

Robert Clark Associates				Page 1																																																																																																																																																																																																									
Willow Cottage Herne Lane Rustington BN16 3EE		Ferringham Lane Area 4 Permeable paving design																																																																																																																																																																																																											
Date 7 April 2022 File Area 4 pp calcs.SRCX		Designed by RTFC Checked by																																																																																																																																																																																																											
Micro Drainage		Source Control 2016.1																																																																																																																																																																																																											
<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 260 minutes. <table><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><tr><td>15 min Winter</td><td>5.671</td><td>0.201</td><td>0.5</td><td>7.1</td><td>O K</td></tr><tr><td>30 min Winter</td><td>5.730</td><td>0.260</td><td>0.5</td><td>9.6</td><td>Flood Risk</td></tr><tr><td>60 min Winter</td><td>5.787</td><td>0.317</td><td>0.5</td><td>12.0</td><td>Flood Risk</td></tr><tr><td>120 min Winter</td><td>5.834</td><td>0.364</td><td>0.5</td><td>14.0</td><td>Flood Risk</td></tr><tr><td>180 min Winter</td><td>5.850</td><td>0.380</td><td>0.5</td><td>14.7</td><td>Flood Risk</td></tr><tr><td>240 min Winter</td><td>5.851</td><td>0.381</td><td>0.5</td><td>14.7</td><td>Flood Risk</td></tr><tr><td>360 min Winter</td><td>5.839</td><td>0.369</td><td>0.5</td><td>14.2</td><td>Flood Risk</td></tr><tr><td>480 min Winter</td><td>5.826</td><td>0.356</td><td>0.5</td><td>13.7</td><td>Flood Risk</td></tr><tr><td>600 min Winter</td><td>5.810</td><td>0.340</td><td>0.5</td><td>13.0</td><td>Flood Risk</td></tr><tr><td>720 min Winter</td><td>5.793</td><td>0.323</td><td>0.5</td><td>12.3</td><td>Flood Risk</td></tr><tr><td>960 min Winter</td><td>5.758</td><td>0.288</td><td>0.5</td><td>10.8</td><td>Flood Risk</td></tr><tr><td>1440 min Winter</td><td>5.689</td><td>0.219</td><td>0.5</td><td>7.9</td><td>O K</td></tr><tr><td>2160 min Winter</td><td>5.603</td><td>0.133</td><td>0.5</td><td>4.2</td><td>O K</td></tr><tr><td>2880 min Winter</td><td>5.547</td><td>0.077</td><td>0.5</td><td>1.9</td><td>O K</td></tr><tr><td>4320 min Winter</td><td>5.522</td><td>0.052</td><td>0.4</td><td>0.9</td><td>O K</td></tr><tr><td>5760 min Winter</td><td>5.516</td><td>0.046</td><td>0.3</td><td>0.7</td><td>O K</td></tr><tr><td>7200 min Winter</td><td>5.512</td><td>0.042</td><td>0.3</td><td>0.6</td><td>O K</td></tr><tr><td>8640 min 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Date 7 April 2022 File Area 4 pp calcs.SRCX	Designed by RTFC Checked by	
Micro Drainage Source Control 2016.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.750
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	No	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.035

Time (mins)	Area
From: To:	(ha)
0 4	0.035

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Model Details

Storage is Online Cover Level (m) 6.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.04936	Width (m)	8.0
Membrane Percolation (mm/hr)	1000	Length (m)	17.6
Max Percolation (l/s)	39.1	Slope (1:X)	271.0
Safety Factor	4.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	5.470	Membrane Depth (m)	0

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