

Client: AYY

Project: Ceylon Service Station

Location: Bolton

Catchment: Ceylon Service Station

Catchment Details:

Buildings	395 m²	x 95 %
Dense surfacing	390 m²	x 90 %
Effective Area	726.25 m²	

Storage Details:

Length	10 m
Width	10 m
Depth	1 m
Porosity	100 %
Area Increase	0 %

Rainfall Details - FSR Method:

Return Period	100 years
Climate Change Factor	40 %
r value	0.4
M5-60	19 mm
Summer Storm Profile	

Duration	Intensity		Required storage(m³)
	mm	mm/h	
5 min	18.1	216.9	11.627
10 min	27.0	162.0	16.606
15 min	32.6	130.6	19.212
30 min	42.9	85.8	22.165
45 min	49.2	65.6	22.473
60 min	53.8	53.8	22.389
2 hours	65.2	32.6	20.847
6 hours	83.7	14.0	11.277
24 hours	111.4	4.6	0.000

Outflow Details:

Infiltration rate	0 m/hr
Attenuation Control	Fixed Outflow
Control Diameter	-
Discharge rate	5 l/s

Result:

Outcome	Pass
Critical Storm Duration	48 min
Hmax	0.225 m
Required Volume	22.48 m³
Time to half empty	37.5 min