

Odyssey		Page 1			
Tuscany House	Stakers Farm, Yapton				
White Hart Lane	As-built				
Basingstoke RG21 4AF	Road 2 and Plots 23-28				
Date 20/04/2022 11:47	Designed by WindesPC5				
File As-built_Road 2_includi...	Checked by				
Innovyze	Source Control 2020.1.3				
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Half Drain Time : 2661 minutes.					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	5.948	0.153	0.3	26.5	O K
30 min Summer	5.982	0.187	0.3	36.0	O K
60 min Summer	6.019	0.224	0.3	46.5	O K
120 min Summer	6.050	0.255	0.3	54.9	O K
180 min Summer	6.074	0.279	0.3	60.0	Flood Risk
240 min Summer	6.090	0.295	0.3	63.4	Flood Risk
360 min Summer	6.109	0.314	0.3	67.4	Flood Risk
480 min Summer	6.120	0.325	0.3	69.9	Flood Risk
600 min Summer	6.128	0.333	0.3	71.5	Flood Risk
720 min Summer	6.133	0.338	0.3	72.6	Flood Risk
960 min Summer	6.138	0.343	0.3	73.7	Flood Risk
1440 min Summer	6.140	0.345	0.3	74.1	Flood Risk
2160 min Summer	6.134	0.339	0.3	72.7	Flood Risk
2880 min Summer	6.129	0.334	0.3	71.7	Flood Risk
4320 min Summer	6.123	0.328	0.3	70.4	Flood Risk
5760 min Summer	6.118	0.323	0.3	69.4	Flood Risk
7200 min Summer	6.115	0.320	0.3	68.8	Flood Risk
8640 min Summer	6.113	0.318	0.3	68.3	Flood Risk
10080 min Summer	6.112	0.317	0.3	68.0	Flood Risk
15 min Winter	5.960	0.165	0.3	29.9	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer	141.164	0.0	19		
30 min Summer	94.700	0.0	34		
60 min Summer	60.903	0.0	64		
120 min Summer	36.128	0.0	124		
180 min Summer	26.473	0.0	184		
240 min Summer	21.126	0.0	244		
360 min Summer	15.214	0.0	362		
480 min Summer	12.016	0.0	482		
600 min Summer	9.993	0.0	602		
720 min Summer	8.590	0.0	722		
960 min Summer	6.756	0.0	962		
1440 min Summer	4.823	0.0	1440		
2160 min Summer	3.462	0.0	1972		
2880 min Summer	2.754	0.0	2308		
4320 min Summer	2.025	0.0	3072		
5760 min Summer	1.648	0.0	3920		
7200 min Summer	1.419	0.0	4752		
8640 min Summer	1.264	0.0	5616		
10080 min Summer	1.153	0.0	6448		
15 min Winter	141.164	0.0	19		
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Tuscany House White Hart Lane Basingstoke RG21 4AF			Stakers Farm, Yapton As-built Road 2 and Plots 23-28		
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Innovyze			Source Control 2020.1.3		
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	5.998	0.203	0.3	40.5	O K
60 min Winter	6.040	0.245	0.3	52.4	O K
120 min Winter	6.083	0.288	0.3	61.9	Flood Risk
180 min Winter	6.109	0.314	0.3	67.6	Flood Risk
240 min Winter	6.128	0.333	0.3	71.4	Flood Risk
360 min Winter	6.153	0.358	0.3	76.1	Flood Risk
480 min Winter	6.182	0.387	0.3	79.0	Flood Risk
600 min Winter	6.202	0.407	0.3	80.9	Flood Risk
720 min Winter	6.215	0.420	0.3	82.3	Flood Risk
960 min Winter	6.236	0.441	0.3	83.8	Flood Risk
1440 min Winter	6.256	0.461	0.3	84.9	Flood Risk
2160 min Winter	6.244	0.449	0.3	84.3	Flood Risk
2880 min Winter	6.219	0.424	0.3	82.7	Flood Risk
4320 min Winter	6.197	0.402	0.3	80.4	Flood Risk
5760 min Winter	6.178	0.383	0.3	78.6	Flood Risk
7200 min Winter	6.162	0.367	0.3	76.9	Flood Risk
8640 min Winter	6.147	0.352	0.3	75.4	Flood Risk
10080 min Winter	6.140	0.345	0.3	74.1	Flood Risk
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	94.700	0.0	34		
60 min Winter	60.903	0.0	64		
120 min Winter	36.128	0.0	122		
180 min Winter	26.473	0.0	182		
240 min Winter	21.126	0.0	240		
360 min Winter	15.214	0.0	358		
480 min Winter	12.016	0.0	476		
600 min Winter	9.993	0.0	594		
720 min Winter	8.590	0.0	710		
960 min Winter	6.756	0.0	942		
1440 min Winter	4.823	0.0	1400		
2160 min Winter	3.462	0.0	2072		
2880 min Winter	2.754	0.0	2680		
4320 min Winter	2.025	0.0	3328		
5760 min Winter	1.648	0.0	4264		
7200 min Winter	1.419	0.0	5184		
8640 min Winter	1.264	0.0	6056		
10080 min Winter	1.153	0.0	6968		
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Innovyze Source Control 2020.1.3		

Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
FEH Rainfall Version	2013
Site Location	GB 497682 103581 SU 97682 03581
Data Type	Point
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.107

	Time (mins)	Area
From:	To:	(ha)
	0	4 0.107

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Model Details

Storage is Online Cover Level (m) 6.355

Complex Structure

Cellular Storage

Invert Level (m) 5.795 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00648 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	74.0	74.0	0.251	0.0	86.7
0.250	74.0	86.7			

Cellular Storage

Invert Level (m) 5.795 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00648 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	47.5	47.5	0.251	0.0	53.5
0.250	47.5	53.5			

Cellular Storage

Invert Level (m) 5.895 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00648 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	175.2	175.2	0.251	0.0	189.2
0.250	175.2	189.2			

Porous Car Park

Infiltration Coefficient Base (m/hr) 0.00000	Width (m) 5.0
Membrane Percolation (mm/hr) 1000	Length (m) 21.8
Max Percolation (l/s) 30.3	Slope (1:X) 0.0
Safety Factor 2.0	Depression Storage (mm) 5
Porosity 0.30	Evaporation (mm/day) 3
Invert Level (m) 6.045	Cap Volume Depth (m) 0.180

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