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One Little London Chichester Sussex PO19 1PP	BOUND LANE HAYLING ISLAND PERMEABLE ROAD 10 UNITS	
Date FEB 2017 File PERMEABLE PAVEMENT 10 u...	Designed By PF Checked By	
Micro Drainage	Source Control W.11.2	

Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 182 minutes

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	3.6	3.6	100.0782	0.0783	32.9	O K
30 Summer	3.6	3.6	100.1073	0.1073	45.1	O K
60 Summer	3.6	3.6	100.1348	0.1348	56.5	O K
120 Summer	3.6	3.6	100.1543	0.1542	64.7	O K
180 Summer	3.6	3.6	100.1582	0.1582	66.4	O K
240 Summer	3.6	3.6	100.1582	0.1582	66.5	O K
360 Summer	3.6	3.6	100.1563	0.1562	65.5	O K
480 Summer	3.6	3.6	100.1507	0.1508	63.3	O K
600 Summer	3.6	3.6	100.1442	0.1443	60.6	O K
720 Summer	3.6	3.6	100.1367	0.1368	57.5	O K
960 Summer	3.6	3.6	100.1223	0.1223	51.3	O K
1440 Summer	3.6	3.6	100.0953	0.0953	40.1	O K
2160 Summer	3.6	3.6	100.0658	0.0658	27.7	O K
2880 Summer	3.6	3.6	100.0498	0.0497	20.9	O K
4320 Summer	2.8	2.8	100.0382	0.0382	16.0	O K
5760 Summer	2.2	2.2	100.0313	0.0312	13.1	O K
7200 Summer	1.9	1.9	100.0267	0.0267	11.1	O K
8640 Summer	1.7	1.7	100.0232	0.0232	9.7	O K
10080 Summer	1.5	1.5	100.0208	0.0207	8.6	O K
15 Winter	3.6	3.6	100.0898	0.0898	37.7	O K
30 Winter	3.6	3.6	100.1227	0.1228	51.6	O K
60 Winter	3.6	3.6	100.1543	0.1542	64.8	O K
120 Winter	3.6	3.6	100.1777	0.1777	74.7	O K
180 Winter	3.6	3.6	100.1833	0.1832	77.0	O K
240 Winter	3.6	3.6	100.1817	0.1817	76.3	O K
360 Winter	3.6	3.6	100.1768	0.1767	74.3	O K
480 Winter	3.6	3.6	100.1683	0.1682	70.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	122.43	22
30 Summer	82.24	36
60 Summer	52.66	64
120 Summer	32.50	122
180 Summer	24.12	158
240 Summer	19.39	190
360 Summer	14.27	254
480 Summer	11.46	324
600 Summer	9.66	390
720 Summer	8.40	458
960 Summer	6.72	590
1440 Summer	4.91	840
2160 Summer	3.57	1188
2880 Summer	2.85	1504
4320 Summer	2.07	2212
5760 Summer	1.64	2944
7200 Summer	1.38	3672
8640 Summer	1.19	4408
10080 Summer	1.06	5136
15 Winter	122.43	22
30 Winter	82.24	36
60 Winter	52.66	64
120 Winter	32.50	120
180 Winter	24.12	174
240 Winter	19.39	206
360 Winter	14.27	276
480 Winter	11.46	352

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Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
600 Winter	3.6	3.6	100.1578	0.1578	66.2	O K
720 Winter	3.6	3.6	100.1462	0.1463	61.4	O K
960 Winter	3.6	3.6	100.1233	0.1233	51.7	O K
1440 Winter	3.6	3.6	100.0827	0.0828	34.8	O K
2160 Winter	3.5	3.5	100.0488	0.0487	20.6	O K
2880 Winter	2.9	2.9	100.0397	0.0397	16.7	O K
4320 Winter	2.1	2.1	100.0293	0.0292	12.3	O K
5760 Winter	1.7	1.7	100.0232	0.0232	9.8	O K
7200 Winter	1.4	1.4	100.0198	0.0197	8.2	O K
8640 Winter	1.2	1.2	100.0173	0.0173	7.1	O K
10080 Winter	1.1	1.1	100.0153	0.0153	6.3	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
600 Winter	9.66	426
720 Winter	8.40	498
960 Winter	6.72	634
1440 Winter	4.91	880
2160 Winter	3.57	1168
2880 Winter	2.85	1528
4320 Winter	2.07	2252
5760 Winter	1.64	2992
7200 Winter	1.38	3720
8640 Winter	1.19	4448
10080 Winter	1.06	5232

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Rainfall Details

Region	ENG+WAL	Cv (Summer)	0.750	Summer Storms	Yes
Return Period (years)	100	Cv (Winter)	0.840	Winter Storms	Yes
M5-60 (mm)	20.000	Shortest Storm (mins)	15	Climate Change %	+30
Ratio-R	0.350	Longest Storm (mins)	10080		

Time / Area Diagram

Total Area (ha) = 0.180

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.060	4	8	0.120

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Porous Car Park Details

Infil Coef - Base (m/hr)	0.016200	Invert Level (m)	100.000
Membrane Percolation (mm/hr)	1000	Cover Level (m)	100.500
Safety Factor	1.5	Slope (1:x)	0.0
Porosity	0.35	Max Percolation (l/s)	333.3
Length (m)	120.0	Depression Storage (mm)	5
Width (m)	10.0	Evaporation (mm/day)	3