

# Greenfield runoff estimation for sites

Site name: 5538  
Site location: Whalley

Site coordinates  
Latitude: 53.82608° N  
Longitude: 2.40786° 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 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.

Reference: gcw61nwxsu93 / 2.2  
Date: 21 Nov 2014

## Site characteristics

Total site area	2.2	ha
Significant public open space	0	ha
Area positively drained	2.2	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	1139	1139	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	18.77	18.77	l/s
1 in 1 year	16.33	16.33	l/s
1 in 30 years	31.91	31.91	l/s
1 in 100 years	39.05	39.05	l/s

Please note that a minimum flow of 5 l/s applies to any site