






Amazi Consulting Ltd		Page 2			
13 Tovells Road Ipswich Suffolk IP4 4DY	Teddington Riverside Soakaway (A = 1,000 sqm) FOS = 1.5				
Date 27 May 2014 File Teddington_soakaway.srcx	Designed by LSP Checked by PW				
Micro Drainage	Source Control 2014.1.1				
<u>Summary of Results for 100 year Return Period (+30%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	4.735	0.535	1.0	45.8	O K
60 min Winter	4.810	0.610	1.0	52.1	O K
120 min Winter	4.881	0.681	1.1	58.3	O K
180 min Winter	4.916	0.716	1.1	61.2	O K
240 min Winter	4.934	0.734	1.1	62.7	O K
360 min Winter	4.944	0.744	1.1	63.6	O K
480 min Winter	4.937	0.737	1.1	63.0	O K
600 min Winter	4.921	0.721	1.1	61.7	O K
720 min Winter	4.906	0.706	1.1	60.3	O K
960 min Winter	4.868	0.668	1.1	57.1	O K
1440 min Winter	4.791	0.591	1.0	50.5	O K
2160 min Winter	4.683	0.483	1.0	41.3	O K
2880 min Winter	4.587	0.387	1.0	33.1	O K
4320 min Winter	4.407	0.207	0.9	17.7	O K
5760 min Winter	4.291	0.091	0.9	7.7	O K
7200 min Winter	4.248	0.048	0.8	4.1	O K
8640 min Winter	4.241	0.041	0.7	3.5	O K
10080 min Winter	4.236	0.036	0.6	3.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	112.974	0.0	36		
60 min Winter	65.865	0.0	66		
120 min Winter	38.400	0.0	122		
180 min Winter	28.007	0.0	180		
240 min Winter	22.388	0.0	238		
360 min Winter	16.328	0.0	350		
480 min Winter	13.052	0.0	458		
600 min Winter	10.971	0.0	554		
720 min Winter	9.520	0.0	578		
960 min Winter	7.549	0.0	728		
1440 min Winter	5.443	0.0	1030		
2160 min Winter	3.925	0.0	1472		
2880 min Winter	3.113	0.0	1876		
4320 min Winter	2.174	0.0	2600		
5760 min Winter	1.685	0.0	3232		
7200 min Winter	1.383	0.0	3672		
8640 min Winter	1.177	0.0	4400		
10080 min Winter	1.027	0.0	5096		
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13 Tovells Road	Teddington Riverside	
Ipswich Suffolk IP4 4DY	Soakaway (A = 1,000 sqm) FOS = 1.5	
Date 27 May 2014	Designed by LSP	
File Teddington_soakaway.srcx	Checked by PW	
Micro Drainage	Source Control 2014.1.1	
<u>Model Details</u>		
Storage is Online Cover Level (m) 5.600		
<u>Cellular Storage Structure</u>		
Invert Level (m) 4.200 Safety Factor 1.5		
Infiltration Coefficient Base (m/hr) 0.05000 Porosity 0.95		
Infiltration Coefficient Side (m/hr) 0.05000		
<u>Depth (m)</u>	<u>Area (m²)</u>	<u>Inf. Area (m²)</u>
0.000	90.0	90.0
0.800	90.0	120.4
0.000	90.0	90.0
0.801	0.0	120.4
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13 Tovells Road Ipswich Suffolk IP4 4DY		Teddington Riverside Small Soakaway			
Date 28 May 2014 File SMALL_SOAKAWAY.SRCX		Designed by LSP Checked by PW			
Micro Drainage		Source Control 2014.1.1			
<p><u>Summary of Results for 100 year Return Period (+30%)</u></p> <p>Half Drain Time : 621 minutes.</p>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	4.952	0.752	0.3	14.3	O K
30 min Summer	5.067	0.867	0.3	16.5	O K
60 min Summer	5.189	0.989	0.3	18.8	O K
120 min Summer	5.310	1.110	0.4	21.1	O K
180 min Summer	5.370	1.170	0.4	22.2	O K
240 min Summer	5.403	1.203	0.4	22.9	O K
360 min Summer	5.427	1.227	0.4	23.3	O K
480 min Summer	5.422	1.222	0.4	23.2	O K
600 min Summer	5.413	1.213	0.4	23.1	O K
720 min Summer	5.402	1.202	0.4	22.8	O K
960 min Summer	5.363	1.163	0.4	22.1	O K
1440 min Summer	5.285	1.085	0.4	20.6	O K
2160 min Summer	5.183	0.983	0.3	18.7	O K
2880 min Summer	5.095	0.895	0.3	17.0	O K
4320 min Summer	4.907	0.707	0.3	13.4	O K
5760 min Summer	4.762	0.562	0.3	10.7	O K
7200 min Summer	4.645	0.445	0.3	8.5	O K
8640 min Summer	4.550	0.350	0.2	6.7	O K
10080 min Summer	4.473	0.273	0.2	5.2	O K
15 min Winter	5.043	0.843	0.3	16.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer	193.777	0.0	19		
30 min Summer	112.974	0.0	34		
60 min Summer	65.865	0.0	64		
120 min Summer	38.400	0.0	122		
180 min Summer	28.007	0.0	182		
240 min Summer	22.388	0.0	242		
360 min Summer	16.328	0.0	360		
480 min Summer	13.052	0.0	448		
600 min Summer	10.971	0.0	502		
720 min Summer	9.520	0.0	564		
960 min Summer	7.549	0.0	692		
1440 min Summer	5.443	0.0	968		
2160 min Summer	3.925	0.0	1384		
2880 min Summer	3.113	0.0	1788		
4320 min Summer	2.174	0.0	2592		
5760 min Summer	1.685	0.0	3344		
7200 min Summer	1.383	0.0	4104		
8640 min Summer	1.177	0.0	4832		
10080 min Summer	1.027	0.0	5544		
15 min Winter	193.777	0.0	19		
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13 Tovells Road Ipswich Suffolk IP4 4DY	Teddington Riverside Small Soakaway				
Date 28 May 2014 File SMALL_SOAKAWAY.SRCX	Designed by LSP Checked by PW				
Micro Drainage	Source Control 2014.1.1				
<u>Summary of Results for 100 year Return Period (+30%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	5.173	0.973	0.3	18.5	O K
60 min Winter	5.313	1.113	0.4	21.2	O K
120 min Winter	5.453	1.253	0.4	23.8	O K
180 min Winter	5.526	1.326	0.4	25.2	O K
240 min Winter	5.568	1.368	0.4	26.0	O K
360 min Winter	5.605	1.405	0.4	26.7	O K
480 min Winter	5.611	1.411	0.4	26.8	O K
600 min Winter	5.599	1.399	0.4	26.6	O K
720 min Winter	5.582	1.382	0.4	26.3	O K
960 min Winter	5.538	1.338	0.4	25.4	O K
1440 min Winter	5.436	1.236	0.4	23.5	O K
2160 min Winter	5.289	1.089	0.4	20.7	O K
2880 min Winter	5.162	0.962	0.3	18.3	O K
4320 min Winter	4.907	0.707	0.3	13.4	O K
5760 min Winter	4.714	0.514	0.3	9.8	O K
7200 min Winter	4.565	0.365	0.2	6.9	O K
8640 min Winter	4.448	0.248	0.2	4.7	O K
10080 min Winter	4.356	0.156	0.2	3.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	112.974	0.0	33		
60 min Winter	65.865	0.0	62		
120 min Winter	38.400	0.0	120		
180 min Winter	28.007	0.0	178		
240 min Winter	22.388	0.0	236		
360 min Winter	16.328	0.0	350		
480 min Winter	13.052	0.0	458		
600 min Winter	10.971	0.0	560		
720 min Winter	9.520	0.0	586		
960 min Winter	7.549	0.0	732		
1440 min Winter	5.443	0.0	1040		
2160 min Winter	3.925	0.0	1492		
2880 min Winter	3.113	0.0	1928		
4320 min Winter	2.174	0.0	2728		
5760 min Winter	1.685	0.0	3520		
7200 min Winter	1.383	0.0	4256		
8640 min Winter	1.177	0.0	5008		
10080 min Winter	1.027	0.0	5648		
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13 Tovells Road	Teddington Riverside	
Ipswich Suffolk IP4 4DY	Small Soakaway	
Date 28 May 2014	Designed by LSP	
File SMALL_SOAKAWAY.SRCX	Checked by PW	
Micro Drainage	Source Control 2014.1.1	

Rainfall Details


Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 516650 171400 TQ 16650 71400
C (1km)	-0.024
D1 (1km)	0.332
D2 (1km)	0.304
D3 (1km)	0.225
E (1km)	0.307
F (1km)	2.513
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.040

Time (mins)	Area
From:	To: (ha)
0	4 0.040

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13 Tovells Road Ipswich Suffolk IP4 4DY	Teddington Riverside Small Soakaway	
Date 28 May 2014 File SMALL_SOAKAWAY.SRCX	Designed by LSP Checked by PW	
Micro Drainage	Source Control 2014.1.1	

Model Details

Storage is Online Cover Level (m) 6.000

Cellular Storage Structure

Invert Level (m) 4.200 Safety Factor 1.5
 Infiltration Coefficient Base (m/hr) 0.05000 Porosity 0.95
 Infiltration Coefficient Side (m/hr) 0.05000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	20.0	20.0	1.501	0.0	46.8
1.500	20.0	46.8			



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