

Greenfield runoff rate
estimation for sites

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Calculated by:	Sohan Ghimire
Site name:	5-7 Adamson Road
Site location:	London NW3 3HX

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	51.54465° N
Longitude:	0.17328° W
Reference:	3466078896
Date:	Oct 15 2023 15:55

Runoff estimation approach

IH124

Site characteristics

Total site area (ha):

0.10

Methodology

 Q_{BAR} estimation method:

Calculate from SPR and SAAR

SPR estimation method:

Calculate from SOIL type

Notes

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

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

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

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible.

Hydrological characteristics

SAAR (mm):

Default	Edited
640	640

Hydrological region:

6	6
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Growth curve factor 1 year:

0.85	0.85
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Growth curve factor 30 years:

2.3	2.3
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Growth curve factor 100 years:

3.19	3.19
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Growth curve factor 200 years:

3.74	3.74
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Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is $SPR/SPRHOST \leq 0.3$?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

Q_{BAR} (l/s):

Default	Edited
0.43	0.43

1 in 1 year (l/s):

0.37	0.37
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1 in 30 years (l/s):

1	1
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1 in 100 year (l/s):

1.39	1.39
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1 in 200 years (l/s):

1.63	1.63
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