

Drainage Statement

Glebe Farm, Honey Lane, Angmering BN16 4AG

Client

Mr. Jonathan Lovejoy
Glebe Farm
Honey Lane
Angmering
BN16 4AG
Ref: 7845

1.0 INTRODUCTION

This statement has been prepared for Mr. Jonathan Lovejoy in relation to Glebe Farm, Honey Lane, Angmering BN16 4AG. The proposal is for converting 2 agricultural buildings to tourist units.

The statement sets out a drainage strategy to show compliance with local and national SuDS policy. This is to support the current application for planning permission with Arun District Council. This reads as follows:-

No responsibility is accepted to any third party for all or part of this study in connection with this or any other development.

2.0 EXISTING SITE

This site comprises a garage and outhouse known as the 'Flint Barn' in a working farm plus soft landscaped (garden) area with external hardstanding and access from Honey Lane. The site area is approximately 0.168ha. Appendix A shows a location map.

A stream flows eastwards along the south boundary. This is in the River Adur's catchment.

Topography: a topographic survey is shown in Appendix B. The site slopes SE-NW with external levels ranging between 14.79m AOD and 13.14m AOD at the site entrance. The garage's floor level (FFL) is 14.17m AOD and the Flint Barn's FFL is 13.93m AOD.

Geology: the BGS online geological map shows bedrock of Lewes Nodular Chalk overlain by River Terrace Deposits (sand, silt and clay). This soil type is likely to possess good infiltration.

A BRE365 test will be undertaken at the next stage. Given the small scale of development it is requested that this matter can be made subject to a Planning Condition. As the soil type is favourable, this would seem a straight forward matter.

Public Sewers: Southern Water's sewer records are shown in Appendix B. There is no public surface water sewer in this area. The nearest public foul sewer is approximately 120m to the north in the High Street. It is assumed that the Farm's foul sewers are routed to this public sewer, which is 3.13m below ground level at the site entrance (at MH ref 1302).

3.0 PROPOSED SURFACE WATER DRAINAGE

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The SuDS Hierarchy (infiltration, watercourses, public sewers, private sewers) was considered for the site. The Chalk soil type is likely to possess good infiltration, as set out in the previous section.

The runoff from both units' roofs will be routed to a soakaway in the garden to the NW corner. This will be sized to hold the volume in the 100years + 40% CC event, following a set of BRE365 soakage tests undertaken in this area.

The hardstanding area will be of porous pavings, e.g. bound gravel or porous paviers. This will reduce the volume of soakaway needed.

For the purposes of providing a conservatively sized soakaway an assumed soakage rate of 1 x 10-5m/s (sized to hold the volume in the critical '1 in 100 years plus 40% climate change' storm).

The drainage strategy layout is shown in Appendix C.

Flow calculation sheets for the system are contained within Appendix C. The calculation for the 100 years + 40% CC event shows that 5.7m³ is needed. A 3m x 2.5m x 0.8m deep cellular soakaway has a volume of 5.7m³ and so will hold this volume.

4.0 PROPOSED FOUL WATER DRAINAGE

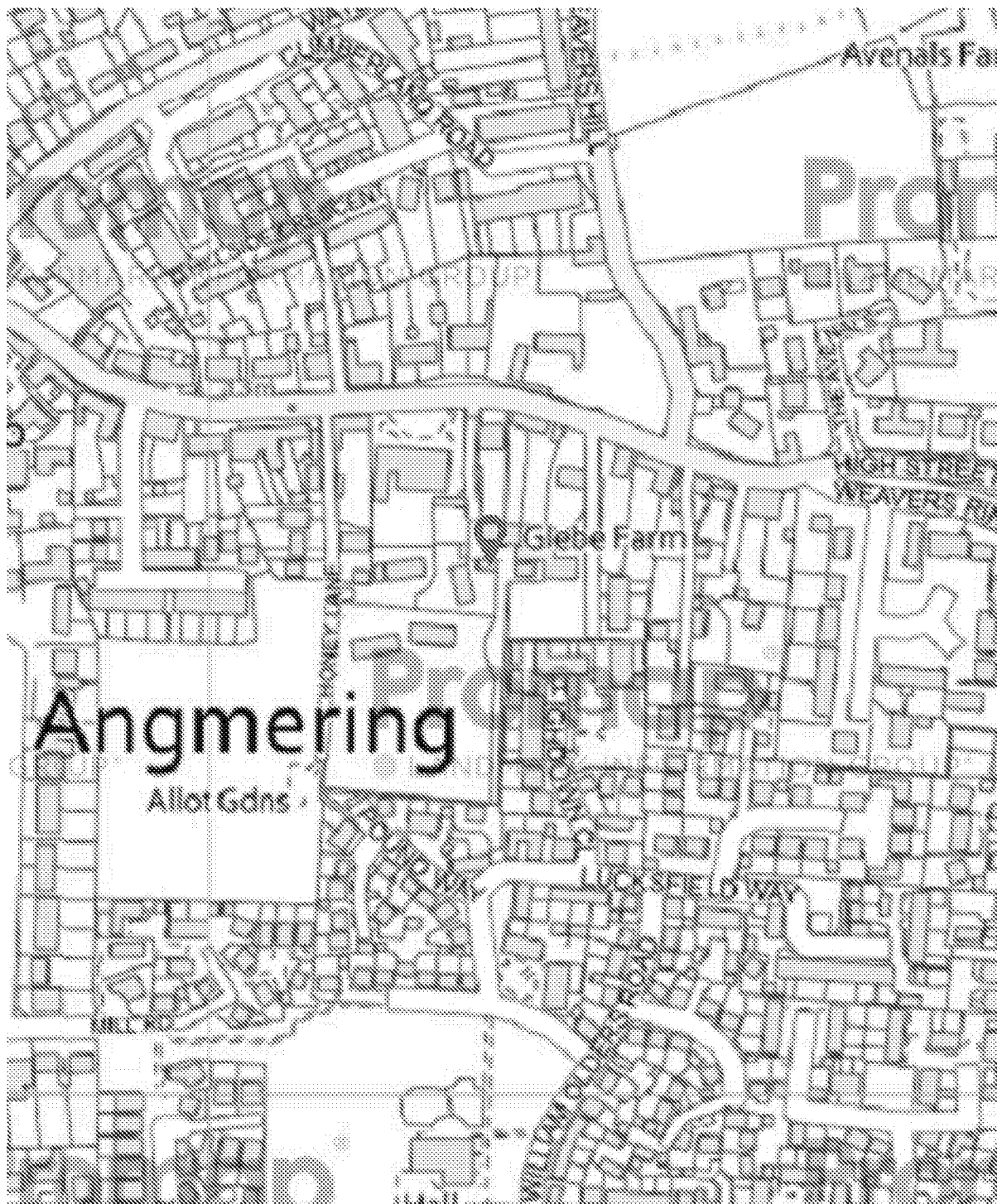
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The development's foul water will be routed to an existing foul manhole in the access road to the north. The drainage strategy shows this as a pumped discharge at present, until the invert level of the existing manhole is known.

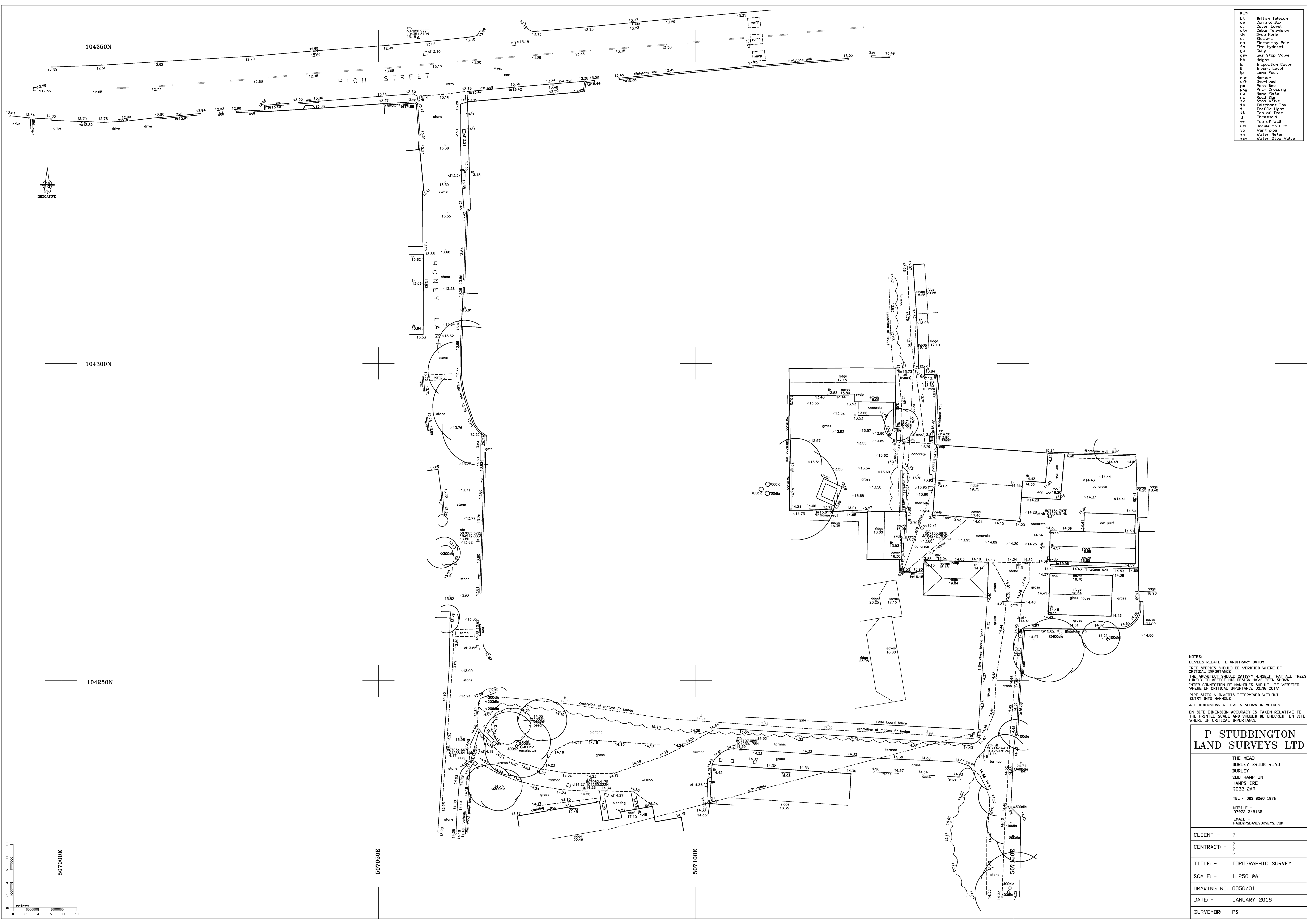
Any new sewer connection will be subject to an indirect Section 106 Agreement with Southern Water.

First Issue: 18 December 2019
Second issue: 6th January 2020

APPENDIX A – SITE LOCATION PLAN



APPENDIX B – TOPOGRAPHIC SURVEY & SEWER RECORDS



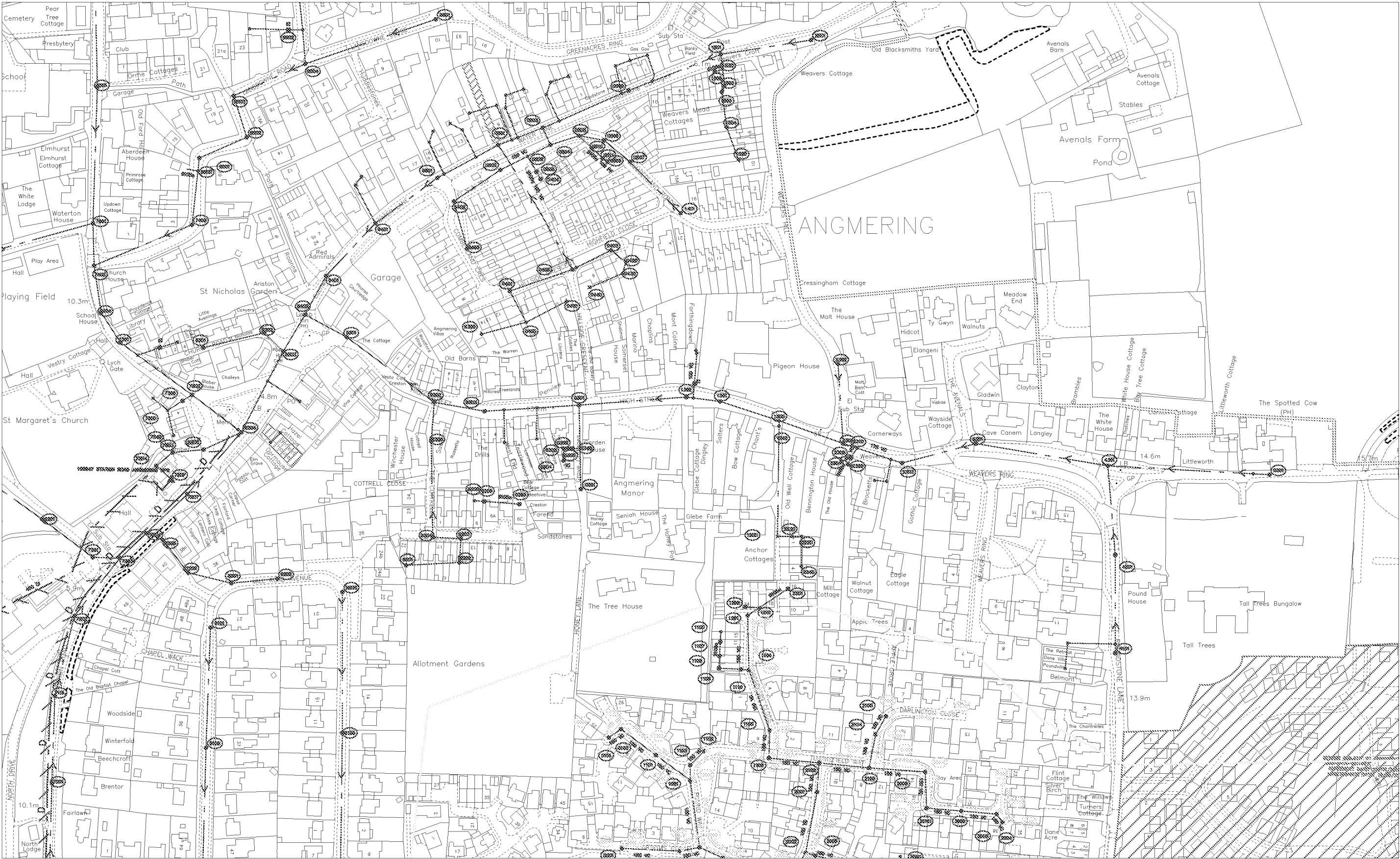
KEY:	
bt	British Telecom
cb	Control Box
cl	Cover Level
ctv	Cable Television
dk	Drop Kerb
el	Electric
ep	Electricity Pole
fh	Fire Hydrant
gu	Gully
gsv	Gas Stop Valve
ht	Height
ic	Inspection Cover
il	Invert Level
lp	Lamp Post
nm	Marker
o/h	Overhead
pb	Post Box
pac	Pan Crossing
np	Name Plate
rs	Road Sign
sv	Stop Valve
tb	Telephone Box
tl	Traffic Light
tt	Top of Tree
th	Threshold
tw	Top of Wall
url	Unable to Lift
vp	Vent pipe
wn	Water Meter
wsv	Water Stop Valve

NOTES:
LEVELS RELATE TO ARBITRARY DATUM
TREE SPECIES SHOULD BE VERIFIED WHERE OF
CRITICAL IMPORTANCE
THE ARCHITECT SHOULD SATISFY HIMSELF THAT ALL TREES
LIKELY TO AFFECT HIS DESIGN HAVE BEEN SHOWN
INTER CONNECTION OF MANHOLES SHOULD BE VERIFIED
WHERE OF CRITICAL IMPORTANCE USING CCTV
PIPE SIZES & INVERTS DETERMINED WITHOUT
ENTRY INTO MANHOLE
ALL DIMENSIONS & LEVELS SHOWN IN METRES
ON SITE DIMENSION ACCURACY IS TAKEN RELATIVE TO
THE PRINTED SCALE AND SHOULD BE CHECKED ON SITE
WHERE OF CRITICAL IMPORTANCE

P STUBBINGS LAND SURVEYS LTD	
THE MEAD DURLEY BROOK ROAD DURLEY SOUTHAMPTON HAMPSHIRE SO32 2AR TEL : 023 8060 1876 MOBILE : 07979 348165 EMAIL : PAUL@PSTLANDSURVEYS.COM	
CLIENT: -	?
CONTRACT: -	?
TITLE: -	TOPOGRAPHIC SURVEY
SCALE: -	1:250 @A1
DRAWING NO.	0050/01
DATE: -	JANUARY 2018
SURVEYOR: -	PS

SEWER RECORDS PAGE 1 OF 2

104619



104041

506670

O.S. REF.

TQ0704SW

Title: 354737_Glebe Farm, Honey Lane,

Drawn by: rohandas

Scale: 1:2500

Date: 10/10/2019

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.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement

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507614

SEWER RECORDS PAGE 2 OF 2

Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape
0001X	12.88	11.18	150	VC	CIRC	1103X	13.51	11.24	150	VC	CIRC	2302X	13.66	11.58	150	VC	CIRC	8504X	13.04	9.98	150	VC	CIRC
0050X	12.86	11.71	225	VC	CIRC	1104X	13.66	11.45	150	VC	CIRC	2303X	13.67	11.25	175	VC	CIRC	8500X			150	VC	CIRC
0051X	12.92	11.64	225	VC	CIRC	1105X	13.99	11.16	150	VC	CIRC	2304X			100	VC	CIRC	8602X			UNK	UNK	UNK
0101X	13.39	12.07	150	VC	CIRC	1106X	14.14	11.03	150	VC	CIRC	2305X			100	VC	CIRC	8600X			150	VC	CIRC
0102X	13.65	11.89	150	VC	CIRC	1107X			UNK	UNK	CIRC	230DX			175	VC	CIRC	861DX			UNK	UNK	UNK
0150X	13.5	12.01	300	CO	CIRC	1108X			UNK	UNK	CIRC	231DX			175	VC	CIRC	9100X	12.14	10.04	150	VC	CIRC
0151X	13.71	11.98	300	CO	CIRC	1109X			UNK	UNK	CIRC	232DX			100	VC	CIRC	9201X	13.44	12.79	150	VC	CIRC
0201X	13.66		150	VC	CIRC	110DX			UNK	UNK	CIRC	2501X	7.35	5.27	150	VC	CIRC	9202X	13.49	12.29	150	VC	CIRC
0203X			UNK	UNK	CIRC	1110X			UNK	UNK	CIRC	3002X	15.121	13.058	150	VC	CIRC	9203X	13.37	11.87	150	VC	CIRC
0301X	13.06	10.04	175	VC	CIRC	1150X	14.04	11.77	150	VC	CIRC	3003X	15.276	13.22	150	VC	CIRC	9204X	13.38	11.18	150	VC	CIRC
0302X			UNK	UNK	CIRC	1151X	14.16	11.56	300	CO	CIRC	3004X	15.126	13.33	150	VC	CIRC	9205X	12.74	10.79	150	VC	CIRC
0303X			UNK	UNK	CIRC	1152X	13.51	11.86	300	CO	CIRC	3052X	15.216	14	150	VC	CIRC	9206X			UNK	UNK	CIRC
0304X			UNK	UNK	CIRC	1153X	13.56	12.14	150	VC	CIRC	3053X	15.276	13.75	225	VC	CIRC	9301X	5.45	3.9	175	VC	CIRC
0305X			UNK	UNK	CIRC	1154X	13.64	12.04	300	VC	CIRC	3054X	15.141	13.895	150	VC	CIRC	9302X	11.62	9.52	175	VC	CIRC
030DX			UNK	UNK	UNK	1155X	13.98	11.65	300	VC	CIRC	310DX			UNK	UNK	UNK	9303X	12.49	9.75	175	VC	CIRC
031DX			175	VC	CIRC	1201X	13.64	12.06	150	VC	CIRC	311DX			UNK	UNK	UNK	9304X	13.17	10.47	150	VC	CIRC
032DX			UNK	UNK	UNK	1202X			UNK	UNK	CIRC	3150X	15.07	13.81	225	VC	CIRC	930DX	11.54	11.07	100	VC	CIRC
033DX			175	VC	CIRC	120DX	13.98		100	VC	CIRC	3301X	13.68	11.48	175	VC	CIRC	9401X	5.76	2.83	175	VC	CIRC
034DX			150	VC	CIRC	121DX			UNK	UNK	CIRC	4101X	14.14	12.92	150	VC	CIRC	9402X	6.28	4.48	150	VC	CIRC
0401X	11.59	9.97	150	VC	CIRC	1250X	13.68	12.21	300	VC	CIRC	410DX			150	VC	CIRC	9403X	7.66	6.08	150	VC	CIRC
0402X	12.17	9.54	150	VC	CIRC	1301X	13.34	10.54	175	VC	CIRC	4201X	14.29	12.5	150	VC	CIRC	940DX			UNK	UNK	UNK
0403X	12.35	10.76	150	VC	CIRC	1302X	13.46	10.33	175	VC	CIRC	4301X	14.86	12.08	150	VC	CIRC	9501X	5.59	3.11	175	VC	CIRC
0404X			100	VC	CIRC	1303X			100	VC	CIRC	6201X	5.31	3.79	225	VC	CIRC	950BX			175	VC	CIRC
040DX	11.62	10.49	100	VC	CIRC	130DX	13.35	10.73	175	VC	CIRC	7001X	9.95	4.81	175	VC	CIRC	950DX			UNK	UNK	UNK
041DX	12.04	11.7	100	VC	CIRC	131DX			100	VC	CIRC	7101X	8.72	4.57	175	VC	CIRC	951BX			UNK	UNK	UNK
042DX	12.46	11.15	100	VC	CIRC	132DX			100	VC	CIRC	7201X	5.27	3.66	225	VC	CIRC	951DX			UNK	UNK	UNK
043DX	12.54		100	VC	CIRC	133DX			175	VC	CIRC	7202X	6.56	4.31	175	VC	CIRC	952BX			175	VC	CIRC
044DX	12.42		100	VC	CIRC	134DX	13.44		100	VC	CIRC	7203X	5.36	3.46	175	VC	CIRC	952DX			UNK	UNK	UNK
0501X	5.55	3.34	175	VC	CIRC	1401X	12.65		150	VC	CIRC	7204X	5.08	3.35	175	VC	CIRC	953DX			UNK	UNK	UNK
0502X	6.27	4.31	150	VC	CIRC	1501X	6.52	4.73	150	VC	CIRC	7205X	8.75	4.46	150	VC	CIRC	954DX			UNK	UNK	UNK
0503X	5.54	3.56	175	VC	CIRC	1502X	7.25	4.97	150	VC	CIRC	7206X	11.24	9.16	150	VC	CIRC	9601X	12.78	10.66	150	VC	CIRC
0504X	6.59	3.74	150	VC	CIRC	1503X	7.35	6.04	150	VC	CIRC	7207X	4.78	3.17	175	VC	CIRC						
0505X	6.78	4.51	150	VC	CIRC	1504X	8.33	7.04	150	VC	CIRC	7301Y	8.79	6.99	175	VC	CIRC						
0506X	7.1	5.41	150	VC	CIRC	1505X			UNK	UNK	CIRC	7302X	4.72	3.09	175	VC	CIRC						
0507X	8.59	7.15	150	VC	CIRC	150DX			UNK	UNK	UNK	7303X	4.88	1.03	300	VC	CIRC						
0508X	5.7	3.94	175	VC	CIRC	151DX			150	VC	CIRC	7304X	4.8	0.86	300	VC	CIRC						
0509X			100	VC	CIRC	152DX	10.26	9.11	150	VC	CIRC	7305X			UNK	UNK	UNK						
050BX			UNK	UNK	UNK	153DX			150	VC	CIRC	7306X			UNK	UNK	CIRC						
050BY			UNK	UNK	UNK	2001X	14.49	10.65	150	VC	CIRC	730DX			UNK	UNK	UNK						
050DX			175	VC	CIRC	2002X	14.21	10.37	150	VC	CIRC	731DX			UNK	UNK	UNK						
0510X			100	PF	CIRC	2006X	14.16	10.9	150	VC	CIRC	732DX			175	VC	CIRC						
0511X			100	PF	CIRC	2009X	14.906	12.746	150	VC	CIRC	733DX			UNK	UNK	UNK						
051BX			UNK	UNK	UNK	200DX			UNK	UNK	CIRC	734DX			UNK	UNK	CIRC						
051DX			175	VC	CIRC	2010X	14.971	12.906	150	VC	CIRC	7401X	11.06	8.24	175	VC	CIRC						
052BX			175	VC	CIRC	2053X	14.18	10.89	450	CO	CIRC	7402X	10.67	8.06	175	VC	CIRC						
052DX			UNK	UNK	UNK	2054X	14.31	11.01	450	CO	CIRC	7403X	11.8	8.66	150	VC	CIRC						
053BX			175	VC	CIRC	2055X	15.031	13.4	300	VC	CIRC	7404X	10.19	7.91	175	VC	CIRC						
053DX			UNK	UNK	UNK	2056X	14.816	14.061	150	VC	CIRC	7501X	11.88	8.7	175	VC	CIRC						
054BX			UNK	UNK	UNK	2102X	14.46	10.79	150	VC	CIRC	8101X	12.08	10.72	150	VC	CIRC						
054DX			UNK	UNK	UNK	2103X	14.76	12.43	150	VC	CIRC	8102X	11.93	10.05	150	VC	CIRC						
05ABX			UNK	UNK	UNK	2104X	14.93	12.76	150	VC	CIRC	8201X	12	10.35	150	VC	CIRC						
05BBX			UNK	UNK	UNK	2105X	15.08	12.88	150	VC	CIRC	8202X	12.27	10.67	150	VC	CIRC						
05CBX			UNK	UNK	UNK	2150X	14.78	13.08	300	CO	CIRC	8301X	5.89	4.35	150	VC	CIRC						
05DBX			150	VC	CIRC	2151X	14.5	11.36	450	CO	CIRC	8302X	5.22	3.62	150	VC	CIRC						
05EBX			100	PF	CIRC	2152X	15.14	13.54	225	VC	CIRC	8303X	5.16	2.24	200	VC	CIRC						
1001X	13.34	11.13	150	VC	CIRC	2153X	14.93	13.43	300	VC	CIRC	8304X	4.67	1.91	300	VC	CIRC						
1002X	13.25	10.8	150	VC	CIRC	2154X	14.911	13.301	300	VC	CIRC	8305X	4.62	1.39	300	VC	CIRC						
1003X	13.14	10.92	150	VC	CIRC	2155X	14.741	13.204	300	VC	CIRC	830DX			UNK	UNK	UNK						
1051X	13.57	11.68	300	CO	CIRC	2201X			UNK	UNK	CIRC	831DX			UNK	UNK	UNK						
1052X	13.38	11.62	375	CO	CIRC	220DX			UNK	UNK	UNK	832DX			200	VC	CIRC						
1053X	13.28	11.24	375	CO	CIRC	221DX			UNK	UNK	UNK	8401X	5.73	2.58	175	VC	CIRC						
1054X	13.13	11.44	300	CO	CIRC	222DX	14.47		100	VC	CIRC	8402X	5.49	2.46	200	VC	CIRC						
1055X	13.39	11.14	375	CO	CIRC	223DX	14.46	13.48	100	VC	CIRC	8501X	12.11	9.06	150	VC	CIRC						
1101X	13.5	11.33	150	VC	CIRC	224DX	14.57	14.15	100	VC	CIRC	8502X	12.43	9.34	150	VC	CIRC						
1102X	13.5	11.71	150	VC	CIRC	2301X	13.59	10.97	175	VC	CIRC	8503X	12.78	9.58	150	VC	CIRC						

LINE STYLES / COLOURS

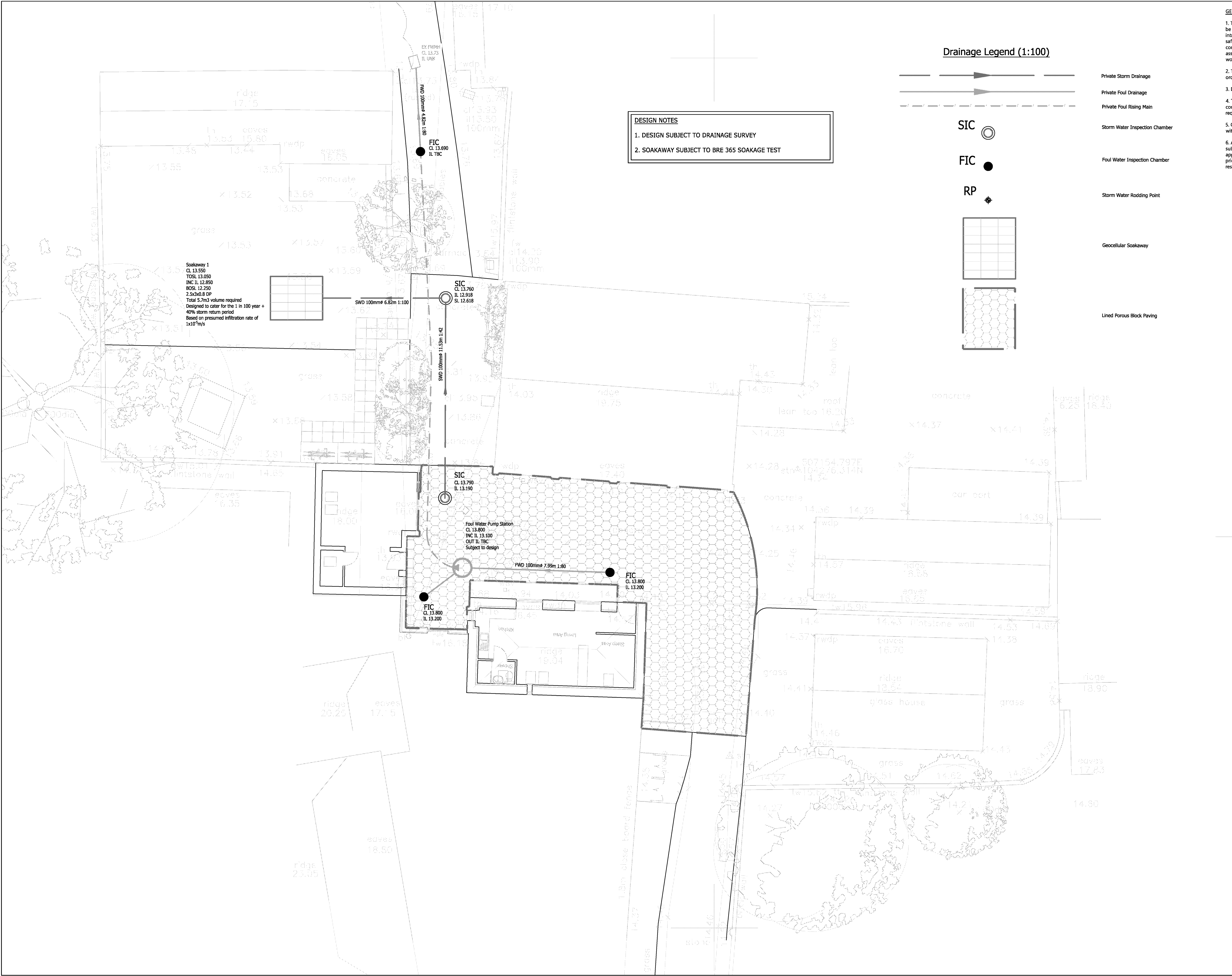
Brown	-----Foul
	-----Foul Syphon Sewer
	-----Foul Vacuum Main
	-----Foul Rising Main
Red	-----Combined
	-----Combined Syphon Sewer
	-----Combined Rising Main
	-----Lateral Drain
Orange	-----Building Over Agreement Area
Dark Blue	-----Treated Effluent
Purple	-----Sludge
	-----Sewer Catchment
	-----Section 104 Area
Light Blue	-----Surface Water
	-----Surface Water Rising Main
Yellow	-----Private
Green	-----Access Shaft
	-----Decommissioned

MATERIALS

AK	Alkaline
BAC	Bonded Asbestos Cement
BRD	Brick (Common)
BRE	Brick (Engineering)
CC	Concrete Box Culvert
CI	Cast Iron
CO	Concrete (In-Situ)
CP	Concrete (Pre-Cast)
CSB	Concrete Segments (bolted)
CSU	Concrete Segments (unbolted)
DI	Ductile Iron
GRG	Glass Reinforced Concrete
GRP	Glass Reinforced Plastic
MAC	Masonry in regular Courses
MAR	Masonry in random Courses
PE	Polyethylene
PF	Pitch Fibre
PP	Polypropylene
PVC	Polyvinyl Chloride
RFW	Reinforced Plastic Matrix
SI	Spun Iron
ST	Steel
VC	Verified Clay
XXX	Other
ZZZ	Unknown

Manhole (SW)	Manhole (F&C)	Lamp hole (SW)	Lamp hole (F&C)	Pumping Station (SW)	Pumping Station (F&C)	Side entry manhole (SW)	Side entry manhole (F&C)
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APPENDIX C – DRAINAGE STRATEGY LAYOUT & MICRO DRAINAGE CALCULATION



DESIGN NOTES

1. DESIGN SUBJECT TO DRAINAGE SURVEY

2. SOAKAWAY SUBJECT TO BRE 365 SOAKAGE TEST

Drainage Legend (1:100)

Private Storm Drainage

Private Foul Drainage

Private Foul Rising Main

Storm Water Inspection Chamber

Foul Water Inspection Chamber

Storm Water Rodding Point

Geocellular Soakaway

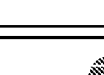
Lined Porous Block Paving

SIC

FIC

RP

- GENERAL NOTES**
1. The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations, record drawings or the like. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. Any discrepancies shall be notified to gta prior to works commencing.
2. Tender or billing drawings shall not be used for construction or the ordering of materials.
3. Do not scale. All dimensions and levels to be site confirmed.
4. This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements.
5. Copyright : This drawing must not be copied, amended nor reproduced without the prior written agreement of gta.
6. All drawings specifications and recommendations made by gta are subject to Local Authority and other relevant Statutory Authorities approval. Any works or services made abortive due to the client proceeding prior to these approvals is considered wholly at the Clients risk. gta hold no responsibility for resulting abortive works or costs.

P-	PRELIMINARY ISSUE		18.12.19	CS	MR
Rev	Amendments		Date	Dsn	Chk
Status			PRELIMINARY		
Client			J LOVEJOY		
Architect			RDV DESIGN		
Project			GLEBE FARM ANGMERING, WEST SUSSEX		
Title			DRAINAGE STRATEGY		
Date		DECEMBER 2019		Scale @ A1 1:100	
Clients Ref.		Project Ref.			
 Civils & Transport Gloucester House, 66a Church Walk, Burgess Hill, West Sussex, RH15 9AS Tel.01444 671444 Web: www.gtacivils.co.uk					
Drawing Number			7845/1061		
Rev.			P-		

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.600
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S1	0.011	5.00	13.790	1200	507134.529	104274.707	0.600
S2			13.760	1200	507134.568	104286.200	0.842
SA1			13.550	10	507127.496	104286.200	0.700

Links (Input)

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	S1	S2	11.493	0.600	13.190	12.918	0.272	42.3	100	5.16	50.0
2.001	S2	SA1	7.072	0.600	12.918	12.850	0.068	104.0	100	5.32	50.0

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15 : 30 : 60 : 120 : 180 : 240 : 360 : 480 : 600 : 720 : 960 : 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
30	0	0	0
100	40	0	0

Node SA1 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.03600	Invert Level (m)	12.250	Depth (m)	0.800
Side Inf Coefficient (m/hr)	0.03600	Time to half empty (mins)	798	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	2.500	Number Required	1
Porosity	0.95	Pit Length (m)	3.000		

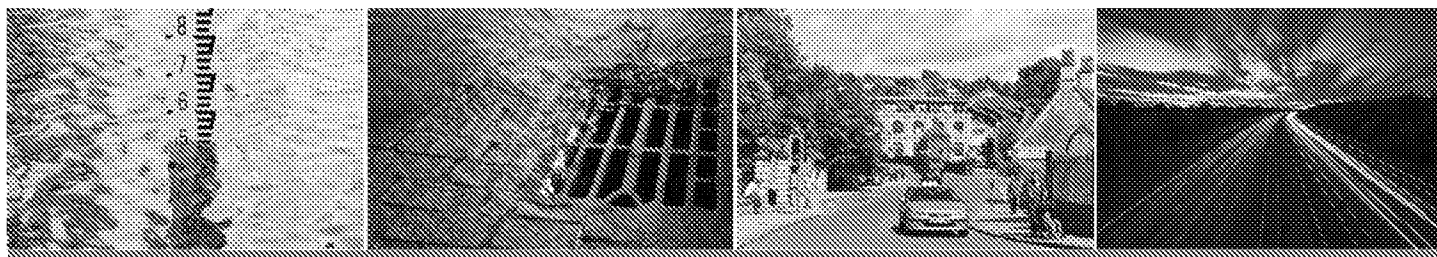
Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
15 minute winter	S1	10	13.234	0.044	3.8	0.0662	0.0000	OK
15 minute winter	S2	11	12.979	0.061	3.8	0.0691	0.0000	OK
720 minute winter	SA1	660	12.794	-0.056	0.3	3.8783	0.0000	OK
Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	
15 minute winter	S1	1.000	S2	3.8	0.906	0.402	0.0477	
15 minute winter	S2	2.001	SA1	3.7	0.769	0.626	0.0341	
720 minute winter	SA1	Infiltration		0.1				

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
1440 minute winter	S1	1350	13.382	0.192	0.3	0.2869	0.0000	SURCHARGED
1440 minute winter	S2	1350	13.382	0.463	0.3	0.5242	0.0000	SURCHARGED
1440 minute winter	SA1	1350	13.381	0.531	0.3	5.7036	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)
1440 minute winter	S1	1.000	S2	0.3	0.460	0.032	0.0899
1440 minute winter	S2	2.001	SA1	0.3	0.392	0.051	0.0553
1440 minute winter	SA1	Infiltration		0.1			



Civil Engineering - Transport Planning - Flood Risk

