Land at Rogers Farm, Fox Hill, Haywards Heath

Flood Risk & Drainage Appraisal

For

Sigma Homes Limited

motion

Document Control Sheet

Flood Risk and Drainage Appraisal

Land at Rogers Farm, Fox Hill, Haywards Heath

Sigma Homes Limited

This document has been issued and amended as follows:

Date	Issue	Prepared by	Approved by
21/07/2020	1st Draft	SM	NJ
23/07/2020	2nd Draft	SM	NJ
24/07/2020	Final	SM	NJ

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Contents

Appendices

1.0 Introduction

1.1 This Flood Risk and Drainage Appraisal has been prepared on behalf of Sigma Homes Limited to cover a site promotion for the proposed residential development at Rogers Farm, Fox Hill, Haywards Heath.

1.2 The proposed development site is approximately 1.3 hectares (ha) and is located in Haywards Heath, which falls within the district of Mid Sussex, within the county of West Sussex. The nearest grid reference is E533434 N121633. A site location plan can be found in full in **Appendix A**.

1.3 This appraisal considers the flood risk and drainage matters associated with the potential residential development of up to 25 homes, in particular the flood risk associated with rivers, surface water and groundwater. Additionally, the report considers how the site would be drained and what SuDS measures could be utilised on site to control and manage the runoff from the site post development.

1.4 As the site is greater than 1 hectare and it is classified as a 'Major Development', a full Flood Risk Assessment and Drainage Strategy will be required as part of the planning application.

2.0 Existing Site Conditions

Current Permeable and Impermeable Areas

2.1 The existing site is an undeveloped greenfield site.

2.2 The site is approximately 1.3ha and is currently completely permeable. This is summarised in Table 2.1.

Land Use	Roofs Area		Gardens and Landscaping	
	Area (ha)	% Cover	Area (ha)	% Cover
Existing	0	0	1.3	100

Table 2.1 – Existing Surface Cover

Topography

2.3 A topographical survey of the existing site is provided in **Appendix B** of this report. The site generally falls from east to west with levels ranging from approximately 33.80mOAD to 32.92mAOD.

Geology and Groundwater

2.4 The British Geological Survey (BGS) online Geoindex Mapping indicates that the site is underlain by Upper Tunbridge Wells Sand - Sandstone and Siltstone, Interbedded with no superficial deposits recorded.

2.5 There are no boreholes located in close vicinity to the site.

Existing Surface Water Drainage Regime

2.6 UK Suds has been used to calculate the QBar Greenfield runoff rate for the site as 7.6/s. This output can be found in **Appendix C**.

2.7 Sewer records were requested from Southern Water (SW) to determine the location of the existing sewer network in relation to the siteto the existing site. The plans show there are no public surface water sewers running in close vicinity to the site.

Existing Foul Water Drainage Regime

2.8 Southern Water sewer records can be found in full in **Appendix D**. The plans show an existing public foul water sewer running adjacent to Fox Hill and Cape Road, to the north of the development.

Proposed Foul Water Drainage Regime

2.9 The Developer will work with Southern Water to identify a suitable point of connection for the proposed development.

3.0 Sustainable Drainage Overview and Hierarchy

3.1 Current planning policy and Environment Agency (EA) guidance requires developments to employ SuDS techniques wherever feasible. Careful design of SuDS features can ensure that the site surface water drainage closely reflects the natural hydrology and hydrogeology of the predeveloped greenfield site.

3.2 SuDS will attenuate and treat surface water run-off quantities at source (source control) in line with National Planning Policy Framework (NPPF) and EA policies. This use of SuDS is needed to replicate the pre-developed Greenfield conditions so as not to increase flood risk to the site or surrounding sites by managing excess run-off at the source.

3.3 The key benefits of SuDS are as follows:

- Improving water quality over a conventional piped system by removing pollutants from diffuse pollutant sources (e.g. roads);
- Improving amenity through the provision of open green space and wildlife habitat; and
- Enabling a natural drainage regime which recharges groundwater (where possible).

3.4 SuDS provide a flexible approach to drainage, with a wide range of components from house soakaways to large-scale basins or ponds. The individual techniques should be used where possible in a management train which mimics the natural pre-development pattern of drainage. The Interim Code of Practice for SuDS set out the hierarchy of techniques. These are:

- Prevention – the use of good site design and housekeeping measures on individual sites to prevent runoff and pollution;
- Source control – control of runoff at or very near its source (such as permeable paving or soakaways for individual houses);
- Site control – management of water from several sub-catchments (including routeing water from roofs and car parks to one large soakaway or infiltration basin for the whole site); and
- Regional control – management of runoff from several sites, typically in a detention pond or wetland.

3.5 Figure 3.1 shows the SuDS drainage hierarchy from the Ciria SuDS Manual C753.

The SUDS Hierarchy

	SUDS technique	*Flood Reduction*	*Pollution Reduction*	*Landscape & Wildlife Benefit*
Most Sustainable	**Living roofs**	✔	✔	✔
	Basins and ponds - Constructed wetlands - Balancing ponds - Detention basins - Retention ponds	✔	✔	✔
	Filter strips and swales	✔	✔	✔
	Infiltration devices - soakaways - infiltration trenches and basins	✔	✔	✔
	Permeable surfaces and filter drains - gravelled areas - solid paving blocks - porous paviors	✔	✔	
Least Sustainable	**Tanked systems** - over-sized pipes/tanks - storms cells	✔		

Figure 3.1 SuDS Hierarchy - Ciria C753

3.6 Figure 3.1 details the sustainability level of each of the SuDS techniques, as well as the SuDS system suitability within 3 general criterial areas:

- Flood Reduction;
- Pollution Reduction; and
- Landscape and Wildlife Benefit.

3.7 Ideally, any designed SuDS system should be multi-functioning, fulfilling as many of the criteria areas as possible.

SuDS Treatment Trains and Maintenance

3.8 The SuDS treatment train can be defined as an integrated sequence of measures in a SuDS scheme which, taken together, control volumes of run off and reduce pollution before discharge. These measures are designed to mimic the natural catchment processes.

Existing site

SuDS Hierarchy

3.9 Options for the destination for the run-off generated on site have been assessed in line with the prioritisation set out in the Building Regulations Part H document and DEFRA's Draft National Standards for SuDS are detailed in table 1.1 below:

Discharge to Ground	No
Discharge to Watercourse	Yes
Discharge to Surface Water Sewer	No
Discharge to Other Sewer	No

Table 3.1 – Run-off destination options

3.10 The potential for different SuDS devices has been assessed and can be seen in the table 3.2 below:

SuDS Feature	Environmental benefits	Water quality improvement	Suitability for low permeability soils (k<10-6)	Ground-water recharge	Suitable for small / confined sites?	Site specific restrictions	Appropriate for subject site?
Wetlands	✓	✓	✓	X	X	N/A	No
Retention ponds	✓	✓	✓	X	X	None	No
Detention basins	✓	✓	✓	X	X	None	No
Infiltration basins	✓	✓	X	✓	X	None	No
Soakaways	X	✓	X	✓	✓	N/A	No
Underground storage	X	X	✓	X	✓	None	Yes
Swales	✓	✓	✓	✓	X	None	Yes
Filter strips	✓	✓	✓	✓	X	N/A	Yes

SuDS Feature	Environmental benefits	Water quality improvement	Suitability for low permeability soils (k<10-6)	Ground-water recharge	Suitable for small / confined sites?	Site specific restrictions	Appropriate for subject site?
Rainwater harvesting	X	✓	✓	✓	✓	None	Yes
Permeable paving	X	✓	✓	✓	✓	None (proposed)	Yes
Green roofs	✓	✓	✓	X	✓	N/A	No
Rain Garden (external)	✓	✓	✓	X	X	N/A	Yes
Rain Garden (planter)	✓	✓	✓	X	X	N/A	Yes

Table 3.2 – Potential for different SuDS devices

3.11 Due to local geology it is not anticipated that infiltration will be feasible and therefore the worst-case scenario has been assumed where infiltration will not be utilised for the proposed development. However, this will need to be investigated further at the planning application stage and if infiltration is feasible it will be incorporated into the scheme.

3.12 The existing watercourse is shallow and therefore this precludes the use of deeper attenuation structures, such as cellular storage. Thus, it is proposed to use permeable paving for the proposed development.

3.13 In line with the CIRIA SuDS Manual C753 the preferred option for surface water discharge from the proposed development site would be via attenuation storage using permeable paving. The surface water will then discharge into existing watercourse with flow rates restricted to QBar.

3.14 UK Suds has been used to calculate the QBar Greenfield runoff rate for the site as 5.83l/s/ha or 7.6l/s. This output can be found in **Appendix C**.

3.15 The total area of the site (based on illustrative layout) is 1.3ha (13,000m^2). An impermeable area of 0.84ha was used to run a quick storage estimate on MicroDrainage that can be found at figures 3.2 and 3.3.

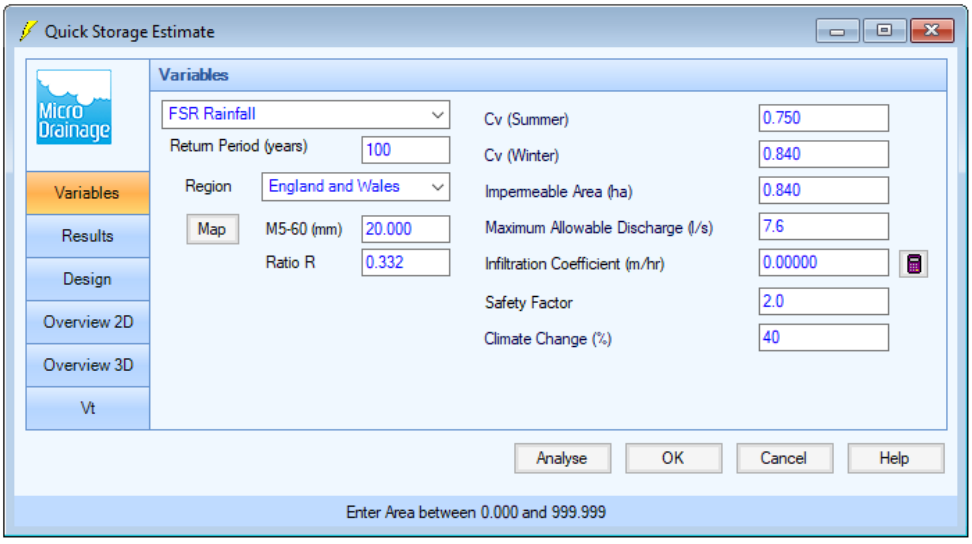


Figure 3.2 – MicroDrainage Input parameters

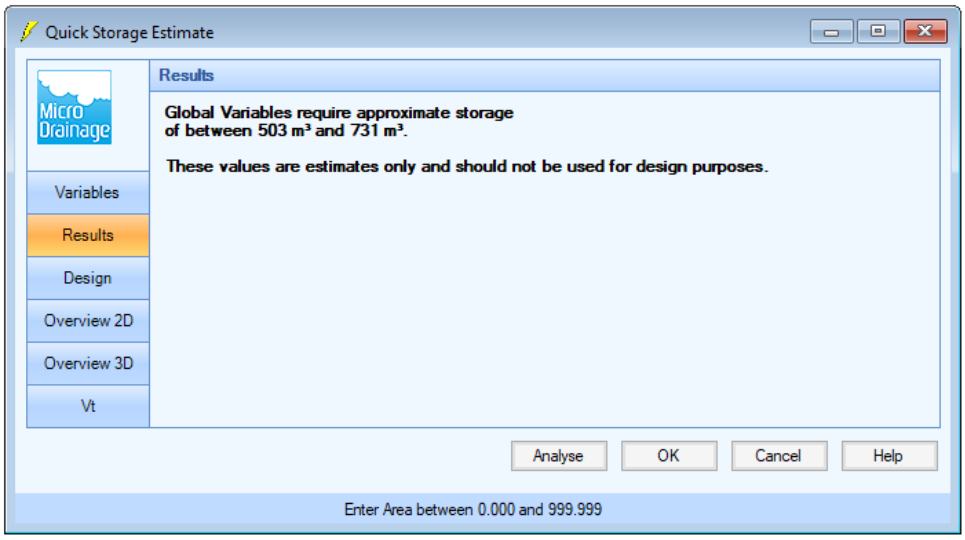


Figure 3.3 – MicroDrainage Results

3.16 The calculations show that a maximum of 731m^3 of attenuation should be provided in order to attenuate the 100 year event plus 40% climate change.

3.17 To attenuate the surface water from the development it is proposed the surface water from the proposed development discharge into permeable paving. The permeable paving will be used in the roads and car parking areas of the site. There will be a flow control which restricts flows into the existing watercourse at a rate of 7.6l/s, which is QBar for the site. The proposed drainage strategy can be found in full in **Appendix E**.

4.0 Flood Risk

4.1 In this section several potential sources of flooding have been considered and the probability of any likely impacts assessed.

Flooding from Rivers and the Sea

4.2 The nearest watercourse to the site is an unnamed ordinary watercourse (ditch) which runs along the western boundary of the development. The nearest main river to the site is Pellingford Brook located approximately 130m to the east of the site.

4.3 The EA Flood Map found in **Appendix F** shows that the site is located within Flood Zone 3 (less than 1 in 1000 annual probability of flooding from rivers or the sea). See Figure 4.1 below:

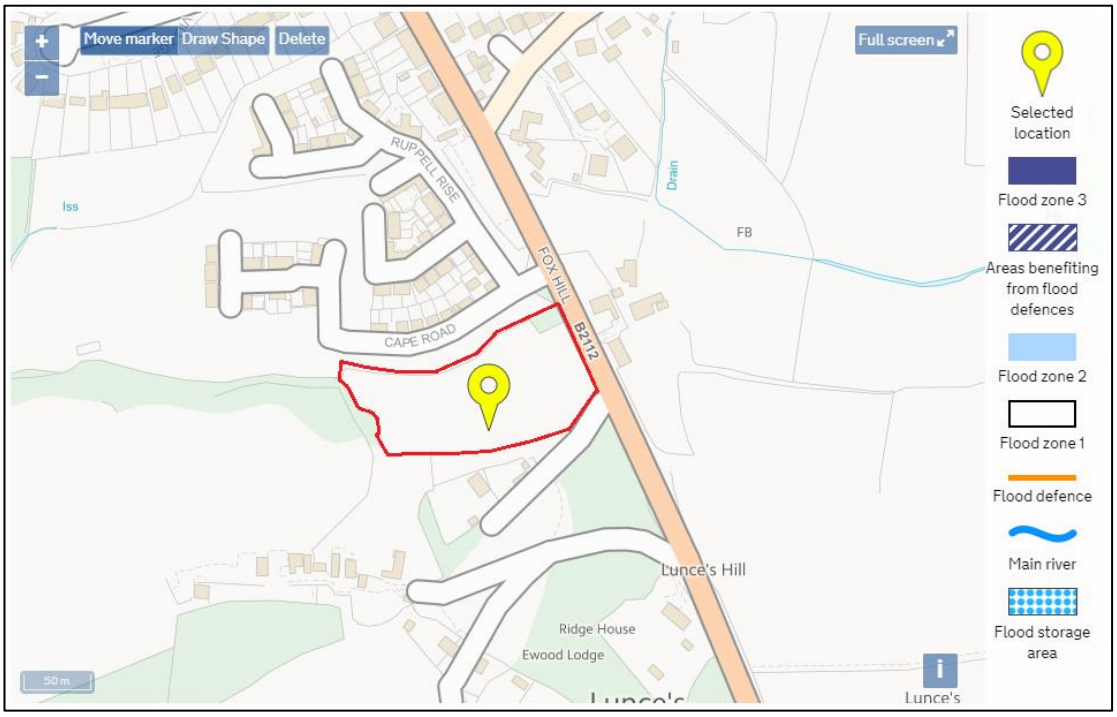


Figure 4.1 Flood Zone

4.4 **The site is therefore considered to be at very low risk of flooding from Rivers and Sea.**

Groundwater Flooding

4.5 It has been identified using public data provided by the British Geological Survey (BGS) that the site is underlain by Upper Tunbridge Wells Sand - Sandstone and Siltstone, Interbedded with no superficial deposits recorded.

4.6 The EA online mapping confirms that the site is located within an Unproductive Aquifer for the superficial deposits and bedrock level. The EA online mapping shows the site is located within a high groundwater vulnerability zone.

4.7 The West Sussex Strategic Flood Risk Assessment (SFRA) has no record of the site being affected by groundwater flooding.

4.8 **It is therefore concluded that the site is at low risk from groundwater flooding.**

Surface Water Flooding

4.9 Flooding from overland flow occurs when intense rainfall is unable to infiltrate into the ground or enter drainage systems resulting in localised flooding in low spots that provide no means of outfall.

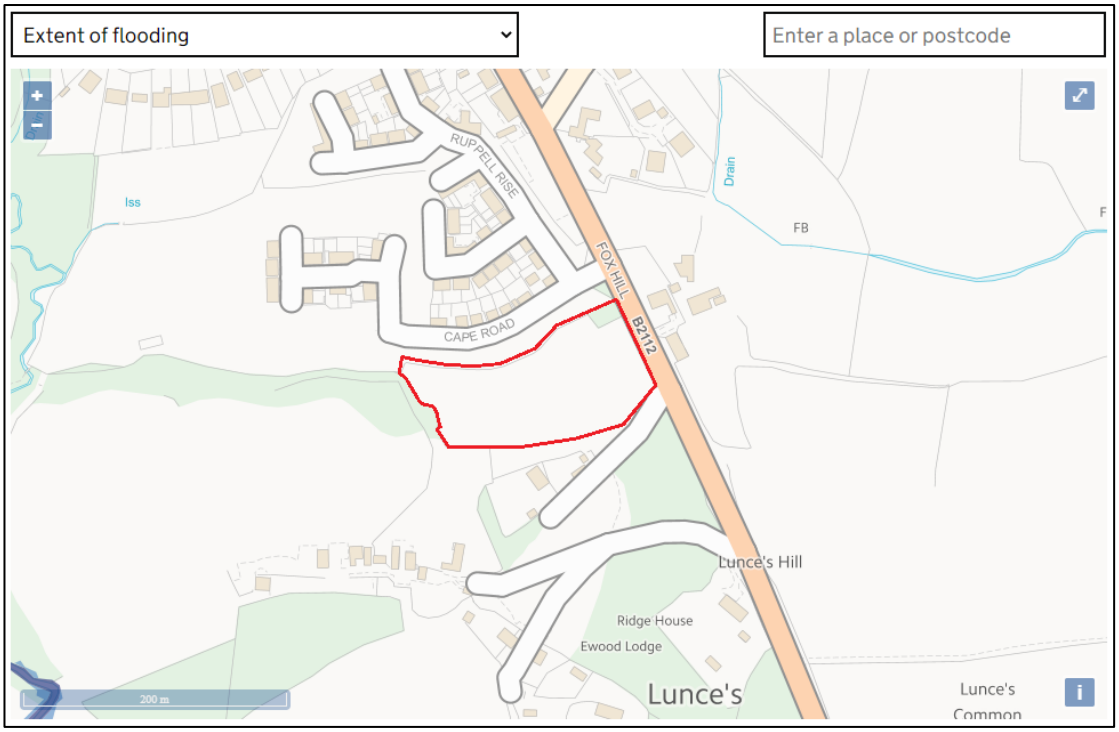


Figure 4.2 Surface Water Flooding

4.10 The Surface Water flood map provides information concerning the risk of surface water flooding to the site. The surface water flood map shows that the majority of the site is within the area classed as 'Very Low' risk of surface water flooding (having less than 0.1% chance every year). However, there is an area at medium to high risk of surface water flooding located to the north-west boundary of the site following the alignment of the existing watercourse. See Figure 4.2 above.

4.11 It is proposed that the site levels will be raised above the existing ground and flows diverted around the edge of the site. The proposed site layout makes space for the surface water to be held in the northwest corner of the site, before draining via the existing ordinary watercourses to the main river.

4.12 Detailed surface water modelling will be carried prior to submission of the planning application to accurately the assess the impact of the flooding pre and post development to demonstrate that the flooding be effectively managed,

4.13 **The site is therefore considered to be at medium to high risk of flooding from Surface Water, however this can be managed onsite to ensure the risk to any future properties is low.**

Flooding from Infrastructure Failure

4.14 In order to control and convey surface water runoff from impermeable surfaces in urban areas, underground surface water sewers or combined sewers (foul and surface water) are often utilised in urban areas. Pipes, culverts etc. have a finite capacity and therefore pose a risk of flooding due to the risk of siltation, blockage or collapse.

4.15 Southern Water has been contacted so as to ascertain any historical sewer flood data within the area. At the time of preparing this report Southern Water has not been able to provide any evidence to suggest that the site is susceptible to flooding or has any historic flooding caused by failure of local infrastructure.

4.16 **The site is therefore considered to be at low risk of flooding from infrastructure failure.**

Flooding from Artificial sources

4.17 The EA provides a map showing the maximum potential flood extent, if all reservoirs with a capacity of greater than 25,000 cubic metres were to fail and release the water they hold. The map shows that the site would not experience flooding in this scenario. There are no other significant artificial waterbodies in proximity of the site. It is therefore concluded that the site is not at risk of flooding from artificial sources.

4.18 **The site is therefore considered to be at very low risk of flooding from artificial sources.**

5.0 Summary

5.1 This flood risk and drainage appraisal confirms that the site is located within flood zone 1.

5.2 The site's Qbar (greenfield discharge rate) has been calculated as 7.6/s using UKSuds and a MicroDrainage quick storage estimate has been used to calculate the attenuation required and this is a maximum of 731m^3.

5.3 To attenuate the surface water from the development it is proposed the surface water from the proposed development will discharge into the permeable paving. The permeable paving will be used in the roads and car parking areas of the site. There will be a flow control which restricts flows into the existing watercourse at a rate of 7.6l/s.

5.4 The proposed SuDS will be designed to cater for the 1 in 100 year plus 40% allowance for climate change event.

5.5 There are existing foul sewers located adjacent to Fox Hill and Cape Road to the north of the development. The Developer will work with Southern Water to identify a suitable point of connection for the proposed development.

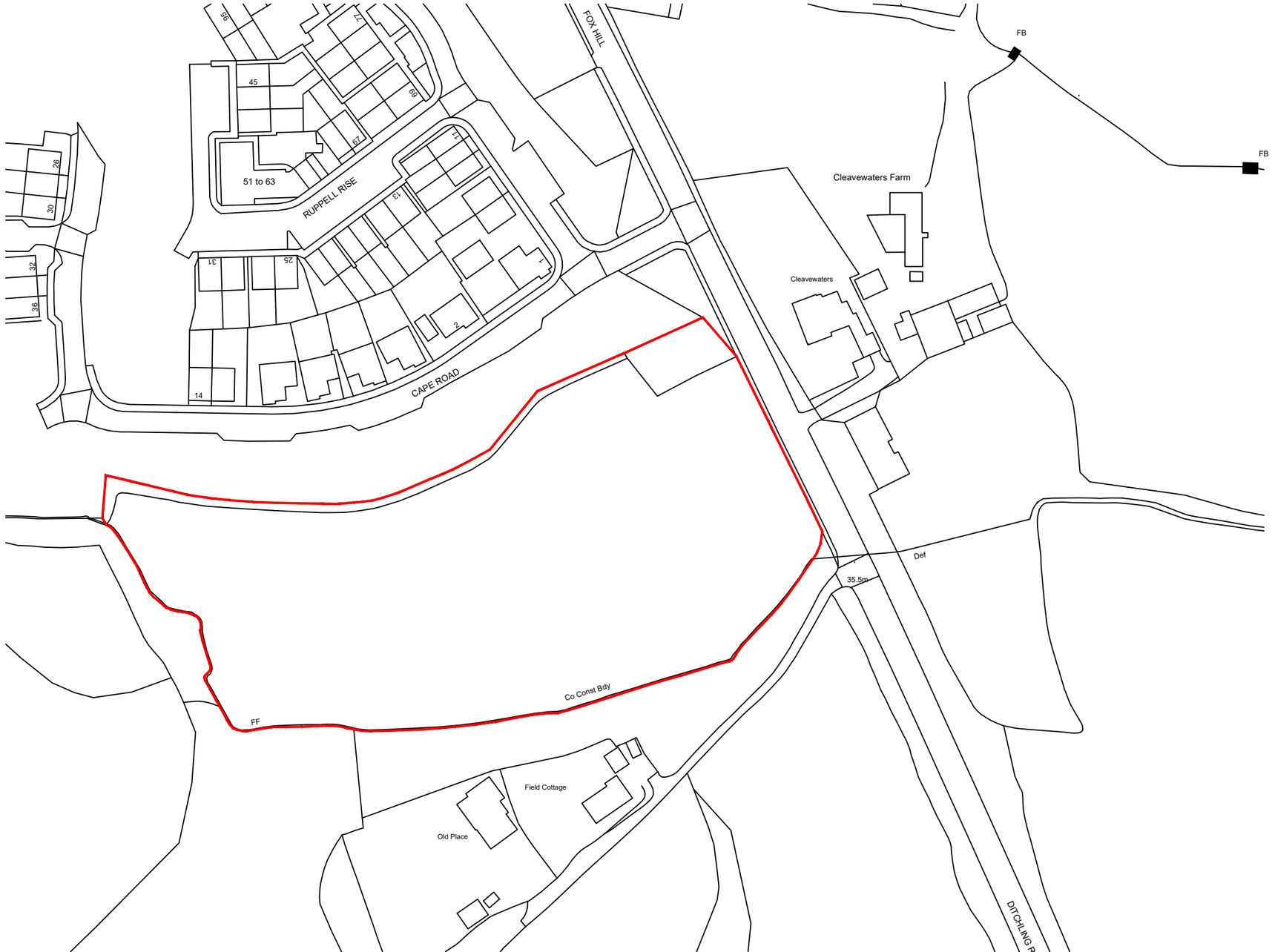
5.6 The site is at very low risk of flooding from rivers and the seas and artificial sources and at low risk of flooding from groundwater and infrastructure failure.

5.7 The site is at medium to high risk of flooding from surface water. However, this will be managed onsite to ensure the risk to any future properties is low.

5.8 This report confirms that the flood risk for the proposed development can be managed on site without increasing the flood risk to any neighbouring developments and downstream areas, therefore fulfilling the requirements of the PPG and NPPF.

Appendix A

Site Location Plan



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Revision Note & Date

Rev	Date	Note	Initial
-			

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Canterbury Studio
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CT1 2RP

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Project Title
Proposed Residential Development,Land at Rogers Farm, Fox Hilll, Haywards Heath

Clients Details
Sigma Homes Ltd.

Drawing Title
Location Plan

BIM Number

Scale	Date	Drawn	Checked
1:1250 @ A3	June 2020	KE	KE

Drawing Status
PRELIMINARY

Project Number	Drawing Number	Drawing Revision
20.2012	01	

Appendix B

Topographic Survey

A1

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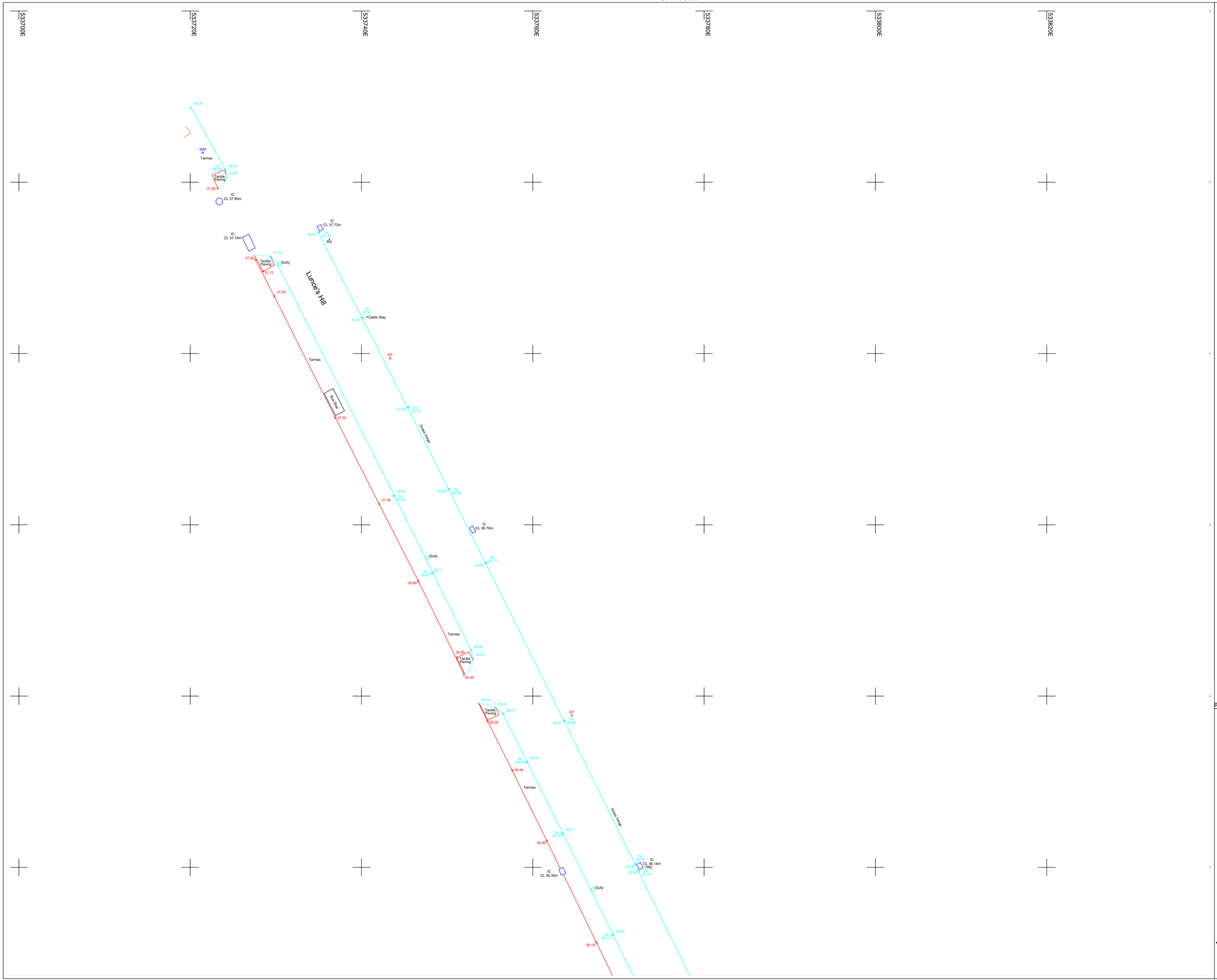


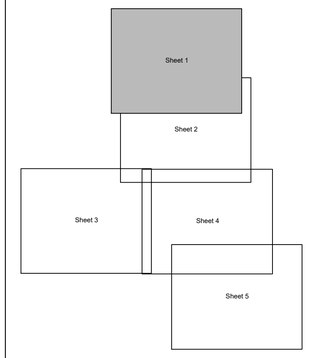
NOTES

1. The Grid and Levels have been co-ordinated using OS Active GPS Network (OSTN15)
2. For details on control and methodology as well as site photos please see PDF report - **S20239 - Survey Report.pdf**

LEGEND

B - Bollard
CL - Cover Level
EAV - Eaves Level
GV - Gas Valve
IC - Inspection Cover
LP - Lamp Post
RID - Ridge Level
RS - Road Sign
TK - Top of Kerb
TW - Top of Wall
WM - Water Meter

KEYPLAN



N

Rev	Revised By	Date	Checked By	Date

Project

ROGERS FARM
LUNCES HILL
HAYWARDS HEATH

Drawing Title

TOPOGRAPHIC SURVEY

16 Allcard Close
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Checked:	M.Jones	June 2020

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TOPOGRAPHIC SURV.
SHEET 1 of 5

A1

Do Not Scale

Cape Road

Lunces Hill

Tarmac
Tactile Paving
Grass Verge
Hedging
Close Board Fence
Wooden Post and Rail Fence
Concrete
Grass
Grass Bank
Drainage Channel
Drainage Outfall
Gully
Kerb
Road
Woodland
Extents of Trees
Long Grass
Area not Surveyed
Plant Area
Sub-Station
Hedge 3.0m
Tanker Length
IC CL 36.30m
IC CL 36.14m RS
IC CL 35.57m
IC CL 35.58m RS
IC CL 34.98m FPO
IC CL 35.56m
IC CL 35.24m
IC CL 35.19m
IC CL 35.17m
BT CL 35.35m
BT CL 35.88m
S2
EP
SV
WO
B
LP
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EAV 40.70
EAV 40.14
RID 43.10
EAV 40.16
EAV 39.96
RID 7.22
EAV 37.55
RID 40.81

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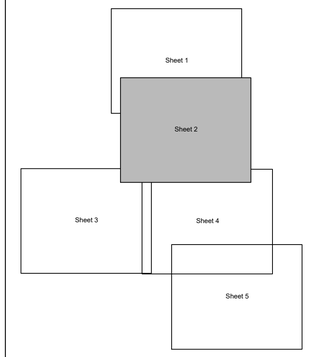

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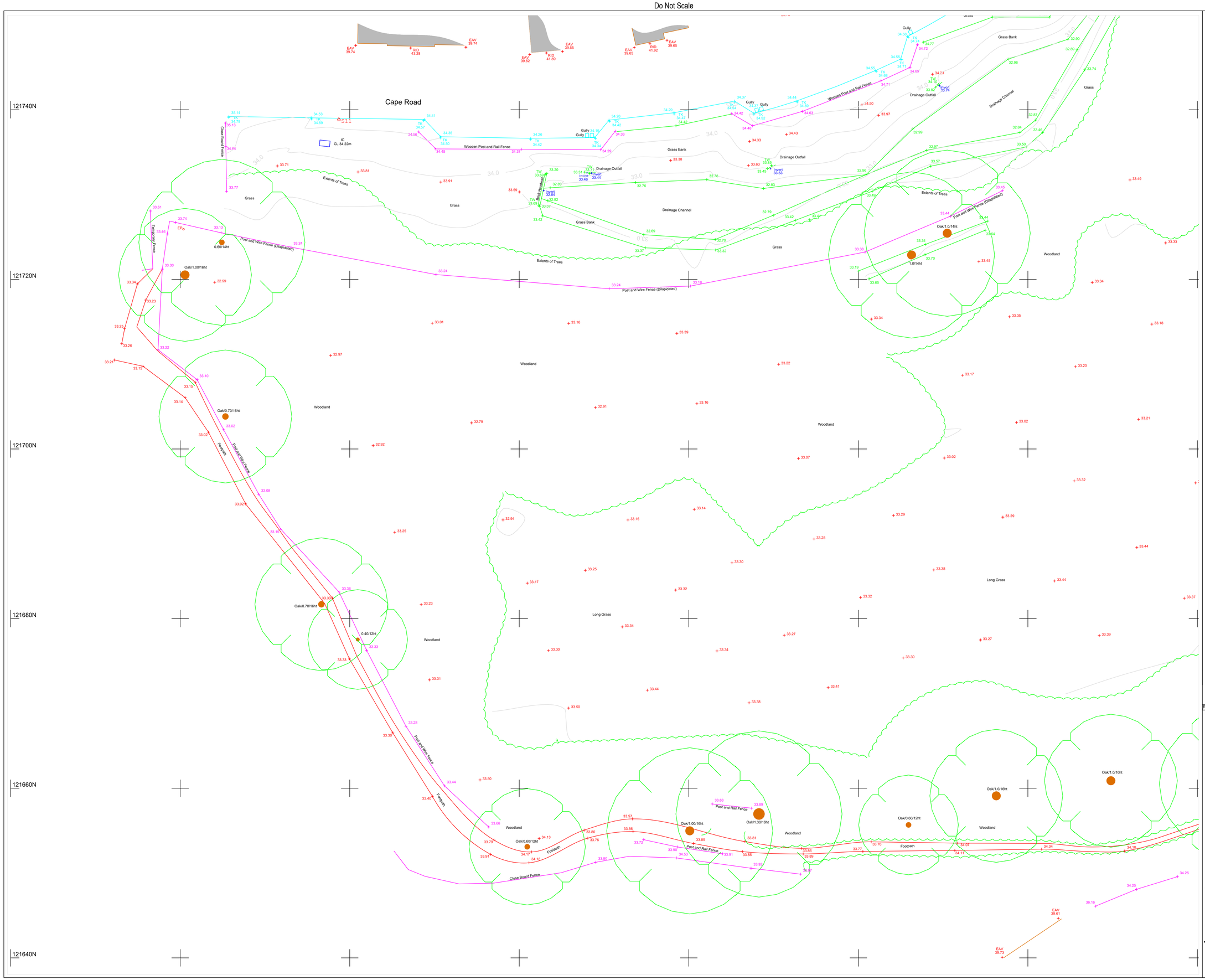

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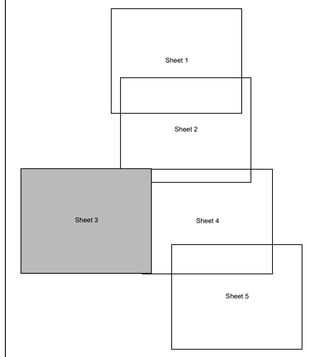

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SHEET 3 of 5

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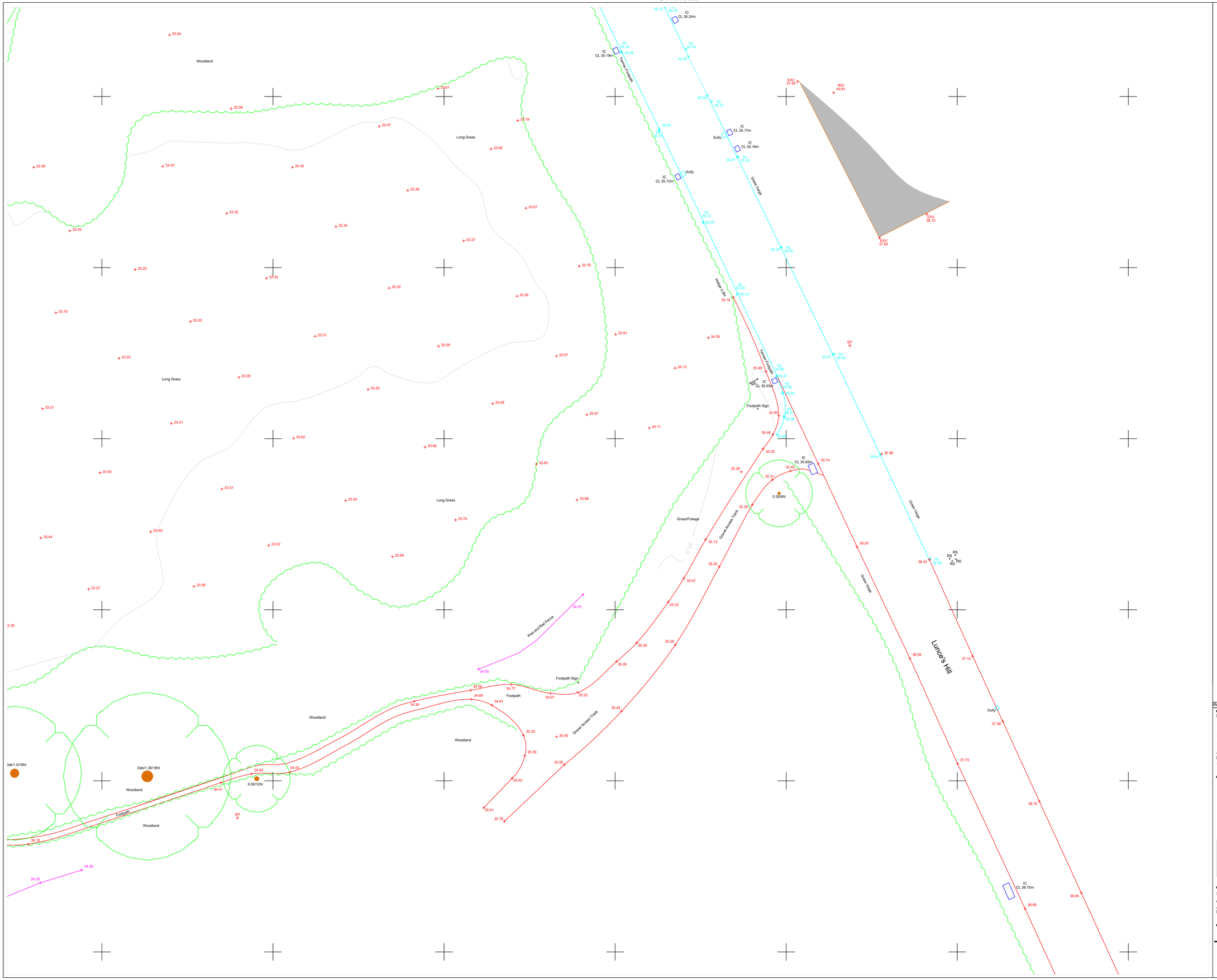

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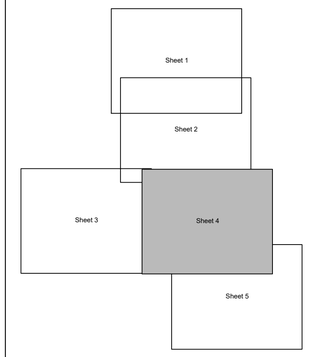

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A1

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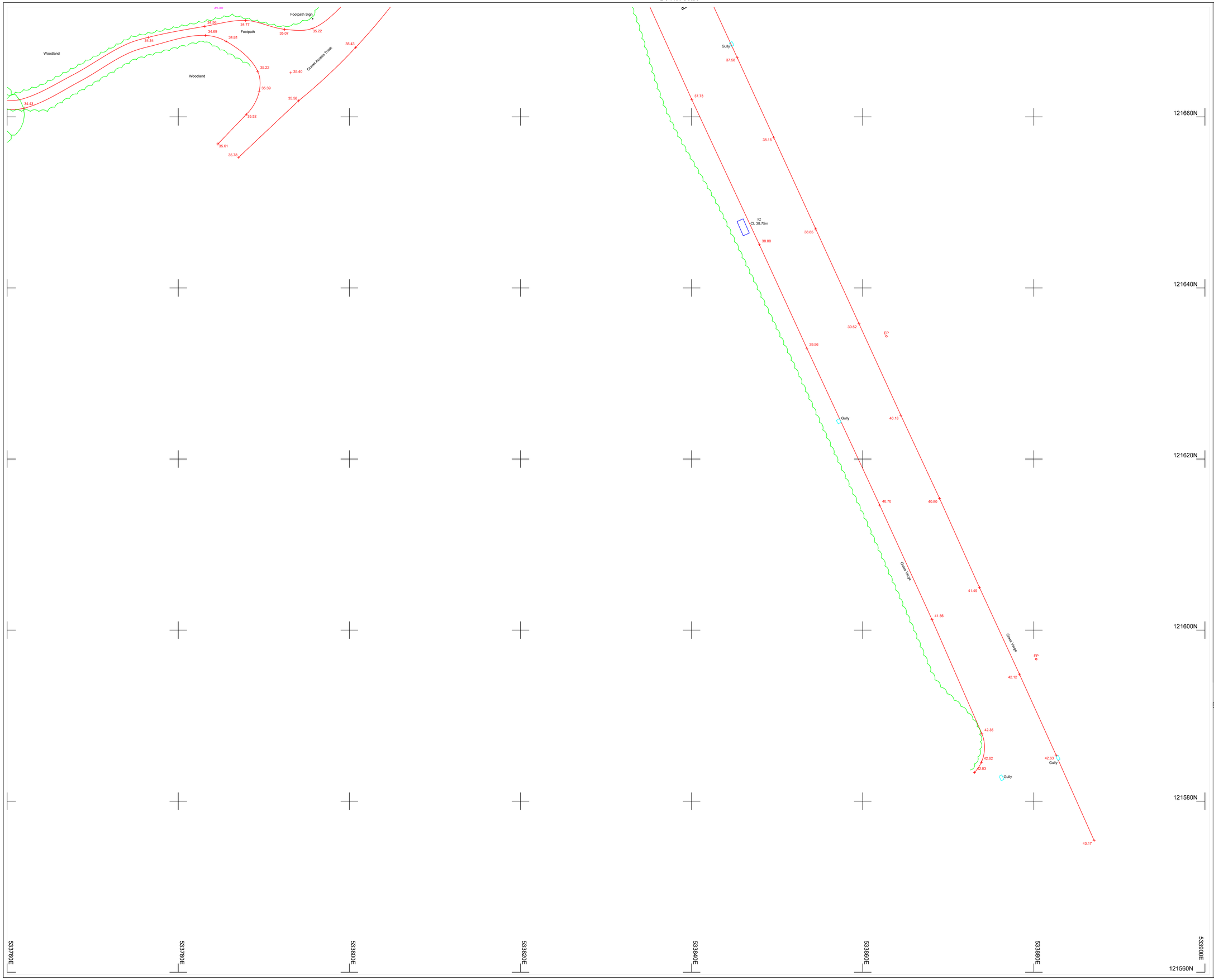

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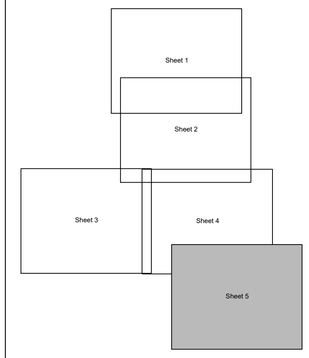

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Appendix C

UK SuDS QBar Calculations

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by: Ana Sofia Moreira

Site name: Rogers Farm

Site location:

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude: 50.97917° N

Longitude: 0.09638° W

Reference: 535465302

Date: Jul 24 2020 14:03

Runoff estimation approach

IH124

Site characteristics

Total site area (ha): 1

Methodology

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

SPR estimation method: Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

Hydrological characteristics

	Default	Edited
SAAR (mm):	823	823
Hydrological region:	7	7
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

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 soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Q_{BAR} (l/s):	5.83	5.83
1 in 1 year (l/s):	4.96	4.96
1 in 30 years (l/s):	13.42	13.42
1 in 100 year (l/s):	18.61	18.61
1 in 200 years (l/s):	21.82	21.82

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by:	Ana Sofia Moreira
Site name:	Rogers Farm
Site location:	Haywards Heath

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	50.97919° N
Longitude:	0.09622° W
Reference:	679547891
Date:	Jul 24 2020 14:08

Runoff estimation approach

IH124

Site characteristics

Total site area (ha): 1.3

Methodology

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

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

Hydrological characteristics

	Default	Edited
SAAR (mm):	823	823
Hydrological region:	7	7
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

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?

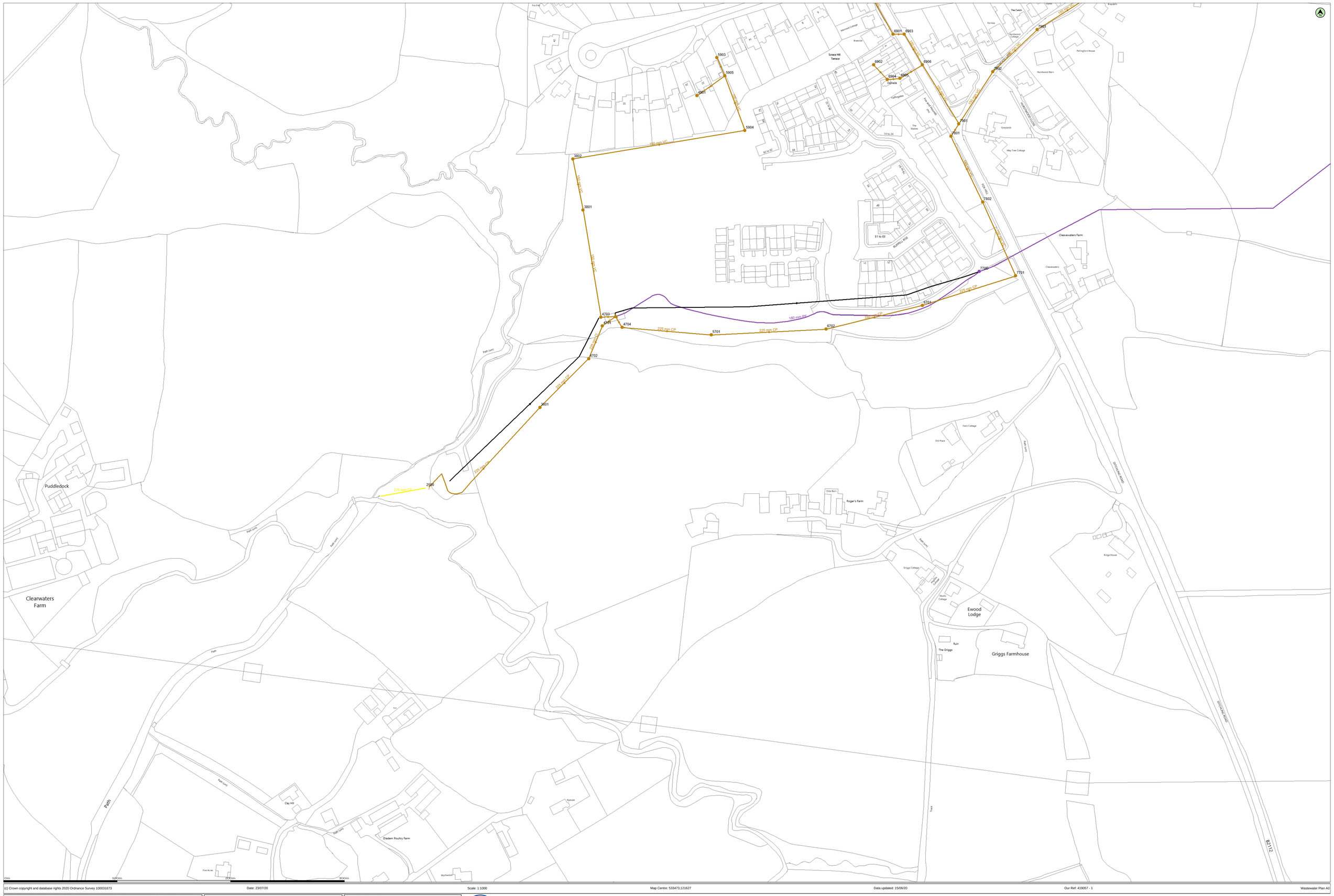
Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Q_{BAR} (l/s):	7.58	7.58
1 in 1 year (l/s):	6.45	6.45
1 in 30 years (l/s):	17.45	17.45
1 in 100 year (l/s):	24.2	24.2
1 in 200 years (l/s):	28.37	28.37

Appendix D

Southern Water Asset Mapping



Date: 23/07/20

Scale: 1:1000

Map Centre: 533473,121627

Data updated: 15/06/20

Our Ref: 419057 - 1

Wastewater Plan A0

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2020 Ordnance Survey 100031673.This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other users of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

smoreira@motcon.co.uk

Rogers Farm

from Southern Water.

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
2500		0.00	26.70	
3601	F	0.00	30.51	
3801	F	32.33	31.17	
3802	F	34.42	32.88	
4701	F	31.91	30.22	
4702	F	31.56	29.99	
4703	F	0.00	0.00	
4704	F	0.00	0.00	
4901	F	0.00	0.00	
5701	F	33.17	30.94	
5903	F	0.00	0.00	
5904	F	0.00	0.00	
5905	F	0.00	0.00	
6701	F	34.49	32.25	
6702	F	33.82	31.63	
6901	F	41.05	39.59	
6902	F	40.77	40.04	
6903	F	40.90	39.41	
6904	F	40.39	39.40	
6905	F	40.43	39.25	
6906	F	39.99	38.44	
7701	F	34.79	32.86	
770D	F	0.00	0.00	
7801	F	37.85	34.73	
7802	F	36.57	34.27	
7901	F	38.02	34.80	
7902	F	37.62	35.14	
7903	F	37.90	35.53	

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert

Appendix E

Drainage Strategy

ARCH ITECT URE
@archtecture.co.uk
info@onarchitecture.co.uk
01227 634334

Client Details
Sigma Homes Ltd

Project Title
Proposed Residential Development,
Land at Rogers Farm, Lunce's Hilll, Haywards Heath

Key:

Surface water drainage

Permeable Paving

Revision Notes:	Drn	Chk	App	Date

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Cargo Works
1-2 Hatfields
London
SE1 9PG

T: 020 8065 5208

www.motion.co.uk

Scale: 1:500	Drawn: SM
Size: A3	Chk'd: NJ
Date: 2020-07-23	Appr'd: NJ

Revision Notes:

Project:
Rogers Farm

Title:
Drainage Strategy

Drawing:
2007010-0500-01

Revision:
-

N:\Projects\1sihay 2007010\Drawings\2007010-0500-01 Drainage Strategy.dwg

Appendix F

EA Flood Map

Flood map for planning

Your reference	Location (easting/northing)	Created
1sihay/200701	**533729/121679**	**24 Jul 2020 13:30**

Your selected location is in flood zone 1, an area with a low probability of flooding.

This means:

- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

Notes

The flood map for planning shows river and sea flooding data only. It doesn’t include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Environment Agency

Flood map for planning

Your reference
1sihay/200701

Location (easting/northing)
533729/121679

Scale
1:2500

Created
24 Jul 2020 13:30

- Selected point
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Flood storage area

0 20 40 60m