

Infrastruct CS Ltd

The Stables
High Cogges, Witney
Oxfordshire, OX29 6UN

Date 23/04/2026
File 6665-MALF.SRCX

Innovyze

Gravel Trench
Christian Malford
SN15 4BH

Designed by RSI
Checked by MBD

Source Control 2020.1.3

Page 1



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

Half Drain Time : 31 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	53.816	0.366	0.0	0.8	0.8	2.0	O K
30 min Summer	53.890	0.440	0.0	0.9	0.9	2.4	O K
60 min Summer	53.930	0.480	0.0	0.9	0.9	2.6	O K
120 min Summer	53.916	0.466	0.0	0.9	0.9	2.5	O K
180 min Summer	53.876	0.426	0.0	0.8	0.8	2.3	O K
240 min Summer	53.835	0.385	0.0	0.8	0.8	2.1	O K
360 min Summer	53.770	0.320	0.0	0.7	0.7	1.7	O K
480 min Summer	53.720	0.270	0.0	0.7	0.7	1.5	O K
600 min Summer	53.681	0.231	0.0	0.6	0.6	1.2	O K
720 min Summer	53.650	0.200	0.0	0.6	0.6	1.1	O K
960 min Summer	53.606	0.156	0.0	0.5	0.5	0.8	O K
1440 min Summer	53.554	0.104	0.0	0.4	0.4	0.6	O K
2160 min Summer	53.517	0.067	0.0	0.3	0.3	0.4	O K
2880 min Summer	53.499	0.049	0.0	0.3	0.3	0.3	O K
4320 min Summer	53.484	0.034	0.0	0.2	0.2	0.2	O K
5760 min Summer	53.479	0.029	0.0	0.1	0.1	0.2	O K
7200 min Summer	53.476	0.026	0.0	0.1	0.1	0.1	O K
8640 min Summer	53.474	0.024	0.0	0.1	0.1	0.1	O K
10080 min Summer	53.472	0.022	0.0	0.1	0.1	0.1	O K
15 min Winter	53.816	0.366	0.0	0.8	0.8	2.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	131.851	0.0	2.4	16
30 min Summer	88.566	0.0	3.3	26
60 min Summer	56.713	0.0	4.2	44
120 min Summer	35.004	0.0	5.2	78
180 min Summer	25.973	0.0	5.8	110
240 min Summer	20.877	0.0	6.2	144
360 min Summer	15.365	0.0	6.9	206
480 min Summer	12.341	0.0	7.4	268
600 min Summer	10.402	0.0	7.8	328
720 min Summer	9.042	0.0	8.1	388
960 min Summer	7.241	0.0	8.7	510
1440 min Summer	5.284	0.0	9.5	748
2160 min Summer	3.848	0.0	10.4	1104
2880 min Summer	3.068	0.0	11.0	1468
4320 min Summer	2.226	0.0	11.9	2168
5760 min Summer	1.771	0.0	12.6	2936
7200 min Summer	1.483	0.0	13.2	3640
8640 min Summer	1.284	0.0	13.6	4296
10080 min Summer	1.137	0.0	14.0	5104
15 min Winter	131.851	0.0	2.4	16

©1982-2020 Innovyze

Infrastruct CS Ltd						Page 2	
The Stables High Cogges, Witney Oxfordshire, OX29 6UN			Gravel Trench Christian Malford SN15 4BH				
Date 23/04/2026 File 6665-MALF.SRCX			Designed by RSI Checked by MBD				
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 Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	53.890	0.440	0.0	0.9	0.9	2.4	O K
60 min Winter	53.921	0.471	0.0	0.9	0.9	2.5	O K
120 min Winter	53.885	0.435	0.0	0.8	0.8	2.3	O K
180 min Winter	53.828	0.378	0.0	0.8	0.8	2.0	O K
240 min Winter	53.775	0.325	0.0	0.7	0.7	1.8	O K
360 min Winter	53.697	0.247	0.0	0.6	0.6	1.3	O K
480 min Winter	53.643	0.193	0.0	0.6	0.6	1.0	O K
600 min Winter	53.605	0.155	0.0	0.5	0.5	0.8	O K
720 min Winter	53.578	0.128	0.0	0.4	0.4	0.7	O K
960 min Winter	53.542	0.092	0.0	0.4	0.4	0.5	O K
1440 min Winter	53.508	0.058	0.0	0.3	0.3	0.3	O K
2160 min Winter	53.487	0.037	0.0	0.2	0.2	0.2	O K
2880 min Winter	53.481	0.031	0.0	0.2	0.2	0.2	O K
4320 min Winter	53.475	0.025	0.0	0.1	0.1	0.1	O K
5760 min Winter	53.472	0.022	0.0	0.1	0.1	0.1	O K
7200 min Winter	53.470	0.020	0.0	0.1	0.1	0.1	O K
8640 min Winter	53.468	0.018	0.0	0.1	0.1	0.1	O K
10080 min Winter	53.466	0.016	0.0	0.1	0.1	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)			
30 min Winter	88.566	0.0	3.3	27			
60 min Winter	56.713	0.0	4.2	46			
120 min Winter	35.004	0.0	5.2	82			
180 min Winter	25.973	0.0	5.8	118			
240 min Winter	20.877	0.0	6.2	150			
360 min Winter	15.365	0.0	6.9	214			
480 min Winter	12.341	0.0	7.4	274			
600 min Winter	10.402	0.0	7.8	334			
720 min Winter	9.042	0.0	8.1	392			
960 min Winter	7.241	0.0	8.7	512			
1440 min Winter	5.284	0.0	9.5	748			
2160 min Winter	3.848	0.0	10.4	1100			
2880 min Winter	3.068	0.0	11.0	1444			
4320 min Winter	2.226	0.0	11.9	2160			
5760 min Winter	1.771	0.0	12.6	2920			
7200 min Winter	1.483	0.0	13.2	3600			
8640 min Winter	1.284	0.0	13.6	4368			
10080 min Winter	1.137	0.0	14.0	4952			
©1982-2020 Innovyze							

The Stables
High Cogges, Witney
Oxfordshire, OX29 6UN

Gravel Trench
Christian Malford
SN15 4BH



Date	23/04/2026
File	6665-MALF.SRCX

Designed by RSI
Checked by MBD

Innovyze

Source Control 2020.1.3

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)	20.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.008

Time	(mins)	Area
From:	To:	(ha)

0 4 0.008

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	Gravel Trench Christian Malford SN15 4BH																									
Date 23/04/2026 File 6665-MALF.SRCX	Designed by RSI Checked by MBD																									
Innovyze																										
Source Control 2020.1.3																										
Model Details Storage is Online Cover Level (m) 54.050 Porous Car Park Structure <table><tr><td>Infiltration Coefficient Base (m/hr)</td><td>0.00000</td><td>Width (m)</td><td>0.9</td></tr><tr><td>Membrane Percolation (mm/hr)</td><td>1000</td><td>Length (m)</td><td>20.0</td></tr><tr><td>Max Percolation (l/s)</td><td>5.0</td><td>Slope (1:X)</td><td>0.0</td></tr><tr><td>Safety Factor</td><td>2.0</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>53.450</td><td>Membrane Depth (m)</td><td>0</td></tr></table> Orifice Outflow Control Diameter (m) 0.025 Discharge Coefficient 0.600 Invert Level (m) 53.450			Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	0.9	Membrane Percolation (mm/hr)	1000	Length (m)	20.0	Max Percolation (l/s)	5.0	Slope (1:X)	0.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	53.450	Membrane Depth (m)	0
Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	0.9																							
Membrane Percolation (mm/hr)	1000	Length (m)	20.0																							
Max Percolation (l/s)	5.0	Slope (1:X)	0.0																							
Safety Factor	2.0	Depression Storage (mm)	5																							
Porosity	0.30	Evaporation (mm/day)	3																							
Invert Level (m)	53.450	Membrane Depth (m)	0																							
©1982-2020 Innovyze																										

Infrastruct CS Ltd		Page 5
The Stables High Cogges, Witney Oxfordshire, OX29 6UN	Gravel Trench Christian Malford SN15 4BH	
Date 23/04/2026	Designed by RSI	
File 6665-MALF.SRCX	Checked by MBD	
Innovyze	Source Control 2020.1.3	

