


CRM Stormflow Stormwater Management using the Wallingford Procedure

Client:	Siaw Ltd	
Project:	3 Kidderpore Avenue, NW3	
Location:	London	
Catchment:	160m ² @ 30 year storm	
Date:	11/04/2011	

Catchment Details:			
Buildings	160	m ²	x 95 %
Dense surfacing		m ²	x 90 %
Effective Area	152	m ²	
Safety Factor against flooding =			1

Storage Details:			
Length	2.4	m	2 cells
Width	0.8	m	1 cells
Depth	0.55	m	2 cells
Total Number of cells			4 cells
Porosity			95 %
Area Increase			0 %
Storage Volume	1.003	m ³	

Outflow Details:					
Infiltration rate	0	m/hr	Discharge rate	2.5	l/s

Rainfall Details:			
Return Period		30	years
r value		0.42	
M5-60		20	mm
Duration	M30-D	intensity	
	mm	m/hour	
5 min	11.1	0.133	
10 min	16.2	0.097	
15 min	19.3	0.077	
30 min	25.0	0.050	
45 min	28.4	0.038	
60 min	30.8	0.031	
2 hours	36.9	0.018	
4 hours	43.3	0.011	
24 hours	63.1	0.003	

Results:	
Outcome:	Pass
Critical Storm Duration	9 min
Volume Required	0.997 m ³
Hmax	0.547 mm
Time to half empty	3.3 min

The Marley Waterloc 250 box is:
1200mm long, 800mm wide and 290mm deep (30mm overlap when stacked).