

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 129 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max E (l/s)	Max Outflow Volume (m³)	Status
15 min Summer	51.297	0.267	0.0	0.4	0.4	4.2	O K
30 min Summer	51.373	0.343	0.0	0.5	0.5	5.5	O K
60 min Summer	51.435	0.405	0.0	0.5	0.5	6.4	O K
120 min Summer	51.466	0.436	0.0	0.5	0.5	6.9	O K
180 min Summer	51.471	0.441	0.0	0.5	0.5	7.0	O K
240 min Summer	51.469	0.439	0.0	0.5	0.5	7.0	O K
360 min Summer	51.451	0.421	0.0	0.5	0.5	6.7	O K
480 min Summer	51.429	0.399	0.0	0.5	0.5	6.3	O K
600 min Summer	51.407	0.377	0.0	0.5	0.5	6.0	O K
720 min Summer	51.386	0.356	0.0	0.5	0.5	5.7	O K
960 min Summer	51.349	0.319	0.0	0.5	0.5	5.1	O K
1440 min Summer	51.289	0.259	0.0	0.4	0.4	4.1	O K
2160 min Summer	51.228	0.198	0.0	0.4	0.4	3.1	O K
2880 min Summer	51.187	0.157	0.0	0.3	0.3	2.5	O K
4320 min Summer	51.137	0.107	0.0	0.3	0.3	1.7	O K
5760 min Summer	51.108	0.078	0.0	0.2	0.2	1.2	O K
7200 min Summer	51.091	0.061	0.0	0.2	0.2	1.0	O K
8640 min Summer	51.080	0.050	0.0	0.2	0.2	0.8	O K
10080 min Summer	51.072	0.042	0.0	0.1	0.1	0.7	O K
15 min Winter	51.297	0.267	0.0	0.4	0.4	4.2	O K
30 min Winter	51.374	0.344	0.0	0.5	0.5	5.5	O K
60 min Winter	51.437	0.407	0.0	0.5	0.5	6.5	O K
120 min Winter	51.467	0.437	0.0	0.5	0.5	7.0	O K
180 min Winter	51.469	0.439	0.0	0.5	0.5	7.0	O K
240 min Winter	51.462	0.432	0.0	0.5	0.5	6.9	O K
360 min Winter	51.434	0.404	0.0	0.5	0.5	6.4	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	125.326	0.0	4.5	18
30 min Summer	82.405	0.0	6.0	32
60 min Summer	51.705	0.0	7.6	62
120 min Summer	31.413	0.0	9.3	104
180 min Summer	23.188	0.0	10.3	134
240 min Summer	18.598	0.0	11.0	168
360 min Summer	13.522	0.0	12.0	236
480 min Summer	10.772	0.0	12.8	304
600 min Summer	9.031	0.0	13.4	372
720 min Summer	7.816	0.0	13.9	440
960 min Summer	6.219	0.0	14.7	568
1440 min Summer	4.499	0.0	16.0	822
2160 min Summer	3.249	0.0	17.3	1188
2880 min Summer	2.577	0.0	18.2	1556
4320 min Summer	1.856	0.0	19.6	2252
5760 min Summer	1.469	0.0	20.5	2992
7200 min Summer	1.225	0.0	21.3	3680
8640 min Summer	1.055	0.0	21.9	4408
10080 min Summer	0.930	0.0	22.4	5144
15 min Winter	125.326	0.0	4.5	18
30 min Winter	82.405	0.0	6.0	32
60 min Winter	51.705	0.0	7.6	60
120 min Winter	31.413	0.0	9.3	112
180 min Winter	23.188	0.0	10.3	140
240 min Winter	18.598	0.0	11.0	178
360 min Winter	13.522	0.0	12.0	254

Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max E Outflow (l/s)	Max Volume (m³)	Status
480 min Winter	51.404	0.374	0.0	0.5	0.5	5.9	O K
600 min Winter	51.375	0.345	0.0	0.5	0.5	5.5	O K
720 min Winter	51.347	0.317	0.0	0.5	0.5	5.0	O K
960 min Winter	51.300	0.270	0.0	0.4	0.4	4.3	O K
1440 min Winter	51.231	0.201	0.0	0.4	0.4	3.2	O K
2160 min Winter	51.168	0.138	0.0	0.3	0.3	2.2	O K
2880 min Winter	51.130	0.100	0.0	0.3	0.3	1.6	O K
4320 min Winter	51.092	0.062	0.0	0.2	0.2	1.0	O K
5760 min Winter	51.073	0.043	0.0	0.2	0.2	0.7	O K
7200 min Winter	51.064	0.034	0.0	0.1	0.1	0.5	O K
8640 min Winter	51.058	0.028	0.0	0.1	0.1	0.4	O K
10080 min Winter	51.056	0.026	0.0	0.1	0.1	0.4	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
480 min Winter	10.772	0.0	12.8	326
600 min Winter	9.031	0.0	13.4	396
720 min Winter	7.816	0.0	13.9	464
960 min Winter	6.219	0.0	14.7	598
1440 min Winter	4.499	0.0	16.0	852
2160 min Winter	3.249	0.0	17.3	1212
2880 min Winter	2.577	0.0	18.2	1560
4320 min Winter	1.856	0.0	19.6	2288
5760 min Winter	1.469	0.0	20.5	2992
7200 min Winter	1.225	0.0	21.3	3672
8640 min Winter	1.055	0.0	21.9	4392
10080 min Winter	0.930	0.0	22.4	5072

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.950
Region	England and Wales	Cv (Winter)	0.950
M5-60 (mm)	18.300	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.016

Time (mins)		Area
From:	To:	(ha)
0	4	0.016

Time Area Diagram

Total Area (ha) 0.000

Time (mins)		Area
From:	To:	(ha)
0	4	0.000

Infrastruct CS Ltd		Page 4
The Stables High Cogges, Witney Oxfordshire, OX29 6UN	Porous Driveway Mill Lane Sindlesham	
Date 20/01/2025 File 6277-OAKV - Permeable Driveway....	Designed by RSI Checked by MBD	
Innovyze	Source Control 2020.1.3	

Model Details

Storage is Online Cover Level (m) 51.600

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.3
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	14.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	51.030	Membrane Depth (m)	0

Orifice Outflow Control

Diameter (m) 0.020 Discharge Coefficient 0.600 Invert Level (m) 51.030

Event: 180 min Summer

