

Project:	Land to the rear of Westminster Avenue
Ref:	4425
Completed by:	HQ
Checked by:	J P CEng MICE
Date:	04/09/2025
Client:	Ian
Site Address:	Radcliffe , Bury , M26 3WD

Catchment Details			
Buildings	292.8	m²	x 95 %
Dense surfacing	204.96	m²	X 90 %
Urban Creep	0%		
Effective Area	462.6	m²	
Rainfall Details - FSR Method:			
Return Period	100 Years		
Climate Change Factor	45 %		
r Value	0.4		
M5-60 Summer Storm Profile	19	mm	
Duration	Intensity		Required storage (m3)
	mm	mm/hr	
5 min	18.7	224.6	8.128
10 min	28	167.8	11.805
15 min	33.8	135.3	13.893
30 min	44.4	88.9	16.892
45 min	51	67.9	17.97
60 min	55.7	55.7	18.25
2 hours	67.5	33.8	16.467
6 hours	86.7	14.5	3.94
24 hours	115.3	4.8	0

Storage Details (assumed)		
Tank Size	4.8 x 4.8 x 0.84 @ 95% Void	
Outflow Details		
Infiltration Rate	0.36	m/hr
Flow Control	N/A	
Safety Factor against flooding	1.5	
Calculation Method	CIRIA 3D	
Results		
Outcome:	Pass	
Critical Storm Duration	1.02	hrs
Hmax	0.834	m
Required Volume	18.251	m³
Time to empty half	1.1	hrs
Tank Behaviour in the Design Storm 		