

Greenfield runoff estimation for sites

Site name: The land at Barrow Brook

Site location: Clitheroe BB7 9BJ

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 CIRIA SUDS Manual (2007). It is not to be used for detailed design of drainage systems. It is recommended that every drainage scheme uses hydraulic modelling software to finalise volume requirements and design details before drawings are produced.

Site coordinates

Latitude: 53.83768° N

Longitude: 2.39431° W

Reference: gcw638be0wcn / 1.06

Date: 22 Jan 2017

Site characteristics

Total site area	1.06	ha
Significant public open space	0	ha
Area positively drained	1.06	ha

Methodology

Greenfield runoff method	IH124
Qbar estimation method	Calculate from SPR and SAAR
SPR estimation method	Calculate from SOIL type
SOIL type	4
HOST class	N/A
SPR	0.47

Hydrological characteristics

	Default	Edited	
SAAR	1178	1178	mm
M5-60 Rainfall Depth	20	20	mm
'r' Ratio M5-60/M5-2 day	0.3	0.3	
FEH/FSR conversion factor	0.86	0.86	
Hydrological region	10	10	
Growth curve factor: 1 year	0.87	0.87	
Growth curve factor: 10 year	1.38	1.38	
Growth curve factor: 30 year	1.7	1.7	
Growth curve factor: 100 year	2.08	2.08	

Greenfield runoff rates	Default	Edited	
Qbar	9.41	9.41	I/s
1 in 1 year	8.19	8.19	I/s
1 in 30 years	15.99	15.99	I/s
1 in 100 years	19.57	19.57	I/s