
**Proposed Drainage Strategy (1:200)**

RWP AND SVP/FOUL CONNECTIONS ARE SUBJECT TO FINAL CONFIRMATION BY ARCHITECT



Notes:

1. This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.

2. It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**Drainage Strategy**

The site is located within flood zone 1, 2 and 3 with a low risk of flooding from rivers or the sea and is less than 1 hectare, therefore a site specific flood risk assessment is required, please refer to Topping Engineers FRA.

Under SuDs guidance the first point of discharge for surface water is percolation via soakaway. Consideration has been given to the use of infiltration devices for dealing with the surface water drainage.

A search of recorded borehole logs in the surrounding area and local knowledge of the site show the underlying strata to consist of yellow/brown silty clays which will be unsuitable for any infiltration devices to work effectively.

The site is currently Greenfield with a site area of 3720m$^2$.

QBAR 50 Ha = 485L/sec pro rata to 0.372Ha = 3.6L/sec

NPPF guidelines require that surface water arising from a developed site should as far as practicable be managed in a sustainable manner to mimic the surface water flows arising from the site prior to development.

**Surface Water:**

Flow restriction 3.6l/s

The proposed impermeable area is 1690m2. Based on a flow restriction of 3.6l/s and modelling using Micro Drainage software the attenuation requirement for a peak return period of 1 in 100year plus 30% climate change is **68.4m3.**

Attenuation to be provided via **5 SEPARATE RAIN WATER HARVESTING TANKS:-**

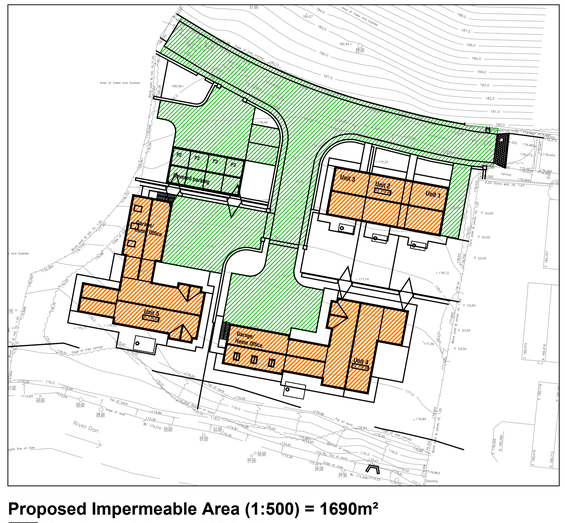
Units 1,2 & 3 - Each tanks provides 1100 Litres (1.1m3)
Unit 4 - Tank provides 10100 Litres (10.1m$^3$)
Unit 5 - Tank provides 10100 Litres (10.1m$^3$)

Total - 23.5m$^3$

The rest of the attenuation will be provided via a **GEO-CELLULAR TANK 10x4x1.2m DEEP WITH 95% VOID RATIO.** The flows will be attenuated using a 87mm Hydrobrake control device ref MD-SHE-0087-3600-1200-3600.

**Foul Water:**

Foul water from the proposed new site will connect into the existing Yorkshire Water foul sewer to the north of the site subject to a Section 106 Agreement with Yorkshire Water.



**Proposed Impermeable Area (1:500) = 1690m²**
**Road and Drives = 1070m²**
**Roof Areas = 620m²**

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