

Appendix 7-1

Greenfield Runoff Rate Calculations

Calculated by: Fergal Timlin
 Site name: Crown Square Development
 Site location: Monivea Road, Galway

Site coordinates
 Latitude: 53.28796° N
 Longitude: 9.02134° W

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.

Reference: 6484561
 Date: 2018-10-25T10:07:56

Methodology	IH124
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Site characteristics

Total site area (ha)	5.4
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Methodology

Qbar estimation method	Calculate from SPR and SAAR
SPR estimation method	Calculate from SOIL type

	Default	Edited
SOIL type	1	1
HOST class	---	---
SPR/SPRHOST	0.1	0.1

Hydrological characteristics

	Default	Edited
SAAR (mm)	1281	1281
Hydrological region	13	13
Growth curve factor: 1 year	0.85	0.85
Growth curve factor: 30 year	1.65	1.65
Growth curve factor: 100 year	1.95	1.95

Notes:

- (1) Is $Q_{BAR} < 2.0$ l/s/ha?
 Normally limiting discharge rates which are less than 2.0 l/s/ha are set at 2.0 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 5.0 l/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 $SPR/SPRHOST \leq 0.3$?
 Where groundwater levels are low enough the use of soakaways to avoid discharge offsite may be a requirement for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Qbar (l/s)	1.84	1.84
1 in 1 year (l/s)	1.56	1.56
1 in 30 years (l/s)	3.04	3.04
1 in 100 years (l/s)	3.59	3.59