winter	2.5	0.0	2.5	72.0778	0.0778	4.2	O K
4320 Winter	1.8	0.0	1.8	72.0613	0.0612	2.6	O K
5760 Winter	1.4	0.0	1.4	72.0538	0.0537	2.1	O K
7200 Winter	1.2	0.0	1.2	72.0498	0.0497	1.7	O K
8640 Winter	1.0	0.0	1.0	72.0468	0.0467	1.5	O K
10080 Winter	0.9	0.0	0.9	72.0433	0.0432	1.3	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	128
240 Winter	14.34	166
360 Winter	10.42	234
480 Winter	8.30	298
600 Winter	6.96	358
720 Winter	6.02	414
960 Winter	4.78	520
1440 Winter	3.46	752
2160 Winter	2.49	1120
2880 Winter	1.98	1472
4320 Winter	1.42	2204
5760 Winter	1.12	2936
7200 Winter	0.94	3632
8640 Winter	0.81	4376
10080 Winter	0.71	5064

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:44

File Porous pavements 8.000 100y.src

Micro Drainage

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Checked By

Source Control W.10.1 net



### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.470

Time	(mins)	Area
from:	to:	(ha)
0	4	0.470

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:44

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### Summary of Results for 100 year Return Period

Half Drain Time : 127 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	7.7	0.0	7.7	71.2353	0.2352	58.0	O K
30 Summer	8.4	0.0	8.4	71.2772	0.2772	80.7	O K
60 Summer	8.8	0.0	8.8	71.3078	0.3077	99.6	O K
120 Summer	9.0	0.0	9.0	71.3233	0.3232	109.6	O K
180 Summer	9.1	0.0	9.1	71.3257	0.3257	111.5	O K
240 Summer	9.1	0.0	9.1	71.3248	0.3247	110.8	O K
360 Summer	9.0	0.0	9.0	71.3182	0.3182	106.5	O K
480 Summer	8.8	0.0	8.8	71.3098	0.3097	100.6	O K
600 Summer	8.7	0.0	8.7	71.2993	0.2992	94.1	O K
720 Summer	8.5	0.0	8.5	71.2888	0.2887	87.6	O K
960 Summer	8.2	0.0	8.2	71.2683	0.2682	75.5	O K
1440 Summer	7.6	0.0	7.6	71.2303	0.2302	55.7	O K
2160 Summer	6.8	0.0	6.8	71.1858	0.1857	36.3	O K
2880 Summer	6.2	0.0	6.2	71.1533	0.1533	24.7	O K
4320 Summer	5.0	0.0	5.0	71.1213	0.1213	15.5	O K
5760 Summer	4.1	0.0	4.1	71.1053	0.1053	11.6	O K
7200 Summer	3.4	0.0	3.4	71.0943	0.0943	9.3	O K
8640 Summer	2.9	0.0	2.9	71.0858	0.0858	7.7	O K
10080 Summer	2.5	0.0	2.5	71.0793	0.0793	6.6	O K
15 Winter	8.0	0.0	8.0	71.2548	0.2547	68.2	O K
30 Winter	8.7	0.0	8.7	71.2993	0.2992	93.9	O K
60 Winter	9.2	0.0	9.2	71.3318	0.3317	115.7	O K
120 Winter	9.4	0.0	9.4	71.3492	0.3492	128.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	18
30 Summer	64.79	32
60 Summer	40.51	62
120 Summer	24.46	106
180 Summer	17.96	138
240 Summer	14.34	170
360 Summer	10.42	238
480 Summer	8.30	306
600 Summer	6.96	374
720 Summer	6.02	440
960 Summer	4.78	568
1440 Summer	3.46	810
2160 Summer	2.49	1168
2880 Summer	1.98	1504
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4400
10080 Summer	0.71	5136
15 Winter	98.68	18
30 Winter	64.79	32
60 Winter	40.51	60
120 Winter	24.46	116

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:44

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Micro Drainage

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	9.4	0.0	9.4	71.3498	0.3497	128.5	O K
240 Winter	9.4	0.0	9.4	71.3472	0.3472	126.5	O K
360 Winter	9.2	0.0	9.2	71.3362	0.3362	118.9	O K
480 Winter	9.0	0.0	9.0	71.3228	0.3227	109.4	O K
600 Winter	8.8	0.0	8.8	71.3078	0.3077	99.5	O K
720 Winter	8.6	0.0	8.6	71.2928	0.2927	89.9	O K
960 Winter	8.1	0.0	8.1	71.2628	0.2627	72.4	O K
1440 Winter	7.3	0.0	7.3	71.2098	0.2097	46.2	O K
2160 Winter	6.2	0.0	6.2	71.1513	0.1513	24.0	O K
2880 Winter	5.2	0.0	5.2	71.1238	0.1238	16.1	O K
4320 Winter	3.7	0.0	3.7	71.0998	0.0998	10.5	O K
5760 Winter	2.9	0.0	2.9	71.0863	0.0863	7.8	O K
7200 Winter	2.4	0.0	2.4	71.0768	0.0768	6.2	O K
8640 Winter	2.1	0.0	2.1	71.0683	0.0683	4.9	O K
10080 Winter	1.8	0.0	1.8	71.0623	0.0622	4.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	146
240 Winter	14.34	184
360 Winter	10.42	258
480 Winter	8.30	332
600 Winter	6.96	404
720 Winter	6.02	470
960 Winter	4.78	600
1440 Winter	3.46	850
2160 Winter	2.49	1188
2880 Winter	1.98	1500
4320 Winter	1.42	2208
5760 Winter	1.12	2936
7200 Winter	0.94	3640
8640 Winter	0.81	4400
10080 Winter	0.71	5112

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ

Date 07 April 2006 08:44

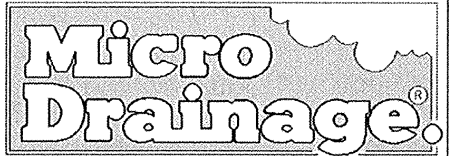
File Porous pavements 10.000 100y....

Micro Drainage

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 1.360

Time	(mins)	Area
from:	to:	(ha)
0	4	1.360

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ



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Summary of Results for 100 year Return Period

Half Drain Time : 387 minutes

Storm Duration (mins)	Maximum Control (1/s)	Maximum Filtration (1/s)	Maximum Outflow (1/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	9.0	0.0	9.0	69.7178	0.3177	177.3	O K
30 Summer	9.8	0.0	9.8	69.7778	0.3777	250.5	O K
60 Summer	10.4	0.0	10.4	69.8277	0.4277	320.9	O K
120 Summer	10.9	0.0	10.9	69.8658	0.4657	381.0	FLOOD RISK
180 Summer	11.0	0.0	11.0	69.8803	0.4802	405.0	FLOOD RISK
240 Summer	11.1	0.0	11.1	69.8853	0.4852	413.7	FLOOD RISK
360 Summer	11.1	0.0	11.1	69.8863	0.4862	415.1	FLOOD RISK
480 Summer	11.1	0.0	11.1	69.8853	0.4852	413.1	FLOOD RISK
600 Summer	11.1	0.0	11.1	69.8827	0.4827	408.7	FLOOD RISK
720 Summer	11.0	0.0	11.0	69.8788	0.4787	402.6	FLOOD RISK
960 Summer	10.9	0.0	10.9	69.8697	0.4697	386.9	FLOOD RISK
1440 Summer	10.6	0.0	10.6	69.8467	0.4467	350.3	O K
2160 Summer	10.2	0.0	10.2	69.8113	0.4112	296.5	O K
2880 Summer	9.8	0.0	9.8	69.7772	0.3772	249.9	O K
4320 Summer	9.0	0.0	9.0	69.7183	0.3182	177.8	O K
5760 Summer	8.2	0.0	8.2	69.6693	0.2692	127.3	O K
7200 Summer	7.6	0.0	7.6	69.6293	0.2292	92.4	O K
8640 Summer	7.0	0.0	7.0	69.5963	0.1963	67.7	O K
10080 Summer	6.5	0.0	6.5	69.5703	0.1703	50.9	O K
15 Winter	9.3	0.0	9.3	69.7438	0.3437	207.2	O K
30 Winter	10.1	0.0	10.1	69.8062	0.4062	289.6	O K
60 Winter	10.8	0.0	10.8	69.8588	0.4587	369.3	FLOOD RISK
120 Winter	11.3	0.0	11.3	69.8997	0.4997	438.5	FLOOD RISK

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	33
60 Summer	40.51	62
120 Summer	24.46	122
180 Summer	17.96	182
240 Summer	14.34	240
360 Summer	10.42	312
480 Summer	8.30	374
600 Summer	6.96	436
720 Summer	6.02	504
960 Summer	4.78	642
1440 Summer	3.46	910
2160 Summer	2.49	1316
2880 Summer	1.98	1700
4320 Summer	1.42	2424
5760 Summer	1.12	3168
7200 Summer	0.94	3824
8640 Summer	0.81	4504
10080 Summer	0.71	5240
15 Winter	98.68	18
30 Winter	64.79	33
60 Winter	40.51	62
120 Winter	24.46	120

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	11.4	0.0	11.4	69.9162	0.5162	467.5	FLOOD RISK
240 Winter	11.5	0.0	11.5	69.9228	0.5227	479.6	FLOOD RISK
360 Winter	11.5	0.0	11.5	69.9248	0.5247	483.7	FLOOD RISK
480 Winter	11.5	0.0	11.5	69.9213	0.5212	476.6	FLOOD RISK
600 Winter	11.5	0.0	11.5	69.9172	0.5172	469.8	FLOOD RISK
720 Winter	11.4	0.0	11.4	69.9123	0.5122	460.4	FLOOD RISK
960 Winter	11.2	0.0	11.2	69.8987	0.4987	436.5	FLOOD RISK
1440 Winter	10.9	0.0	10.9	69.8662	0.4662	381.9	FLOOD RISK
2160 Winter	10.3	0.0	10.3	69.8157	0.4157	303.5	O I
2880 Winter	9.7	0.0	9.7	69.7682	0.3682	237.7	O I
4320 Winter	8.5	0.0	8.5	69.6858	0.2857	143.3	O I
5760 Winter	7.5	0.0	7.5	69.6213	0.2212	85.8	O I
7200 Winter	6.6	0.0	6.6	69.5723	0.1723	51.9	O I
8640 Winter	5.9	0.0	5.9	69.5373	0.1373	33.1	O I
0080 Winter	5.2	0.0	5.2	69.5238	0.1238	26.9	O I

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	178
240 Winter	14.34	234
360 Winter	10.42	342
480 Winter	8.30	396
600 Winter	6.96	466
720 Winter	6.02	542
960 Winter	4.78	694
1440 Winter	3.46	984
2160 Winter	2.49	1404
2880 Winter	1.98	1788
4320 Winter	1.42	2512
5760 Winter	1.12	3224
7200 Winter	0.94	3888
8640 Winter	0.81	4496
10080 Winter	0.71	5144



Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ



Date 07 April 2006 08:44

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Micro Drainage

Source Control W.10.1 net

### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 0.620

Time	(mins)	Area
from:	to:	(ha)
0	4	0.620

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

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### Summary of Results for 100 year Return Period

Half Drain Time : 176 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	8.1	0.0	8.1	69.7588	0.2587	78.9	O K
30 Summer	8.8	0.0	8.8	69.8052	0.3052	110.0	O K
60 Summer	9.3	0.0	9.3	69.8413	0.3412	137.3	O K
120 Summer	9.6	0.0	9.6	69.8622	0.3622	154.7	FLOOD RISK
180 Summer	9.6	0.0	9.6	69.8658	0.3657	157.8	FLOOD RISK
240 Summer	9.6	0.0	9.6	69.8658	0.3657	157.8	FLOOD RISK
360 Summer	9.6	0.0	9.6	69.8618	0.3617	154.4	FLOOD RISK
480 Summer	9.5	0.0	9.5	69.8547	0.3547	148.7	FLOOD RISK
600 Summer	9.4	0.0	9.4	69.8468	0.3467	142.0	O K
720 Summer	9.2	0.0	9.2	69.8378	0.3377	134.7	O K
960 Summer	9.0	0.0	9.0	69.8192	0.3192	120.3	O K
1440 Summer	8.5	0.0	8.5	69.7837	0.2837	95.0	O K
2160 Summer	7.7	0.0	7.7	69.7383	0.2382	66.9	O K
2880 Summer	7.1	0.0	7.1	69.7018	0.2017	47.9	O K
4320 Summer	6.1	0.0	6.1	69.6498	0.1498	26.5	O K
5760 Summer	5.3	0.0	5.3	69.6253	0.1253	18.5	O K
7200 Summer	4.5	0.0	4.5	69.6118	0.1118	14.7	O K
8640 Summer	3.8	0.0	3.8	69.6013	0.1013	12.1	O K
10080 Summer	3.4	0.0	3.4	69.5938	0.0938	10.3	O K
15 Winter	8.4	0.0	8.4	69.7798	0.2797	92.5	O K
30 Winter	9.1	0.0	9.1	69.8288	0.3287	127.6	O K
60 Winter	9.6	0.0	9.6	69.8667	0.3667	158.7	FLOOD RISK
120 Winter	9.9	0.0	9.9	69.8902	0.3902	180.0	FLOOD RISK

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	18
30 Summer	64.79	33
60 Summer	40.51	62
120 Summer	24.46	120
180 Summer	17.96	152
240 Summer	14.34	182
360 Summer	10.42	248
480 Summer	8.30	316
600 Summer	6.96	386
720 Summer	6.02	454
960 Summer	4.78	586
1440 Summer	3.46	838
2160 Summer	2.49	1208
2880 Summer	1.98	1556
4320 Summer	1.42	2248
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4408
10080 Summer	0.71	5136
15 Winter	98.68	18
30 Winter	64.79	32
60 Winter	40.51	60
120 Winter	24.46	118

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:44  
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Micro Drainage

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	10.0	0.0	10.0	69.8943	0.3942	183.4	FLOOD RISK
240 Winter	10.0	0.0	10.0	69.8922	0.3922	181.6	FLOOD RISK
360 Winter	9.9	0.0	9.9	69.8853	0.3852	175.4	FLOOD RISK
480 Winter	9.7	0.0	9.7	69.8752	0.3752	166.1	FLOOD RISK
600 Winter	9.6	0.0	9.6	69.8628	0.3627	155.5	FLOOD RISK
720 Winter	9.4	0.0	9.4	69.8498	0.3497	144.5	O K
960 Winter	9.0	0.0	9.0	69.8232	0.3232	123.4	O K
1440 Winter	8.3	0.0	8.3	69.7728	0.2727	87.8	O K
2160 Winter	7.3	0.0	7.3	69.7093	0.2092	51.8	O K
2880 Winter	6.4	0.0	6.4	69.6618	0.1618	30.9	O K
4320 Winter	4.9	0.0	4.9	69.6193	0.1193	16.8	O K
5760 Winter	3.9	0.0	3.9	69.6023	0.1023	12.3	O K
7200 Winter	3.2	0.0	3.2	69.5908	0.0908	9.7	O K
8640 Winter	2.7	0.0	2.7	69.5828	0.0828	8.0	O K
10080 Winter	2.4	0.0	2.4	69.5758	0.0758	6.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	170
240 Winter	14.34	192
360 Winter	10.42	268
480 Winter	8.30	344
600 Winter	6.96	418
720 Winter	6.02	490
960 Winter	4.78	626
1440 Winter	3.46	882
2160 Winter	2.49	1236
2880 Winter	1.98	1584
4320 Winter	1.42	2208
5760 Winter	1.12	2936
7200 Winter	0.94	3672
8640 Winter	0.81	4400
10080 Winter	0.71	5056

Moubtatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:21

File Area -East 17-03-06.SUM

Designed By UKVXJ002

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Micro Drainage

Simulation W.10.1 net

Network No.4

Global Variables

Region	FSR - England & Wales
Return Period (yrs)	100
M5-60 (mm)	20.000
Ratio R	0.400
Volumetric Runoff Coef	0.750
Profile Type	Summer
PIMP (%)	100
Areal Reduction Factor	1.000
Storm Duration (mins)	15
Hot Start (mins)	0
Manhole Headloss Coefficient	0.500
MADD Factor * 10m <sup>3</sup> /ha Storage	2.000
Foul Sewage/Hectare (l/s)	0.00
Additional Flow - % of Total Flow	0
Number of Input Hydrographs	0
Number of Time/Area Diagrams	0
Number of Bifurcations	0
Number of Overflows	0
Number of Off-Line Controls	10
Number of On-Line Controls	5

Freely Discharging Outfalls

Outfall Pipe Number	Outfall MH/No	C.Level (m)	I.Level (m)	D,L (mm)	B (mm)
1.005	O/F 1	72.800	71.350	1200	0

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:21

File Area East 17-03-06.SUM

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Network Details

\* - Indicates pipe has been modified outside of WinDes's Storm/Foul & Schedules

PN	Length (m)	Fall (m)	Slope (1:x)	Area (ha)	T.E. (mins)	Rain Pro	k (mm)	Hyd Sect	Dia (mm)
* 1.000	10.00	0.175	57.1	0.738	5.00	1	0.600	o	300
* 2.000	10.00	0.175	57.1	0.681	5.00	1	0.600	o	300
* 1.001	280.00	2.050	136.6	1.281	0.00	1	0.600	o	525
* 3.000	10.00	0.400	25.0	1.606	5.00	1	0.600	o	375
* 4.000	10.00	0.400	25.0	1.482	5.00	1	0.600	o	375
* 1.002	370.00	1.875	197.3	2.363	0.00	1	0.600	oo	45
* 5.000	10.00	0.050	200.0	1.903	5.00	1	0.600	o	450
* 6.000	10.00	0.050	200.0	1.757	5.00	1	0.600	o	450
* 1.003	310.00	1.330	233.1	2.375	0.00	1	0.600	oo	45
* 7.000	10.00	0.001	10005.5	0.000	5.00	1	0.600	o	100
* 7.001	12.00	0.001	12006.6	0.000	0.00	1	0.600	o	300
* 8.000	10.00	0.001	10005.5	1.903	5.00	1	0.600	o	450
* 9.000	10.00	0.001	10005.5	1.977	5.00	1	0.600	o	450
* 8.001	217.00	0.030	7231.8	2.866	0.00	1	0.600	o	450
* 1.004	104.00	0.019	5472.3	0.050	0.00	1	0.600	oo	45
* 1.005	10.00	0.001	10005.5	0.000	0.00	1	0.600	oo	45

PN	USMH No.	US/CL (m)	US/IL (m)	US/Dep (m)	DS/CL (m)	DS/IL (m)	DS/Dep (m)	Ctrl No.	US/MH (mm)
* 1.000	1	78.300	77.100	0.900	78.100	76.925	0.875		1050
* 2.000	2	78.300	77.100	0.900	78.100	76.925	0.875		1050
* 1.001	3	78.100	76.700	0.875	76.200	74.650	1.025		1500
* 3.000	4	76.200	75.200	0.625	76.200	74.800	1.025		1350
* 4.000	5	76.200	75.200	0.625	76.200	74.800	1.025		1800
* 1.002	6	76.200	74.575	1.025	74.000	72.700	0.700		1800
* 5.000	7	74.100	72.900	0.750	74.000	72.850	0.700		1350
* 6.000	8	74.100	72.900	0.750	74.000	72.850	0.700		1350
* 1.003	9	74.000	72.700	0.700	72.890	71.370	0.920		1800
* 7.000		72.800	72.001	0.699	72.675	72.000	0.575		1200
* 7.001		72.675	71.671	0.704	72.890	71.670	0.920	3	1200
* 8.000	10	72.800	71.551	0.799	72.800	71.550	0.800		1350
* 9.000		72.800	71.551	0.799	72.800	71.550	0.800		1200
* 8.001		72.800	71.550	0.800	72.890	71.520	0.920		1800
* 1.004	10	72.890	71.370	0.920	72.900	71.351	0.949	9	2500
* 1.005	15	72.900	71.351	0.949	72.800	71.350	0.850	9	2500

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ

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 File Area East 17-03-06.SUM

Micro Drainage

Simulation W.10.1 net

On-Line Controls (Non Return Valve)

US/PN      Volume      Ctrl  
                  (m³)      MH Name

7.000      0.069

On-Line Controls (Hydro-Brake@)

US/PN	Volume (m³)	Ctrl MH Name	Invert (m)	Type	Dia (m)	D.Head (m)	D.Flow (l/s)	Headloss (m)	Flow (l/s)
1.003	173.935	10	71.370	Md1	0.583	2.100	550	0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
								0.6	343.4
								0.7	410.6
								0.8	462.5
								0.9	495.8
								1.0	521.3
7.001	0.717	10	71.370	Md1	0.583	2.100	550	1.2	523.0
								1.4	498.7
								1.6	498.7
								0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
								0.6	343.4
								0.7	410.6
0.8	462.5								
0.9	495.8								
1.0	521.3								
1.2	523.0								
1.4	498.7								
1.6	498.7								
8.001	34.170	10	71.370	Md1	0.583	2.100	550	0.1	13.4
								0.2	53.5
								0.3	114.3
								0.4	188.0
								0.5	266.9
								0.6	343.4
								0.7	410.6
								0.8	462.5
								0.9	495.8
								1.0	521.3
1.2	523.0								
1.4	498.7								
1.6	498.7								
1.004	57.348	15	71.351	Md1	0.472	1.650	319	0.1	12.2
								0.2	47.1
								0.3	97.5
								0.4	154.5
								0.5	209.7
								0.6	255.5
								0.7	285.7
								0.8	305.3
								0.9	311.8
								1.0	304.7
1.2	291.0								
1.4	298.0								
1.6	317.4								

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:21

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Off-line Weir Controls

DS/PN	Loop PN	MH Loss	Height above outgoing PN (m)	Width (m)	Discharge Coefficient
8.001	7.001	0.150	0.450	1.500	0.544
1.004	7.001	0.150	1.125	1.500	0.544

Infiltration Systems

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier.

DS/PN	MH Loss	Height above outgoing PN (m)	Filename	Type	Include Volume
1.000	0.500	0.200	Cellular Storage East 1.000 100y.src	Cellular Storage	Yes
2.000	0.500	0.600	Porous pavements East 2.000 100y.src	Porous Car Park	Yes
3.000	0.500	0.000	Cellular Storage East 3.000 100y.src	Cellular Storage	Yes
4.000	0.500	0.400	Porous pavements East 4.000 100y.src	Porous Car Park	Yes
5.000	0.500	0.200	Cellular Storage East 5.000 100y.src	Cellular Storage	Yes
6.000	0.500	0.600	Porous pavements East 6.000 100y.src	Porous Car Park	Yes
8.000	0.500	0.249	Cellular Storage East 5.000 100y.src	Cellular Storage	Yes
9.000	0.500	0.649	Porous pavements East 9.000 100y.src	Porous Car Park	Yes

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:21

File Area East 17-03-06.SUM

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Micro Drainage

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Storage Pond at pipe 7.001 USMH

Storage Pond Invert Level (m) 71.675

Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )
0.0	10000.0	2.4	10000.0	4.8	10000.0	7.2	10000.0	9.6	10000.0
0.4	10000.0	2.8	10000.0	5.2	10000.0	7.6	10000.0	10.0	10000.0
0.8	10000.0	3.2	10000.0	5.6	10000.0	8.0	10000.0		
1.2	10000.0	3.6	10000.0	6.0	10000.0	8.4	10000.0		
1.6	10000.0	4.0	10000.0	6.4	10000.0	8.8	10000.0		
2.0	10000.0	4.4	10000.0	6.8	10000.0	9.2	10000.0		



Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ  
 Date 07 April 2006 08:21  
 File Area East 17-03-06.SUM  
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Summary Wizard of "CRITICAL" (Rank 1 by Max Level)  
 Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status ON  
 DVD Status ON Analysis Time Step Fine

Profile(s) Summer and Winter  
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440  
 Return Period(s) (years) 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	30 Winter	100	1				0	
2.000	15 Winter	100	1	100/15	Summer		0	
1.001	15 Winter	100	1	100/15	Summer			
3.000	60 Winter	100	1				0	
4.000	30 Winter	100	1	100/15	Summer		0	
1.002	15 Winter	100	1	100/15	Summer			
5.000	120 Winter	100	1				0	
6.000	60 Winter	100	1	100/15	Summer		0	8
1.003	30 Winter	100	1	100/15	Summer			9
7.000	480 Winter	100	1					18
7.001	480 Winter	100	1	100/360	Summer			18
8.000	480 Winter	100	1	100/60	Summer		0	15
9.000	30 Winter	100	1	100/15	Summer		0	5
8.001	30 Winter	100	1	100/15	Summer	100/15 Summer	18	
1.004	15 Winter	100	1	100/15	Summer	100/15 Summer	17	18
1.005	15 Summer	100	1	100/15	Summer			18

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	77.349	-0.051	0.000	1.00	0	105	O K
2.000	77.887	0.487	0.000	1.87	0	195	SURCH'ED
1.001	77.751	0.526	0.000	0.93	0	379	SURCH'ED
3.000	75.316	-0.259	0.000	0.21	0	52	O K
4.000	75.889	0.314	0.000	1.06	0	262	SURCH'ED
1.002	75.823	0.648	0.000	0.93	0	892	SURCH'ED
5.000	73.345	-0.005	0.000	1.00	0	159	O K
6.000	73.936	0.586	0.000	1.25	0	198	FLD RISK
1.003	73.990	0.690	0.000	0.92	0	808	FLD RISK
7.000	72.044	-0.057	0.000	0.00	0	0	O K
7.001	72.045	0.074	0.000	1.22	0	31	SURCH'ED
8.000	72.220	0.219	0.000	0.57	0	44	SURCH'ED
9.000	72.546	0.545	0.000	3.70	0	287	FLD RISK
8.001	72.451	0.451	0.000	0.69	761	69	SURCH'ED
1.004	72.876	0.906	0.000	0.89	560	375	FLD RISK
1.005	72.602	0.651	0.000	0.78	0	307	FLD RISK



Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ  
 Date 07 April 2006 08:23  
 File Area East 17-03-06.SUM  
 Micro Drainage

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Summary Wizard of "CRITICAL" (Rank 1 by Max Level)  
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status ON  
 DVD Status ON Analysis Time Step Fine

Profile(s) Summer and Winter  
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440  
 Sensitivity flow(s) (%) 0, 20

PN	Storm	Sensitivity Flow (%)	Rank	Surcharge Sensitivity	Flood Sensitivity	Overflow Sensitivity	O/F Act	Lvl Ex.
1.000	30 Winter	+20%	1				0	
2.000	15 Winter	+20%	1	0%/15 Summer			0	
1.001	15 Winter	+20%	1	0%/15 Summer				
3.000	60 Winter	+20%	1				0	
4.000	30 Winter	+20%	1	0%/15 Summer			0	
1.002	15 Winter	+20%	1	0%/15 Summer				
5.000	120 Winter	+20%	1	+20%/120 Summer			0	
6.000	60 Winter	+20%	1	0%/15 Summer			0	17
1.003	30 Winter	+20%	1	0%/15 Summer	+20%/30 Summer			19
7.000	480 Winter	+20%	1	+20%/240 Winter				36
7.001	480 Winter	+20%	1	0%/360 Summer				36
8.000	480 Winter	+20%	1	0%/60 Summer			0	32
9.000	30 Winter	+20%	1	0%/15 Summer			0	12
8.001	30 Winter	+20%	1	0%/15 Summer		0%/15 Summer	36	1
1.004	15 Winter	+20%	1	0%/15 Summer	+20%/15 Winter	0%/15 Summer	34	36
1.005	15 Winter	+20%	1	0%/15 Summer				36

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	77.367	-0.033	0.000	1.00	0	105	O K
2.000	77.951	0.551	0.000	1.99	0	208	SURCH'ED
1.001	77.885	0.660	0.000	0.94	0	382	FLD RISK
3.000	75.350	-0.225	0.000	0.34	0	84	O K
4.000	75.968	0.393	0.000	1.02	0	252	FLD RISK
1.002	75.969	0.794	0.000	0.94	0	903	FLD RISK
5.000	73.414	0.064	0.000	1.00	0	159	SURCH'ED
6.000	74.012	0.662	0.000	1.26	0	199	FLD RISK
1.003	74.041	0.741	40.742	0.95	0	836	FLOOD
7.000	72.178	0.077	0.000	0.00	0	0	SURCH'ED
7.001	72.178	0.207	0.000	1.76	0	45	SURCH'ED
8.000	72.256	0.255	0.000	0.61	0	47	SURCH'ED
9.000	72.603	0.602	0.000	3.99	0	309	FLD RISK
8.001	72.506	0.506	0.000	0.68	901	68	FLD RISK
1.004	72.890	0.920	1.115	0.88	622	370	FLOOD
1.005	72.639	0.688	0.000	0.78	0	306	FLD RISK



Network No. 4

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.738

Time	(mins)	Area
from:	to:	(ha)
0	4	0.738

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:42

File Cellular Storage East 1.000 100...

Designed By UKEXJ004

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Micro Drainage

Source Control W.10.1 net

### Summary of Results for 100 year Return Period

Half Drain Time : 1291 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	0.6	0.0	0.6	77.7358	0.0357	136.3	O K
30 Summer	1.0	0.0	1.0	77.7468	0.0468	178.5	O K
60 Summer	1.6	0.0	1.6	77.7583	0.0583	221.7	O K
120 Summer	2.1	0.0	2.1	77.7693	0.0693	264.1	O K
180 Summer	2.4	0.0	2.4	77.7753	0.0753	286.9	O K
240 Summer	2.5	0.0	2.5	77.7793	0.0793	301.2	O K
360 Summer	2.8	0.0	2.8	77.7837	0.0838	318.8	O K
480 Summer	3.0	0.0	3.0	77.7868	0.0868	328.8	O K
600 Summer	3.0	0.0	3.0	77.7878	0.0878	334.1	O K
720 Summer	3.1	0.0	3.1	77.7888	0.0888	336.5	O K
960 Summer	3.1	0.0	3.1	77.7893	0.0893	339.6	O K
1440 Summer	3.2	0.0	3.2	77.7903	0.0903	343.7	O K
2160 Summer	3.2	0.0	3.2	77.7908	0.0908	344.7	O K
2880 Summer	3.2	0.0	3.2	77.7903	0.0903	342.0	O K
4320 Summer	3.0	0.0	3.0	77.7873	0.0873	331.9	O K
5760 Summer	2.8	0.0	2.8	77.7843	0.0843	320.2	O K
7200 Summer	2.6	0.0	2.6	77.7813	0.0813	308.4	O K
8640 Summer	2.5	0.0	2.5	77.7782	0.0783	297.0	O K
10080 Summer	2.4	0.0	2.4	77.7753	0.0753	286.3	O K
15 Winter	0.8	0.0	0.8	77.7403	0.0402	152.6	O K
30 Winter	1.3	0.0	1.3	77.7528	0.0528	199.8	O K
60 Winter	1.9	0.0	1.9	77.7652	0.0653	248.1	O K
120 Winter	2.5	0.0	2.5	77.7778	0.0778	295.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	34
60 Summer	40.51	64
120 Summer	24.46	124
180 Summer	17.96	182
240 Summer	14.34	242
360 Summer	10.42	362
480 Summer	8.30	482
600 Summer	6.96	600
720 Summer	6.02	702
960 Summer	4.78	800
1440 Summer	3.46	1038
2160 Summer	2.49	1444
2880 Summer	1.98	1844
4320 Summer	1.42	2640
5760 Summer	1.12	3456
7200 Summer	0.94	4248
8640 Summer	0.81	5016
10080 Summer	0.71	5752
15 Winter	98.68	19
30 Winter	64.79	34
60 Winter	40.51	64
120 Winter	24.46	122

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	2.8	0.0	2.8	77.7843	0.0843	321.1	O K
240 Winter	3.1	0.0	3.1	77.7888	0.0888	336.8	O K
360 Winter	3.4	0.0	3.4	77.7938	0.0938	356.1	O K
480 Winter	3.6	0.0	3.6	77.7968	0.0968	367.1	O K
600 Winter	3.6	0.0	3.6	77.7983	0.0983	373.2	O K
720 Winter	3.7	0.0	3.7	77.7993	0.0993	376.3	O K
960 Winter	3.7	0.0	3.7	77.7993	0.0993	377.6	O K
1440 Winter	3.8	0.0	3.8	77.8003	0.1003	380.1	O K
2160 Winter	3.7	0.0	3.7	77.7987	0.0988	375.2	O K
2880 Winter	3.5	0.0	3.5	77.7963	0.0963	366.4	O K
4320 Winter	3.2	0.0	3.2	77.7912	0.0913	346.3	O K
5760 Winter	2.9	0.0	2.9	77.7863	0.0863	327.1	O K
7200 Winter	2.7	0.0	2.7	77.7818	0.0818	310.0	O K
8640 Winter	2.4	0.0	2.4	77.7772	0.0773	293.9	O K
10080 Winter	2.3	0.0	2.3	77.7738	0.0738	279.4	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	180
240 Winter	14.34	238
360 Winter	10.42	354
480 Winter	8.30	468
600 Winter	6.96	578
720 Winter	6.02	684
960 Winter	4.78	798
1440 Winter	3.46	1082
2160 Winter	2.49	1536
2880 Winter	1.98	1964
4320 Winter	1.42	2812
5760 Winter	1.12	3632
7200 Winter	0.94	4464
8640 Winter	0.81	5272
10080 Winter	0.71	5960

Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ

Date 07 April 2006 08:42  
 File Cellular Storage East 3.000 100...

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Micro Drainage

Source Control W.10.1 net

### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 1.606

Time	(mins)	Area
from:	to:	(ha)
0	4	1.606



Mountbatten House  
Basing View  
Basingstoke RG21 4HJ



Date 07 April 2006 08:42  
File Cellular Storage East 3.000 100...

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Source Control W.10.1 net

### Summary of Results for 100 year Return Period

Half Drain Time : 1445 minutes

Storm Duration (mins)	Maximum Control (1/s)	Maximum Filtration (1/s)	Maximum Outflow (1/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	1.8	0.0	1.8	74.5623	0.0623	296.3	O 1
30 Summer	2.7	0.0	2.7	74.5818	0.0818	387.8	O 1
60 Summer	3.8	0.0	3.8	74.6013	0.1013	481.6	O 1
120 Summer	5.0	0.0	5.0	74.6208	0.1208	573.1	O 1
180 Summer	5.6	0.0	5.6	74.6308	0.1308	621.7	O 1
240 Summer	5.9	0.0	5.9	74.6373	0.1373	651.8	O 1
360 Summer	6.0	0.0	6.0	74.6453	0.1453	689.9	O 1
480 Summer	6.1	0.0	6.1	74.6503	0.1503	712.6	O 1
600 Summer	6.2	0.0	6.2	74.6528	0.1528	725.8	O 1
720 Summer	6.2	0.0	6.2	74.6543	0.1543	732.9	O 1
960 Summer	6.3	0.0	6.3	74.6558	0.1558	739.3	O 1
1440 Summer	6.3	0.0	6.3	74.6573	0.1573	746.7	O 1
2160 Summer	6.3	0.0	6.3	74.6573	0.1573	746.7	O 1
2880 Summer	6.2	0.0	6.2	74.6553	0.1553	737.8	O 1
4320 Summer	6.1	0.0	6.1	74.6493	0.1493	708.9	O 1
5760 Summer	6.0	0.0	6.0	74.6423	0.1423	675.6	O 1
7200 Summer	5.8	0.0	5.8	74.6353	0.1353	643.6	O 1
8640 Summer	5.6	0.0	5.6	74.6298	0.1298	616.6	O 1
10080 Summer	5.3	0.0	5.3	74.6248	0.1248	593.1	O 1
15 Winter	2.1	0.0	2.1	74.5698	0.0698	331.8	O 1
30 Winter	3.2	0.0	3.2	74.5913	0.0913	434.2	O 1
60 Winter	4.5	0.0	4.5	74.6133	0.1133	539.0	O 1
120 Winter	5.8	0.0	5.8	74.6353	0.1353	641.4	O 1

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	34
60 Summer	40.51	64
120 Summer	24.46	124
180 Summer	17.96	182
240 Summer	14.34	242
360 Summer	10.42	362
480 Summer	8.30	482
600 Summer	6.96	600
720 Summer	6.02	720
960 Summer	4.78	830
1440 Summer	3.46	1070
2160 Summer	2.49	1472
2880 Summer	1.98	1876
4320 Summer	1.42	2680
5760 Summer	1.12	3464
7200 Summer	0.94	4248
8640 Summer	0.81	5008
10080 Summer	0.71	5744
15 Winter	98.68	19
30 Winter	64.79	34
60 Winter	40.51	64
120 Winter	24.46	122

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

Date 07 April 2006 08:42  
File Cellular Storage East 3.000 100...

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Micro Drainage

Source Control W.10.1 net

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	6.1	0.0	6.1	74.6468	0.1468	696.6	O K
240 Winter	6.2	0.0	6.2	74.6538	0.1537	731.4	O K
360 Winter	6.4	0.0	6.4	74.6633	0.1632	776.0	O K
480 Winter	6.5	0.0	6.5	74.6693	0.1692	803.4	O K
600 Winter	6.6	0.0	6.6	74.6728	0.1727	820.3	O K
720 Winter	6.6	0.0	6.6	74.6748	0.1747	830.5	O K
960 Winter	6.7	0.0	6.7	74.6763	0.1762	838.3	O K
1440 Winter	6.7	0.0	6.7	74.6763	0.1763	837.3	O K
2160 Winter	6.6	0.0	6.6	74.6738	0.1738	826.0	O K
2880 Winter	6.5	0.0	6.5	74.6693	0.1693	803.4	O K
4320 Winter	6.3	0.0	6.3	74.6573	0.1573	748.0	O K
5760 Winter	6.0	0.0	6.0	74.6458	0.1458	692.9	O K
7200 Winter	5.8	0.0	5.8	74.6358	0.1358	644.7	O K
8640 Winter	5.5	0.0	5.5	74.6283	0.1283	608.4	O K
10080 Winter	5.1	0.0	5.1	74.6218	0.1218	577.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	180
240 Winter	14.34	238
360 Winter	10.42	354
480 Winter	8.30	470
600 Winter	6.96	584
720 Winter	6.02	694
960 Winter	4.78	906
1440 Winter	3.46	1126
2160 Winter	2.49	1580
2880 Winter	1.98	2044
4320 Winter	1.42	2896
5760 Winter	1.12	3688
7200 Winter	0.94	4464
8640 Winter	0.81	5192
10080 Winter	0.71	5952

Mountbatten House

Basing View

Basingstoke RG21 4HJ

Date 07 April 2006 08:42

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 1.903

Time	(mins)	Area
from:	to:	(ha)
0	4	1.903

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

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### Summary of Results for 100 year Return Period

Half Drain Time : 1747 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	1.8	0.0	1.8	72.5618	0.0618	351.3	O K
30 Summer	2.6	0.0	2.6	72.5808	0.0808	460.0	O K
60 Summer	3.8	0.0	3.8	72.6003	0.1003	572.0	O K
120 Summer	4.9	0.0	4.9	72.6198	0.1198	682.3	O K
180 Summer	5.6	0.0	5.6	72.6303	0.1303	742.0	O K
240 Summer	5.9	0.0	5.9	72.6368	0.1368	779.9	O K
360 Summer	6.0	0.0	6.0	72.6458	0.1458	829.4	O K
480 Summer	6.2	0.0	6.2	72.6513	0.1513	860.8	O K
600 Summer	6.2	0.0	6.2	72.6548	0.1548	880.9	O K
720 Summer	6.3	0.0	6.3	72.6568	0.1568	893.7	O K
960 Summer	6.3	0.0	6.3	72.6588	0.1588	905.0	O K
1440 Summer	6.3	0.0	6.3	72.6603	0.1603	914.7	O K
2160 Summer	6.4	0.0	6.4	72.6613	0.1613	918.7	O K
2880 Summer	6.3	0.0	6.3	72.6603	0.1603	913.6	O K
4320 Summer	6.3	0.0	6.3	72.6558	0.1558	888.3	O K
5760 Summer	6.1	0.0	6.1	72.6498	0.1498	854.8	O K
7200 Summer	6.0	0.0	6.0	72.6438	0.1438	820.1	O K
8640 Summer	5.9	0.0	5.9	72.6383	0.1383	786.6	O K
10080 Summer	5.7	0.0	5.7	72.6328	0.1328	757.1	O K
15 Winter	2.1	0.0	2.1	72.5693	0.0693	393.3	O K
30 Winter	3.2	0.0	3.2	72.5903	0.0903	515.1	O K
60 Winter	4.5	0.0	4.5	72.6123	0.1123	640.2	O K
120 Winter	5.8	0.0	5.8	72.6338	0.1338	763.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	19
30 Summer	64.79	34
60 Summer	40.51	64
120 Summer	24.46	124
180 Summer	17.96	184
240 Summer	14.34	242
360 Summer	10.42	362
480 Summer	8.30	482
600 Summer	6.96	602
720 Summer	6.02	720
960 Summer	4.78	934
1440 Summer	3.46	1142
2160 Summer	2.49	1516
2880 Summer	1.98	1932
4320 Summer	1.42	2728
5760 Summer	1.12	3528
7200 Summer	0.94	4320
8640 Summer	0.81	5096
10080 Summer	0.71	5848
15 Winter	98.68	19
30 Winter	64.79	34
60 Winter	40.51	64
120 Winter	24.46	122

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Basing View  
Basingstoke RG21 4HJ

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Micro Drainage

Source Control W.10.1 net

Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	6.0	0.0	6.0	72.6458	0.1458	831.2	0
240 Winter	6.2	0.0	6.2	72.6533	0.1532	874.7	0
360 Winter	6.4	0.0	6.4	72.6638	0.1637	932.1	0
480 Winter	6.5	0.0	6.5	72.6703	0.1702	969.0	0
600 Winter	6.6	0.0	6.6	72.6743	0.1742	993.5	0
720 Winter	6.7	0.0	6.7	72.6773	0.1772	1009.8	0
960 Winter	6.7	0.0	6.7	72.6803	0.1802	1027.1	0
1440 Winter	6.7	0.0	6.7	72.6808	0.1808	1029.2	0
2160 Winter	6.7	0.0	6.7	72.6798	0.1797	1024.3	0
2880 Winter	6.7	0.0	6.7	72.6768	0.1768	1006.1	0
4320 Winter	6.5	0.0	6.5	72.6673	0.1673	952.6	0
5760 Winter	6.3	0.0	6.3	72.6568	0.1568	893.9	0
7200 Winter	6.1	0.0	6.1	72.6473	0.1473	838.0	0
8640 Winter	5.9	0.0	5.9	72.6383	0.1383	788.0	0
10080 Winter	5.7	0.0	5.7	72.6313	0.1313	748.0	0

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	180
240 Winter	14.34	240
360 Winter	10.42	356
480 Winter	8.30	472
600 Winter	6.96	586
720 Winter	6.02	700
960 Winter	4.78	922
1440 Winter	3.46	1300
2160 Winter	2.49	1624
2880 Winter	1.98	2080
4320 Winter	1.42	2980
5760 Winter	1.12	3800
7200 Winter	0.94	4608
8640 Winter	0.81	5360
10080 Winter	0.71	6056

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## Network No. 4

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.681

Time	(mins)	Area
from:	to:	(ha)
0	4	0.681

Mountbatten House  
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 Basingstoke RG21 4HJ

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Micro Drainage

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Summary of Results for 100 year Return Period

Half Drain Time : 63 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	19.2	0.0	19.2	77.2573	0.2572	81.8	O K
30 Summer	21.1	0.0	21.1	77.2987	0.2987	110.3	O K
60 Summer	22.1	0.0	22.1	77.3233	0.3232	129.3	O K
120 Summer	22.5	0.0	22.5	77.3348	0.3347	138.5	O K
180 Summer	22.5	0.0	22.5	77.3332	0.3332	137.4	O K
240 Summer	22.2	0.0	22.2	77.3273	0.3272	132.3	O K
360 Summer	21.6	0.0	21.6	77.3108	0.3107	119.4	O K
480 Summer	20.8	0.0	20.8	77.2933	0.2932	106.3	O K
600 Summer	20.1	0.0	20.1	77.2763	0.2762	94.4	O K
720 Summer	19.4	0.0	19.4	77.2603	0.2602	83.9	O K
960 Summer	18.1	0.0	18.1	77.2338	0.2337	67.5	O K
1440 Summer	15.6	0.0	15.6	77.1973	0.1973	48.2	O K
2160 Summer	12.2	0.0	12.2	77.1673	0.1673	34.5	O K
2880 Summer	10.1	0.0	10.1	77.1478	0.1478	27.0	O K
4320 Summer	7.4	0.0	7.4	77.1233	0.1233	18.8	O K
5760 Summer	5.9	0.0	5.9	77.1053	0.1053	13.7	O K
7200 Summer	4.9	0.0	4.9	77.0928	0.0928	10.7	O K
8640 Summer	4.3	0.0	4.3	77.0853	0.0853	8.9	O K
10080 Summer	3.7	0.0	3.7	77.0798	0.0798	7.9	O K
15 Winter	20.2	0.0	20.2	77.2788	0.2787	96.3	O K
30 Winter	22.1	0.0	22.1	77.3228	0.3227	129.0	O K
60 Winter	23.1	0.0	23.1	77.3492	0.3492	151.2	O K
120 Winter	23.4	0.0	23.4	77.3573	0.3572	157.9	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	17
30 Summer	64.79	31
60 Summer	40.51	54
120 Summer	24.46	86
180 Summer	17.96	120
240 Summer	14.34	154
360 Summer	10.42	220
480 Summer	8.30	286
600 Summer	6.96	348
720 Summer	6.02	408
960 Summer	4.78	528
1440 Summer	3.46	764
2160 Summer	2.49	1124
2880 Summer	1.98	1472
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4384
10080 Summer	0.71	5136
15 Winter	98.68	17
30 Winter	64.79	31
60 Winter	40.51	58
120 Winter	24.46	92

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 1.482

Time	(mins)	Area
from:	to:	(ha)
0	4	1.482



Mountbatten House  
 Basing View  
 Basingstoke RG21 4HJ  
 Date 07 April 2006 08:55  
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### Summary of Results for 100 year Return Period

Half Drain Time : 40 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	60.5	0.0	60.5	75.3068	0.3067	171.7	O K
30 Summer	73.4	0.0	73.4	75.3478	0.3477	220.4	O K
60 Summer	80.9	0.0	80.9	75.3713	0.3712	251.4	O K
120 Summer	83.1	0.0	83.1	75.3783	0.3782	260.7	O K
180 Summer	80.6	0.0	80.6	75.3703	0.3702	250.0	O K
240 Summer	76.9	0.0	76.9	75.3588	0.3587	234.4	O K
360 Summer	69.3	0.0	69.3	75.3348	0.3347	204.5	O K
480 Summer	62.9	0.0	62.9	75.3143	0.3142	180.0	O K
600 Summer	57.4	0.0	57.4	75.2968	0.2967	160.3	O K
720 Summer	52.6	0.0	52.6	75.2813	0.2812	144.2	O K
960 Summer	45.2	0.0	45.2	75.2568	0.2567	120.0	O K
1440 Summer	35.5	0.0	35.5	75.2198	0.2197	87.9	O K
2160 Summer	27.6	0.0	27.6	75.1843	0.1843	62.0	O K
2880 Summer	22.8	0.0	22.8	75.1658	0.1658	50.0	O K
4320 Summer	16.5	0.0	16.5	75.1443	0.1443	38.0	O K
5760 Summer	13.0	0.0	13.0	75.1278	0.1278	29.8	O K
7200 Summer	10.8	0.0	10.8	75.1153	0.1153	24.1	O K
8640 Summer	9.3	0.0	9.3	75.1063	0.1063	20.5	O K
10080 Summer	8.1	0.0	8.1	75.0993	0.0993	18.0	O K
15 Winter	68.6	0.0	68.6	75.3322	0.3322	201.1	O K
30 Winter	82.2	0.0	82.2	75.3752	0.3752	256.7	O K
60 Winter	88.9	0.0	88.9	75.3963	0.3962	286.1	O K
120 Winter	88.3	0.0	88.3	75.3943	0.3942	283.2	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	17
30 Summer	64.79	29
60 Summer	40.51	44
120 Summer	24.46	78
180 Summer	17.96	112
240 Summer	14.34	144
360 Summer	10.42	208
480 Summer	8.30	268
600 Summer	6.96	330
720 Summer	6.02	390
960 Summer	4.78	512
1440 Summer	3.46	752
2160 Summer	2.49	1104
2880 Summer	1.98	1468
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4384
10080 Summer	0.71	5136
15 Winter	98.68	17
30 Winter	64.79	30
60 Winter	40.51	48
120 Winter	24.46	84

Mountbatten House  
Basing View  
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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	83.1	0.0	83.1	75.3783	0.3782	260.5	O K
240 Winter	77.2	0.0	77.2	75.3598	0.3597	235.9	O K
360 Winter	66.8	0.0	66.8	75.3267	0.3267	194.4	O K
480 Winter	58.3	0.0	58.3	75.2997	0.2997	163.7	O K
600 Winter	51.6	0.0	51.6	75.2778	0.2777	140.6	O K
720 Winter	46.1	0.0	46.1	75.2598	0.2597	122.9	O K
960 Winter	37.8	0.0	37.8	75.2303	0.2302	96.6	O K
1440 Winter	28.6	0.0	28.6	75.1888	0.1888	65.0	O K
2160 Winter	21.0	0.0	21.0	75.1598	0.1598	46.6	O K
2880 Winter	16.8	0.0	16.8	75.1453	0.1453	38.3	O K
4320 Winter	11.8	0.0	11.8	75.1213	0.1213	26.9	O K
5760 Winter	9.4	0.0	9.4	75.1068	0.1068	20.7	O K
7200 Winter	7.7	0.0	7.7	75.0973	0.0973	17.2	O K
8640 Winter	6.5	0.0	6.5	75.0898	0.0898	14.7	O K
10080 Winter	5.7	0.0	5.7	75.0833	0.0833	12.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	118
240 Winter	14.34	152
360 Winter	10.42	216
480 Winter	8.30	280
600 Winter	6.96	340
720 Winter	6.02	402
960 Winter	4.78	528
1440 Winter	3.46	764
2160 Winter	2.49	1108
2880 Winter	1.98	1468
4320 Winter	1.42	2204
5760 Winter	1.12	2928
7200 Winter	0.94	3648
8640 Winter	0.81	4408
10080 Winter	0.71	5072

Mountbatten House  
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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 1.757

Time	(mins)	Area
from:	to:	(ha)
0	4	1.757

Mountbatten House  
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 Basingstoke RG21 4HJ



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Summary of Results for 100 year Return Period

Half Drain Time : 38 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	65.2	0.0	65.2	73.3218	0.3217	205.9	O K
30 Summer	79.3	0.0	79.3	73.3663	0.3662	267.1	O K
60 Summer	87.5	0.0	87.5	73.3918	0.3917	305.4	O K
120 Summer	90.5	0.0	90.5	73.4013	0.4012	320.0	O K
180 Summer	88.4	0.0	88.4	73.3947	0.3947	309.9	O K
240 Summer	84.9	0.0	84.9	73.3837	0.3837	293.2	O K
360 Summer	77.6	0.0	77.6	73.3608	0.3607	258.9	O K
480 Summer	70.9	0.0	70.9	73.3397	0.3397	229.8	O K
600 Summer	65.2	0.0	65.2	73.3218	0.3217	205.8	O K
720 Summer	60.2	0.0	60.2	73.3058	0.3057	185.9	O K
960 Summer	52.2	0.0	52.2	73.2798	0.2797	155.7	O K
1440 Summer	40.9	0.0	40.9	73.2428	0.2427	117.0	O K
2160 Summer	31.8	0.0	31.8	73.2033	0.2032	82.2	O K
2880 Summer	26.5	0.0	26.5	73.1793	0.1793	64.0	O K
4320 Summer	19.6	0.0	19.6	73.1548	0.1548	47.6	O K
5760 Summer	15.4	0.0	15.4	73.1408	0.1408	39.3	O K
7200 Summer	12.8	0.0	12.8	73.1268	0.1268	31.8	O K
8640 Summer	10.9	0.0	10.9	73.1158	0.1158	26.7	O K
10080 Summer	9.6	0.0	9.6	73.1083	0.1083	23.2	O K
15 Winter	73.6	0.0	73.6	73.3482	0.3482	241.4	O K
30 Winter	88.7	0.0	88.7	73.3957	0.3957	311.3	O K
60 Winter	96.2	0.0	96.2	73.4192	0.4192	349.3	O K
120 Winter	96.5	0.0	96.5	73.4202	0.4202	351.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	17
30 Summer	64.79	30
60 Summer	40.51	46
120 Summer	24.46	80
180 Summer	17.96	112
240 Summer	14.34	146
360 Summer	10.42	210
480 Summer	8.30	272
600 Summer	6.96	332
720 Summer	6.02	394
960 Summer	4.78	514
1440 Summer	3.46	754
2160 Summer	2.49	1120
2880 Summer	1.98	1472
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4400
10080 Summer	0.71	5104
15 Winter	98.68	17
30 Winter	64.79	30
60 Winter	40.51	48
120 Winter	24.46	86

Mountbatten House  
Basing View  
Basingstoke RG21 4HJ

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	91.9	0.0	91.9	73.4058	0.4057	327.2	O K
240 Winter	86.2	0.0	86.2	73.3878	0.3877	299.2	O K
360 Winter	75.7	0.0	75.7	73.3547	0.3547	250.2	O K
480 Winter	66.8	0.0	66.8	73.3267	0.3267	212.4	O K
600 Winter	59.6	0.0	59.6	73.3038	0.3037	183.6	O K
720 Winter	53.7	0.0	53.7	73.2847	0.2847	161.1	O K
960 Winter	44.6	0.0	44.6	73.2548	0.2547	128.9	O K
1440 Winter	33.5	0.0	33.5	73.2108	0.2107	88.2	O K
2160 Winter	24.8	0.0	24.8	73.1728	0.1728	59.5	O K
2880 Winter	19.7	0.0	19.7	73.1553	0.1553	48.1	O K
4320 Winter	14.1	0.0	14.1	73.1343	0.1343	35.7	O K
5760 Winter	11.1	0.0	11.1	73.1168	0.1168	27.0	O K
7200 Winter	9.1	0.0	9.1	73.1053	0.1053	22.0	O K
8640 Winter	7.7	0.0	7.7	73.0973	0.0973	18.9	O K
10080 Winter	6.8	0.0	6.8	73.0918	0.0918	16.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	120
240 Winter	14.34	154
360 Winter	10.42	220
480 Winter	8.30	282
600 Winter	6.96	344
720 Winter	6.02	406
960 Winter	4.78	528
1440 Winter	3.46	766
2160 Winter	2.49	1120
2880 Winter	1.98	1472
4320 Winter	1.42	2204
5760 Winter	1.12	2936
7200 Winter	0.94	3592
8640 Winter	0.81	4408
10080 Winter	0.71	5096

Mountbatten House

Basing View

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### Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.400	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+0
Cv (Winter)	0.840		

### Time / Area Diagram

Total Area (ha) = 1.977

Time	(mins)	Area
from:	to:	(ha)
0	4	1.977

Summary of Results for 100 year Return Period

Half Drain Time : 43 minutes

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
15 Summer	68.7	0.0	68.7	69.3328	0.3327	233.7	O K
30 Summer	83.8	0.0	83.8	69.3803	0.3802	305.1	O K
60 Summer	92.4	0.0	92.4	69.4073	0.4072	349.6	O K
120 Summer	95.9	0.0	95.9	69.4182	0.4182	368.6	O K
180 Summer	94.2	0.0	94.2	69.4127	0.4127	359.4	O K
240 Summer	90.8	0.0	90.8	69.4022	0.4022	341.6	O K
360 Summer	83.6	0.0	83.6	69.3798	0.3797	304.2	O K
480 Summer	76.9	0.0	76.9	69.3588	0.3587	271.6	O K
600 Summer	71.1	0.0	71.1	69.3403	0.3402	244.2	O K
720 Summer	65.9	0.0	65.9	69.3238	0.3237	221.4	O K
960 Summer	57.5	0.0	57.5	69.2973	0.2972	186.2	O K
1440 Summer	45.6	0.0	45.6	69.2583	0.2582	140.9	O K
2160 Summer	35.3	0.0	35.3	69.2188	0.2187	100.8	O K
2880 Summer	29.3	0.0	29.3	69.1918	0.1918	77.5	O K
4320 Summer	21.9	0.0	21.9	69.1628	0.1628	56.0	O K
5760 Summer	17.4	0.0	17.4	69.1473	0.1473	45.8	O K
7200 Summer	14.3	0.0	14.3	69.1358	0.1358	38.8	O K
8640 Summer	12.3	0.0	12.3	69.1238	0.1238	32.3	O K
10080 Summer	10.8	0.0	10.8	69.1153	0.1153	27.9	O K
15 Winter	77.4	0.0	77.4	69.3602	0.3602	273.9	O K
30 Winter	93.5	0.0	93.5	69.4107	0.4107	355.4	O K
60 Winter	100.3	0.0	100.3	69.4358	0.4357	400.8	O K
120 Winter	101.1	0.0	101.1	69.4397	0.4397	407.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	98.68	17
30 Summer	64.79	30
60 Summer	40.51	46
120 Summer	24.46	80
180 Summer	17.96	114
240 Summer	14.34	146
360 Summer	10.42	212
480 Summer	8.30	274
600 Summer	6.96	334
720 Summer	6.02	396
960 Summer	4.78	518
1440 Summer	3.46	762
2160 Summer	2.49	1124
2880 Summer	1.98	1472
4320 Summer	1.42	2204
5760 Summer	1.12	2936
7200 Summer	0.94	3672
8640 Summer	0.81	4400
10080 Summer	0.71	5136
15 Winter	98.68	17
30 Winter	64.79	30
60 Winter	40.51	48
120 Winter	24.46	86

Mountbatten House

Basing View

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Summary of Results for 100 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m <sup>3</sup> )	Status
180 Winter	98.2	0.0	98.2	69.4257	0.4257	382.6	O K
240 Winter	92.9	0.0	92.9	69.4087	0.4087	352.2	O K
360 Winter	82.2	0.0	82.2	69.3752	0.3752	297.3	O K
480 Winter	73.3	0.0	73.3	69.3472	0.3472	254.0	O K
600 Winter	65.7	0.0	65.7	69.3233	0.3232	220.3	O K
720 Winter	59.4	0.0	59.4	69.3033	0.3032	193.9	O K
960 Winter	49.7	0.0	49.7	69.2717	0.2717	155.7	O K
1440 Winter	37.3	0.0	37.3	69.2278	0.2277	109.2	O K
2160 Winter	27.7	0.0	27.7	69.1848	0.1847	72.0	O K
2880 Winter	22.2	0.0	22.2	69.1638	0.1638	56.5	O K
4320 Winter	15.9	0.0	15.9	69.1423	0.1423	42.6	O K
5760 Winter	12.4	0.0	12.4	69.1243	0.1243	32.7	O K
7200 Winter	10.2	0.0	10.2	69.1118	0.1118	26.4	O K
8640 Winter	8.8	0.0	8.8	69.1033	0.1033	22.4	O K
10080 Winter	7.6	0.0	7.6	69.0968	0.0968	19.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
180 Winter	17.96	122
240 Winter	14.34	156
360 Winter	10.42	222
480 Winter	8.30	284
600 Winter	6.96	346
720 Winter	6.02	408
960 Winter	4.78	530
1440 Winter	3.46	778
2160 Winter	2.49	1124
2880 Winter	1.98	1472
4320 Winter	1.42	2200
5760 Winter	1.12	2936
7200 Winter	0.94	3672
8640 Winter	0.81	4384
10080 Winter	0.71	5080