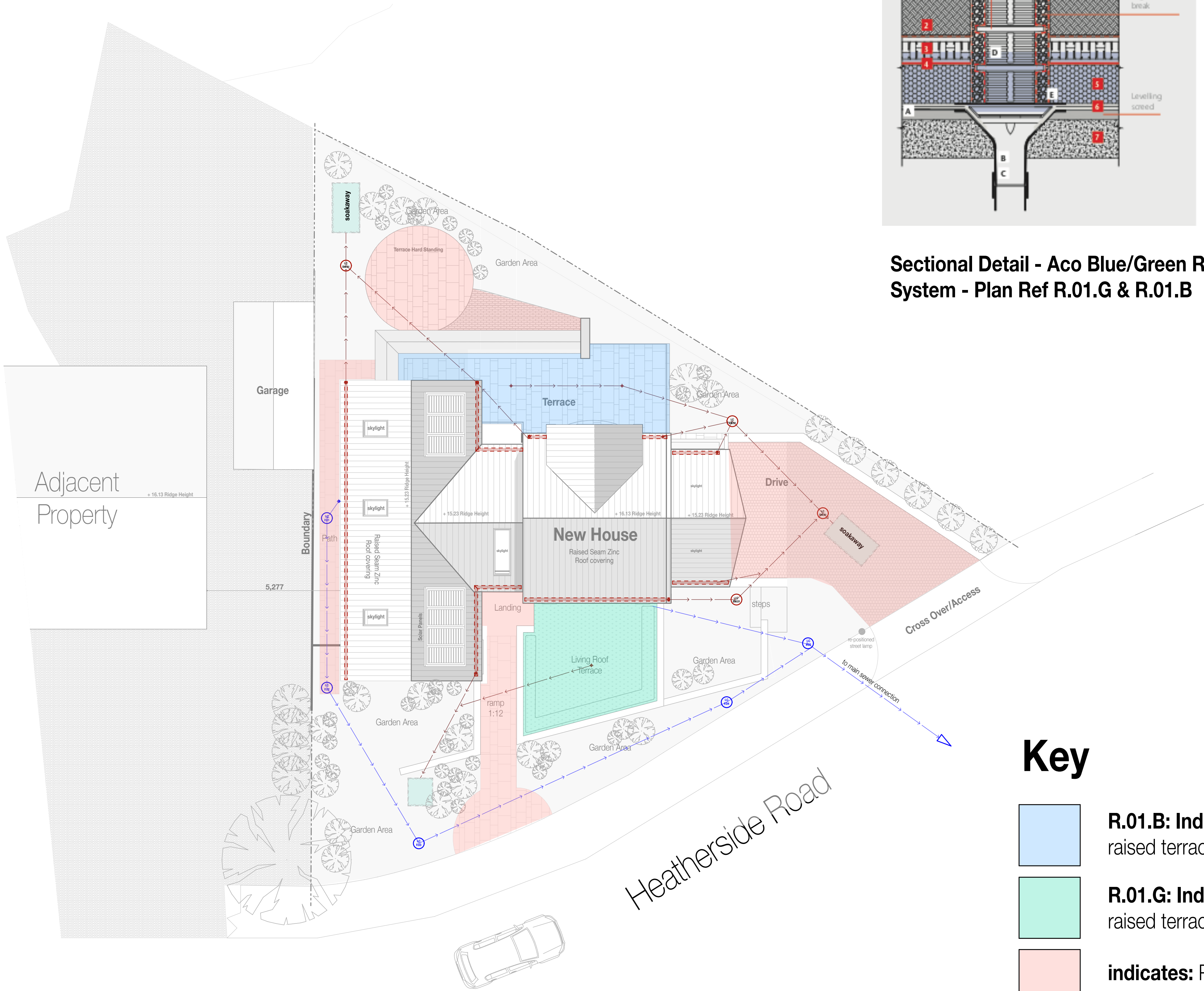
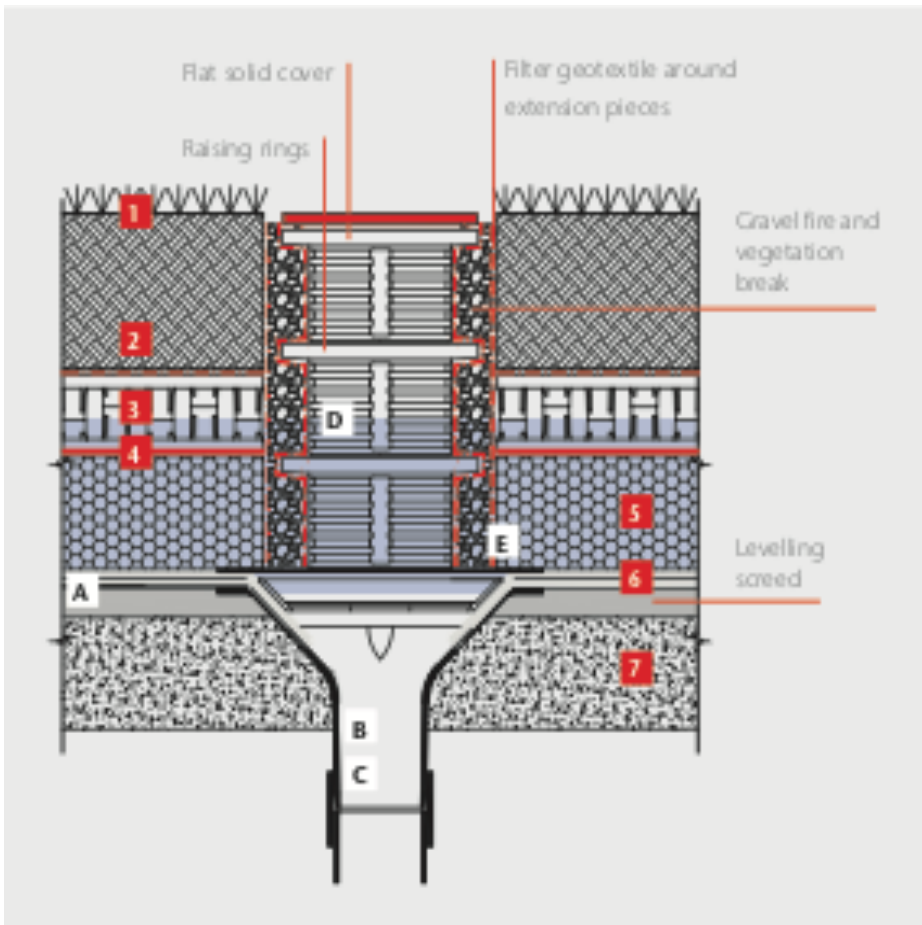




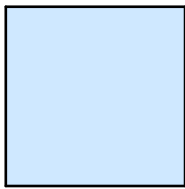
Proposed Site : Preliminary Drainage Design/Statement

scale: 1:100 @ A1

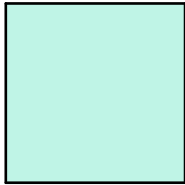


Sectional Detail - Aco Blue/Green Roof System - Plan Ref R.01.G & R.01.B

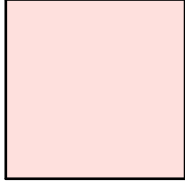
Key



R.01.B: Indicates: Aco Blue Roof Attenuation system to raised terrace area. Refer to detail above



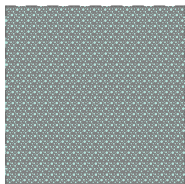
R.01.G: Indicates: Aco Green Roof Attenuation system to raised terrace area. Refer to detail above



indicates: Permeable Drive and Pathway Areas



indicates: Garden Area



indicates: Soakaway positions



indicates: Surface water below ground drainage



indicates: Foul - below ground drainage



Calculated by: Don Hobson
Site name: Site adj No 2 Heatherside Rd
Site location: Ramsbottom

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Partial runoff management for developments", SCD30019 (2013), the SUDS Manual (2013) (CWA, 2015) and the non-statutory standards for SUDS (Defra, 2015). The information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Runoff estimation approach: BH124

Site characteristics

Total site area: 0.1

(ha):

Methodology

Q_{BAR} estimation method: Calculate from SPR and SAAR

SPR estimation method: Calculate from SOIL

Soil characteristics

SOIL type: 5

HOST class: N/A

SPR/SPRHOST: 0.53

Hydrological characteristics

SAAR (mm): 1312

Hydrological region: 10

Growth curve factor 1 year: 0.87

Growth curve factor 30 years: 1.7

Growth curve factor 100 years: 2.08

Growth curve factor 200 years: 2.37

Greenfield runoff rates

Q_{BAR} (l/s): 1.31

1 in 1 year (l/s): 1.14

1 in 30 years (l/s): 2.22

1 in 100 year (l/s): 2.72

1 in 200 years (l/s): 3.1

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uk-suds.com. The use of this tool is subject to the UK SUDS terms and conditions and licence agreement, which can both be found at www.uk-suds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

Greenfield runoff rate estimation for sites

www.uk-suds.com | Greenfield runoff tool

Site Details

Latitude: 53.65128° N

Longitude: 2.31751° W

Reference: 3898485930

Date: Oct 19 2022 14:07

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.

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

(3) Is SPR/SPRHOST ≤ 0.3?

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

Site Specific - Run Off Rates .

DESIGN

greentop

old mount road

marsden

HD7 6NN

T: 07545 696911

E: design.email@mac.com

registered office: 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a, 35a, 36a, 37a, 38a, 39a, 40a, 41a, 42a, 43a, 44a, 45a, 46a, 47a, 48a, 49a, 50a, 51a, 52a, 53a, 54a, 55a, 56a, 57a, 58a, 59a, 60a, 61a, 62a, 63a, 64a, 65a, 66a, 67a, 68a, 69a, 70a, 71a, 72a, 73a, 74a, 75a, 76a, 77a, 78a, 79a, 80a, 81a, 82a, 83a, 84a, 85a, 86a, 87a, 88a, 89a, 90a, 91a, 92a, 93a, 94a, 95a, 96a, 97a, 98a, 99a, 100a, 101a, 102a, 103a, 104a, 105a, 106a, 107a, 108a, 109a, 110a, 111a, 112a, 113a, 114a, 115a, 116a, 117a, 118a, 119a, 120a, 121a, 122a, 123a, 124a, 125a, 126a, 127a, 128a, 129a, 130a, 131a, 132a, 133a, 134a, 135a, 136a, 137a, 138a, 139a, 140a, 141a, 142a, 143a, 144a, 145a, 146a, 147a, 148a, 149a, 150a, 151a, 152a, 153a, 154a, 155a, 156a, 157a, 158a, 159a, 160a, 161a, 162a, 163a, 164a, 165a, 166a, 167a, 168a, 169a, 170a, 171a, 172a, 173a, 174a, 175a, 176a, 177a, 178a, 179a, 180a, 181a, 182a, 183a, 184a, 185a, 186a, 187a, 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