

GEOTECHNICAL REPORT

Site Address:	Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN
Report Date:	March 2025
Project No.:	19458
Prepared for:	Open Architecture Ltd



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SUMMARY

ADDRESS: Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

SOILS PROFILE

Location	Made Ground	Depths (m)	Natural Soils	Depths (m)
WS1	Crushed concrete hardcore FILL	0.50m	Stiff becoming firm, brown, silty CLAY with occasional flint gravel	1.90m
	Compact dark brown very silty sandy claybound FILL with occasional flint gravel, brick and ash.	0.75m	Medium dense, light brown, silty claybound SAND and angular flint GRAVEL with chalk	3.30m
			CHALK	4.00m+
WS2	Hardcore stone FILL	1.00m	Soft to firm, brown silty CLAY	1.70m
			Stiff becoming firm, brown, silty CLAY with occasional flint gravel	2.10m
			Soft, light brown, silty CLAY with much chalk fragments	2.40m
			Medium dense, light brown, silty claybound SAND and angular flint GRAVEL with chalk	3.10m
			CHALK	4.00m+
WS3	Gravel over hardcore chalk FILL	0.10m	Stiff becoming firm, brown, silty CLAY with occasional flint gravel	1.90m
	Moderately compact, black brown, silty claybound, gravel FILL with slate and brick	0.60m	Medium dense, light brown, silty claybound SAND and angular flint GRAVEL with chalk	2.70m
	Chalk Rock	0.80m	CHALK	4.00m+
WS4	Gravel over chalk flint brick FILL	0.80m	Stiff becoming firm, brown, silty CLAY with occasional flint gravel	1.90m
			Medium dense, light brown, silty very claybound SAND and angular flint GRAVEL	4.00m+
WS5	Gravel drive over hardcore brick FILL	0.80m	Stiff becoming firm, brown, silty CLAY with occasional flint gravel	1.90m
			CHALK	4.00m+

ROOT SYSTEM OVERVIEW

Location	Depth Recorded (m bgl)	Identification (If completed)
WS1	NONE	
WS2	NONE	
WS3	1.60m	
WS4	1.70m	
WS5	NONE	

GROUNDWATER OVERVIEW

Location	Depth Water Struck (m bgl)	Depth of Standing Water (m bgl)	Rate of Inflow
WS1	DRY		
WS2	DRY		
WS3	DRY		
WS4	DRY		
WS5	DRY		

SOIL ANALYSIS: Cohesive Soils

Strength:	Hand Penetrometer tests 59-150+ kN/m²		
Casagrande Plasticity Classification:	Intermediate		
Plasticity Index:	22-27 %		
NHBC Shrinkability Classification:	Medium		
Significant Desiccation:	WS1	Only Slight or No Desiccation	
	WS2		
	WS3		
	WS4		
	WS5		
Sulphate Content:	DS-1/AC-1s		

SOIL ANALYSIS: Granular Soils

SPT N-Values :	4-36
Fines Content:	SAND & GRAVEL geology < 35% fines
Sulphate Classification	DS-1 / AC-1s

1. Introduction

- 1.1 All site investigation works have been undertaken in accordance with BS5930:2015+A1:2020, (Code of Practice for Ground Investigations).
- 1.2 In accordance with your instructions, we visited the above site on the 26TH February 2025.
- 1.3 The comments and opinions expressed are based purely on the soil and groundwater conditions identified within this report and the subsequent laboratory testing.
- 1.4 Some special condition may be present on site that, to date, has not been encountered within the scope of the site investigation works completed and therefore may not have been considered within the report. The findings of this report are based on the soil and groundwater sampling completed at the locations tested.
- 1.5 Unless otherwise stated, all groundwater recordings relate to short term observations and do not consider fluctuations in elevation due to seasonal, tidal, or other effects. It is possible that fluctuations in the groundwater elevation may have an impact on the proposed design and as such, it is recommended that long term monitoring is undertaken to obtain accurate information relevant to the proposed design in terms of the ground water elevation.

2. Description of Site

- 2.1 The site is formed by an existing commercial farm site which is no longer in use and has farm barns to the rear and a garage to the side of the site. A pond is also present on site.
- 2.2 The site is shown within the British Geological Survey Online Geology Viewer (Scale 1:50 000, Solid & Drift), which shows that the site situated with an area of Head Deposits which in turn overlie New Pit Chalk formation.

3. Fieldwork

- 3.1 In order to assess the site, the following site investigation works were implemented.
 - 5No Dynamic Competitor Rig boreholes were sunk to a maximum depth of 3.00 meters.
 - Geotechnical Laboratory Testing.
- 3.2 The location of these works is indicated on the site plan-forming Appendix 1.
- 3.3 The various strata encountered were noted and are recorded on the excavation logs forming Appendix 2.
- 3.4 Full ranges of samples were recovered as noted and retained for subsequent laboratory testing.

4. Laboratory Testing

- 4.1 Laboratory testing has been undertaken in accordance with BS 1377-2:2022, (Methods for Tests for Soils for Civil Engineering Purposes), the results of which are enclosed.
- 4.2 Selected samples were recovered to determine their Atterberg Limits, Particle Size Distribution Testing, Hand Penetrometer Testing, Soluble Sulphate value and pH.
- 4.3 The results of this laboratory testing are enclosed and form Appendix 3.

5. Fieldwork Results

- 5.1 Based on the borehole logs which can be found forming Appendix 2 the geology is recorded as a nominal depth of made ground which in turn overlies a Clay soil which subsequently overlies a granular soil. The granular soil is present to a depth of 1.90-4.00 meters. Below this, Chalk is identified in place.
- 5.2 No groundwater has been identified based on the short term observations made.
- 5.3 Groundwater records, unless otherwise stated, are based on short-term observations, and do not allow for or consider seasonal or other fluctuations, global warming, or periods of excessive wet or dry weather. All groundwater records are noted at the time of the drilling works and any other subsequent groundwater readings taken which, if present, are shown. Should the development be reliant on groundwater impacting on either below ground excavations, basements or short- or long-term excavations, HESI would recommend the installation of standpipes to depths relevant to any proposed excavation works and a period of either short- or long-term monitoring. This can be completed on request.
- 5.4 Roots were encountered within the boreholes based on examination of the soil samples across the site as shown below and recorded within the attached sample logs in Appendix 2. WS3 and WS4 recorded root systems which were identified to depths of between 1.60-1.70 meters. The remaining boreholes did not identify root systems.

6. Results

- 6.1 By inspection of the borehole logs and from a visual assessment of the samples recovered, a scheme of laboratory testing has been undertaken. The results are enclosed within Appendix 3 and prove the following:
- 6.2 Hand Penetrometer tests have been undertaken disturbed samples recovered from the site works. From the information gathered, it is recorded that allowable bearing capacity values of between 59-150+ kN/m² were achieved.
- 6.3 SPT N-Values have been completed within the boreholes completed at the site. It is confirmed within the borehole logs forming Appendix 2 of this report that SPT N-Values of between 4-36 were achieved. This would indicate an approximate allowable bearing capacity of between 40 kN/m² to 360 kN/m² would be recognized. If groundwater is present within close proximity to the proposed founding depths, any allowable bearing capacity identified as a result of calculations undertaken as a result of the site investigation should be halved.
- 6.4 Where the SPT N-Value test is completed in fine grained soils, the displacement of the pore water pressure is reduced due to permeability and as such, artificially high. As such, any SPT N-Value test completed in fine grained soils should be halved.
- 6.5 Atterberg Limits tests proved the clay soils to be of intermediate to high plasticity, (PI= 22-27 %), which indicates a Medium susceptibility to movement associated with moisture content change.
- 6.6 A measurement of the potential desiccation has been completed using Driscoll's Method of Desiccation Analysis which uses a comparison of moisture content profiles measures against the liquid limit measured in the Atterberg Limits test. This makes an assumption as to the state of the soil moisture content against the state of the soil in its liquid state to assess desiccation. Driscoll makes a comparison that the soils would likely be in a state of slight desiccation if the moisture content of the soil was less than 0.5 multiplied by the liquid limit state of the soil, (slight desiccation being a level of desiccation at which overburden pressure may influence), and significant desiccation if the moisture

content of the soil was less than 0.4 multiplied by the liquid limit, (significant desiccation being a level which would be un-natural to reduce to and therefore influenced by surrounding trees or vegetation). This is a mathematical representation of the state of the clay and does not consider overburden pressure which may form a factor in this calculation.

- 6.7 If the state of desiccation is a driving factor to consider foundation design, HESI would recommend the use of soil suction analysis utilising a control borehole as a comparison against desiccation levels which will provide a more accurate depiction of tree influence at that time.
- 6.8 Utilizing this method of assessment, it can be seen that no obvious signs of desiccation have been recorded within the site. This does not suggest that the existing tree presence has not impacted the underlying clay soils across the site at some locations where the proposed development is to take place, just that where we have drilled boreholes and tested has not revealed any obvious signs of desiccation.
- 6.9 Included within the laboratory testing was sulphate analysis, which can determine the use of sulphate resisting cement within the foundation design for the development. The results are enclosed and prove the classification in accordance with ACEC to be DS- 1 /AC-1S.
- 6.10 Particle Size Distribution Testing has been completed on the made ground at the site in order to assess the granular content of the soils. Based on the information gained, we can confirm that the soils tested contained less than 35% fines and as such, can be considered non shrinkable when subjected to moisture content change.

7. Conclusion

- 7.1 Any new foundations should be seated at a depth of as a minimum, 0.90 meters below the site level to overcome the impact of weathering. In order for foundations to be seated in materials suitable for the proposed foundations, factors will influence the design which are as follows, (although, this list is not exhaustive) :-
- Any new foundations should be seated in a uniform geotechnical material with regards possible volume change, future movements and differential settlements, where seated on variable soils.
 - Depth of made ground.
 - Allowable bearing capacity.
 - The proposed development.
 - Groundwater.
 - Trees.
 - Topography, and
 - Solution Features.
- 7.2 Any new foundations should be taken to depths in excess of the influence of any surrounding trees or vegetation, (recently removed, existing or proposed). An assessment has been recorded as to the depth of the existing root system within the site.
- 7.3 Should trees be present on site, the influence of those trees needs to be considered. As such, we can confirm the following :-
- *Any new foundations should be taken to depths more than the influence of any surrounding trees or vegetation, (recently removed, existing or proposed). An assessment has been recorded as to the depth of the existing root system within the soils profiles completed. This cannot be utilized across*

the site due to limited observations and as such, a guideline should be used to determine the depth of foundations required to overcome the influence of any surrounding vegetation.

- *As a result, we would suggest that any new foundations should be taken to a minimum depth of 0.90m. The use of NHBC Chapter 4.2, (Building Near Trees), should be incorporated in the design of any foundations, which dictates species, clay type and, ultimately, foundation depth. This is only a guideline that should be implemented as a method of costing the substructure within the development. The depth of any root systems within the subsoil will dictate the actual in-situ depth of any foundations across the site. It is envisaged that NHBC Chapter 4.2 will provide a reasonable assessment of actual foundation depths.*
- *Where trees are to be removed or have recently been removed from the site to provide new landscaping or to enable the development to take place, the existing height of the trees and vegetation to be/or that has been removed should be used in assessing the proposed foundation depths local to those specific trees.*
- *Where trees are to remain and will undergo some degree of growth to reach maturity, the mature height of the tree should be used within NHBC Chapter 4.20m.*
- *Strip foundations will vary in depth dependent upon the distance of the foundation from the trees within the area, (closer to the trees will increase foundation depth). This may also increase foundation depths to depths more than depths identified within this report. All foundations should be designed in accordance with the comments made above.*

7.4 For the soils to be suitable for use as a founding material, the following must be in place.

- NHBC Design guides as detailed above must be completed,
- An assessment of the load bearing capacity of the soil should be made in comparison with a structural engineer's report in relation to loading of the proposed structure,
- Any physical excavations should be undertaken under a watching brief to ensure no tree roots, variable ground or soft spots are in place,
- Any new foundations must exceed FILL or reworked ground and below existing features such as old foundations.

7.5 Based on the geology identified at the site, it is identified that the geology across the site is entirely variable and includes clay soils, granular soils and ultimately Chalk at depth. The depths of Chalk are not uniform across the site and the upper soils vary in stratum thickness which would define a uniform foundation solution as difficult at best.

7.6 Given the soils profiles in place, we would suggest that the potential for the upper soils to be used in a foundation solution could be undertaken, although, the allowable bearing capacity of these soils would have to be able to support the proposed loading of the proposed structures and this would promote different depths of foundation across the site to achieve this.

7.7 Again, considering a traditional foundation, due to the variability of the soils, any foundations which would be suitable to support the proposed loadings would require reinforcement in the foundation design solution in order to overcome differential settlements and future movements.

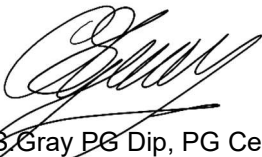
7.8 Taking the above information into account, we would suggest that a system of piles and ground beams would form the optimum foundation solution for the site. The depth of piles can be calculated using the parameters defined within this report, (to include both the SPT N-Values shown in Appendix 2 and Strengths provided in Appendix 3) and a structural engineers calculation in respect to loading of the

proposed structure. The information within this report could be sent to a piling contractor who would be able to provide bespoke design parameters based on the information provided and costs of associated works to develop those piles.

- 7.9 Protection against heave and shrinkage should be included in any design in accordance with NHBC Chapter 4.2, (Building Near Trees) and include in any pile and also ground beam design.
- 7.10 A suspended floor should be included in any design guide where foundation depths exceed 1.50 meters due to the influence of trees or where made ground or compressible soil is in place to depths in excess of 0.60 meters unless it can be proven that these made ground is of a uniform density and consistency across the build.
- 7.11 All foundations should be designed by a suitably qualified structural engineer in terms of the proposed project and all aspects of the ground, groundwater, loadings of the proposed structure etc. Should any elements of this report be unclear, consultation with ourselves should be sought to clarify any elements prior to a final design being made. The final decision in terms of foundation options should be made by a structural engineer with full working knowledge of the site and site conditions.

I hope the foregoing is sufficient for your requirements, although please do not hesitate to contact us should require any further information regarding the above.

Yours Faithfully



C. S. Gray PG Dip, PG Cert, M.Sc.
Managing Director

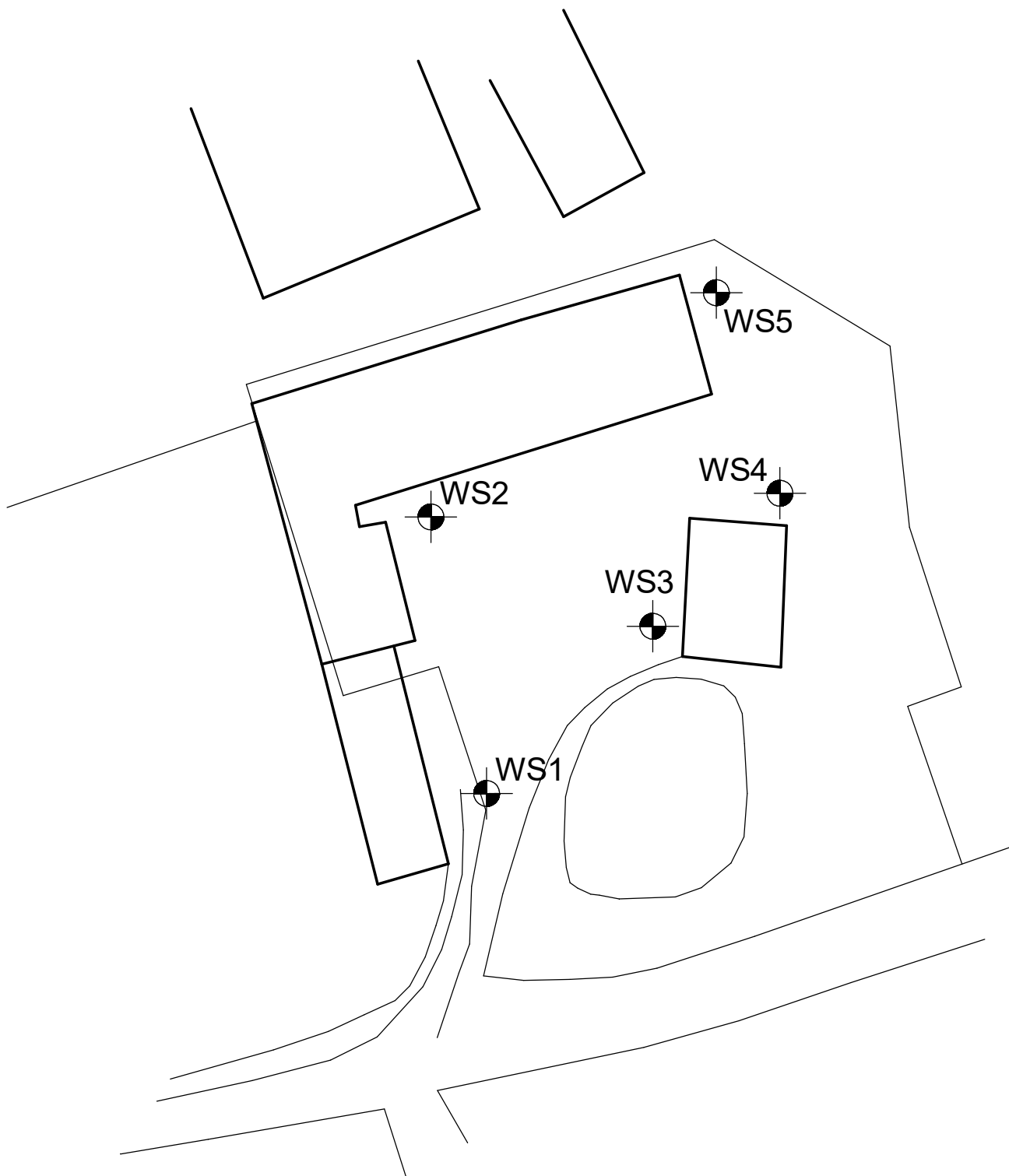
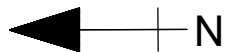
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Location Plan



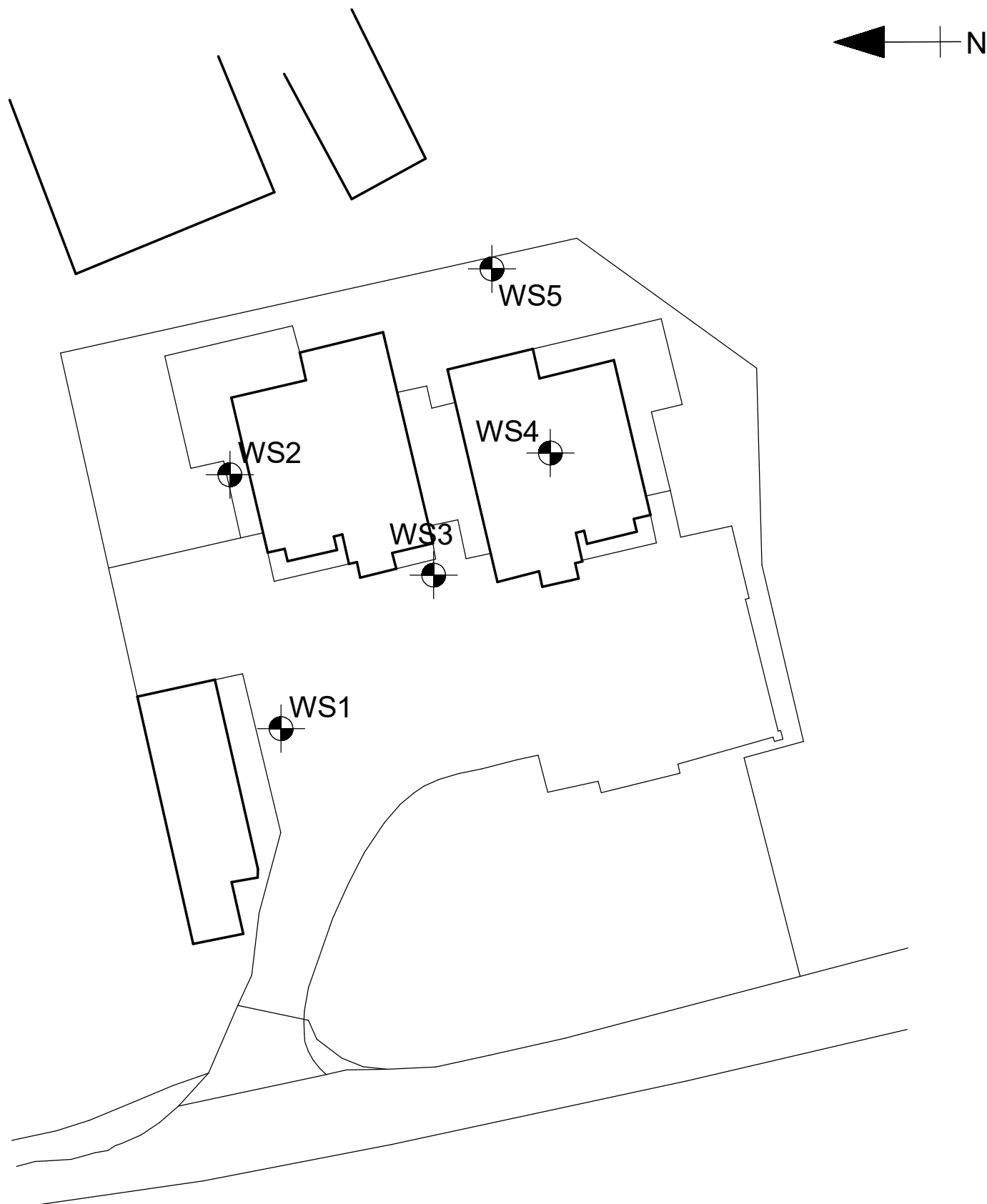
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Existing Site Plan



Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Proposed Site Plan



Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Window Sampler One

Description Of Stratum	Legend	Depth	Thickness (m)	Water Level	Samples			S.P.T N-Value or Vane Strength	VOC's (ppm)	Installations	Casing Depth, (m)
					No	Type	Depth (m)				
Crushed concrete hardcore FILL			0.50	DRY	1	U	G.L. - 1.00				
		0.50									
Compact dark brown very silty sandy claybound FILL with occasional flint gravel, brick and ash.		0.75	0.25								
Stiff becoming firm, brown, silty CLAY with occasional flint gravel					2	U	1.00 - 2.00	N=4			1.00
			1.15								
		1.90									
Medium dense, light brown, silty claybound SAND and angular flint GRAVEL with chalk					3	U	2.00 - 3.00	N=13			
			1.40								
					4	U	3.00 - 4.00	N=36			
		3.30									
CHALK			0.70								
		4.00						N=14			
Window Sample closed at 4.00m bgl											

Remarks

Scale 1 : 25

 Key : U - Undisturbed Sample
 (100mm diameter)

 B - Bulk Sample
 - Water Struck

 D - Disturbed Sample
 - Water Standing

 W - Water Sample
 T - Chemical Tub

 N - SPT N-Value
 V - Vane Test, (kN.m²)

Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Window Sampler Two

Description Of Stratum	Legend	Depth	Thickness (m)	Water Level	Samples			S.P.T N-Value or Vane Strength	VOC's (ppm)	Installations	Casing Depth, (m)
					No	Type	Depth (m)				
Hardcore stone FILL			1.00	DRY	1	U	G.L. - 1.00				
Soft to firm, brown silty CLAY		1.00	0.70		2	U	1.00 - 2.00	N=4			1.00
Stiff becoming firm, brown, silty CLAY with occasional flint gravel		1.70	0.40		3	U	2.00 - 3.00	N=27			
Soft, light brown, silty CLAY with much chalk fragments		2.10	0.30								
Medium dense, light brown, silty claybound SAND and angular flint GRAVEL with chalk		2.40	0.70		4	U	3.00 - 4.00	N=22			
CHALK		3.10	0.90					N=15			
Window Sample closed at 4.00m bgl		4.00									
Remarks											

Scale 1 : 25

Key : U - Undisturbed Sample
(100mm diameter)

B - Bulk Sample
 - Water Struck

D - Disturbed Sample
 - Water Standing

W - Water Sample
T - Chemical Tub

N - SPT N-Value
V - Vane Test, (kN.m²)

Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Window Sampler Three

Description Of Stratum	Legend	Depth	Thickness (m)	Water Level	Samples			S.P.T N-Value or Vane Strength	VOC's (ppm)	Installations	Casing Depth, (m)
					No	Type	Depth (m)				
Gravel over hardcore chalk FILL		0.10	0.10	DRY	1	U	G.L. - 1.00	N=4			1.00
Moderately compact, black brown, silty claybound, gravel FILL with slate and brick		0.60	0.50								
CHALK rock		0.80	0.20								
Stiff becoming firm, brown, silty CLAY with occasional flint gravel		1.90	1.10		2	U	1.00 - 2.00				
Medium dense, light brown, silty claybound SAND and angular flint GRAVEL with chalk		2.70	0.80		3	U	2.00 - 3.00	N=26			
CHALK		4.00	1.30		4	U	3.00 - 4.00	N=27			
Window Sample closed at 4.00m bgl								N=14			

Remarks

Scale 1 : 25

 Key : U - Undisturbed Sample
 (100mm diameter)

 B - Bulk Sample
 - Water Struck

 D - Disturbed Sample
 - Water Standing

 W - Water Sample
 T - Chemical Tub

 N - SPT N-Value
 V - Vane Test, (kN.m²)

Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Window Sampler Five

Description Of Stratum	Legend	Depth	Thickness (m)	Water Level	Samples			S.P.T N-Value or Vane Strength	VOC's (ppm)	Installations	Casing Depth, (m)
					No	Type	Depth (m)				
Gravel drive over hardcore brick FILL			0.80	DRY	1	U	G.L. - 1.00				
		0.80									
Stiff becoming firm, brown, silty CLAY with occasional flint gravel			1.10		2	U	1.00 - 2.00	N=5			1.00
		1.90									
CHALK			2.10		3	U	2.00 - 3.00	N=23			
					4	U	3.00 - 4.00	N=17			
		4.00						N=11			
Window Sample closed at 4.00m bgl											
Remarks											

Scale 1 : 25

 Key : U - Undisturbed Sample
 (100mm diameter)

 B - Bulk Sample
 - Water Struck

 D - Disturbed Sample
 - Water Standing

 W - Water Sample
 T - Chemical Tub

 N - SPT N-Value
 V - Vane Test, (kN.m²)



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Geotechnical Assessments | Environmental Assessments | Desktop Studies | Contamination Analysis

APPENDIX

SHEET

JOB NUMBER

DATE

3

1

194583

Feb-25

LOCATION Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

HAND PENETROMETER STRENGTH TEST RESULTS

Excavation Location Number	Depth (m)	Sample	Natural Moisture Content (%)	Hand Penetrometer (Undrained)	Estimated Allowable Bearing Capacity (kN/m ²)	Notes
WS1	1.00	U	28	69	59	
WS1	1.50	U	30	103	150+	
WS2	1.00	U				
WS2	1.50	U				
WS2	2.00	U	32	103	150+	
WS2	2.50	U				
WS2	3.00	U				
WS3	1.00	U	26	152	150+	
WS3	1.50	U	29	103	150+	
WS3	2.00	U				
WS3	2.50	U				
WS4	1.00	U	26	103	150+	
WS4	1.50	U	26	98	150+	
WS4	2.00	U				
WS4	2.50	U				
WS4	3.00	U				
WS4	4.00	U				
WS5	1.00	U	29	78	67	
WS5	1.50	U	64	74	63	

LOCATION Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

ATTERBERG LIMITS TEST DATA

Excavation Location Number	Depth (m)	Sample	Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Group Symbol	Ammended Plasticity Index (%)	Desiccation Profile	Percentage Retained on 425 Micron Sieve (%)
WS1	1.00	U	28	48	20	28	CI	27	No	3
WS1	1.50	U	30	48	20	28	CI	27	No	5
WS1	2.00	U								
WS1	2.50	U								
WS1	3.00	U								
WS2	1.00	U								
WS2	1.50	U								
WS2	2.00	U	32	46	19	27	CI	26	No	4
WS2	2.50	U								
WS2	3.00	U								
WS3	1.00	U	26							
WS3	1.50	U	29	48	21	27	CI	24	No	11
WS3	2.00	U								
WS3	2.50	U								
WS4	1.00	U	26							
WS4	1.50	U	26	40	16	24	CI	22	No	8
WS4	2.00	U								
WS4	2.50	U								
WS4	3.00	U								
WS4	4.00	U								
WS5	1.00	U	29							
WS5	1.50	U	64	40	16	24	CI	22	No	10



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SULPHATE ANALYSIS

Excavation Location Number	Depth (m)	Sample	Concentrations of Soluble Sulphate			Classification	pH
			Soil		Groundwater		
			Total SO4 (%)	SO4 in 2:1 Water:soil (g/l)			
WS2	2.00	U		0.21		DS-1 / AC-1s	7.63
WS4	1.50	U		0.15		DS-1 / AC-1s	7.48
WS5	1.50	U		0.27		DS-1 / AC-1s	7.67



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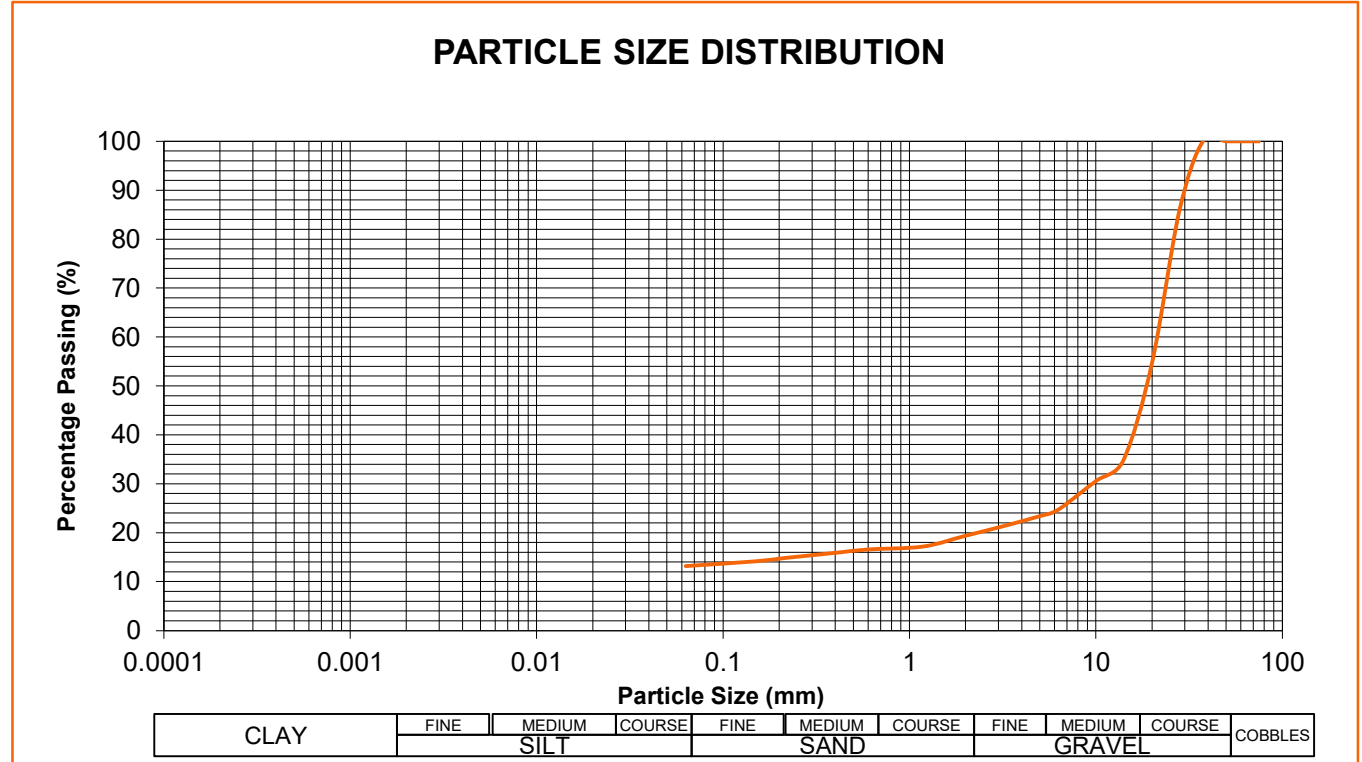
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Appendix No. 3
Sheet No. 4
Job No. 194583
Date Feb-25

LOCATION Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Location : **WS1** Depth : **2.50 m** Sample No: **U3** Initial Mass: 500 g

Sieve Size (mm)	Weight Retained (g)	Percent Retained (%)	Total Passing (%)
75	0	0	100
63	0	0	100
50	0	0	100
37.50	0	0	100
28.00	71	14	86
20.00	155	31	55
14.00	100	20	35
10.00	21	4	31
6.30	29	6	25
5.00	7	1	23
3.35	9	2	22
2.00	11	2	19
1.180	11	2	17
0.600	3	1	17
0.425	3	1	16
0.300	3	1	15
0.212	3	1	15
0.150	3	1	14
0.063	5	1	13



Fines (%) = **13** Sands (%) = **6** Gravels (%) = **81** Cobbles (%) = **0**

British Standard Sieve Test 5930:2015 as Per Test 7a



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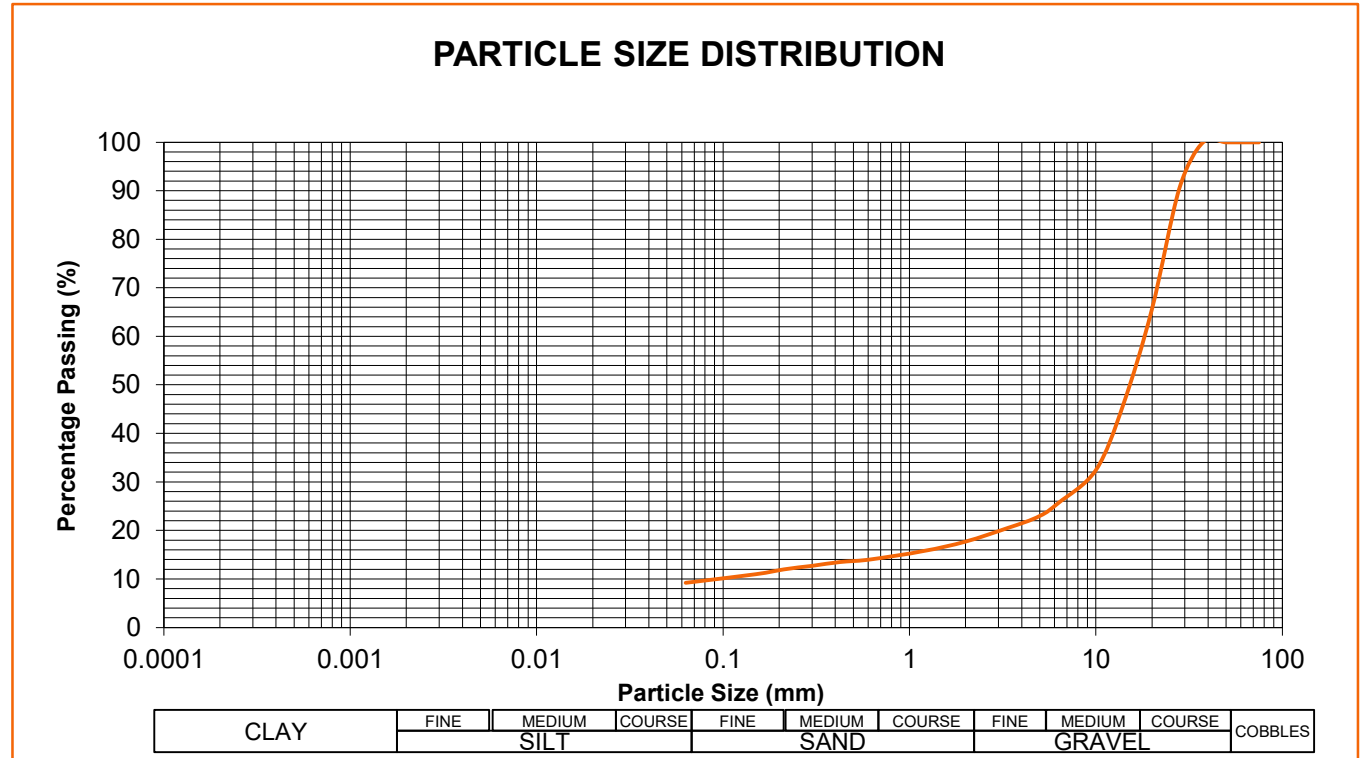
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Appendix No. 3
Sheet No. 4
Job No. 194583
Date Feb-25

LOCATION Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Location : **WS2** Depth : **3.00 m** Sample No: **U3** Initial Mass: 400 g

Sieve Size (mm)	Weight Retained (g)	Percent Retained (%)	Total Passing (%)
75	0	0	100
63	0	0	100
50	0	0	100
37.50	0	0	100
28.00	38	10	91
20.00	99	25	66
14.00	79	20	46
10.00	54	14	33
6.30	27	7	26
5.00	11	3	23
3.35	10	3	21
2.00	11	3	18
1.180	8	2	16
0.600	7	2	14
0.425	2	1	14
0.300	3	1	13
0.212	3	1	12
0.150	4	1	11
0.063	7	2	9



Fines (%) = **9** Sands (%) = **9** Gravels (%) = **82** Cobbles (%) = **0**

British Standard Sieve Test 5930:2015 as Per Test 7a



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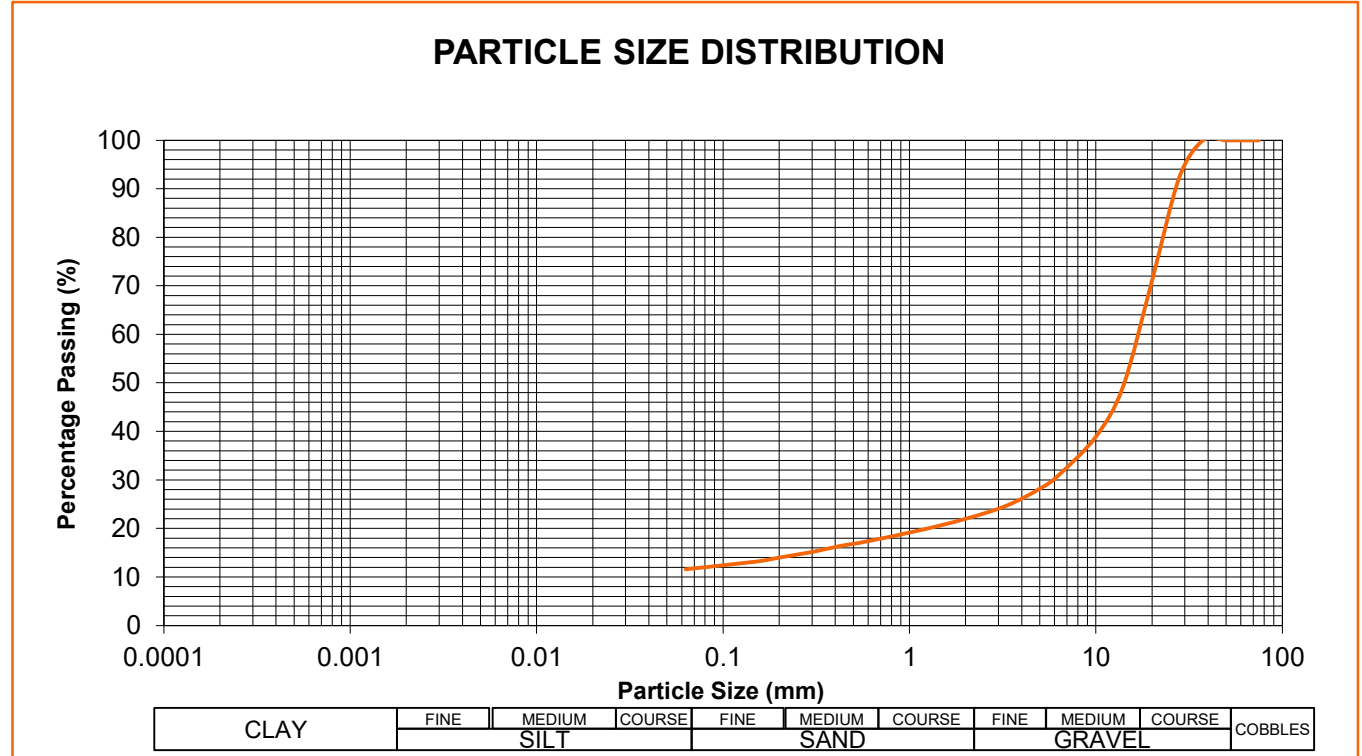
Geotechnical Assessments | Environmental Assessments | Desktop Studies | Contamination Analysis

Appendix No. 3
Sheet No. 4
Job No. 194583
Date Feb-25

LOCATION Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Location : **WS3** Depth : **2.00 m** Sample No: **U3** Initial Mass: 500 g

Sieve Size (mm)	Weight Retained (g)	Percent Retained (%)	Total Passing (%)
75	0	0	100
63	0	0	100
50	0	0	100
37.50	0	0	100
28.00	38	8	92
20.00	106	21	71
14.00	109	22	49
10.00	52	10	39
6.30	40	8	31
5.00	14	3	28
3.35	17	3	25
2.00	14	3	22
1.180	11	2	20
0.600	12	2	17
0.425	5	1	16
0.300	6	1	15
0.212	5	1	14
0.150	5	1	13
0.063	8	2	12



Fines (%) = **12** Sands (%) = **10** Gravels (%) = **78** Cobbles (%) = **0**

British Standard Sieve Test 5930:2015 as Per Test 7a



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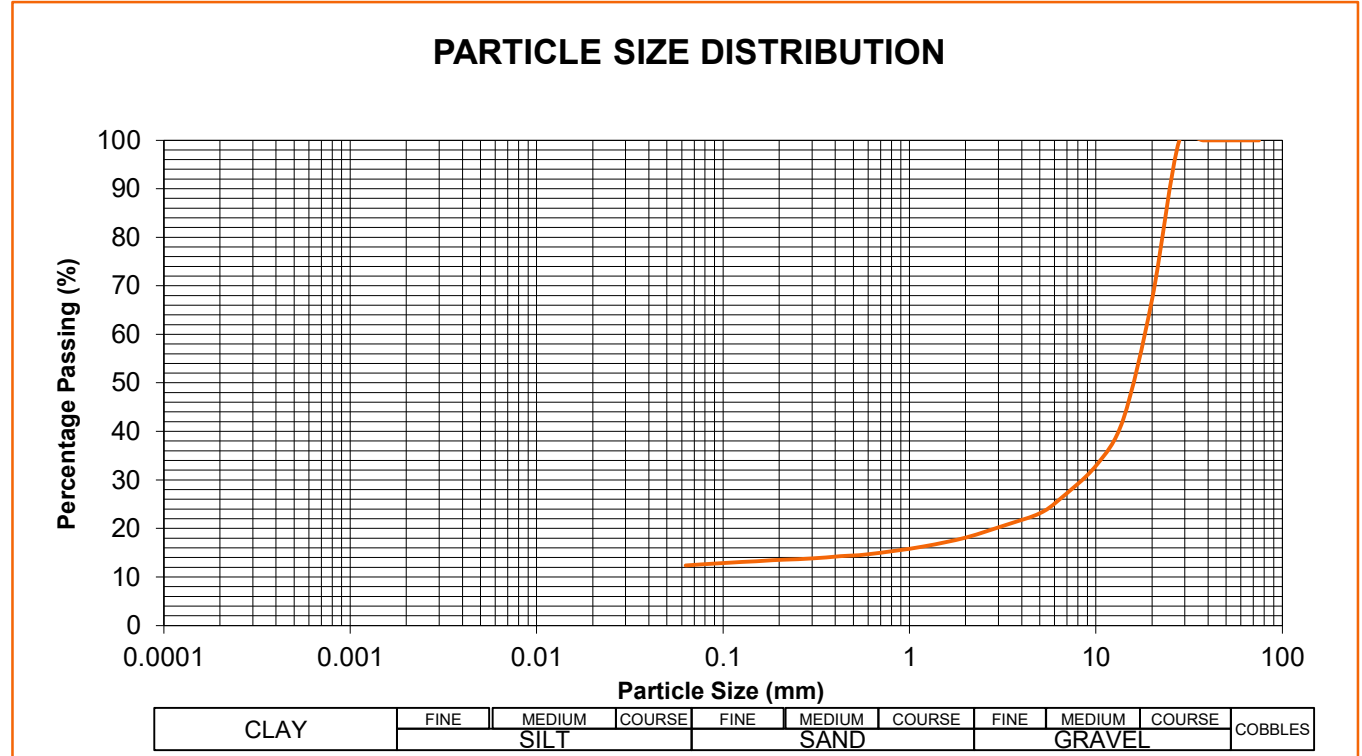
Geotechnical Assessments | Environmental Assessments | Desktop Studies | Contamination Analysis

Appendix No. 3
Sheet No. 4
Job No. 194583
Date Feb-25

LOCATION Brimsole Barn, Brimstone Hill, Meopham, Gravesend, Kent DA13 0BN

Location : **WS4** Depth : **2.50 m** Sample No: **U3** Initial Mass: **700 g**

Sieve Size (mm)	Weight Retained (g)	Percent Retained (%)	Total Passing (%)
75	0	0	100
63	0	0	100
50	0	0	100
37.50	0	0	100
28.00	0	0	100
20.00	229	33	67
14.00	173	25	43
10.00	67	10	33
6.30	50	7	26
5.00	19	3	23
3.35	16	2	21
2.00	19	3	18
1.180	13	2	16
0.600	11	2	15
0.425	3	0	14
0.300	3	0	14
0.212	2	0	14
0.150	2	0	13
0.063	6	1	12



Fines (%) = **12** Sands (%) = **6** Gravels (%) = **82** Cobbles (%) = **0**

British Standard Sieve Test 5930:2015 as Per Test 7a