

Drainage Strategy

The site is located within flood zone 1 with a low risk of flooding from rivers or the sea and is less than 1 hectare, therefore a site specific flood risk assessment should not be required.

Under SuDs guidance the first point of discharge for surface water is percolation via soakaway. Site percolation was carried on 28th April 2022 and is proven infiltration via soakaway is not viable. Please refer to Topping Engineers report.

The existing site is a greenfield with an area of a 1500m². The proposed site consist of one dwelling, therefore we propose to discharge surface water at 0.5l/s due to blockages.

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 0.5l/s will be achieved using a 16mm orifice plate.

The proposed impermeable area is 827m² + 10% urban creep equates to 909m². Based on a flow restriction of 0.5l/s and modeling using Micro Drainage software the attenuation requirement for a peak return period of 1 in 100year plus 30% climate change is 60.8m³.

Attenuation for the proposed impermeable area of 909m² to be provided via GEO-CELLULAR TANK 9.5x8x0.8m DEEP = 60.8m³. The flows will be restricted using a SW package pump.

Surface water from the proposed site will connect into a open drainage ditch subject to consent from the IDB.

Foul Water:

The foul water is proposed to connect to a new cess tank subject to EA permit which will be emptied regularly.

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Status

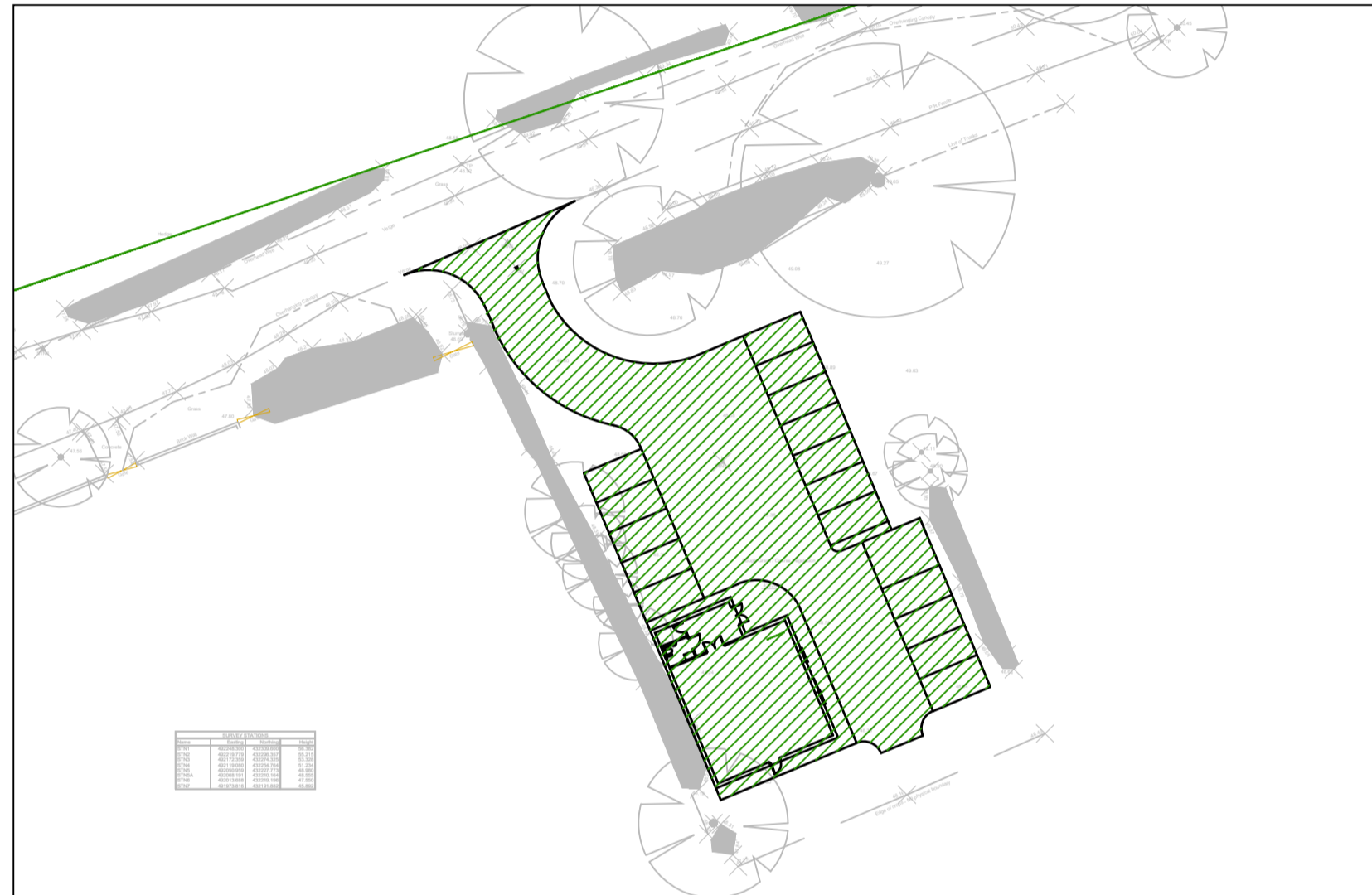
No.	Revision	Date	Drwn

Notes:

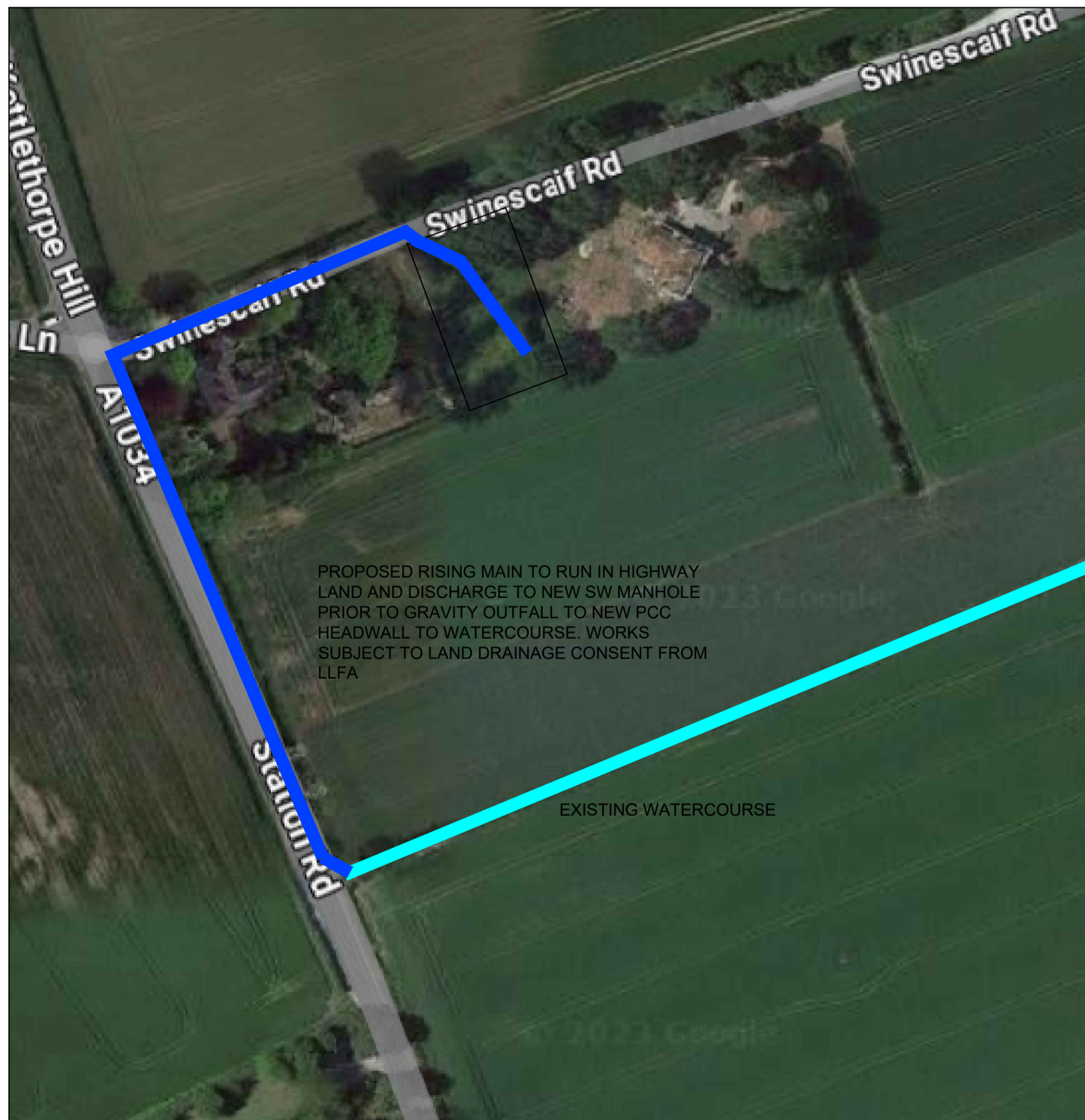
- This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.
- It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Key

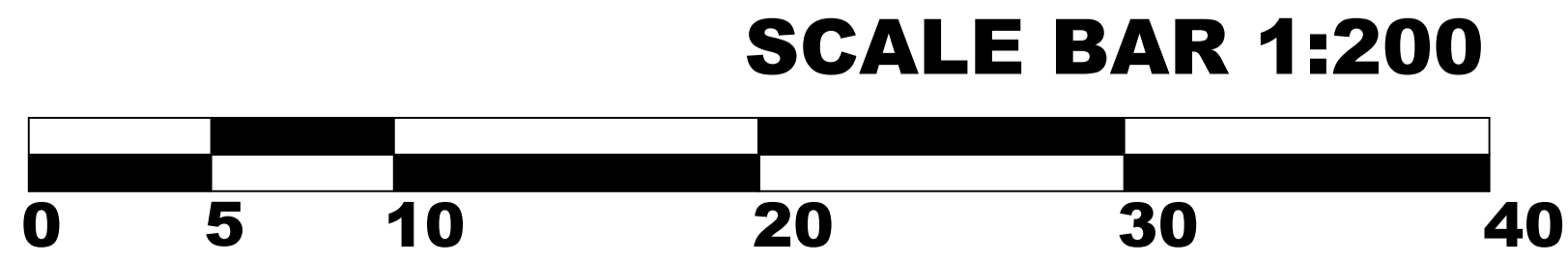
- Proposed Surface Water Drainage
- Proposed Foul Water Drainage
- Open Drainage Ditch



Proposed Impermeable Area Plan = 909m² - Scale (NTS)



Off Site Drainage - Scale (NTS)



Y STATIONS

Stn	Northings	Height
70	43209.609	56.367
71	43209.307	55.215
72	43204.865	53.238
73	43204.704	51.234
74	43207.713	49.980
75	43210.164	48.555
76	43218.164	47.200
77	43218.882	45.882

Drainage Strategy - Scale (1:200)

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PROJECT
DREWTON PADDOCK, SOUTH CAVE

DRAWING TITLE
DRAINAGE STRATEGY

Drawn	AD	Chkd	RT	Date	Dec 2023	Scale	AS SHOWN @ A1
Sheet Size	A1	Drawing No.	23580-DR-C-0100	Revision			P6