



GENERAL NOTES

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.

ALL RELEVANT DIMENSIONS TO BE OBTAINED/CHECKED AGAINST ARCHITECT'S DRAWINGS AND BY SITE MEASUREMENT PRIOR TO THE COMMENCEMENT OF WORKS OR ORDERING OF MATERIALS. DISCREPANCIES BETWEEN THE DRAWINGS AND SITE CONDITIONS TO BE NOTIFIED TO THE ENGINEER.

DO NOT SCALE FROM THIS DRAWING.

- Key:
- Combined Drainage
 - Foul Drainage
 - Surface Water Drainage
 - Geocellular Baskets (4.5x2.0x0.8m)
 - Geocellular Baskets (5.5x2x0.8m)
 - Open Drainage Feature

Drainage Strategy:

SUDS Hierarchy

The hierarchy of potential methods for disposing of surface water are shown below in order of preference:

- discharge via infiltration
- discharge to watercourse
- discharge to a surface water sewer
- discharge to a combined sewer

BRE365 soakaway testing has been carried out which deem infiltration drainage to be suitable for the south and south western sections of the site.

There is an unnamed watercourse that runs along the northern boundary of the site.

Drainage records United Utilities sewer records show a 525mm diameter public surface water running from south to north along Uldale View, before discharging into the watercourse that runs along the northern boundary of the site.

There are two combined public sewers to the east of the site, running parallel to the eastern boundary. One is 450mm vitrified clay and the other is a 900mm diameter concrete sewer. There is also a combined 300mm diameter concrete sewer running along the northern boundary of the site.

Surface Water Strategy

Highways will be served by gulleys, that will then enter the piped network. House roof and driveway areas (for the north and western part of the site) will also enter the system that will include a conveyance swale and two attenuation basins before discharging into the adjacent watercourse. The discharge will be restricted using a vortex flow control device.

The area to the south east of the site will enter a piped network and be served by an infiltration basin. The highway within this area will be impermeable and surface water will enter the piped network. House roof and driveway areas will also enter the piped network before discharging into the basin.

The remaining plots will have permeable driveways and will infiltrate naturally, with attenuation provided in the stone layer beneath. House roof areas will enter individual geocellular soakaways and also infiltrate.

The surface water system will attenuate for storm periods up to and including the 100 year plus 50% climate change event with an allowance of 10% for urban creep and a 30 % allowance for the remaining greenfield areas on site.

The discharge to the watercourse will be restricted using a vortex flow control device. The runoff rate will match the one year return period and QBAR for all storms above this up to and including the 100 year event plus a 50% allowance for climate change.

Foul Water Strategy

The foul drainage will be a traditional gravity fed piped network that will discharge into the existing combined sewer to the north east of the site.

Maintenance:

- Highway to be adopted by Highway Authority
- Surface water drainage be adopted by United Utilities
- Foul drainage to be adopted by United Utilities

General Notes:

Geocellular soakaways to be min 5m from property and 2.5m from boundaries.

PRELIMINARY SUBJECT TO CONFIRMATION OF UNITED UTILITIES AND LLFA ACCEPTANCE OF DISCHARGE CONNECTION LOCATIONS AND FLOW RATES

EXISTING DRAINAGE TO BE INVESTIGATED VIA CCTV SURVEY TO CONFIRM DISCHARGE LOCATIONS

REV	23/04/2024	AMENDED FLOW CONTROL AT SUD	RB	RS	MG
PRG	13/03/2024	REMOVED WETLAND AND AMENDED OUTFALL	RB	RS	MG
REV	28/01/2024	AMENDED LAYOUT AND DRAINAGE DESIGN	RB	RS	MG
REV	23/06/2023	UPDATED TO SUFT REVISED SITE LAYOUT	RB	RS	MG
REV	10/06/2023	AMENDED SW DRAINAGE AND REMOVED PERMEABLE HIGHWAY	RB	RS	MG
REV	30/05/2023	UPDATED SOAKAWAYS	RB	RS	MG
REV	23/05/2023	PLANNING ISSUE	RB	RS	MG
REV		DESCRIPTION	DR	CHK	APP

DRAWING STATUS									
PLANNING									
CLIENT									
GLEESON HOMES									
ARCHITECT									
DESIGN BY POD									
PROJECT									
LAND OFF ULDALE VIEW EGREMONT									
TITLE									
DRAINAGE LAYOUT									
ERROR	PROJECT NO	ORIGINATOR	PHASE	LEVEL	TYPE	NOTE	DRAWING NO	REV	
S2	23127	- GAD -	00	- 00	- DR	- C -	1000	P07	
SCALE @ NO	DESIGNED	DRAWN	CHECKED	APPROVED	DATE				
1:500	RB	RB	RB	MG	MAY 2023				
GADSDEN CONSULTING									
info@gadsdens.co.uk			01229 813333				www.gadsdens.co.uk		