

Greenfield runoff estimation for sites

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Calculated by: Sohan Ghimire

Site name: Stephenson House

Site location: 75 Hampstead Rd, Kings Cross, London NW1 2F

This is an estimation of the greenfield runoff rate limits that are needed to meet normal best practice criteria in line with Environment Agency guidance "Preliminary rainfall runoff management for developments", W5-074/A/TR1/1 rev. E (2012) and the SuDS Manual, C753 (Ciria, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site coordinates

Latitude: 51.52669° N

Longitude: 0.13918° W

Reference: 5897920

Date: 2017-03-01T16:41:35

IH124

Site characteristics

Growth curve factor: 100 year

Total site area (ha) 0.38

Methodology

Qbar estimation method	Calculate from SPR and SAAR			
SPR estimation method	Calculate from SOIL type			
		Default	Edited	
SOIL type		4	4	
HOST class				
SPR/SPRHOST	0.47	0.47		
Hydrological characteristics Default Edited				
SAAR (mm)		616	616	
Hydrological region		6	6	
Growth curve factor: 1 year		0.85	0.85	
Growth curve factor: 30 year	^	2.3	2.3	

3.19

3.19

Notes:

(1) Is $Q_{BAR} < 2.0 \text{ l/s/ha}$?

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consents are usually set at 5.0l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set in which case blockage work must be addressed by using appropriate drainage elements

(3) Is SPR/SPRHOST ≤ 0.3?

Greenfield runoff rates	Default	Edited
Qbar (l/s)	1.58	1.58
1 in 1 year (I/s)	1.34	1.34
1 in 30 years (l/s)	3.63	3.63
1 in 100 years (l/s)	5.04	5.04