

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 10 year Return Period (+40%)</u> Half Drain Time : 190 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>6.692</td><td>0.032</td><td>0.1</td><td>0.9</td><td>O K</td></tr><tr><td>30 min Summer</td><td>6.705</td><td>0.045</td><td>0.1</td><td>1.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>6.718</td><td>0.058</td><td>0.1</td><td>1.7</td><td>O K</td></tr><tr><td>120 min Summer</td><td>6.729</td><td>0.069</td><td>0.1</td><td>2.0</td><td>O K</td></tr><tr><td>180 min Summer</td><td>6.734</td><td>0.074</td><td>0.1</td><td>2.1</td><td>O K</td></tr><tr><td>240 min Summer</td><td>6.736</td><td>0.076</td><td>0.1</td><td>2.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>6.739</td><td>0.079</td><td>0.1</td><td>2.3</td><td>O K</td></tr><tr><td>480 min 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Willow Cottage Herne Lane Rustington BN16 3EE		99 Victoria Drive Bognor Regis Permeable paving			
Date 15 July 2020 File Permeable Drive only 10yr.SRCX		Designed by RC Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 10 year Return Period (+40%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	6.713	0.053	0.1	1.5	O K
60 min Winter	6.728	0.068	0.1	2.0	O K
120 min Winter	6.741	0.081	0.1	2.3	O K
180 min Winter	6.746	0.086	0.1	2.5	O K
240 min Winter	6.748	0.088	0.1	2.5	O K
360 min Winter	6.750	0.090	0.1	2.6	O K
480 min Winter	6.750	0.090	0.1	2.6	O K
600 min Winter	6.748	0.088	0.1	2.5	O K
720 min Winter	6.745	0.085	0.1	2.4	O K
960 min Winter	6.738	0.078	0.1	2.2	O K
1440 min Winter	6.723	0.063	0.1	1.8	O K
2160 min Winter	6.708	0.048	0.1	1.4	O K
2880 min Winter	6.701	0.041	0.1	1.2	O K
4320 min Winter	6.691	0.031	0.1	0.9	O K
5760 min Winter	6.686	0.026	0.1	0.7	O K
7200 min Winter	6.682	0.022	0.1	0.6	O K
8640 min Winter	6.679	0.019	0.0	0.5	O K
10080 min Winter	6.677	0.017	0.0	0.5	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	50.290	0.0	32		
60 min Winter	31.908	0.0	60		
120 min Winter	19.755	0.0	118		
180 min Winter	14.804	0.0	172		
240 min Winter	12.028	0.0	206		
360 min Winter	8.957	0.0	274		
480 min Winter	7.262	0.0	352		
600 min Winter	6.168	0.0	426		
720 min Winter	5.396	0.0	498		
960 min Winter	4.369	0.0	636		
1440 min Winter	3.241	0.0	894		
2160 min Winter	2.402	0.0	1232		
2880 min Winter	1.942	0.0	1588		
4320 min Winter	1.437	0.0	2332		
5760 min Winter	1.161	0.0	3056		
7200 min Winter	0.983	0.0	3752		
8640 min Winter	0.859	0.0	4472		
10080 min Winter	0.766	0.0	5248		
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Willow Cottage Herne Lane Rustington BN16 3EE	99 Victoria Drive Bognor Regis Permeable paving	
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Micro Drainage Source Control 2016.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	10	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.010

Time (mins)	Area
From:	To: (ha)
0	4 0.010

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<u>Model Details</u> Storage is Online Cover Level (m) 7.100 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.01824</td> <td>Width (m)</td> <td>4.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>24.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>26.7</td> <td>Slope (1:X)</td> <td>0.0</td> </tr> <tr> <td>Safety Factor</td> <td>4.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>6.660</td> <td>Membrane Depth (m)</td> <td>0</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.01824	Width (m)	4.0	Membrane Percolation (mm/hr)	1000	Length (m)	24.0	Max Percolation (l/s)	26.7	Slope (1:X)	0.0	Safety Factor	4.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	6.660	Membrane Depth (m)	0
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